The Committee on Government Affairs was called to order by Chair Marilyn K. Kirkpatrick at 8:01 a.m., on Wednesday, February 21, 2007, in Room 3143 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda (Exhibit A), the Attendance Roster (Exhibit B), and other substantive exhibits are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature’s website at www.leg.state.nv.us/74th/committees/. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau’s Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblywoman Marilyn Kirkpatrick, Chair
Assemblywoman Peggy Pierce, Vice Chair
Assemblyman Kelvin Atkinson
Assemblyman Bob Beers
Assemblyman David Bobzien
Assemblyman Chad Christensen
Assemblyman Jerry D. Claborn
Assemblyman Pete Goicoechea
Assemblyman Ruben Kihuen
Assemblyman Harvey J. Munford
Assemblywoman Bonnie Parnell
Assemblyman James Settelmeyer
Assemblyman Lynn D. Stewart
Assemblywoman RoseMary Womack

STAFF MEMBERS PRESENT:

Amber Joiner, Committee Policy Analyst
Scott McKenna, Committee Counsel
Mary Kay Doherty, Committee Secretary
OTHERS PRESENT:

Andy Belanger, Senior Management Analyst, Southern Nevada Water Authority
Patricia Mulroy, General Manager, Southern Nevada Water Authority
Kay Brothers, Deputy General Manager, Engineering/Operations, Southern Nevada Water Authority

[Call to Order, Roll Call 8:01]

Chair Kirkpatrick:
Thank you, we have a quorum. We are going to have an overview from the Southern Nevada Water Authority. There are a few BDRs that we need to introduce first.

** BDR 22-477—Expands the purposes for which impact fees may be used. (Assembly Bill 138.) **

It was requested by the Nevada League of Cities.

ASSEMBLYWOMAN PIERCE MOVED TO INTRODUCE BDR 22-477.

ASSEMBLYWOMAN PARNELL SECONDED THE MOTION.

THE MOTION CARRIED.

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** BDR 28-773—Provides for certain contractors to receive an additional preference in the bidding process. (Assembly Bill 140.) **

ASSEMBLYMAN GOICOECHEA MOVED TO INTRODUCED BDR 28-773.

ASSEMBLYWOMAN WOMACK SECONDED THE MOTION.

THE MOTION CARRIED.
This was requested by the Committee on Government Affairs, by Assemblyman Parks who was the Chair last session.

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**BDR 20-325**—Revises provisions relating to local government administration. (Assembly Bill 139.)

ASSEMBLYWOMAN PIERCE MOVED TO INTRODUCE BDR 20-325.

ASSEMBLYMAN STEWART SECONDED THE MOTION.

THE MOTION CARRIED.

This was requested on behalf of the Nevada Association of County Recorders.

**Andy Belanger, Senior Management Analyst, Southern Nevada Water Authority:**

With me today is Patricia Mulroy, General Manager, and Kay Brothers, Deputy General Manager. Given the time constraints this morning, I am going to turn it over to Mrs. Mulroy.

**Patricia Mulroy, General Manager, Southern Nevada Water Authority:**

I will give you a brief overview of the water situation in southern Nevada. I know it is the subject of much discussion, as it has been since about the late 1980s, when southern Nevada's water supply began to diminish.

As those of you who live in southern Nevada probably know, 90 percent of southern Nevada's water supply, which fuels the Southern Nevada Water Authority's member agencies, comes from the Colorado River. Ten percent of our water supply comes from our groundwater basin that underlies the Las Vegas Valley.

When Las Vegas began in the early part of the last century, it was exactly the opposite. One hundred percent of the water came from our groundwater basin, and it was not until 1971, when the Southern Nevada Water System came online, that we began to take Colorado River water. In 1989, we began to run out of readily available resources given the growth and usage patterns existing in southern Nevada. Once the Southern Nevada Water Authority was created, we began a different path. We spent the better part of the nineties in discussions with our fellow basin states to put together arrangements that would give southern Nevada additional water supplies. Nevada shares Colorado River resources with six other states in the United States, four in the upper basin: Wyoming, Colorado, Utah and New Mexico, and two in the lower basin:
Arizona and California. In 1944, the United States entered into an agreement with Mexico, and guaranteed 1.5 million acre-feet of flow into the country of Mexico.

If I had been sitting here in 2000, I would be happily telling you that our work in the 1990s had resulted in a robust and adequate water supply that would last southern Nevada 40 to 50 years. We had acquired the ability to use surplus flows, which were essentially unused upper basin water. We had entered into an agreement with the State of Arizona, whereby they were going to bank their unused apportionment for our use, up to 1.2 million acre-feet. They would create a "savings account" that we could draw down. Flexibilities were beginning to emerge within the Colorado River system, and we knew we had a substantive bridge that would allow southern Nevada to utilize those resources while looking to the future for more augmentation.

The problem began in 1999, when Mother Nature threw us a curve ball. The ink had no more than dried on the documents that were signed with the Secretary of the Interior when the worst drought to ever hit the Colorado River basin began. It was what we considered to be normal low flow years in 2000 and 2001, but in 2002, the run-off in the Colorado River system was 25 percent of normal. Lake Powell cratered. Lake Powell and Lake Mead are the backbone for the storage basins that feed all of the lower basin demands and also the demands in Mexico. When those two reservoirs are full, there are over 50 million acre-feet of storage. Currently they are at 52 percent capacity. This drought has not diminished, and people began to more openly discuss things that had only been whispered about in the past.

One of the areas on this planet that are going to be subject to severe long droughts during this era of climate change is the Colorado River Basin. There are three areas on earth that are most at risk: Spain, the Near East, and the Colorado River Basin. We, as water users in that basin, have to come to grips with the fact that the 18 million acre-feet upon which the allocations of the river systems were predicated, and upon which we have come to rely, simply are not there nor will they be in the future. We are looking at an average flow that is closer to 13 or 14 million acre-feet annual run-off.

Southern Nevada had to respond. We are the smallest of all the states in terms of our allotment to use Colorado River resources, and the reason is simple. There was no agricultural development in the 1920s when the Colorado River was developed. Southern Nevada was a stop on the Union Pacific railroad and no one ever imagined a Las Vegas emerging in that dry spot.
When the drought began, the first thing we in southern Nevada had to do was cut back on our overuse of the system. We were already using 325,000 acre-feet when our allocation was 300,000 acre-feet. We embarked on the most aggressive conservation plan that any urban area has ever done. Not only was it a conservation plan that was in response to a drought, but it was also a strategic plan. We saw this as an opportunity for us to change our usage patterns and to do it in a dramatic, permanent way. The previous conservation efforts that began once the Southern Nevada Water Authority was created were going along a predictable path. It was voluntary conservation, which was all that was acceptable in southern Nevada at the time. With the onslaught of this drought, we were able to make some dramatic changes. The centerpiece was a water-smart landscaping program: we agreed to pay our customers $1 per square foot to remove turf. We have removed enough turf to go a third of the way around the world, and we also put the community on a water diet. We said that we do not need to water throughout the winter, spring, summer, and fall. In southern Nevada, you now can water three days a week in the fall and spring, once a week in the winter, and not at all during the heat of the day in the summer. We put the golf courses on a budget, which says they cannot exceed a certain aggregate amount on an annual basis. If they do, they will pay a multiple of their highest monthly bill. That ran into millions for them at the end of the year, so they began to remove non-playing turf.

Hotels were required to submit water efficiency plans. The Las Vegas Strip and all gaming establishments in southern Nevada use 3 percent of southern Nevada’s water. They are the single most efficient user of water; their only real consumptive use is for their evaporative coolers. The reason I can say that is we recycle 100 percent of our water in southern Nevada. Everything that hits the sewer system is recycled. We either send it to a facility for reuse, such as a golf course to use as treated effluent, or we send it to large tertiary plants that then treat the water and return it to the Colorado River. For every gallon of treated wastewater that we put back into the Colorado River, we can take one gallon over our allocation back out again.

The net effect of these conservation plans is that within two years we have reduced the amount of water we are using from 325,000 acre-feet a year to 265,000 acre-feet a year. That is almost a quarter of our usage in southern Nevada. The Board has subsequently made all those conservation measures, which were originally adopted in the drought plan, permanent. The Board has also increased our rebate from $1 per square foot to $2 per square foot for the first 1,500 square feet. We are working with the landscaping community and the developers to build water smart communities. If you have seen some of the newer developments in southern Nevada, you have noticed they look very
different than the developments that emerged in the early 1990s, not even to mention those built in the 1980s.

Having gone through all that conservation, it still left southern Nevada with a dilemma. You cannot supply 100 percent of the demand with 10 percent of the supply. When we look at the models that the Bureau of Reclamation is doing, there are projections that show 2 million acre-feet of shortages in the lower basin. We are, in anticipation of greatly reduced reservoir levels, building a third intake into Lake Mead, which will be the single most complicated construction project in the world. It is going to cost us a billion dollars to build it down to an elevation of 860 feet; Lake Mead is full at 1,204 feet. It is going to require an international company to be able to handle a project that size. We have a resource problem. Every other alternative that we have explored uses the Colorado River as an exchange tool. We have spent the better part of this century in discussions with the basin states on shortages. When shortages occur in the lower basin, southern Nevada will assume 4 percent of that shortage, depending on lake levels. Right now we have an agreement that will allow the Secretary of the Interior to declare shortages up to 600,000 acre-feet, but shortages well beyond 600,000 acre-feet are likely. It is not a matter of if it is going to happen but a matter of when it is going to happen. The only thing that can protect southern Nevada users, the ones that live there today, is to develop a source of supply that is separate and apart from the hydrology of the Colorado River basin. Even if we embarked on ocean desalting, it would be done through a series of exchanges. One exchange would have desalting in California, replacing California’s supply with desalted ocean water, and trading California’s share of the Colorado. If there is no Colorado River water to trade, there is no way to access the ocean. Therein lies the fundamental problem.

We know that one day we will be looking at desalted ocean water, but it is not a neither simple nor silver bullet solution. The Coastal Commission in California is not particularly keen on taking the most expensive real estate in the United States and dotting it with desalters and power plants adjacent to it. The single largest issue with desalting is not the price, nor the energy, but what do you do with the brine? If you take the salt out, you have to put it somewhere. The most efficient place to put it is back into the ocean; however, the Pacific Institute in San Francisco has just released a thoughtful analysis of the pros and cons of desalting. You create a brine pocket and can change the ecosystem around the desalting plants by doing that. There are opportunities with coastal property in Mexico. Mexico is not the most stable of governments at this time. Besides, Mexico and the United States are going to be embarking on some very difficult discussions over shortages that require an amendment to the 1944 treaty. Until those issues and some of the other border issues concerning water get resolved between the United States and Mexico, I am certain that the
ability to build a desalter in Mexico is limited. It will happen sometime, but not within the time span needed to protect the people in southern Nevada.

In 1989, we filed for unused groundwater within the State of Nevada. This is water that is not currently in use, and we went to basins where there were no large towns. In fact, our anchor basin, Spring Valley, as you can see from this map (Exhibit C), has no towns, nor do the basins in Lincoln County.

Groundwater transfers, or inter-basin transfers, have been the backbone for civilizations since the Roman aqueducts were built and since the Egyptians built their first irrigation systems. The State of Nevada has any number of inter-basin transfers; there would not be a Wendover, Tonopah, Eureka, Virginia City, or even Carson City, were it not for inter-basin transfers. The Truckee Meadows Water Authority (TMWA) and Reno are looking at transferring water from Honey Lake Valley into the Reno area. New York City transfers water. Every major metropolitan area has a water transfer from somewhere else into the metropolitan area. The City of Los Angeles moves Colorado River water 600 miles to the coastal front. Phoenix and Tucson move the Colorado River water 300 miles through the Central Arizona Project, from Lake Havasu to Tucson. Salt Lake City built the Central Utah Project and is moving water from the Green River to the Wasatch front. Colorado built a pipeline through the Rocky Mountains across the Continental Divide from the Colorado River to the City of Denver in order to satisfy the water needs for the City of Denver. That is the way that civilization has handled its water demands.

We are fortunate in Nevada because we have the most stringent groundwater law anywhere (Exhibit D). Arizona, only two decades ago, created groundwater management areas where there was over-pumping. California, to this day, has no groundwater law. Under the auspices of an existing Nevada law, we filed for unused water in basins in Lincoln and White Pine Counties. Early on, we entered into an agreement with Lincoln County whereby we divide the water we had filed on between ourselves and Lincoln County. We have since amended our agreement so they will have use of whatever facilities we build, which represents a $350 million benefit to them. We have entered into an arrangement whereby we are paying lost property taxes on office buildings and other facilities that we have acquired in Lincoln County. We have an ongoing partnership with Lincoln County, and have had one for some time.

The anxiety about this project has emerged from White Pine County, particularly the Snake Valley area. This is an appropriate time to first talk about the stipulation (Exhibit E) that we entered into in Spring Valley and make it very clear what our intent is in developing these resources.
We recognize that the days of an "Owens Valley" are over. "Owens Valley" needs to be relegated to its rightful place in history with the caveman and the dinosaur. "Owens Valley" happened at the beginning of the last century, when there were no environmental laws in this country, nor an environmental ethic in this county. No one understood what they were doing. Today, that is very different. The environmental destruction in Owens Valley did not occur because of groundwater development, but as a matter of surface diversion. It was the diversion of Mono Lake that created the dust bowl in Owens Valley. We have that backdrop to overcome. We have done several things. We went to a hearing in Spring Valley in front of the State Engineer in September. Before the hearing began, we signed a stipulation with those federal agencies charged with the environmental stewardship in that basin. Those agencies are the U.S. Fish and Wildlife, the Park Service, the Bureau of Indian Affairs, and the Bureau of Land Management. In that stipulation, the Water Authority has agreed to a rigorous monitoring and mitigation plan. We agreed to create a biological working group and a technical review panel which will forever have roles in our management of Spring Valley. Those that have the environmental stewardship have a seat at the table to help us manage that basin on a year to year basis in order to avoid environmental destruction.

We also have spent $35 million on acquiring ranches in Spring Valley (Exhibit F). We bought those ranches for one reason and one reason only. That is to give us the tools in order to protect the environment, while at the same time keeping the ranching culture and lifestyle alive in Spring Valley. We are committed to having those ranches continue, and we have hired a local manager to oversee our ranching operations in Spring Valley. We now have the surface water tools with which to recharge those groundwater basins to prevent environmental destruction from occurring. It is through that kind of adaptive management approach that Spring Valley will be protected.

Last year we began a series of discussions with White Pine County. It was our sincere desire that we enter into an agreement with White Pine County and give them a seat at the same table that we have created with the federal government. They too would have a voice in how Spring and Snake Valley water resources get developed. In fact, it was our desire that the agreement be in place before we acquired a single ranch. Ranchers had been coming to us for some time offering their ranches for sale. We resisted those offers, saying we were not ready to talk about ranch acquisitions prior to an agreement with White Pine County. Unfortunately, the emotions around this project are at such a high pitch, that to date, the agreement has not been possible. We are ready to sit down at any time or place and continue that dialogue. We know that by acquiring those ranches, White Pine County is losing property tax revenue and we want to help White Pine County overcome that. We made a substantive
proposal to White Pine County, which would have given them a portion of the water resources, a seat at the table to protect their resources, and establish a mitigation trust fund. We offered them $12 million for applications that we knew the State Engineer was not going to be able to uphold. In buying and operating those ranches, we have opened accounts in all the stores in Ely that sell ranching equipment and supplies. We intend to be a productive and paying member of their economy.

Southern Nevada is not embarking on this project because it is the cheapest or easiest solution; we are doing it because it is the only solution southern Nevada has that can meet our timeframe and criteria. These criteria are simple: provide a backup supply to Colorado River water that will allow us to protect the health and safety of southern Nevadans during a longer and even more protracted drought; provide additional resources in the short term while alternatives to the wider western problem are pursued; and have it done by the middle of the next decade. Those are the challenges that we have to address, and any solution that cannot meet that timeframe and provide those other benefits are ones that are very difficult for southern Nevada to consider.

We looked at everything. We spent a decade looking at everything. We have spent $750,000 for the seven states to do an augmentation study to look at any and all options on how the entire Colorado River supply system can be augmented from somewhere else. The other states have said to Nevada, "Do not come to us and ask us to fallow our ranches and fallow our farms, and to do what you are not willing to do yourself. Do not come to us and ask us to look at our water resources, when you will not develop your own water resources that we know you have." This is a litmus test for Nevada, and believe me, the other basin states are watching very carefully what we in Nevada are doing in developing this project. We have been fortunate enough to have our banking agreement with our neighbors in Arizona so that we pay them $350 million, for which they guarantee us 1.2 million acre-feet from their groundwater basin. However, every year I send Kay [Brothers] to the Arizona Groundwater Bank to give them an update on where we are in developing our in-state resources because, as you can imagine, the Legislature, the Governor, the State Representatives, and the Central Arizona Water Conservancy District are adamant that Nevada will not be permanently dependent on Arizona’s water resources. They also have growing demands and challenges in meeting tomorrow’s water needs.

Chair Kirkpatrick:
Thank you, Mrs. Mulroy. I know that I put Mrs. Wilcox on the hot seat when we had some of our rural neighbors here during presentations. For the
Committee's knowledge, we will be seeing several water bills from the interim study.

Assemblyman Bobzien:
I appreciate your presenting to us some of the larger societal implications of what this discussion is about and the importance of water in our State's future. I appreciate your pointing out the Owens Valley example; certainly, you understand that there is a lot of mythology around water. Your challenge is to punch through that and bring a scientific understanding to the table as we consider these issues. Just declaring that "Owens Valley" needs to be relegated to the time of the caveman is not going to make it so. For those of us that have constituents concerned about this very issue, that mythology and the true history of Owens Valley weighs heavily on all of them.

Some of the questions that I have are specifically about where the Water Authority is going, where we are going as a society, and where Nevada is going with water. One of my biggest concerns is the Water Authority's real estate program. I understand the proactive side of your purchases in order to have some mitigation tools available.

Under the stipulation, and in creating the technical review board and doing the scientific monitoring, what are the scenarios? Have they addressed the impact of maybe too much water coming out? What will you do? Will the pipes get shut off?

Kay Brothers, Deputy General Manager, Engineering/Operations, Southern Nevada Water Authority:
In establishing the review panels for the biological working group, we will have a team of scientists that will be able to look at what is happening in the Valley as we extract water. We will have computer models that will simulate future extractions based on the historical responses of the groundwater system. One can predict what may happen, and also predict when one would need to rotate one's well fields. There is a reliable model that can show when to rotate water resources as needed, minimizing the impact to one particular area and allowing it be recharged. By recharging water in certain places, one can minimize the draw downs that occur when pumping water. We are not going to say that extracting groundwater does not reduce the groundwater table, but it can be managed, rotated, and allowed to recover.

Patricia Mulroy:
Our number one source of supply is still going to be the Colorado River. Should there ever be a surplus again, and we can take the surplus, we would then take nothing out of Spring Valley. There are all kinds of tools available.
Assemblyman Bobzien:
What is the total acre footage of water available to you through the real estate purchases that you have made in White Pine County so far, and how much water are you estimating will be coming from this project?

Patricia Mulroy:
We have bought 14,903 acre-feet of surface water, 5,649 acre-feet of groundwater, and 10,619 acre-feet of supplemental water. This water was not acquired to export from Spring Valley. We would have to file another application to export surface water to southern Nevada. That was not the intent of the acquisition. We are looking to develop approximately 125,000 acre-feet out of all six basins. The utilization of that will be to obtain return flow credits. We have been successful in our negotiations during the last several years to generate return flow credits from imported groundwater from the Colorado River. Every acre-foot that we develop and bring to southern Nevada can be multiplied by 1.7, because every drop that comes in will be reused. It is not just a one time use.

Assemblyman Bobzien:
Is the acre-footage from real estate program available for mitigation or recharge?

Patricia Mulroy:
We have substantial water rights for mitigation.

Assemblyman Bobzien:
On the real estate program, you have focused on White Pine County, specific to this project. Getting back to the mythology: is there an active real estate program with a scope that goes beyond White Pine County and a scope that goes beyond Nevada?

Patricia Mulroy:
Outside Nevada, the Southern Nevada Water Authority could not buy anything. It has been suggested that with 85 percent of the water in the Colorado River basin, especially in the lower basin, being utilized for agriculture, that we enter into arrangements with farming districts in California and Arizona. Nevada cannot access that supply without the state of origin forbearing that use. The state of origin will not forebear that use and therein lies the problem. We are precluded from doing that on the Colorado River. This was a large issue in Elko County: were we going to come into Elko County and buy ranches? We have had many people come to us and offer their ranches for sale, but we are not buying, nor will we. We have bought these ranches specifically to manage the
groundwater basin and that is the only reason. We are not buying ranches in order to dry them up and move the water to southern Nevada.

Assemblyman Stewart:
I am from southern Nevada and I love grass, but I put my front lawn into desert landscaping, and I want to commend your people. They did it very quickly and efficiently, and I had no problems.

Can you describe the Snake Valley aquifer system compared to the lower Lincoln County systems? If you continue to have problems getting approval in White Pine County, will you start building the pipeline from Lincoln County to access that water? Has the recent Utah decision adversely affected your plans?

Kay Brothers:
In Spring Valley we have requested from the State Engineer 91,000 acre-feet of water rights. We attended hearings in September, but there has not been a decision issued yet from the State Engineer. In Snake Valley, we have applications for about 50,000 acre-feet, but we are planning on accessing only 25,000 [acre-feet] at this time. That gets us to about 110,000 [acre-feet]. In Cave, Dry, and Delamar Valleys, we are looking at accruing 20,000 to 30,000 acre-feet. This is on the high side, the maximum we could get. As Pat [Mulroy] said, we are anticipating less than that, but this would be the maximum in the applications that we have. In Coyote Spring Valley we actually own 9,000 acre-feet of water rights and have gone to a hearing for an additional 27,000 acre-feet. We have to do an aquifer test and get more information to the State Engineer before he will act on that set of applications.

The flow systems are quite different; Spring Valley is a closed basin, only a little bit leaks out of the southern end through Hamblin into Snake Valley. Water generated in the Snake Range, the mountain range between Spring [Valley] and Snake [Valley], flows east and north to the Great Salt Desert flow system. The White River flow system is what we are seeing for the other valleys: Cave Valley flows to Dry Lake, Dry Lake to Delamar and Coyote Spring Valley. That flow system exits at the Muddy River springs in southern Nevada, right above Glendale. That is a different flow system from the other two.

Patricia Mulroy:
Your question was, if we are not successful in getting water rights in Spring Valley or Snake Valley, would we still develop the Lincoln valley basins? No, at that point we would have real problems. There is not enough water in Lincoln County to make this work.
Assemblyman Stewart:
Have you ever explored the Cold Creek area, the run-off there by Indian Springs?

Patricia Mulroy:
We have applications in Indian Springs Valley. We have not yet asked for any action on those applications.

There was a third part to your question about Utah. If you will remember, two years ago, Congress passed the Lincoln County Lands Act. Embedded in the Lincoln County Lands Act was a requirement that the State of Utah and the State of Nevada must enter into an agreement on the shared basins before water from those basins can be exported out of the basin. Since that time, the State of Nevada and the State of Utah have been in discussions about that. There is a real misconception in the State of Utah that the water in Snake Valley is exclusively the State of Utah’s. The hydrology actually shows the opposite. The majority of the water is on the Nevada side, the majority of the land is on the Utah side. These are very difficult discussions. Recently, Cedar City filed for applications in Hamblin Valley, which we have subsequently protested, because if southern Nevada is going to be under scrutiny in Snake Valley, then Cedar City is going to be under scrutiny in Hamblin Valley. It is a shared basin. Furthermore, the State of Utah is proposing to build a pipeline from Lake Powell into St. George to deliver 130,000 acre-feet of Colorado River water. The minute St. George begins utilizing that water, it increases the likelihood of shortages in the lower basin. Nevada’s position with Utah has been that it cannot make a greater risk of shortage at one end and deny Nevada the right to protect itself on the other. The actions of the Utah State Legislature have grown out of the same concerns that you heard from White Pine County. It is fear and the belief that something is being taken away. In the final analysis, the resolutions and processes that are being put in place in Utah will not prevent an agreement between the two states because if one stops, they both will stop.

Assemblyman Goicoechea:
Good presentation this morning, but I do not need to explain to you the politics in White Pine County. You are talking about a drought scenario impacting the Colorado. Does it not make sense that the same drought would affect the Great Basin? The USGS (United States Geological Survey) reconnaissance I saw showed that when Spring Valley is full, there is up to 16,000 acre-feet that leaks into Snake Valley. I know you are doing a number of test and production wells in Spring Valley; could you give us a thumbnail sketch of that?
Kay Brothers:
There have been many studies over the years. The USGS estimates for the lower part were originally 4,000 acre-feet of leakage. Additional data, I think from the Nichol study, upped it to around 11,000. I do not remember anything quite as high as 16,000, but I do remember 11,000. So there are different numbers for leakage out of that lower area, and that is one reason we are putting test wells in that area. It was a primary concern of the federal agencies—that water that goes out of the south and back into Snake [Valley]. We will better define that gradient with the test wells, it is a matter of physics. There is a gradient and a geology there, and unless you raise the water table greatly, there will be a fixed amount of water going out. So we can monitor and make sure that we do not impact that gradient to a degree that would markedly change what goes out.

Assemblyman Goicoechea:
You currently have at least two test wells in Spring Valley and anticipate drilling four?

Kay Brothers:
Right, we have the third, if not the fourth one complete. We will begin doing the testing on the holes with test pumping equipment soon. The fourth site might not be finished, but we have started on it.

Assemblyman Goicoechea:
Can you give us a time frame for when you anticipate some data coming out of those wells, and when it would be supplied to the State Engineer or White Pine County?

Kay Brothers:
We can brief them any time. We have a packet of data now, but we would like to retain that until we actually do the aquifer testing. However, we already have some data, including the well depths where we encountered water and the amount of hydraulic lifting we have done with air lifting. So we have a package that is not complete, but could share at any time.

Assemblyman Goicoechea:
What are we going to do about the tax base in White Pine County? With your property acquisition, and I have a bill addressing that, if White Pine County cannot or will not come to the table to negotiate that process, what do we do with the $35 million in property taxes that will be lost? I realize that you are agriculture deferred and will continue to be agriculture deferred, but it still has an impact to a county that is already having severe economic hardship. Any thoughts?
Patricia Mulroy:
We stand ready to pay the lost property tax. What is disappointing is, if it comes from the Legislature, it diminishes our ability to sit down and have some productive dialogue with White Pine County. We evaded the issue in some of the other questions when we were talking about Owens Valley. I agree that saying "Trust us, we will not hurt you," is ludicrous. What we are saying is "Take a seat at the table." Put people there who will, as long as we are taking water from Spring Valley, protect the interests of White Pine County into perpetuity. Let us put that trust fund together to make sure that the money is there. Let us put those mechanisms in place so that we will pay the property tax that is lost. There are a lot of opportunities for White Pine County, but we are not asking them to trust us, we are asking them to take a seat at the table and protect themselves.

Assemblyman Settelmeyer:
I greatly appreciate that the Las Vegas Water [District] appreciates the correlation between groundwater and surface water. I would like to see a bill that says that no county has the right to go into another county and take their groundwater because that diminishes their ability to recharge and that is how the Owens Valley fiasco was created. How much, in percentage of the groundwater, is from artesian flow? In reality, once you start pumping, artesian flows quit.

Patricia Mulroy:
If you are asking about the usages that are occurring now in those valleys, the predominance of the agriculture is based on surface flow.

Assemblyman Settelmeyer:
Surface water is made up of two things, run-off from snow and artesian flows; do you have any idea of the breakdown between those two? In my opinion, once you start pumping, you will not see the artesian flows anymore.

Patricia Mulroy:
It depends on where you pump and that is an area of water management. If you look at the lower part of Spring Valley, the water table is much deeper than it is in the upper part of Spring Valley.

Assemblyman Settelmeyer:
Then you do not know the ratio?

Patricia Mulroy:
No, I do not.
Assemblyman Settelmeyer:
There seems to be a large question about the tax base being lost from White Pine County. Was there any desire to not own the land? Why not just buy the water? Why buy the land, even if they wanted to sell it to you?

Patricia Mulroy:
That is for two reasons. First, the rancher was not interested in selling the water without the land. We did not just buy the land; we bought the farm equipment, the cattle, and the sheep, everything that was pertinent to the ranch. Second, we have no intention of destroying the ranching lifestyle in that community. To that end it would have been counterproductive to buy only the water. We do not intend to move the water out of that valley.

Kay Brothers:
Owning the land affords us the opportunity to do additional projects to get more water in high run-off years. The land is part of protecting our investment in the recharge areas.

Assemblyman Settelmeyer:
Maybe you misunderstood. Water is two parts, groundwater and surface water. I was not asking why you bought the ranch in relation to the underground water; I was asking why you did not just buy the underground water period? Leave the farmer with the surface water, allowing him to do his job to replenish the groundwater aquifer.

Kay Brothers:
That was not the way the ranchers wanted to sell.

Assemblyman Beers:
Do you know what the replenishment rate of the hydrographic basins is? How long does it take for water that has left the basin to be replaced?

Kay Brothers:
This is the good thing about Nevada water law. The amount that the State Engineer allocates is based on what is replenished yearly (Perennial Yield). Our water law in Nevada is one of the few in the West that does not allow more water than what is replenished yearly to be taken. We know that the estimate of recharge in Spring Valley is around 100,000 to 120,000 acre-feet a year. The estimate of recharge in Snake Valley is about 100,000 acre-feet a year. That is based on USGS studies and additional studies.
Assemblyman Beers:
How much of that water from these basins is planned to be sent south once the system is up and active?

Kay Brothers:
It would depend on what the State Engineer would allocate to us or give us in permits. If he gave us 80,000 acre-feet of water in Spring Valley, at times we could take 80,000 acre-feet and send it south because we can take that on a yearly basis without impacting the groundwater system markedly. As Pat [Mulroy] said, as you rotate, it affords you the opportunity to rotate the impacts, but when the Colorado River has a surplus again, we cannot take anything and must allow that basin to rest for three or four or five years.

Assemblyman Beers:
You said that you were not changing the ranching lifestyle with the purchases. So, if the ranches have been sold, who is working them?

Patricia Mulroy:
We hired a local who had been working on the ranches. He is managing the ranches for us. We hired Brandon Humphries.

Assemblyman Settelmeyer:
How long do you believe this will solve the issue, considering their current rate of growth? Is this a five-year or 100-year fix?

Patricia Mulroy:
Southern Nevada’s future growth depends on two things, not just bringing in additional resources but also continuing to reduce the amount of water that we use. Our goal is to drive the per capita consumption downward significantly, which will reduce how much each new or existing resident will use.

I spoke earlier about an augmentation study. We are looking at this project to give us 30, 35, or 40 years of water supply. All of us in the Colorado River Basin know that there is a need to develop an augmented supply on a much larger scale for all the Colorado River states. We have already invested $750,000. It is just a matter of how fast those additional opportunities can emerge. Forty or fifty years down the road, you will see Nevada participating in desalters, and you will see more exchanges and cooperative water ventures amongst the states. You will see a different kind of partnership with the country of Mexico. The problem is that those will not happen as quickly as southern Nevada needs them to happen.
Assemblyman Settelmeyer:
Andy [Belanger] talked at quite some length. It would be wise to develop as many different options as possible, including desalination, which is off-line right now, but does exist. Could you give us an update on something: he mentioned the concept of a surge protection reservoir to try to capture a little extra water?

Patricia Mulroy:
We have already entered into that agreement. Over the course of the last several years we have garnered the ability for several projects like that on the Colorado River. First, we will be building what is called the Drop-2 Structure on the All American Canal. It is a reservoir that will prevent over-deliveries to Mexico and will allow the Imperial Irrigation District to divert Colorado River water and store it until they need it. We will be paying for it, and in exchange, we will get a one-time shot of water, somewhere between 300,000 and 400,000 acre-feet, depending on how much we spend. It is a per dollar exchange. We have also gotten the ability to move agricultural waters that we have acquired on the Muddy and Virgin Rivers within the State of Nevada, allowing them to enter Lake Mead. That retired agricultural water that enters Lake Mead and the water at Saddle Island that we intake are the kind of arrangements that we are looking for future additional supply.

Assemblywoman Womack:
What are you doing with the builders and the water permits? Are the developments slowing down?

Patricia Mulroy:
We do not grant water rights, nor do we grant water permits. A builder builds at his own risk; it is no different in any community in southern Nevada. We used to issue will-serve letters. We stopped issuing will-serve letters a long time ago because we found we were creating land with water and land without water. It was creating great disparity among builders. So now, in all of the jurisdictions, once you have paid your fees and you are so far down the road that it cannot be a speculative venture, you can then rely on the water supply. If we were to ever run out, the last guy in will be out of luck. We have some very stiff regional and local connection charges; in fact 57 percent of all capital costs are paid for by connection charges. It is an economic engine. If the developer is serious about building a project, and he invests all the up front capital, and gets all of his approvals from the land use agencies, and begins building, then he has a relative surety of water supply.
Chair Kirkpatrick:
As a native Nevadan, I heard as a kid that the water would run out in 2010. I know you are sitting here today saying the Southern Nevada Water Authority is going to keep this land, but times change and new people come in. How do we guarantee that the land will be owned by the Southern Nevada Water Authority in 50 years and not sold off as it is not needed? Who is going to make sure that the leases are fair market value? That was a very contentious bill last time with local governments. When you own the land, will you be leasing it to another person who will oversee it?

Patricia Mulroy:
We are not leasing the land to him, he is an employee.

Chair Kirkpatrick:
He is an employee of the Southern Nevada Water Authority? That makes me feel better. As far as the land, how do we make sure that the land is owned by the Southern Nevada Water Authority in the future? My concern is that local government will sell or trade off parcels.

Patricia Mulroy:
We are developing a Master Plan for the area, identifying areas for environmental mitigation, and identifying areas for ranching. Before we take that plan to the Water Authority Board for final approval, I will go to White Pine County and look for approval from White Pine County. The day may come when White Pine County does not want us to own the land. I would like to leave those options open. One of the things that makes me very sad about our inability to have a working relationship with White Pine County is that they are not to be at the table for those land use decisions, and they need to be there. It is land in their county, and we would love to have them as a partner in the decision-making process.

Nothing is ever permanent, but it would be rather foolish for a water agency to sell off the tools it needs in order to manage a watershed. I have never known a water agency to do that; it would be penny-wise and pound-foolish.
Chair Kirkpatrick:
Thank you for coming to Carson City.

Any public comment? [There was none. Meeting adjourned 9:05]

RESPECTFULLY SUBMITTED:

Emilie Reafs
Transcribing Secretary

APPROVED BY:

Assemblywoman Marilyn K. Kirkpatrick, Chair

DATE:______________________________
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