

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

**October 2-3, 2018
Bassett Auditorium
Roswell Museum and Art Center
Roswell**

The fourth meeting of the Water and Natural Resources Committee (WNRC) was called to order by Representative Matthew McQueen, co-chair, on Tuesday, October 2, 2018, at 9:05 a.m. in the Bassett Auditorium of the Roswell Museum and Art Center in Roswell.

Present

Rep. Bealquin Bill Gomez, Co-Chair
Rep. Matthew McQueen, Co-Chair
Rep. Gail Armstrong
Rep. Paul C. Bandy
Sen. Craig W. Brandt
Rep. Randal S. Crowder
Rep. Derrick J. Lente (10/2)
Sen. Benny Shendo, Jr. (10/2)
Sen. Mimi Stewart
Rep. Bob Wooley

Advisory Members

Sen. Pete Campos
Rep. Candy Spence Ezzell
Sen. Ron Griggs
Sen. Stuart Ingle (10/2)
Rep. Bill McCamley
Sen. Cisco McSorley
Rep. Greg Nibert
Sen. Gerald Ortiz y Pino
Sen. Mary Kay Papen
Rep. William "Bill" R. Rehm
Rep. Tomás E. Salazar
Sen. Peter Wirth

Absent

Sen. Joseph Cervantes, Vice Chair
Rep. Rodolpho "Rudy" S. Martinez
Sen. Sander Rue
Rep. Nathan P. Small
Sen. Jeff Steinborn
Rep. James R.J. Strickler
Rep. Carl Trujillo
Sen. Pat Woods

Sen. Carlos R. Cisneros
Rep. Sharon Clahchischilliage
Rep. George Dodge, Jr.
Rep. Rebecca Dow
Rep. Brian Egolf
Rep. Harry Garcia
Rep. Yvette Herrell
Rep. D. Wonda Johnson
Sen. Gay G. Kernan
Sen. Carroll H. Leavell
Rep. Rick Little
Sen. Linda M. Lopez
Rep. Sarah Maestas Barnes
Rep. Javier Martínez
Sen. Steven P. Neville
Rep. Debbie A. Rodella
Sen. Nancy Rodriguez

Rep. Angelica Rubio
Rep. Patricio Ruiloba
Sen. William E. Sharer
Sen. John Arthur Smith

Guest Legislator

Rep. David M. Gallegos

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

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS)

Erin Bond, Research Assistant, LCS

Sara Wiedmaier, Research Assistant, 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, October 2

Welcome and Introductions

Representative McQueen had members of the committee and staff introduce themselves. Dennis J. Kintigh, mayor, City of Roswell, welcomed the committee to Roswell and invited the committee members to attend the Eastern New Mexico State Fair. He described the southeastern corner of New Mexico as an island that is isolated from the rest of the state. However, due to its location at the edge of the Permian Basin, the success of this area is imperative for the success of the state. Mayor Kintigh also emphasized the high quality of the water in the area due to excellent management and stewardship, despite booming oil and gas development.

Interbasin Water Transfers

Michel Jichlinski, project director, Augustin Plains Ranch, Representative Armstrong and Stacy Timmons, hydrogeologist, New Mexico Bureau of Geology and Mineral Resources (NMBGMR), New Mexico Institute of Mining and Technology, discussed current issues regarding water transfers throughout the state.

Mr. Jichlinski provided an overview of ground water transfers between counties. He stated that the Constitution of New Mexico regards water as an asset of the state and, therefore, all counties have equal claim to water, regardless of the area of origin. It is predicted that the water supply will be insufficient to meet the needs of the state in the next 40 years. Mr.

Jichlinski said that water scarcity causes every part of the state to rely on interbasin transfers, especially as wet and dry years can fluctuate so drastically. He recognized that legislation is needed to address this issue but stated that the legislation proposed in 2017 in House Bill (HB) 418 would have added cost, increased lawsuits and made transfers nearly impossible. He suggested that future legislation clarify the notion of beneficial use and provide compensation to the area of origin for diverting water to other areas for that use.

Representative Armstrong, sponsor of HB 418, recounted that there was a lot of pushback to the bill. She stated that New Mexico needs data-driven information and non-political solutions to this statewide problem and that better data will mean better decisions. She also noted that with every new administration, the leadership of the Office of the State Engineer (OSE) also changes, and despite any progress made up to that point, the process must then be started over.

Ms. Timmons shared the research that she has been conducting for the Aquifer Mapping Program. Funding for this program comes from the NMBGMR, as well as grants, gifts and contracts. Projects include ground water level monitoring, 3D aquifer mapping, hydrogeology and water quality studies. Aquifer mapping of the Plains of San Agustin (PSA) began in 2009 to evaluate the availability and quality of water for transfer and mining applications. From two previous studies conducted in 1973 and 1994, it was predicted that the eastern PSA had about 34 million acre-feet of good quality ground water in storage and the western PSA had about 19 million acre-feet of possibly brackish water.

The current data and mapping are far more robust and include flow path, annual fluctuations, geologic influences, ground water age, review of well logs and the impact of one well on another. The new findings suggest that ground water levels have not been changing much in the PSA area, and the ground water in the eastern PSA is on average 11,000 years old because recharge is very slow. The updated estimate of ground water in storage at the eastern PSA is between 21 million and 25 million acre-feet. Ms. Timmons suggested drilling more deep wells and testing water quality and hydraulics in different zones. Maps provided in the handout show the basins, subbasins, other geological features and OSE well sites across the state.

Panelists responded to questions and comments from the committee as follows:

- any future interbasin transfer legislation should be applicable to all of New Mexico, not just tailored to the PSA area;
- as municipalities grow, filtration technology for brackish water will need to be developed;
- as gas and oil operations increase and require more water, innovations will follow to recycle brackish water;
- water in the eastern PSA is of good quality with low total dissolved solids, meaning it is not brackish;

- gravity and resistivity surveys serve as primary data points because seismic surveys are too costly;
- water in the state belongs to the people of New Mexico under the state constitution;
- flash flood water could be captured to recharge aquifers;
- ground water is not an unlimited or recurring resource; most of the water flowing into the basin is lost to evaporation;
- water access based on speculative use will be damaging to farmers, ranchers, the agriculture industry and rural life as a whole because rural populations have fewer votes than urban centers;
- rural priorities are not always the same as urban priorities, and one person's idea of beneficial use will differ from another's;
- exploratory permits allow for pumping wells for up to 10 days and are easier to approve; and
- upcoming projects for the NMBGMR will include geochemical sampling at a cost of about \$100,000 or roughly \$1,000 per well, drilling deep wells at a cost of about \$1 million each and water quality and hydraulics testing at about \$1 million per well; the time line for the projects is spread over three years.

Water District Updates and Water Usage

Mike Hamman, chief engineer, Middle Rio Grande Conservancy District (MRGCD), discussed the various water diversions off the Rio Grande, current water trends and future plans within the district. The MRGCD encompasses a large portion of the Rio Grande in New Mexico, beginning at Cochiti Dam and ending at the Bosque del Apache National Wildlife Refuge, and also includes El Vado Dam on the Rio Chama.

Mr. Hamman reported that this year's spring runoff was one of the lowest since 1956; fortunately, about 40,000 acre-feet of water from the previous year had been stored. All supplemental storage in upstream reservoirs has already been released for 2018, and the Interstate Stream Commission (ISC) predicts that the Rio Grande Compact (RGC) requirements will be met but not exceeded, resulting in little to no credit or debit with Texas and no stored water for the upcoming year. Mr. Hamman said that if National Weather Service predictions of increased precipitation in 2019 are correct:

- the MRGCD can expect up to 20,900 acre-feet of San Juan-Chama contract water;
- capture of monsoon flows will support agriculture and compact obligations; and
- the U.S. Department of the Interior will store around 22,000 acre-feet of Rio Grande water for delivery to "Pueblo Prior and Paramount" lands.

Mr. Hamman added that with the expected increase in precipitation, flash floods will be a major issue. He suggested that the MRGCD work with counties, the state and federal agencies to find solutions for flooding in urban areas.

Gary L. Esslinger, treasurer-manager, Elephant Butte Irrigation District (EBID), began by announcing the one-hundredth anniversary of the EBID. The EBID delivers water to 90,640 acres through an extensive network of over 264 miles of canals and laterals. Due to a lack of funding, less than 10 percent of these canals and laterals have been piped, and other infrastructure improvements are needed to reduce seepage and evaporation of limited water resources. Mr. Esslinger outlined the hydrologic history of Elephant Butte Reservoir, noting that about every 40 years, the reservoir will fill entirely and spill over, with the next spill event predicted to occur around 2035.

To improve on conservation efforts, the EBID implemented a storm water management system to track storm activity, monitor inflow to the Rio Grande and capture storm water to recharge aquifers. The EBID manages 25 flood-control dams, many of which are now located above highly populated areas due to urban development. Mr. Esslinger stated that these dams are very old, having passed their 50-year design life, and no longer meet the design requirements of the OSE's Dam Safety Bureau. The dams could pose a high risk to many communities in the event of a flood. Due to the widespread risk faced by community members and a lack of resources for the EBID and its farmers, the EBID is looking for new revenue streams or another governmental agency to replace or rehabilitate the dams to meet safety regulations. He emphasized that watershed restoration should be viewed by the legislature as a safety and public welfare issue.

In regard to drought and climate change effects, Mr. Esslinger reminded the committee that this issue is a concern to all of the western states, not just New Mexico. Persistent drought conditions in the EBID have decreased surface water allotments to farms, requiring more ground water pumping to offset the deficit, which has resulted in the current crisis of declining aquifer levels and the need to better balance surface and ground water usage. Mr. Esslinger said that it will be imperative in the future to find another source for water and questioned why the nearest desalination plant is in El Paso, Texas, while New Mexico would greatly benefit from this infrastructure. EBID is currently in the process of evaluating the feasibility of building a desalination plant to provide water to the planned industrial development in Santa Teresa on the U.S.-Mexico border.

Aron Balok, superintendent, Pecos Valley Artesian Conservancy District (PVACD), discussed water issues in the Pecos Valley. The PVACD maintains 10 wells, which are measured three times per month and reported to the State Land Office (SLO) for diversion calculations. From these measurements, it has been concluded that, despite relatively normal inflow, aquifer levels have been declining since reporting began in 1970, meaning that the decline is due to an increase in usage.

Mr. Balok said that the PVACD will continue to meet with the Carlsbad Irrigation District (CID) and the settlement parties in the Pecos River Compact (PRC) to find solutions and techniques to conserve water in the Pecos Valley. He suggested increasing the mill levy from \$2 million to \$4 million, with the goal of decreasing the demand for water, since there is no control

over the supply. He referenced a 1978 statute that created a "water bank" that allows for storage of upstream surface water in times of drought, but due to depleting surface water sources, Mr. Balok stressed the importance of developing new mechanisms to react to changing conditions.

Dale Ballard, manager, CID, said that the CID provides water to 600 farmers for cultivation of over 25,000 acres of land. Mr. Ballard discussed the requirements of the CID to deliver water to Texas and rapidly repay any net shortfalls under the PRC. To meet compact requirements, augmentation well fields were drilled and the CID project acreage and other lands were retired. He said that the maintenance and capacity of these wells have been a recurring problem, worsened under extreme drought conditions and new applications to divert surface water from the Pecos River.

Panelists responded to questions and comments from the committee as follows:

- a majority of farmers have supplemental wells on their land that are supposed to be metered, but monitoring has been limited by a lack of funding and personnel;
- about 30 percent of water diverted to farmland returns to the river;
- of 11 applications to divert water from the Pecos River, nine are being protested by the CID;
- diverting water back to the river can increase the salinity level and would require flooding to dilute the water for agricultural use;
- the state has purchased roughly 12,000 to 13,000 acre-feet of water in the Pecos Valley to meet compact requirements with Texas. This amount will have to be increased to 17,000 acre-feet to meet the new requirements under the U.S. Supreme Court (USSC) settlement;
- the MRGCD is holding a water debit with Texas, but prudent scheduling during spring runoff months will allow the district to meet RGC requirements;
- in the last five years, the CID has been able to provide a full allotment to all of its farms due to a credit with Texas and improved conservation methods by the PVACD; and
- of the 3.5 acre-feet of water delivered to each farm, only about 2.3 acre-feet are actually delivered due to evaporation.

Approval of Minutes

On a motion made, seconded and duly passed, the minutes of the July and August meetings of the committee were approved as submitted.

Copper Mining Water Usage

Jeff Smith, P.E., chief operating officer, Copper Flat Mine (CFM), began with a brief history of the area and a project overview of the CFM. The CFM will be located 20 miles southwest of Truth or Consequences on a mix of private lands owned by New Mexico Copper Corporation (NMCC) and public lands overseen by the U.S. Bureau of Land Management, where mining has occurred since 1877. The time line for the project will entail two years for

construction, 12 years for production and 20-plus years for reclamation and closure. Although the permitting process began in 2012, Mr. Smith noted that some state and federal permits are currently under way, such as biological and cultural surveys and a federal environmental impact statement (EIS).

The CFM is owned and operated by NMCC, but the project will be fully funded by Tulla Group, an Australian investment group that has invested \$55 million to date, 71 percent of which has been spent in-state. NMCC is dedicated to providing employment and economic development opportunities in Sierra County, and Mr. Smith stated that this project will bring many benefits to the local community, from construction and operation jobs to federal and state tax revenue. NMCC is also responsible for all regulatory requirements, and its plans are designed to meet or exceed health, safety and environmental standards. Mr. Smith outlined some of the plans that will be implemented at the CFM to efficiently use water, prevent water pollution and safely perform reclamation and closure of the mine.

Chris Lindeen, special assistant attorney general, OSE, and Greg Ridgley, general counsel, OSE, discussed water law concepts and the lower Rio Grande adjudication. Mr. Lindeen has been the attorney on the lower Rio Grande case since 2012. He stated that the question of water rights for use at the CFM is complicated because the mine has gone through various owners since the original four wells were drilled for the project in the 1980s. Citing precedent set in *State v. Mendenhall*, Mr. Lindeen said that NMCC abandoned its water rights because it did not act diligently to develop the water and put it to beneficial use within a reasonable amount of time. NMCC filed an appeal with the OSE to reclaim the abandoned water right, and the Water Rights Division is currently processing the appeal.

Mr. Ridgley offered further legal background on water rights in New Mexico. The *Mendenhall* case determined that to acquire a valid water right, the water must be put to beneficial use and the well that is being drilled must fall outside the parameters of an established basin, which parameters are defined by the state engineer. Mr. Ridgley said that, today, all water in the state is administered by the OSE, so a permit is required to drill any new wells regardless of the location. He also discussed other cases through the years that have upheld the authority of the state engineer in determining water rights and setting requirements to offset ground water pumping with increased surface water flow, thereby allowing the state to meet compact requirements while still permitting new appropriations of ground water.

Charles de Saillan, staff attorney, New Mexico Environmental Law Center (NMELC), discussed concerns regarding the NMCC appeal. As the attorney for two ranches in the area, Mr. de Saillan said that his clients are opposed to the CFM permit because of the potential negative effects on his clients' businesses and way of life. Their concerns include depletion of the water table, waste piles of excavated rock, contamination of soil and water and disruption to the habitat of the many species of birds, fish and large game in the area, as well as the cattle on his clients' ranches.

Panelists responded to questions and comments from the committee as follows:

- the method of processing ore by flotation still requires the use of reagents to bring the minerals to the surface to be scraped off;
- the intention of the owner of a water right is key in determining abandonment versus forfeiture of right;
- the waste rock that surrounds ore is broken up, and minerals leach into ground water;
- it is part of the authority of the state engineer to address ground water claims and ensure that there will be no impairment to existing wells;
- although Texas alleges that ground water pumping is interfering with RGC delivery requirements, conjunctive management of ground and surface water has been in practice in New Mexico for the past 60 years;
- the NMELC is involved because it has represented ranch families for decades;
- the water table at the CFM is approximately 50 feet to 100 feet below the surface; and
- the appeal by NMCC to acquire water rights for 6,000 acre-feet of water will require proof of offsets; if protests occur, the acquisition will be subject to a public hearing.

2018 State Water Plan (SWP) Review

John Longworth, director, ISC, and Lucia Sanchez, water planning program manager, ISC, discussed details of the State Water Plan Act. The purpose behind the act is to protect the water supply and quality throughout the state, while considering the various environmental, economic and legal factors, by providing statewide continuity of policy. Mr. Longworth acknowledged that the planning process is both continuous and inclusive, meaning that updates and modifications to the plan will be ongoing and that the planning process involves various entities and agencies such as tribal governments, the OSE and the public.

The SWP is intended to complement the state's 16 regional water plans and create consistency among the plans. The three sections of the 2018 SWP are: (1) policy; (2) a technical report; and (3) legal landmarks. Policy topics in the SWP include infrastructure, data collection, conservation, quality and planning, and this section also designates agency assignments and authority regarding each topic. The technical report includes a summary of the history, the supply-demand gap, key issues and potential strategies. Legal landmarks include water law, acequias, interstate compacts, Native American water rights and environmental regulations.

In response to public input, the SWP will serve as a centralized location for water data that is web-based and adaptable. It is designed to be a strategic management tool to inform decisions and engage legislators and stakeholders. Mr. Longworth stated that the ISC is nearly done reviewing the more than 600 public comments and incorporating necessary changes, and it intends to complete the 2018 SWP by the end of the year. The ISC will collaborate with partners, work on public outreach and education and support strategies in the SWP, such as creating a data clearinghouse and metering all water use.

Rio Grande, Pecos River and Gila River Issues

Mr. Longworth discussed current issues regarding the Rio Grande and the Pecos and Gila rivers and the history and status behind the compacts and settlements surrounding them.

Beginning with the Rio Grande, Mr. Longworth expressed concern that flows on the river are much below normal, partly as a result of lower discharge from Colorado. He said that the ISC and OSE are working together on the Rio Chama to ensure that RGC requirements are met. He added that without the San Juan-Chama project, the river would be dry.

Mr. Longworth discussed challenges concerning the Pecos River, such as intrastate and interstate disputes, drought and endangered species preservation. The PRC was signed by Texas and New Mexico in 1948. In 1974, Texas sued New Mexico in the USSC for noncompliance of water deliveries under the compact. The 1988 USSC decree determined that New Mexico had under-delivered about 10,000 acre-feet of water per year to Texas, that New Mexico was required to pay \$14 million in damages and that it was no longer allowed to carry a cumulative debt.

To comply with the decree, New Mexico acquired over \$30 million in local water rights and leases, but deliveries again declined in the early 2000s. As a result of the decline, Pecos water users negotiated the 2003 Pecos Settlement to permanently comply with the PRC while stabilizing the water supply for the CID. Under the settlement, the state funded a program to acquire and retire additional irrigation rights and build well fields for river augmentation with ground water. The settlement resulted in roughly \$130 million in one-time costs for water rights purchases, well fields, pipelines and administrative costs and an additional \$1 million to \$3 million per year in operational expenses. Mr. Longworth added that more water rights purchases are necessary to fulfill settlement requirements, despite the current credit with Texas.

Mr. Longworth briefly mentioned the more recent litigation over storage of water for Texas in Brantley Reservoir, in which the federal river master ruled in favor of New Mexico and credited the state for 16,600 acre-feet of water for evaporative losses. He then updated the committee on the 2004 Arizona Water Settlements Act (AWSA) and the New Mexico Central Arizona Project (CAP) Entity and provided a summary of budget expenditures to date. The current role of the ISC is to continue to administer CAP funds and work as a joint lead with the U.S. Bureau of Reclamation in the National Environmental Policy Act of 1969 (NEPA) process to prepare an EIS.

Panelists responded to questions and comments from the committee as follows:

- three units are being proposed to store about 7,000 acre-feet of water from the Gila River;
- the ISC has been working with the CAP Entity since the beginning of the year on details of the proposal for compliance with the NEPA;
- the construction budget for the storage units is provided by the AWSA, and the CAP Entity will own the title and is responsible for design and operations;

- payments to Arizona for water use will come from the CAP Entity;
- the ISC plans to complete a draft EIS by March 2019 and then open the next public comment period; the overall process will take under a year;
- \$1.46 million was spent on studies for conceptual engineering and water modeling;
- 16 wells were drilled under the Pecos Settlement; and
- the Pecos Settlement killed many small communities in the area due to retiring water rights.

Reimagining State and Regional Water Planning Programs and Processes

Bob Wessely, water planner and member, House Memorial (HM) 1 (2017) Working Group, and Theresa Cardenas, consultant, Union of Concerned Scientists, and member of the HM 1 Working Group, discussed water planning in New Mexico.

Ms. Cardenas provided background on New Mexico's water woes and HM 1, which created a task force for the purpose of improving state and regional water planning processes. Rising temperatures and increased water use along the Rio Grande have led to reduced water availability. She said that across the state, consumptive use still exceeds renewable supply. Another issue is the disconnect between the ISC, OSE and hydrological data in water administration and planning. She stated that planning should be an ongoing process and a tool for management and protection of water resources, it should be a collaborative effort among stakeholders and it should also involve public input because New Mexico's water belongs to the public.

Mr. Wessely outlined components and initiatives within the proposal created by the HM 1 Working Group. Problems identified in HM 1 include a federal lawsuit, unreliable RGC compliance, undefined tribal priority rights, unsustainable ground water usage, minimal enforcement of water usage, a lack of funding and New Mexico's overall hands-off approach to water management. To address these and other issues, Mr. Wessely said that initiatives include strengthening the appropriate state agencies, better consideration of RGC constraints, acquiring better hydrologic and analytic data and funding a one-time appropriation from the legislature to cover two years of the costs of the ISC and OSE in implementing the proposed reforms. Mr. Wessely emphasized the importance of prompt action by the legislature to avoid further lawsuits, federal control of New Mexico's water and depletion of water reserves.

Panelists responded to questions and comments from the committee as follows:

- the current climate in New Mexico should no longer be viewed as a drought but rather as a new normal, which will allow better planning for the future under these conditions;
- legislation is being drafted to require that ISC appointees have professional water experience and that the overall appointment process be more broad and not subject only to the preference of the current administration;

- to comply with RGC requirements, more incentives will be needed to encourage local water users to cooperate;
- the ISC is the best entity to administer the SWP and to help coordinate regional plans;
- the New Mexico Water Resources Research Institute at New Mexico State University is a good source of data and modeling;
- the Constitution of New Mexico specifies water rights and gives priority to senior rights over junior rights, but water planning should be used as a tool to find a balance between claims by various users; and
- many farmers are requesting an increase in farm delivery requirements but must provide proof to the OSE of increased need; only about 38 percent of applicants reviewed so far have established the necessary evidence.

Recess

The committee recessed at 5:02 p.m.

Wednesday, October 3

Acequia Concerns and Legislative Considerations

Ralph Vigil, chair, Acequia Commission, discussed issues within the acequia community and the objective of the commission to preserve acequias, initiate outreach to younger generations, improve infrastructure and bring together stakeholders to find solutions to water shortages. Mr. Vigil argued that it is unfair to regulate acequias but not wells or municipal water users and that aquifer mapping would provide better accountability of water use. Acequias are often asked to forfeit their water rights for the benefit of the public welfare, but Mr. Vigil argued that by promoting small, sustainable farms, water rights could be put to beneficial use by the acequias in providing healthy food for the community as well as an opportunity to show the next generation an alternative to addiction and depression.

The goals of the commission are to promote the survival of acequias in New Mexico; to provide good food to local schools, restaurants and farmers' markets; and to create a model for sustainable living within the community. Mr. Vigil described past budget constraints as a bottleneck issue because, while the necessary funds are there, even small projects are delayed by excessive state oversight. He noted that fights often occur between acequia owners over claims to water rights, and this will sometimes lead to expensive adjudication. He also noted that tensions are particularly high across the border between Colorado and New Mexico water users.

Paula Garcia, executive director, New Mexico Acequia Association (NMAA), provided background on the NMAA and discussed acequias and community ditches in New Mexico. The NMAA is a grassroots, membership-based organization of acequias that works to protect farmland and water rights, strengthen governance, invest in infrastructure and cultivate the next generation of acequia farmers and ranchers. The NMAA began conducting an annual survey of acequias in 2015 and now has a database of 640 acequias in 22 counties. Ms. Garcia emphasized

the important contributions of acequias to the agricultural economy, from the local and county level to the statewide level. She also noted that acequias help recharge ground water levels.

Facing challenges of water scarcity and increasing demand for water transfers, Ms. Garcia said that acequias are working together to uphold water-sharing traditions and build capacity for local governance. Recognized as political subdivisions of the state under Chapter 73, Articles 2 and 3 NMSA 1978, acequias are governed by a three-member elected commission and by each acequia's mayordomo. They are largely self-sufficient and operate on volunteer labor and membership fees. The NMAA works with hundreds of acequias and various partners, such as the ISC, every year to address governance issues, improve infrastructure planning and identify sources of funding. Ms. Garcia listed policy and budget recommendations by the NMAA, which include:

- updates to the language in Chapter 73, Articles 2 and 3 NMSA 1978 to clarify conflicts between the sections of law and to allow acequias to set the dates of their biennial meetings;
- introduction of a bill, similar to Senate Bill 86 (2017), that would provide public notice of applications for water transfers on the OSE website;
- restoring long-term solvency to the New Mexico Irrigation Works Construction Fund and limiting use of the fund to irrigation projects;
- adequate funding to complete projects within the same year and inclusion of acequia leaders in infrastructure funding and capital outlay deliberations;
- an appropriation of contract water for the Rio Chama irrigation reserve to mitigate seasonal shortages;
- funding for acequias in Albuquerque's South Valley to begin infrastructure planning and design; and
- recurring state funding for the OSE to continue statewide acequia mapping.

Panelists responded to questions and comments from the committee as follows:

- disputes over water rights should be settled by the OSE because adjudication between acequias is expensive and difficult;
- water transfers between acequias often occur, without adjudication, after the OSE determines if the transfer is in the best interest of the public welfare and if the transfer would be detrimental to any acequia members; if deemed detrimental, the transfer is subject to a hearing, testimony from both sides is presented and voted on by members and final approval is still required by the OSE;
- although there is no set definition in statute for "public welfare", some acequias have created their own definitions;
- there is a need for an interstate compact or a memorandum of understanding with Colorado because Colorado is not regulating discharge from the Animas River to account for water shortages;

- funding should be allocated to restore the acequia funds rather than increasing funding for OSE operations;
- there should be an easier, more streamlined process for acequias to submit project proposals; the current process is designed for large-scale projects, and acequia members do not have the resources to complete the same lengthy, complicated process;
- there was a proposal for a new program that would pay acequias to rehabilitate prisoners by providing jobs in farming and infrastructure projects; and
- capital outlay is considered to be less predictable and serves mainly as supplemental funding to infrastructure capital improvement plan funding.

Water Issues on State Lands

Aubrey Dunn, commissioner of public lands, SLO, and Lisa Henne, associate counsel, Office of General Counsel, SLO, presented on recent issues regarding temporary water use permits for oil and gas development and gave a brief overview of SLO revenue sources.

Ms. Henne began by addressing the writ of mandamus filed by Commissioner Dunn against State Engineer Tom Blaine to cease issuing multiple permits for temporary use of underground public waters that in combination exceed three acre-feet per year for a single proposed use. She stated that the state engineer has on numerous occasions issued multiple temporary use permits to the same applicant within the same year and for the same purpose of use, thereby exceeding the maximum of three acre-feet per year per proposed use allowed by Section 72-12-1.3 NMSA 1978. She said that the state engineer is issuing multiple permits to the same applicant for the same well by claiming that each phase of the hydraulic fracturing process is considered a separate use, meaning that the end user will use up to nine acre-feet of water per year for three separate but identical permits. Ms. Henne outlined several of the issues regarding permitting actions by the state engineer that exceed his statutory authority:

- no notice is given to state trust land owners when water is diverted from wells located on state trust land;
- no water rights are required to obtain a temporary use permit;
- permits are only \$5.00 but an acre-foot of water is worth \$30,000;
- there is degradation of domestic-quality water while suitable lesser-quality water is available; and
- there is depletion of aquifers that supply state trust lands for agricultural activity during a time of increasing water scarcity.

In response to the writ of mandamus, the court ruled in favor of the OSE, stating that the state engineer has the authority to determine each phase of hydraulic fracturing as a distinct use. Ms. Henne said that in response to this decision, the SLO is requesting that the legislature repeal Section 72-12-1.3 NMSA 1978 because even if it is modified, it may still allow for loopholes. She cited existing alternatives to temporary use permits, such as Section 72-12-7 NMSA 1978, which allows owners of a valid water right to transfer up to three acre-feet of water to a different

location, or for a different use, upon investigation and approval by the state engineer. She said that a statute already exists allowing for the expedited marketing and leasing of water in areas of priority under Section 72-2-9.1 NMSA 1978, which, unlike the temporary use permits, includes language to ensure that rules are based on appropriate hydrologic models so as to create no increased depletions of aquifers or impairment of existing water rights. She argued that the state engineer has abused his authority by further expediting the process and avoiding oversight.

Commissioner Dunn addressed other issues regarding public trust lands, including illegal dumping of produced water from oil and gas development that leads to the contamination of ground water. He suggested that produced water from these activities be reused for the same purpose to reduce the reliance on fresh water. Other issues include abandoned wells; plugged wells not being remediated properly; theft of oil and over-flaring, which cause a loss of revenue to the state; and a lack of staffing in regulatory agencies such as the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (EMNRD).

Panelists responded to questions and comments from the committee as follows:

- New Mexico statutes do not allow for commercial sale of water under a temporary use permit, but farmers and ranchers are incentivized to drill more wells under agriculture or livestock leases and then sell their water rights to oil and gas developers;
- the intention behind temporary use permits is to allow for use of small amounts of water for drilling wells and road construction, not large volumes for extended use in hydraulic fracturing operations;
- permits are being granted under Sections 72-12-1.1 and 72-12-1.2 NMSA 1978 for domestic or livestock wells but are being used for hydraulic fracturing instead and are being combined with additional temporary use permits pursuant to Section 72-12-1.3 NMSA 1978;
- the suggested repeal is only in reference to Section 72-12-1.3 NMSA 1978 and will not affect domestic or livestock well permits;
- Section 72-12-7 NMSA 1978 will still allow for the issuance of temporary use permits but requires a valid water right and is therefore less subject to abuse;
- recycling of produced water should be incentivized, perhaps by a tax break;
- the federal Environmental Protection Agency is promoting the reuse of produced water through a working group with the EMNRD and OSE;
- oil and gas developers are applying for temporary use permits with the intention of using large amounts of water for hydraulic fracturing operations rather than for the intended purpose of short-term use for drilling wells;
- on average, one hydraulic fracturing operation can use up to 600,000 barrels of water;
- continued water use on state trust land by oil and gas companies is interfering with the water rights of farmers and ranchers; and
- the OSE is not upholding its responsibility in metering and regulating the amount of water being used for hydraulic fracturing operations under temporary use permits.

Water Project Capital Outlay Monitoring and Reform

Bill Conner, executive director, New Mexico Rural Water Association (NMRWA), addressed the status of water projects and issues within the capital outlay system. Mr. Conner began with a brief overview of capital outlay, which he stated provides grant funding for infrastructure improvements, equipment purchases and other projects for governmental entities across the state. The demand for capital outlay from both state and federal sources is typically far greater than the supply.

Mr. Conner stated that a major issue within the capital outlay system is that funds are often not used in a timely manner. He suggested that all funds should be tracked, and if they are not used in a reasonable amount of time, they should revert back to the program so they can be invested in other projects. He noted that in the near future, New Mexico will have to address the issue of aging infrastructure, which will require roughly \$1 billion to repair or replace. Much of this money has already been appropriated to various projects but has not yet been spent. Between 2009 and 2017, only 44 percent of capital outlay funds appropriated have actually been expended.

Mr. Conner then discussed the status of water projects specifically. In 2014, funds were appropriated for various water projects, and unexpended funds for these projects range from three percent to 46 percent of the appropriations. Twenty-three projects were deauthorized due to inactivity, and \$1.7 million reverted. Mr. Conner outlined some reasons for these unexpended funds: projects are completed without expending the whole appropriation; projects are not ready at the time of appropriation; or the entity receiving the funding is discovered to be noncompliant.

For entities to receive capital outlay funds, Mr. Conner said they should be able to demonstrate that their projects will be ready to commence at the time the appropriations are awarded and that they will have adequate funding to complete their projects in functional phases, among other considerations. He recommended that a study be conducted to inventory unexpended funds, organized by each legislative district, to determine the scope and status of projects, remaining funds, existing barriers to completion, reasons for unexpended funds and whether the funds should be reverted. Mr. Conner further recommended that the results of the study be reported to the Legislative Finance Committee, the Department of Finance and Administration (DFA) and the legislator or legislators that designated the appropriations.

Panelists responded to questions and comments from the committee as follows:

- funding for the engineering study will come from the United States Department of Agriculture (USDA) and the state;
- capital outlay should be reserved for projects that do not have access to more traditional sources of funding;
- the NMRWA is working with the USDA and DFA for help in applying for capital outlay funding;

- most projects could be funded with a combination of loans and grants, but agencies prefer grants instead of loans;
- the New Mexico Finance Authority requires a grant-loan match, so the state should implement a borrowing program;
- counties should list projects by priority level;
- community colleges should offer courses in wastewater management; and
- audits of appropriated funds can be difficult in smaller communities.

A Template to Create Regional Water Authorities

Rick Martinez, chief executive officer, The Apricot Tree, LLC; Robert Apodaca, principal, Motiva Corporation; and Representative Salazar discussed legislation to enact a "Regional Water Utility Authority Act". Representative Salazar said that it would be beneficial to incorporate small, domestic water systems into regional water authorities. The act would allow for each regional water authority to:

- purchase, acquire, establish or construct waterworks to supply water for domestic, commercial and industrial use;
- purchase, acquire, establish or construct wastewater systems for the treatment and disposal of sewage;
- develop infrastructure for renewable energy projects that will support operation and maintenance of the regional facilities; and
- plan, develop, manage and coordinate regional water and wastewater facilities.

The proposed legislation specifies that an authority can only be created if it will serve a minimum of 15 connections or a population of 25 people. After the entities each adopt a resolution in support of incorporating into a regional authority, the resolution will be subject to a public hearing and the authorities will hold elections to determine membership and officers.

Mr. Apodaca highlighted other duties and requirements for the formation of regional water authorities. He noted that under Governor Bill Richardson, the state began looking into ways to bring entities together to create a mutual domestic plan, and it appropriated \$500,000 in seed money to aid regional water efforts. This plan created one of the largest regional water authorities in the state, the Lower Rio Grande Water Authority (LRGWA).

Mr. Martinez emphasized the need for the legislature to create a template for regional water users to cooperate and share water. He said that this is especially important because nearly all rivers in the state are at a trickle. Without a large amount of snowfall this winter, rivers are expected to dry up in certain regions. Other issues that would be mitigated by the creation of regional water authorities are the aging infrastructure and the decline in volunteers and operators for mutual domestic water systems in rural areas.

Panelists responded to questions and comments from the committee as follows:

- enactment of a Regional Water Utility Authority Act would provide the necessary template for entities to incorporate into a regional water utility authority;
- it is advantageous for mutual domestics to incorporate into an authority because the funding mechanism will be quicker and easier;
- one size does not fit all in terms of funding, membership structure and other organizational aspects of an authority; and
- a total of \$40 million in state and federal grants and loans was awarded for the creation of the LRGWA.

Adjournment

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