

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

**September 5-6, 2017
Grant County Business and Conference Center
Silver City**

The third meeting of the Water and Natural Resources Committee was called to order by Senator Joseph Cervantes, chair, on September 5, 2017 at 9:30 a.m. in the Grant County Business and Conference Center in Silver City.

Present

Sen. Joseph Cervantes, Chair
Rep. Bealquin Bill Gomez, Co-Vice Chair
Rep. Matthew McQueen, Co-Vice Chair
Rep. Gail Armstrong
Rep. Paul C. Bandy
Rep. Rodolpho "Rudy" S. Martinez
Sen. Sander Rue
Rep. Nathan P. Small
Sen. Jeff Steinborn
Sen. Mimi Stewart
Rep. James R.J. Strickler
Rep. Carl Trujillo (9/5)
Sen. Pat Woods
Rep. Bob Wooley

Advisory Members

Sen. Craig W. Brandt
Rep. Candy Spence Ezzell
Rep. Harry Garcia (9/5)
Rep. D. Wonda Johnson
Rep. Larry A. Larrañaga
Rep. Rick Little
Rep. Bill McCamley
Sen. Gerald Ortiz y Pino (9/5)
Sen. Mary Kay Papen (9/5)
Rep. Debbie A. Rodella
Rep. Angelica Rubio
Sen. Peter Wirth

Absent

Rep. Randal S. Crowder
Rep. Derrick J. Lente
Sen. Cliff R. Pirtle
Sen. Benny Shendo, Jr.

Sen. Pete Campos
Sen. Carlos R. Cisneros
Rep. Sharon Clahchischilliage
Rep. George Dodge, Jr.
Rep. Rebecca Dow
Rep. Brian Egolf
Sen. Ron Griggs
Rep. Yvette Herrell
Sen. Stuart Ingle
Sen. Gay G. Kernan
Sen. Carroll H. Leavell
Sen. Linda M. Lopez
Rep. Sarah Maestas Barnes
Rep. Javier Martínez

Sen. Cisco McSorley
Sen. Steven P. Neville
Rep. Greg Nibert
Sen. Nancy Rodriguez
Rep. Patricio Ruiloba
Rep. Tomás E. Salazar
Sen. William E. Sharer
Sen. John Arthur Smith

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

Staff

Jon Boller, Legislative Council Service (LCS)
Shawna Casebier, LCS
Jeret Fleetwood, LCS
Maria Alaena Romero, LCS

Guests

The guest list is in the original meeting file.

Handouts

Handouts and other written testimony can be found in the meeting file or on the New Mexico Legislature's website at www.nmlegis.gov.

Tuesday, September 5

Call to Order and Welcome

Senator Howie C. Morales welcomed the committee to Silver City and thanked committee members for coming to southwestern New Mexico. He briefly discussed some of the water-related issues, noting efforts made by local communities to conserve water with an eye toward regionalizing water supply systems.

Several county commissioners echoed Senator Morales' comments, while also noting the importance of the mining industry to the local economy.

Salt Cedar Eradication and the Salt Cedar Beetle

Carol Sutherland, extension entomologist, New Mexico State University (NMSU), and state entomologist, New Mexico Department of Agriculture, provided the committee with an overview of the proliferation of various non-native phreatophyte species, such as the salt cedar, along New Mexico waterways, noting that they tend to consume significant amounts of water, which can impact surface water flows and displace native species. She went on to discuss various means of phreatophyte control, noting that the use of several species of the *Diorhabda* beetle has proven particularly effective in attacking salt cedar, although mechanical removal of

dead trees is still necessary. Dr. Sutherland explained that four *Diorhabda* species have been introduced in the western United States, and even though New Mexico was denied release permits for the beetles, all four species that were released in neighboring states have migrated to New Mexico. The resulting die-off of salt cedar on certain stretches of the Rio Grande is particularly noticeable, she said, with large swaths of orange-colored trees lining the river. These trees may not be completely dead, she explained, although after five to seven years of attack by the beetles, they most likely will die off. Eradication of salt cedar presents other problems, such as fire risk and habitat loss, she noted.

Nyleen Troxel Stowe, director of special projects for the Socorro Soil and Water Conservation District, said that although *Diorhabda* beetles are now widely spread throughout the state and have defoliated trees, they have not yet caused significant mortality. Chemical control is no longer feasible, she explained, since herbicides cannot enter the trees in sufficient quantity due to defoliation caused by the beetles, and the beetles are fatally sensitive to herbicides. Mechanical treatment is still necessary, she said, and the Socorro Soil and Water Conservation District has worked with several landowners to reclaim farmland from large stands of salt cedar. Ms. Troxel Stowe gave several examples of projects along the Rio Grande where the district has worked with local farmers on reclamation projects.

Judy Bock and Judith McCollaum, Carlsbad Soil and Water Conservation District, outlined salt cedar treatment efforts on the Pecos River in southeastern New Mexico. They explained that the Pecos River Non-Native Phreatophyte Management Program began in the late 1990s, and from 2002 to 2006, approximately 18,000 acres were treated with aerial application of herbicides. The Carlsbad Soil and Water Conservation District has continued with mechanical treatments for the removal of salt cedar since 2006, and it continues to restore riparian habitat along the Pecos River and its tributaries, they explained.

Questions and comments from the committee included:

- beetles take about seven years to kill a tree, and they do not attack other plant species;
- in about 20 years, land near the river bank currently populated by salt cedar and other invasive species should see the return of native plant species;
- salt cedar and other invasive species may be used nearby for firewood, but the material is difficult to transport long distances as an economically viable fuel or mulch source;
- some landowners along the Pecos River have been reluctant to participate in salt cedar removal projects; and
- bird nesting season, particularly for the southwestern willow flycatcher (a protected species), and other habitat issues complicate treatment of some areas at certain times of the year.

Regional and State Water Plan Progress

Lucia Sanchez, water planning program manager, Interstate Stream Commission (ISC), provided the committee with an update on the regional and state water planning process. She began with an overview of the process and its importance, noting the benefits of water planning and acknowledging past planning efforts. Ms. Sanchez went on to discuss both the previous and current processes for developing water plans and how they relate to development of a state water plan for 2018. She pointed out the involvement of various stakeholders at multiple points in the process, as well as collaborative efforts between the ISC and various other entities throughout the state.

Priscilla Lucero, executive director, Southwest New Mexico Council of Governments, echoed Ms. Sanchez's comments, emphasizing the importance of updating plans and projects as the process continues, particularly as a means of showing that projects have been carefully planned.

Questions and comments from the committee included:

- funding issues associated with the water planning process and the importance of providing adequate funding for it;
- the importance of input from both governmental agencies and nongovernmental stakeholders in developing regional plans;
- the location of steering committee meetings;
- participation of federal agencies in the water plan development process; and
- some transfers of water rights, particularly from one basin to another, could complicate the water planning process.

Southwestern New Mexico Ground Water Hydrogeology Update; Statewide Water Assessment and Water Budget

Stacy Timmons, hydrogeologist and aquifer mapping program manager, New Mexico Bureau of Geology and Mineral Resources (NMBG), New Mexico Institute of Mining and Technology, provided the committee with an overview of the aquifer mapping process, pointing out its non-regulatory approach and unbiased interpretation of impartial data. She went on to discuss some of the projects the aquifer mapping program has been involved with in 2017, including long-term monitoring of the Animas River aquifer and the San Agustin Plains aquifer and ground-water-level monitoring in La Cienega. Ms. Timmons also discussed the hydrogeology of southwest New Mexico, noting that the geologic complexity of the region makes it difficult to accurately estimate both available ground water resources and surface water storage options.

The NMBG, in conjunction with the Water Resources Research Institute (WRRI) at NMSU, is conducting a statewide water assessment, part of which involves tracking ground water levels and storage changes. For example, in the Mimbres Basin, there has been a two million acre-foot storage loss since the 1960s, with a ground water level decline of more than 100

feet from 1910 to 1990 in some wells, she explained. However, she noted, declines in ground water levels are variable in the Mimbres Basin, with some areas more stressed than others. Continued monitoring is vital to understanding the effects of climate change on recharge to local aquifers and consequent increases in demand for ground water due to predicted decreases in the availability of surface water, she said.

Sam Fernald, director, WRRI, NMSU, explained that the WRRI has compiled available water data and developed an interactive visualization tool, which is publicly available, to help users compare multiple water use variables and scenarios. He said that conducting a statewide water assessment is critical for proper planning for the use of water resources in the state. Developing a statewide water budget involves tracking and combining a number of data sources and assessments from state and federal agencies, universities and other entities across the state, he explained. Data sources include ground water level and storage changes, ground water recharge assessments, remotely sensed evapotranspiration and precipitation assessments, surface water flow statistics, water use reports and the statewide systems dynamic water budget.

Questions and comments from the committee included:

- data quality issues complicate analysis of ground water in the Mesilla Basin;
- data outreach specialists could help decision makers, including the legislature, use available mapping data to inform decisions;
- some funding for the WRRI was vetoed by the governor over concerns regarding funding sources;
- a "data gap" exists regarding the quality of brackish water in aquifers;
- the potential effect of watershed restoration on available surface water resources and recharge of ground water in aquifers;
- there are indicators of long-term deficits in some aquifers, suggesting that rainfall alone is not sufficient to recharge them;
- the availability of tools and training to the public could increase citizen involvement in aquifer mapping programs and prove useful use in decision making; and
- aquifer recharge is driven mostly by snowpack levels and their effect on surface flows.

Proposed Transfer of Mesilla Valley Bosque State Park to the Department of Game and Fish

Kevin Bixby, executive director, Southwest Environmental Center, began by providing the committee with background information regarding the creation of the Mesilla Valley Bosque State Park along the Rio Grande near Mesilla in Dona Ana County. He outlined the park's location and the various funding mechanisms used to create it, emphasizing the significant amount of riparian restoration involved in its development. Mr. Bixby went on to explain that, while the State Parks Division of the Energy, Minerals and Natural Resources Department (EMNRD) initially managed the park, concerns over ongoing funding of park operations prompted the EMNRD to initiate the transfer of the park to the Department of Game and Fish

(DGF), which raised a number of concerns, particularly with regard to notice provided to local entities and stakeholders and their opportunity to participate in the decision-making process. Also of concern, he said, is whether the change in management will change the purposes of the park and the educational focus of the park. As he understood the plan, classrooms would be converted to office space for DGF employees, and the exhibit hall would be converted to a meeting room.

Nora L. Barraza, mayor, Town of Mesilla, noted that while the DGF has indicated that it plans to make education a focal point in its management of the park and that she agrees with the concept, she has serious concerns about the lack of notification to local entities from the EMNRD on its plans to transfer the park. She wanted to know if the DGF could guarantee that it would carry on the current programs and mission of the park.

Ken McQueen, secretary, EMNRD, noted that some parks present more challenges than others in terms of operations. He said that the Mesilla Valley Bosque State Park has been particularly challenging, given the budget problems of the past few years. He said that the transfer to the DGF is a unique solution to the problem.

Matthias Sayer, deputy secretary, EMNRD, also provided the committee with background information on the park. He went on to explain that both the EMNRD and the DGF are heavily involved in connecting people to the outdoors and that while most state parks tend to offer consumptive uses, such as camping, the Mesilla park does not. Mr. Sayer said that volunteers currently are keeping the park running, especially in regard to its educational programs, and that the DGF would continue those programs. He also pointed out that a key benefit of transferring the park is that it would be free for the public to use. He said that the EMNRD does not want to close the park, a prospect that other states, besides New Mexico, are facing due to budget shortfalls. The transfer would avoid having to make the decision to close the park.

Alexa Sandoval, director, DGF, explained that the DGF wants to shift its policy toward more conservation education and public outreach in an effort to reach more New Mexicans. She emphasized the potential of the Mesilla Valley Bosque State Park as an opportunity for the DGF to interact with more people.

Questions and comments from the committee included:

- public meetings regarding the proposed transfer consisted mainly of open houses;
- notices regarding the proposed transfer were published in Las Cruces-area newspapers;
- user fees are intended to cover ongoing operations of most state parks, but often do not, thus requiring additional funding from the state;
- legislative approval has traditionally been sought for a transfer of ownership of public lands worth more than \$100,000;
- most state parks offer value beyond profits and losses;

- concerns regarding state agencies transferring assets without public input;
- the DGF could run the park with the money it saves by not having to lease building space in Las Cruces;
- the transfer of the Vietnam Veterans' Memorial in Angel Fire required two separate pieces of legislation; and
- the DGF has been reluctant to expand its mission in the past but now appears to be willing to do so by acquiring the park.

On a motion made, seconded and passed, the committee directed staff to research the issue of transferring ownership of the Mesilla Valley Bosque State Park from the EMNRD to the DGF and to report on the statutory state property transfer process to the New Mexico Legislative Council.

Carlsbad Brine Well Collapse Remediation and Implementation of Legislation

Secretary McQueen provided the committee with an update regarding the collapse of a brine well in the Carlsbad area. Secretary McQueen began by explaining that a brine well forms when mining operations for salt create underground caverns filled with liquid salt solution. These caverns can collapse under certain conditions, Secretary McQueen said. He provided examples of collapsed brine wells, noting that, while previous collapses have occurred outside of populated areas, there is one brine well with significant potential for collapse located under Carlsbad. Secretary McQueen pointed out that while the brine well has ceased its use for salt production, conditions exist that could make a collapse possible, presenting a threat to both businesses and residents located within the brine well's footprint. He went on to discuss efforts to mitigate the effects of a collapse, including installation of monitoring and early warning systems, as well as efforts to ensure the stability of the cavern created by the well.

Questions and comments from the committee included:

- the site of the brine well is still owned by a now-defunct company;
- liability issues and tort claims are still being resolved;
- collapse of the brine well could cost \$1 billion, including \$100 million for transportation infrastructure;
- another 12 wells exist in the area, all of which have been inspected and none of which are near people, roads or businesses;
- a trailer park sits above the Carlsbad brine well site, meaning that collapse poses a risk to human life;
- the Oil Conservation Division of the EMNRD has inspected other brine wells in the area and is satisfied that the overburden (ground between the well cavity and the surface) is sufficient to prevent collapse;
- the current brine well permitting process requires study of the geology and overburden of proposed brine well sites, but the Carlsbad site was permitted before these requirements took effect; and
- no other brine wells have been permitted west of Carlsbad.

Recess

The committee recessed at 5:15 p.m.

Wednesday, September 6

Reconvene

The committee reconvened at 9:25 a.m.

Arizona Water Settlements Act Implementation, Budget and Issues: New Mexico Central Arizona Project (NM CAP) Entity Plans, Southwest Region Water Project Alternatives

Ali Effati, Gila Basin manager, ISC, and Kim Abeyta-Martinez, program manager, ISC, provided the committee with background information regarding implementation of the federal Arizona Water Settlements Act (AWSA), enacted in 2004. Mr. Effati began by explaining that the ISC has two roles in implementation of the settlement: acting as joint lead agency in the National Environmental Policy Act of 1969 (NEPA) process along with the federal Bureau of Reclamation; and continuing to administer the New Mexico Unit Fund. Ms. Abeyta-Martinez discussed the status of the New Mexico Unit Fund, noting that as of June 30, 2017, the fund had received \$54.24 million, spent \$12.64 million and earned \$2.5 million in interest, leaving a balance of \$44.1 million. She went on to provide the committee with a breakdown of expenditures since 2012, as well as an overview of the NM CAP Entity fiscal process. Mr. Effati went on to outline the ISC's involvement pursuant to the AWSA, including informing the U.S. secretary of the interior of the decision to pursue construction of a New Mexico Unit; requesting to be a joint lead in the NEPA process; and designating the NM CAP Entity, which, he noted, is a proponent of the project. He also outlined the role of the NM CAP Entity, the NEPA process and non-NM CAP projects that do not involve diversion of the Gila River.

Anthony Gutierrez, executive director, NM CAP Entity, began by clarifying that there are no plans for a \$1 billion diversion project, nor are there plans to build a dam along the Gila River. He provided the committee with maps showing three potential diversion sites, noting that the NM CAP Entity's goals are to develop a feasible, affordable project. Mr. Gutierrez also noted that the entity has removed consideration of municipal water delivery as a project and instead intends to focus on agricultural need, particularly on-farm storage, which should prove useful, both for agriculture and for aquifer recharge. He also discussed storage of water in the Winn Reservoir and two reservoirs located near the San Francisco River, noting that the entity has studied use of the most modern technology available for storage. Mr. Gutierrez went on to acknowledge that there are numerous constraints associated with construction of a New Mexico Unit project, including the cost of structures.

Ms. Lucero provided the committee with an overview of the Grant County Regional Water Project. She began with the history of the project and the development of a 40-year water plan, which identified area water needs, such as a primary water supply for Hurley and supplemental water supplies for Bayard, Santa Clara and Silver City. Ms. Lucero went on to discuss the development of a regional water system to address water needs in the area, including

the development of wells and the construction of water lines throughout the area. She also provided the committee with an overview of funding sources for the system, as well as maps detailing the various existing and planned components of the regional water system.

Harry Browne, Grant County commissioner, outlined his concerns regarding potential NM CAP Entity projects. He acknowledged that involved parties are moving toward general agreement, but he noted that concerns still exist over funding of any diversion projects. Commissioner Browne pointed out that less than 2,000 acres of agricultural land are irrigated in the Gila Valley, suggesting that additional water in the area is not necessary. He also raised concerns over an amendment to the NM CAP Entity agreement involving the purchase of water rights by mine operators in the area.

Senator Cervantes requested that Mr. Gutierrez report back to the committee at its November meeting on what decisions the NM CAP Entity made at the entity's October meeting.

Questions and comments from the committee included:

- increasing estimated costs for construction of New Mexico Unit projects;
- users must bear the cost of any diverted water;
- use of AWSA funding for projects other than a New Mexico Unit project, particularly for water supply and conservation projects;
- funds available for non-diversion projects and their cost, versus available funds for diversion projects, and the potential cost of those projects;
- \$1.2 million has been set aside for wetlands projects, which can help with aquifer recharge;
- the NM CAP Entity has focused more on water availability than on the economic development benefits of potential projects;
- agricultural users face water availability issues during the growing season, which could be addressed through some of the storage scenarios contemplated by the NM CAP Entity;
- per the terms of the AWSA, water available for diversion will not be available every year;
- while the ISC is a nonvoting member of the NM CAP Entity, the agency is still responsible for allocation of funds for various projects;
- involvement of mining companies in the AWSA, their ownership of existing water rights in the basin and whether transfer of water rights to area mines constitutes an inter-basin transfer;
- unclear details of a joint powers agreement involving mining companies and the NM CAP Entity;
- details and time line for the NEPA process;
- cost of conveyance of diverted water to agricultural interests in the valley and responsibility for those costs;
- scalability of potential projects;

- about 35 studies have already been conducted on various aspects of the AWSA;
- water projects are considered using a 50-year horizon;
- the value of investment of current funds could yield better returns in the future;
- the time line for completion of studies, funding and project construction; and
- responsibility of the legislature to consider and fund water projects.

Adjournment

There being no further business, the committee adjourned at 12:45 p.m.