

**MINUTES**  
**of the**  
**FOURTH MEETING**  
**of the**  
**WATER AND NATURAL RESOURCES COMMITTEE**

**October 15-16, 2012**  
**Ruidoso**

The fourth meeting of the Water and Natural Resources Committee was called to order by Senator Phil A. Griego, vice chair, at 9:20 a.m. on Monday, October 15, 2012 in the Ruidoso Convention Center in Ruidoso.

**Present**

Sen. Phil A. Griego, Vice Chair  
Rep. Joseph Cervantes, Chair  
Sen. Mary Jane M. Garcia (Oct. 15)  
Rep. Thomas A. Garcia (Oct. 15)  
Rep. William "Bill" J. Gray  
Rep. Dona G. Irwin  
Rep. Larry A. Larrañaga  
Sen. Steven P. Neville  
Rep. Andy Nuñez  
Sen. Gerald Ortiz y Pino  
Sen. Mary Kay Papen (Oct. 15)  
Sen. Sander Rue  
Rep. Don L. Tripp

**Advisory Members**

Rep. Anna M. Crook  
Rep. Nora Espinoza  
Rep. Candy Spence Ezzell  
Sen. Cisco McSorley  
Sen. Nancy Rodriguez  
Sen. Peter Wirth

**Guest Legislators**

Rep. Yvette Herrell (Oct. 15)  
Sen. Carroll H. Leavell (Oct. 16)

**Absent**

Rep. Paul C. Bandy  
Rep. Ray Begaye  
Rep. Brian F. Egolf, Jr.  
Sen. George K. Munoz  
Rep. Mimi Stewart  
Rep. James R.J. Strickler

Sen. Rod Adair  
Sen. Vernon D. Asbill  
Sen. Carlos R. Cisneros  
Sen. Dede Feldman  
Sen. Timothy Z. Jennings  
Rep. Ben Lujan  
Rep. James Roger Madalena  
Rep. Rodolpho "Rudy" S. Martinez  
Rep. Bill B. O'Neill  
Sen. John C. Ryan  
Rep. Henry Kiki Saavedra

(Attendance dates are noted for those members not present for the entire meeting.)

**Staff**

Jon Boller, Legislative Council Service (LCS)  
Jeret Fleetwood, LCS  
Gordon Meeks, LCS

**Guests**

The guest list is in the meeting file.

**Handouts**

Handouts and other written testimony can be found in the meeting file or on the LCS web site.

**Monday, October 15**

Senator Griego began the meeting by having members of the committee and audience introduce themselves.

Gloria Sayers, councilor for the Village of Ruidoso, Sam Hammonds, mayor of Capitan, and former Senator Clinton D. Harden, Jr., welcomed the committee to Ruidoso and thanked them for coming.

**Potable Water for Small and Rural Communities**

Matthew Holmes, executive director of the New Mexico Rural Water Association (NMRWA), outlined the mission, governance and programs of the NMRWA. He began by explaining that the association tries to provide the highest quality training and technical assistance to rural water and wastewater utilities throughout New Mexico, and he discussed some of the training programs available to community and private utility operators and board members. He also noted that available technology tends to focus on large water systems and that, whenever possible, the NMRWA tries to build partnerships to help solve some of the problems facing smaller water systems. Small water utilities, he said, often have a difficult time finding small, affordable and scalable technology to provide safe, clean drinking water. Mr. Holmes pointed out a partnership that the NMRWA developed with a New Mexico company called MIOX and of which it is particularly proud.

Kyle Lee of MIOX provided the committee with an overview of technology that the company has developed to help purify water and make it suitable for drinking. Mr. Lee explained that while more traditional water treatments use chemicals such as chlorine, MIOX has developed a combination of salt, water and electricity that is actually cheaper and more efficient than chemical treatment. He also indicated that the technology was developed by Los Alamos Technical Associates as part of a project for the U.S. Navy. Mr. Lee said that the company is 20 years old, is based in New Mexico and distributes its products worldwide, with 100 percent of its manufacturing and testing done in Albuquerque.

Mr. Holmes provided the committee with more information regarding the NMRWA. He explained that the association is funded through membership fees and federal funds. He indicated that while the NMRWA offered free training for water system operators in the past, the association now charges a fee for the training. Mr. Holmes also discussed the New Mexico Water/Wastewater Agency Response Network, explaining that it is modeled on agreements in other states that allow water systems to help each other during emergencies. He noted that the water sector, particularly in New Mexico, is behind in emergency preparedness. Finally, Mr. Holmes noted some of the federal funding that the NMRWA has helped to secure for New Mexico, such as funds for the New Mexico Environmental Finance Center. Mr. Holmes also requested that there be an accounting done of the Drinking Water State Revolving Loan Fund and the use of the state's water conservation fee.

Questions and comments from the committee members included:

- smaller MIOX systems are designed to handle about 100 hookups, while much larger, city-scale systems are available;
- smaller MIOX systems are designed to be operated with minimal training, while larger ones require two days of training;
- Los Alamos Technical Associates is a contractor with Los Alamos National Laboratory;
- the U.S. Navy uses reverse osmosis systems, but because those systems can leave biofilm buildup, MIOX is also used;
- cyberattacks are a legitimate concern for water and other utilities, most of which use some type of internet connection in their daily operations;
- the NMRWA's plan for attacks is to deter them if possible, detect them as soon as they occur and respond rapidly to them;
- MIOX systems have been in use in some water systems for about 15 years;
- table salt is actually the preferred salt for MIOX systems;
- a large number of variables, such as the initial price of MIOX units, dictate whether MIOX makes a suitable replacement for large chlorine tanks and regular chlorine injections;
- some commercial applications are possible for MIOX systems, particularly in oil and gas production;
- sodium production in the MIOX process is minimal; and
- there are ways for small communities and businesses to find out about MIOX and its products.

### **Implementation of Changes to the Geothermal Resources Conservation Act**

Nicholas Goodman, chief executive officer of Cyrq Energy Incorporated, and Chuck Smiley, Lightning Dock site manager for Cyrq, briefed the committee on a geothermal power project the company is developing in southwestern New Mexico. They began by providing the committee with an overview of geothermal power, explaining that the energy source is used in 24 countries around the world, with the United States having the largest geothermal capacity at 3,187 megawatts. Mr. Goodman and Mr. Smiley went on to note that New Mexico sits atop a world-class geothermal resource but currently produces no geothermal energy. They also

discussed geothermal energy as a renewable resource capable of producing baseload capacity, which most other renewable sources cannot. Mr. Goodman and Mr. Smiley explained that the Lightning Dock facility, located near Lordsburg, is a closed "binary" geothermal system, which features fluid with a low boiling point being pumped at high pressure through a heat exchanger to vaporize and propel a turbine. They also provided the committee with a time line for the Lightning Dock facility, noting that several wells have already been dug and should produce power by the end of 2013. Mr. Goodman and Mr. Smiley indicated that the project would generate about 700 construction jobs and 10 other full-time jobs and would have an economic impact of about \$11 million a year.

Questions and comments by committee members included:

- the estimated output of the Lightning Dock facility will be between 11 and 27 megawatts;
- the location for the Lightning Dock facility was selected because it is closest to the resource;
- another potential resource is located near Rio Rancho, but it is much deeper and riskier to invest in;
- Lightning Dock is regulated by the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department (EMNRD), which handles both extraction industries and renewable energy;
- monitoring wells are shallower wells drilled to the depth of the water table;
- Cyrq shares information with both the OCD and the Office of the State Engineer (OSE);
- royalties are paid to the U.S. Bureau of Land Management (BLM), which automatically pays 50 percent back to the state;
- if the Lightning Dock facility only manages to produce 11 megawatts of power, the economics are somewhat competitive for Cyrq, but the economics improve drastically if capacity is expanded, mostly because of the value of the resource as a base load;
- tax credits for renewable energy tend to impose artificial time lines on production that are not in line with financing cycles of renewable energy facilities, making financing of those facilities more difficult;
- continuation of wind production tax credits would help with geothermal production;
- re-injection of the binary fluid in geothermal systems too close to the heat source eventually reduces the temperature of the heat source;
- the New Mexico Renewable Energy Transmission Authority has played a vital role in providing transmission capacity for projects in the state;
- the Lightning Dock facility is Cyrq's primary focus at the moment, although the company does own leases in Oregon and Nevada and in Indonesia;
- horizontal drilling is less effective for geothermal resources than it is in oil and gas development; and
- Cyrq is working with the State Land Office (SLO) on lease and royalty issues and may propose legislation to set royalties to match the federal gross rate, which is much easier to calculate and administer, rather than the current net rate that applies to state lands.

### **San Agustin Basin Ground Water Appropriation Application**

Lynn Kennedy, protestant to the San Agustin Basin Ground Water Appropriation application, explained that the application is to pump ground water from 35 wells for 24 hours a day, seven days a week, from the same aquifer that many of the residents in the area depend on for drinking water and livestock. Ms. Kennedy noted that while the OSE had turned down the application, an appeal was pending in district court. She also pointed out that the applicant is an out-of-state corporation that likely has little interest in area residents or the numerous people who visit the area for hunting and tourism.

Anita Hand, another protestant, said that her property is adjacent to the Plains of San Agustin property and that her well would almost certainly be affected by the deeper wells proposed in the application. She also noted that Catron and Socorro counties passed declarations of a public welfare policy for retaining water use and conservation.

Eileen Dodds, another protestant, said that water is closely tied to life in the Southwest and questioned whether that is a right or a privilege.

Bruce Fredericks, an attorney for the New Mexico Environmental Law Center, explained that he represents several of the people protesting the Augustin Plains Ranch application. He noted that the application seeks to use water for every purpose under the sun in a large geographic area twice the size of New Jersey, all without identifying a particular place or purpose of use for the water. Mr. Fredericks also noted that most states that use prior appropriation water law have case law that prohibits such speculation in the water market, and in some cases, statutes prohibit such practices.

Joe Thompson, consultant for the Augustin Plains Ranch, introduced three members of the group applying to drill the wells.

Bob Bowcok, technical adviser of the project, said that the Plains of San Agustin are a closed basin and that about 50 million acre-feet of water are available in the underlying aquifer to serve the people of New Mexico. He likened the aquifer to a bathtub and explained that while it is full now, drilling would deplete the water in that bathtub, but it could be filled back up by digging holes in certain areas to stimulate artificial recharge. Mr. Bowcock noted that rainwater that could be used for artificial recharge is currently being lost to evaporation. He said that by approving the well application and tapping into the available water resources in the aquifer, resource planners across the state could engage in real, conjunctive water use.

Michel Jichlinski, program manager, explained that it is not possible to take all the available water in the aquifer. Instead, he noted that the vision of the Augustin Plains Ranch is for a public-private partnership. Mr. Jichlinski also indicated that it is possible to prevent nearby wells, such as Ms. Hand's, from being affected by drilling activities. He said that the vision is to have the private sector provide the funding for development of the water, which would involve no government debt or cost to taxpayers and that this amounts to a good opportunity for New Mexico.

Mr. Thompson added that it is worth finding out if the applicants are right that the water in the aquifer can be developed using private funds without affecting the wells of other residents in the area.

Questions and comments from committee members included:

- the OSE found that the application did not identify the water user nor did the applicant appear ready to put the water to beneficial use;
- about 100 individuals and companies have formally protested the application;
- the Augustin Basin is physically closed, not legally closed;
- the Augustin Plains Ranch is about 20,000 acres, is located about two miles east of Datil and is not irrigated, but it does have some stock tanks on it;
- artificial recharge has worked in Chino, California;
- granting the application would turn water law on its head;
- the OSE has said that other ranches in New Mexico are not entitled to all of the water underneath them;
- there is a difference between the average rainfall in Chino, California, and the average rainfall in Catron County;
- it is possible for this application to set a precedent in New Mexico and lead other developers to do the same thing;
- there are eminent domain issues regarding any pipeline used to transfer water from the ranch to somewhere else in the state; and
- Augustin Plains Ranch hopes to keep some water for local use.

### **Report on Local Effects of the Little Bear Fire**

Debbie Lee, Ruidoso village manager, explained that while the Little Bear fire occurred in Lincoln County, mostly out of the jurisdiction of the Village of Ruidoso, the fire has had a significant impact on the village and serves as an example of various government entities coming together to address a problem. She explained that the fire burned a large portion of the watershed in the area, affecting the complex system that Ruidoso uses to provide water to its residents and that includes three surface water reservoirs as well as some ground water resources. Ms. Lee explained that one reservoir has become unusable after it filled with sludge from post-fire runoff, and while the village understands that it will have to convert to wells to deliver water, it will take time and money to do so. She indicated that it will cost about \$14.8 million over the next four years to accomplish all of the village's water supply needs. Ms. Lee emphasized that it would be easier to manage the aftermath of the fire if this were the first disaster Ruidoso has faced in recent years; instead, this is the fourth disaster in five years.

Justin King, director of public works for the Village of Ruidoso, provided the committee with an overview of the damage caused by the Little Bear fire to the various water sources for the village and some of the efforts undertaken to address the damage. He noted that the Alto Reservoir duck pond, which is actually a sediment reservoir, has almost completely filled with sediment from the fire and that while 90,000 cubic yards of sediment have been removed, the pond has become anaerobic and is unusable. Mr. King also indicated that the main Alto Reservoir had to be lined with rock to reinforce it in case flooding caused the dam to breach.

Mr. King went on to explain that the Eagle Creek drainage will have to be cleared of woody debris, which will cost about \$300,000. He also noted that 100 percent of the surface water in the Eagle Creek drainage is compromised, forcing the village to rely on ground water resources. However, he explained that because water has to be pumped up and down canyons, a complex pressure reduction system has been in use in the village for some time but that additional pressure valves and zones would have to be installed and interconnected.

Mr. King also noted that the Village of Ruidoso is currently under a stage five water emergency, which means no extra watering, causing additional economic impact to the area. He also discussed some of the other work that needs to take place to address water issues in the area, such as relocation of a bypass line for Eagle Creek, well rehabilitation, water treatment systems and development of alternative water sources.

Nita Taylor, Lincoln County manager, provided the committee with the basic facts regarding the Little Bear fire. She said that 44,000 acres were burned and 224 residences were destroyed in the fire. She also explained that the success of fire response efforts, both during and after the fire, relied on partnerships between federal, state and local governments and volunteers. For example, Ms. Taylor noted, immediately after the fire, the Watershed Protection and Restoration Team coordinated the efforts of 27 agencies and organizations to help assess immediate and future problems caused by fire damage. Volunteers put in over 18,000 hours in response to the fire. She also indicated that Lincoln County has been authorized as the fiscal agent for all of the county and local governments affected by the fire and has provided so far about \$1.4 million in funding up front to address problems caused by the fire.

Jackie Powell, Lincoln County commissioner, also provided the committee with testimony regarding the fire. She noted that the community was still dealing with the White fire, which occurred in 2011. Ms. Powell also indicated that a vast amount of silt covered much of the area affected by both fires, pointing out that it has almost completely filled in many of the 92 acequias in the area. She explained that the legislature can help all New Mexico counties by learning about the incident command system and perhaps providing some funding for each county to develop incident command systems. Ms. Powell also emphasized that some policies need to be changed, in particular those of the U.S. Forest Service (USFS), which does not allow for enough input at the local level.

Kathryn Minter, Lincoln County commissioner, explained that the BLM and the USFS are thinning as much of the watershed as they can and that a matching funds program exists to do

so. She also noted that if homeowners are educated about forest thinning, they are likely to do the right thing, pointing out that while only 98 of the 227 homes that burned during the Little Bear fire were actually primary residences, many of those who did lose second homes are not planning on coming back to Ruidoso. Ms. Minter echoed the comments of Ms. Powell that some of the policies of the USFS do not make sense but that local officials would stand by Dave Warnack, their local USFS ranger, anytime.

Mr. Warnack explained that while an "us against them" mentality has developed between some residents and the USFS, the reality is that everyone is involved in forest health and fire issues and that the only way to get things done is to work together. He also noted that some of the bureaucratic problems discussed by residents are not as pronounced as they suggest, citing as an example the seeding of 19,000 acres and mulching of 11,000 acres since the fire. Mr. Warnack also indicated that the USFS is working closely with both the Village of Ruidoso and Ski Apache to try to repair damage done by the fire.

Questions and comments by committee members included:

- the silt removed from reservoirs is deposited at an old Lincoln County landfill site;
- Ruidoso's wastewater treatment plant is completed and functioning;
- an agreement is in place between Alamogordo and Holloman Air Force Base for water;
- one identified emergency need is for radio equipment because mobile phone service went down during the fire;
- there are problems with various USFS policies;
- the potential cost to taxpayers of firefighting efforts for wildfires versus forest thinning and treatment;
- driving factors in the severity of the Little Bear fire were forest conditions, drought, a hard freeze the winter before and high winds;
- tying domestic wells to city wells will not work, mostly because there is not sufficient benefit given the costs;
- while many small fires will likely burn themselves out, firefighting agencies still try to respond;
- searches for fires are based on lightning maps rather than smoke reports;
- at least three fire towers in the area are manned constantly during fire season; and
- while cooperation between government entities is not mandated, many of them are cooperating anyway.

### **Wildfire Mitigation and Forest and Watershed Management**

Tony Delfin, state forester with the EMNRD, listed the many catastrophic wildfires in New Mexico over the past few years, noting that the 2011-2012 period was the worst wildfire season on record. He explained that about 22.5 million acres in New Mexico have burned over the past few years, with the two biggest fires being the Las Conchas and Whitewater Baldy fires. He said that the Little Bear fire was the most destructive in terms of burned structures. Mr. Delfin pointed out that Governor Susana Martinez spent a week in Ruidoso monitoring the Little Bear fire. He also noted that four Federal Emergency Management Administration grants had

been given to New Mexico for the Whitewater Baldy, Blanco, Romero and Little Bear fires.

Mr. Delfin also discussed the statewide fire situation, which he noted does not have a good outlook. He also noted that forests in the Southwest are experiencing more drought stress now than at any time since the 1200s and 1500s. However, he pointed out that there are opportunities to treat forests and watersheds, noting that the Little Bear fire is an example of forest treatments being effective. Mr. Delfin indicated that the Forestry Division of the EMNRD has used \$20.5 million in federal funds to treat 17,453 acres of nonfederal lands and another \$1.9 million in state funds to treat 3,000 acres of state lands, explaining that thinning, slash reduction and maintenance seem to be the most effective forest treatments.

Bob Leaverton, Southwestern Region Fire and Aviation Management director for the USFS, explained that the massive fires that have burned in the Southwest over the past two years are completely different from what was faced over the preceding 40 years. The Southwest is 10 to 15 years into the current drought, he explained, noting that fire season comes faster and lasts longer than ever before and that the fires are much larger, driven by drought conditions, warmer ambient temperatures and fuel in the form of forests that have gone untreated for decades. Mr. Leaverton said that everyone will have to work together to address forest conditions, including thinning them and reengaging the private timber industry. He pointed out that while current economic conditions are not favorable to the timber industry, opportunities still exist.

Mr. Leaverton also discussed the practice of controlled burns in forests, explaining that it is an effective way of thinning the fuel load and addressing canopy closure. However, he indicated that controlled burns create smoke to which nearby residents, particularly those with sensitivities to smoke, often object. He cited as an example of dealing with the issue that during a controlled burn in Flagstaff, Phoenix hotels offered free rooms to those with smoke sensitivities.

Andrew Egan, director, New Mexico Forest and Watershed Restoration Institute, noted that partnerships in dealing with post-fire issues are critical, particularly when it comes to flooding. However, he pointed out that when possible, it is best to have partnerships in place beforehand. Mr. Egan also stressed the need to get private industry involved in the thinning process, given the immense amount of acreage in need of treatment and the limited amount of federal, state and local money available to pay for treatment.

Brent Racher, president, New Mexico Forest Industries Association, explained that research has shown that forest treatments are an effective tool in active forest management. However, he explained that neither the state nor the federal government has the billions of dollars necessary to treat forests on the massive scale they require. Instead, Mr. Racher stressed that it is vital that forest treatments be market-driven and that markets must be diversified because 60 percent to 70 percent of forest products often have no value except as fuel. He also noted that public-private partnerships, especially in the form of government funding to help with planning and prioritization, are necessary to implement an effective forest treatment program. The committee requested staff to work with Mr. Racher on legislation that he thought would help

address the issue.

Mark Doth, Lincoln County commissioner, said that Ruidoso is the poster child for what can go wrong as a result of catastrophic fires and their aftermath. He also noted that fire issues are not going away, as the Ruidoso area has experienced at least seven or eight fires in the last 20 years. Mr. Doth also discussed an interstate compact with the federal government and western states regarding land management. He said Lincoln County is trying to use the little amount of money it has on forest thinning and other related projects. Mr. Doth went on to note that New Mexico is not the only western state facing this issue, and he listed a number of bills that Congress has considered but not passed in recent years that address healthy forests. He explained that small-diameter trees need to be dealt with, and he emphasized that it is much easier to deal with these issues up front than it is to pay for the aftermath of a catastrophic wildfire.

Questions and comments from committee members included:

- waiting for private industry to help deal with forest health could mean waiting for a long time;
- while prescribed burns may present some health issues, ash falling on Albuquerque from massive fires in Arizona has presented an even larger health concern;
- some land grants appear to have good firewood harvesting programs;
- federal standards have stalled many large-scale forest health and firewood harvesting programs;
- forest health plans should be looking at least 50 years into the future;
- some wilderness areas are simply too steep and rugged to be able to accommodate treatments easily;
- smaller forest health projects are fine, but a need exists for bigger thinking; and
- each forest has slightly different policies regarding dead and downed trees, but for the most part, free permits are available to harvest them.

### **Public Comment**

Gene Colton of Capitan expressed concerns about the availability of water during droughts. He noted that research conducted by the national laboratories suggests that nearby villages can only sustain a little more growth. He also suggested that the state develop and mandate plans addressing water conservation and coordination of rural water supplies.

Dr. Bernhard Reimann of Capitan explained that he has studied water for most of his life, most recently as an environmental adviser to the Village of Capitan. He explained that there are some contamination issues with area water supplies, noting that while he helped design a constructive wetlands system to mitigate some contamination, such a system cannot handle a sudden influx of newcomers. Dr. Reimann acknowledged that while some mismanagement of water resources has occurred, failure to investigate what water resources are available and unchecked growth will only serve to worsen the area's water issues.

Ellen Wedum, whose land is adjacent to the Lincoln National Forest, said some of the

damage to structures during the Little Bear fire could have been prevented by allowing defensive thinning up to 300 feet into adjoining forest lands. She also noted that policymakers in Washington, D.C., do not understand the state of forests in New Mexico, emphasizing that local solutions are necessary. She also pointed out that criticism of the USFS is a bit unfair as its budget has been cut significantly in recent years.

Roger Mallin, representing the biomass industry, explained that a biomass plant near Holloman Air Force Base was going to be discussed by the Public Regulation Commission and that long-term forest stewardship could go toward providing the plant with fuel.

Dan Bryant, county attorney for Otero County, lost his home to the Little Bear fire. He explained that while bureaucracies tend to move slowly, New Mexico is empowered to sit with the USFS at the time it develops plans, but New Mexico has never been at that table. He said that he sat on an identification team for an endangered butterfly in the area and that the butterfly population is coming back, which has avoided placement of the butterfly on the endangered species. He stressed that state and local agencies must be at the table when the USFS is developing its plans or nothing will change.

## **Tuesday, October 16**

### **Report on Jal Basin Negotiations with Midland, Texas**

Senator Leavell explained to the committee that the city of Jal has relied on the 13-square-mile Jal basin for water since 1961. However, he noted that the aquifer the community relies on extends into Texas and that prolonged drought has led the city of Midland, Texas, to initiate plans to pump ground water out of the aquifer into a 48-inch, 70-mile-long pipeline to Midland. Senator Leavell indicated that Midland plans to pump about 15 million to 20 million gallons a day, which the aquifer cannot sustain. He said that the two communities were involved in ongoing talks, and while Midland has not yet said no to any proposals, it appears that Jal may eventually have to buy water from Midland.

Curtis Schrader, Jal city manager, explained that while Jal has received a lot of support from Congressman Steve Pearce and Senator Tom Udall, there are no federal laws or interstate compacts that address ground water. He went on to provide a brief history of the situation, noting that Midland conducted a study in 2005 that identified water in the aquifer as a potential source but did not inform Jal or two small Texas communities of Midland's plans. Mr. Schrader also discussed talks, between Jal and Midland, explaining that while a number of options have been discussed, such as buffer zones and a cap on how much water can be pumped each day, it appears that Jal may eventually have to tap into Midland's pipeline and buy water. He did note that he and the Midland city manager are still working on a fair price, but he pointed out that the citizens of Jal would eventually have to bear the cost of buying water from Midland. Mr. Schrader explained that while Jal is not seeking any type of legal help from the legislature, the city is hoping for more financial support.

Scott Verhines, state engineer, explained that there are no easy answers in the situation.

He noted that the Texas Supreme Court had recently reaffirmed the rule of capture, which allows well users to pump as much ground water as they can. Mr. Verhines said that the OSE has been working with Jal since Senator Leavell informed him of the issue in March 2012 and that the OSE recognizes the need to monitor the aquifer.

Questions and comments from committee members included:

- the aquifer represents a somewhat long-term water supply, even with modest drawdown and recharge;
- some combination of strategies might help solve the two communities' problems, but Midland's preference does not represent what is best for Jal;
- if a solution cannot be worked out with Midland, Jal will have to turn to desalination, and the city has already toured the desalination facility in Alamogordo;
- similar concerns exist over Texas' rule of capture for Clovis and other eastern New Mexico cities;
- New Mexico communities will have to negotiate with Texas, as they have little ability to influence state law there;
- the federal government is not involved in the process to this point, although other states are dealing with federal assertion over ground water; and
- a discussion about the water and the federal commerce clause.

### **House Joint Memorial 10 Report on Wildlife Corridors**

Coleman Burnett, Department of Transportation (NMDOT), and Mark Watson, Department of Game and Fish, provided the committee with a report on House Joint Memorial 10 from the 2011 session, which was developed by the Wild Friends and which asks that a pilot project be conducted to try to reduce the number of collisions between cars and large animals. More than 7,000 such collisions have been reported over the past five years, they said, with as many as another 7,000 unreported because collisions with pronghorn antelope often are not reported at all. They explained that five roads have been considered for the project based on the number of collisions, with a stretch of U.S. 64 between Tierra Amarilla and Chama selected for the pilot project. Ms. Burnett and Mr. Watson explained that the project consists of installing signs with flashing lights and of a vegetation management program. Other recommendations from the pilot project include implementation of a wildlife corridor speeding law, reconvening a critical mass workshop, investigating federal funding for wildlife crossing, best management practices along certain roads and using other collision mitigation strategies as highway improvement projects are implemented.

Questions and comments from committee members included:

- the best use of fencing is to push wildlife to safer crossing areas;
- drought conditions seem to increase collisions;
- NMDOT designation of special speed zones;
- animal collision incident data do not contain data on tourists versus locals;
- data suggest that slower speeds have a significant impact on lowering collision rates;
- the study used existing funding on fencing and other project costs, but it does not have funding to extend the program to other roads at this time; and

- bumper-mounted wildlife deterrent devices are not effective.

### **SLO Initiatives on State Land Management**

Ray Powell, state land commissioner, provided the committee with an overview of the operations of the SLO. He discussed the various revenue sources and beneficiaries of funds distributed annually by the SLO, particularly for public education. Commissioner Powell also discussed some of the other projects the SLO has worked on, such as the Sandia Science and Technology Park and Mesa del Sol. He also noted some of the agreements the SLO has entered into, such as one with the Melrose Bombing Range, with 13 field district resource managers handling some of the day-to-day operations. Commissioner Powell went on to discuss some of the work done by his office to clean up problems on state trust lands, particularly the "river of tires" and a massive chicken manure dumpsite. Mr. Powell asked for support from the legislature on his budget and explained that it is very difficult for the office to keep employees because the SLO has had a flat budget for eight years, so staff members have not gotten raises and consequently are being lured away by other agencies and the private sector. Finally, Commissioner Powell noted some of the strategic goals of the SLO, such as generating optimum revenues and managing them soundly, developing renewable energy resources and managing natural and cultural resources for future generations.

Questions and comments from committee members included:

- most of the SLO's money is generated by oil and gas leases on state lands;
- endangered species issues require working together to use resources in a responsible way;
- new technology may help the oil and gas industry and the potash industry work together on saltwater disposal;
- feral pig issues in New Mexico;
- costs of cleanup of state trust lands;
- budget requests for the SLO; and
- speculators appear to have benefited from deals cut by the SLO in recent years, but many of those leases are now expiring, so the SLO will be able to enter into new leases that actually benefit the taxpayers of New Mexico.

There being no further business, the committee adjourned at 12:15 p.m.