

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

**August 31-September 1, 2015
J. Cloyd Miller Library
Western New Mexico University
Silver City**

The third meeting of the Water and Natural Resources Committee was called to order by Senator Peter Wirth, chair, on August 31, 2015 at 9:30 a.m. in the J. Cloyd Miller Library at Western New Mexico University (WNMU) in Silver City.

Present

Sen. Peter Wirth, Chair
Rep. Candy Spence Ezzell, Vice Chair
Rep. Paul C. Bandy
Sen. Joseph Cervantes
Rep. Randal S. Crowder
Rep. Dona G. Irwin
Rep. Matthew McQueen
Rep. Andy Nunez
Sen. Benny Shendo, Jr.
Rep. Jeff Steinborn
Sen. Mimi Stewart

Advisory Members

Sen. Carlos R. Cisneros
Rep. Sharon Clahchischilliage
Sen. Lee S. Cotter
Rep. Bealquin Bill Gomez
Sen. Ron Griggs
Rep. Jimmie C. Hall
Rep. Larry A. Larrañaga
Rep. Bill McCamley
Sen. Cisco McSorley
Sen. Gerald Ortiz y Pino
Sen. Nancy Rodriguez
Rep. James G. Townsend

Absent

Rep. James Roger Madalena
Rep. Javier Martínez
Sen. Cliff R. Pirtle
Sen. Sander Rue
Rep. James R.J. Strickler
Sen. Pat Woods

Sen. Ted Barela
Rep. Cathrynn N. Brown
Sen. Pete Campos
Rep. George Dodge, Jr.
Rep. Brian Egolf
Rep. Nora Espinoza
Rep. David M. Gallegos
Sen. Stuart Ingle
Rep. D. Wonda Johnson
Sen. Gay G. Kernan
Sen. Carroll H. Leavell
Rep. Tim D. Lewis
Rep. Rick Little
Sen. Linda M. Lopez

Rep. Stephanie Maez
Sen. Steven P. Neville
Sen. Mary Kay Papen
Rep. G. Andres Romero
Sen. John C. Ryan
Rep. Tomás E. Salazar
Sen. William E. Sharer
Sen. John Arthur Smith
Rep. Don L. Tripp
Rep. Bob Wooley
Rep. John L. Zimmerman

Staff

Jon Boller, Legislative Council Service (LCS)
Gordon Meeks, LCS
Jeret Fleetwood, LCS
Erin Bond, 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 New Mexico Legislature's website at www.nmlegis.gov.

Monday, August 31

Welcome

Dr. Jack Crocker, provost and vice president of academic affairs, WNMU, welcomed the committee to Silver City and thanked the members for coming.

Brett Kasten, chair, Grant County Commission, also welcomed the committee to Silver City and thanked the members for coming, adding that he hoped the committee would have a good dialogue about water resources.

Bruce Ashburn, president, Grant County Prospectors, also thanked the committee for coming to Silver City.

Silver City Area Water Supply Needs

James Marshall, assistant town manager, Silver City, provided the committee with an overview of Silver City's current water supply, future needs and plans for meeting future needs. He began by discussing the town's current water system and development of its 40-year water plan in 2006 and the plan's update in 2009. Mr. Marshall noted that the 2006 plan projected that

Silver City would have to acquire additional water rights as early as 2021, or as late as 2044. However, Mr. Marshall explained that as a result of the 2006 40-year plan and its associated studies, Silver City initiated measures to ensure longer sustainability of currently available water resources, including infrastructure improvements to aid in the transmission of water and limit losses due to leakage, and developing a regional water project to add supplemental water rights to the system.

The updated 2009 plan estimates that Silver City would not have to obtain more water rights before 2057 under a high-growth scenario or 2118 under a low-growth scenario. He noted that \$2.1 million had been awarded by the Interstate Stream Commission (ISC) for a regional water system that would be the primary source of water for Hurley and that design of the first phase of the system has been completed. Finally, Mr. Marshall discussed water conservation programs implemented in Silver City since 2013, which have significantly reduced water use in the area and should help Silver City's existing resources last longer.

Comments in response to questions from the committee included:

- use of a tiered billing system;
- per capita water use is about 112 gallons per person per month;
- most of the water rights in the area have been adjudicated;
- Silver City may not need to purchase additional water rights for the next 100 years;
- work on a regional water system is progressing;
- the Silver City Town Council was unanimous in its decision that it was not in Silver City's best interests to join the New Mexico Central Arizona Project (NM CAP) Entity joint powers agreement;
- mines in the area hold up to 40,000 acre-feet of water rights, but they do not use all of them;
- use of recycled water to recharge the Mangas Trench aquifer; and
- use of treated effluent to satisfy requirements for recharge credits.

NM CAP Unit Studies, Plans and Status Update

Mary Reece, program development division manager, U.S. Bureau of Reclamation (BOR), provided the committee with a brief history of the 1968 federal Colorado River Basin Project Act, the 2004 federal Arizona Water Settlements Act (AWSA) and the New Mexico Unit and explained the BOR's role in implementation of the AWSA. Ms. Reece also discussed the BOR's work with the ISC on helping with New Mexico's AWSA planning process and the BOR's June 2015 value engineering planning study, which assesses proposed New Mexico Unit projects and alternatives to ensure that they are technically sound and comply with diversion requirements. She also discussed the phased-project approach used in the value study and provided the committee with details of one of the highest-rated projects, which includes diversion points, necessary infrastructure, potential yield and projected costs of \$350 million for phase one and \$800 million for all three phases of that project.

Craig Roepke, ISC, also provided the committee with an overview of the New Mexico Unit, which he explained could involve water from the Gila or San Francisco rivers, tributaries or underground sources to be used for any beneficial purpose through gravity diversion, conveyance, aquifer storage and recovery, pumping, piping or channel to facilities within New Mexico. Mr. Roepke also reviewed the ISC's work to this point, including informing the U.S. secretary of the interior that the state would pursue a New Mexico Unit in December 2014 and formation of the NM CAP Entity in July 2015. He also discussed ISC tasks moving forward, including negotiating the unit agreement and providing technical and other support to the NM CAP Entity and the BOR.

Darr Shannon, chair of the NM CAP Entity, provided the committee with an overview of the NM CAP Entity, noting that the 13 voting members had only recently signed a joint powers agreement to form the entity and that it is still in the process of organizing. She also provided the committee with membership in the NM CAP Entity.

Questions and comments from the committee included:

- cost estimates for completion of phase one of the 12 projects evaluated ranged from \$115 million to \$450 million, with completion costs for all three phases of those projects ranging from \$660 million to \$1 billion;
- approximately \$120 million in federal money will be available to design, plan and construct the New Mexico Unit;
- additional sources of funding for a New Mexico Unit diversion project are not yet identified;
- New Mexico will have to pay the NM CAP entity for the operation, maintenance, replacement and pumping costs (currently \$157 per acre-foot) for exchange water for every acre-foot it diverts from the Gila River;
- none of the proposed diversion projects would alter the Gila River's free-flowing status in the Gila Wilderness;
- the U.S. Department of the Interior may still add and define supplemental terms to the New Mexico Unit agreement;
- the NM CAP Entity has no current plans to seek additional funding from the legislature for a diversion project;
- there are currently 11 diversions on the Gila River in New Mexico;
- potential users of water from a diversion project include Deming; Hidalgo and Catron counties; and agricultural users;
- the ISC has looked at the federal Endangered Species Act of 1973 implications of proposed diversion projects, but the federal National Environmental Policy Act of 1969 process will have to be conducted before construction of any diversion project;
- if a diversion structure is built, it would require a reservoir off the main stem of the Gila River;
- NM CAP Entity voting rights and bylaws will be established at an upcoming meeting;
- there are other alternatives that have not yet been analyzed; and

- it is difficult to project exactly how much water New Mexico can really harvest from a diversion project at this point in the process.

Gila Diversion Technical and Financial Concerns

Norm Gaume, former director of the ISC, began by providing the committee with a brief history of the AWSA, including his own involvement in early negotiations as the ISC director. He also discussed his concerns regarding a diversion project and his efforts to analyze available information to determine whether such a project is viable, noting that the ISC had already spent over \$4.2 million analyzing alternatives but has yet to decide on a viable project.

Mr. Gaume explained that a BOR cost-benefit analysis of proposed diversion projects projected a \$.25 benefit for each \$1.00 of cost, while five of the proposed nondiversion projects have a positive cost-benefit ratio. Mr. Gaume noted that there are serious concerns regarding whether sufficient flows will even be available in the Gila River to justify diversion. He also said that local geology indicates that seepage will be a major problem in any reservoir and that lining a reservoir drastically increases the cost of a project. Mr. Gaume also noted that significant amounts of sediment would likely be diverted with any water taken from the Gila River. He suggested that nondiversion alternatives would likely yield more water for less money. Mr. Gaume also said that any municipalities using project water would likely have to impose extreme increases in their water rates, given an estimated \$8,000 per acre-foot per year cost of water delivered through the New Mexico Unit.

Jim Brooks, a retired U.S. Fish and Wildlife Service employee, also raised concerns regarding diversion of the Gila River. He began by noting that he was not speaking on behalf of the U.S. Fish and Wildlife Service. Mr. Brooks went on to explain the importance of river flows on the ecology of any river, particularly the Gila. He also suggested that any plan needs to be based on the best available science, which he noted includes a peer-review component. Mr. Brooks said that there is no evidence of peer review of the studies funded by the ISC regarding diversion of the Gila.

Questions and comments from the committee included:

- the Gila Wilderness is not necessarily a balanced ecosystem, but it does have good biodiversity;
- whether a twelfth diversion of the Gila River would cause the local ecosystem to become unbalanced;
- the ISC is currently working on a peer review of its studies;
- potential beneficiaries of phase one of the proposed diversion projects would be irrigators on the Gila River; phase three of the projects could benefit Deming and various colonias;
- no local government has committed to contribute additional funding for a diversion project;
- treatment plants for use of the water have not yet been factored in;

- a diversion project could affect movement of fish along the Gila River;
- the existing diversions on the Gila River are not large permanent structures that cut fish off from upstream; and
- cost of exchange water ranges from \$157 per acre-foot to \$196 per acre-foot, which New Mexico would have to pay before diverting any water.

Soil and Water Conservation District Dam Inundation Mapping and Planning Project

Jeff Witte, secretary, New Mexico Department of Agriculture, briefed the committee on a project to improve and rehabilitate soil and water conservation district dams statewide, which includes inundation mapping. He began by explaining that funding for the project came from \$1 million in severance tax bonds. Secretary Witte also discussed the statutory role of soil and water conservation districts, including control and prevention of soil erosion and prevention of floodwater damage.

Greg Glunz, project manager, gave the committee a brief overview of the scope of work for the project, including data collection, flood hydrology reports, dam breach reports, inundation mapping and development of emergency action plans at some dams. Mr. Glunz went on to provide the committee with dam locations around the state and discussed development of emergency action plans for dams, which include detection, emergency level determination, notification, expected actions and follow-up. He also provided the committee with a project schedule for each dam.

Secretary Witte also pointed out that the project is able to use state money to leverage additional federal funds.

Questions and comments from the committee included:

- the project only covers soil and water conservation district dams;
- dam repairs are prioritized by the greatest potential for impact on human life and property, as many subdivisions have been built in floodplains;
- soil and water conservation districts have the authority to impose ad valorem taxes with the approval of voters in the district;
- some confusion exists regarding ownership of many dams;
- counties and local governments should develop ordinances to determine how much building in a floodplain is permissible;
- the Office of the State Engineer (OSE) reviews dams in accordance with county ordinances, but it does not make or review land-use decisions;
- defined, written responsibilities do not exist for most dams;
- the OSE does inspect some privately owned dams; and
- soil and water conservation districts pay the Risk Management Division of the General Services Department for insurance.

Animas River Spill Update

Representative Bandy provided the committee with a brief history of mining and mining spills in southwestern Colorado and northwestern New Mexico. He then discussed the spill of contaminated mine sludge from the Gold King Mine into Cement Creek that traveled down the Animas River into New Mexico. Representative Bandy also discussed the reaction of various local, state and federal agencies to the spill as it traveled from Colorado to New Mexico, into the San Juan River and eventually through the Navajo Nation. He pointed out that three different U.S. Environmental Protection Agency (EPA) regions were affected by the spill: (1) Region 8, which covers Colorado; (2) Region 6, which covers New Mexico; and (3) Region 9, which covers the Navajo Nation.

Representative Clahchischilliage also discussed the spill, noting that a tremendous amount of sometimes conflicting information was being distributed by various government agencies, making it difficult for Navajos to know whom to believe, particularly with regard to how safe water in the river was for both humans and livestock. She also said that while the EPA did provide trucks with drinking water to Navajo Nation residents, the water turned out to be contaminated with oil, making residents even angrier.

Representative Bandy said that the response by both the state and San Juan County was timely, well-coordinated and vigorous.

Dennis McQuillan, Department of Environment (NMED), also discussed the contamination of the river, providing the committee with a time line of the movement of contaminants downriver. He noted that interactive maps were available on both the NMED and EPA websites, pointing out that the NMED had a map available by Friday after the Wednesday morning spill. Mr. McQuillan also discussed efforts by the NMED Drinking Water Bureau to contact water systems and begin testing water for evidence of harmful contaminants. He went on to detail the closure and eventual reopening of the rivers and ongoing testing efforts to ensure that water quality meets safe standards.

John Longworth, OSE, discussed the nature of the contaminants in the river and the transition of some contaminants from suspended sediments to dissolved sediments.

Tom Blaine, state engineer, also discussed the time line for the accident and the coordination among various agencies to address it. He said that the takeaway from this incident is that a number of state agencies, including the OSE, the NMED, the New Mexico Department of Agriculture, the Department of Health and the Department of Game and Fish, were able to quickly coordinate responses to the accident and work well together.

Questions and comments from the committee included:

- while there are many mines in New Mexico, the possibility of a similar incident happening in this state is relatively remote; the Gold King Mine offered a mix of high elevation and other elements that are rare in mines in New Mexico;
- continued monitoring of contaminants to ensure that they do not end up in the food chain;
- state and federal agencies are conducting many assessments and corrective actions to ensure that similar incidents do not happen again;
- the EPA has a claims process to help mitigate damage costs;
- there are many similar mines in southern Colorado that feature acid rock drainage and that are abandoned, with no responsible party to monitor or clean up the sites;
- New Mexico was not notified by the EPA, but rather by the Southern Ute Tribe;
- development of a global, long-term strategy for addressing mine cleanup;
- reclamation of the Willow Creek Mine near Pecos;
- most New Mexico mines are below ground, which could present ground water contamination issues; and
- NMED prioritization of abandoned mine sites.

Tuesday, September 1

The minutes of the June 1, 2015 meeting were approved without objection as submitted.

Regional Water Planning Process and Status

Deborah Dixon, director, ISC, provided the committee with an overview of the water planning process in New Mexico. She began by discussing the benefits of water planning and went on to talk about the regional water planning process in New Mexico. Ms. Dixon explained that while initial regional water planning efforts were relatively successful, current efforts are more focused on changing conditions and integration of individual regional plans into a state water plan and to tie water funding to those plans to ensure their implementation. She also talked about the development of a regional plan update handbook and formation of regional water planning steering committees that will take input from local stakeholders. Ms. Dixon also discussed input received from a New Mexico Water Dialogue meeting held in late July, which identified several areas of improvement for the planning process, including emphasis on policies as well as projects, additional tribal and pueblo input and integration and funding to support effective planning. Finally, she explained that the next steps involve submission and ISC review of draft plans, feedback from regions and ISC acceptance of plans in 2016, though the schedule may have to be extended to address the concerns of the regions.

Eileen Dodds, secretary/treasurer, New Mexico Water Dialogue, also discussed the regional water planning process, noting that the first round of planning took 11 years and that each region basically handled its own plan. She also noted that the current approach is different in that it is much more of a top-down process, rather than a bottom-up process. Ms. Dodds

outlined five major issues that the representatives from 13 of the 16 planning districts discussed at a recent New Mexico Water Dialogue workshop on the water planning process.

1. There is dissatisfaction with the data because the common technical platform figures represent the "lowest common denominator" and are generalized across the state, where regional conditions vary greatly. With additional time and effort, more complete information for each region could be included to enhance the crucial understanding between the supply and demand gap.

2. There seems to be no good process for prioritizing the projects and programs that each region has presented to the ISC. There is great inequity between very large and very small planning entities. Additional work is needed to establish a framework to assist the regions with submission of projects that can succeed in being implemented.

3. Participation in the planning process has been somewhat lacking, with little involvement by the pueblos and tribes, as well as many other stakeholders. The organization believes that participation can be increased through continued outreach within the regions.

4. The need to consider the issue of governance will result in a joint working group consisting of representatives from the ISC, regional water planners, steering committee members and the New Mexico Water Dialogue. The working group will look at models from other states and consider ways to make regional water planning groups more effective, both legally and administratively. New Mexico Water Dialogue will also explore ways the regions can be brought together to address conflicts.

5. Legislative funding has decreased. There was discussion about the need for funding using a "cost-benefit" approach in regard to legal issues, reducing the supply/demand gap and building relationships, as well as implementing policies, programs and projects to justify the legislative funding requests.

Questions and comments from the committee included:

- New Mexico appropriated almost \$4 million for its first round of planning, while Texas spent about \$10 million;
- feedback on the current planning model suggests that it needs improvement;
- whether New Mexico needs to structure recurring funding for water planning;
- use of Land Grant Permanent Funds and New Mexico Irrigation Works Construction Fund money for ISC/OSE operations rather than water projects;
- use of water withdrawal data versus water depletion data in the water planning process;
- Elephant Butte Irrigation District is not participating in the water planning process in the lower Rio Grande region;
- a timetable for submission of draft reports and publication of those reports;

- drought is addressed in plans, but it should also include the possible effects of climate change; and
- completion of water plans will help the legislature prioritize funding for water projects.

Interbasin Water Transfers

Anne Minard, a student at the University of New Mexico School of Law, briefly described the advantages and risks of transferring water from one watershed to another and explained that many states have specific criteria governing such transfers, especially transfers involving large amounts of water. Ms. Minard noted that while New Mexico law does not distinguish between intra- and inter-basin transfers of water, there are criteria that apply to all appropriations of water such that a change in place of use cannot impair existing valid water rights, be contrary to the conservation of water within the state or be detrimental to the public welfare of the state. During the last legislative session, she said, a bill was introduced that would have required transfers of more than 7,000 acre-feet per year of water to obtain legislative approval, with applications for transfers of more than 1,000 acre-feet per year to be evaluated by the OSE using specific criteria that consider the effects on the area of origin.

Ms. Minard also outlined laws in other western states, including those of Idaho, Nevada, Oregon, Texas and Utah, noting similarities and differences in each state's approach. Some states require that applicants for inter-basin transfers analyze the economic, environmental or social effects of their proposed projects. Some require financial compensation to communities in the original basin, evaluation of return flow and water quality impacts. She recommended that the committee track the success of other states' statutes in addressing the concerns raised by inter-basin transfers of water and explore why the various states set legislative triggers on specific volumes and rates of withdrawals for such transfers. She also recommended that if the legislature considers any such legislation, that it try to avoid the use of ambiguous terms that seem to be all too commonly used in other states' existing laws on inter-basin transfers.

Chris Lindeen, OSE, discussed some of the criteria his office uses to evaluate completed applications, explaining that a number of criteria may be used to evaluate whether a project is speculative in nature, such as technical feasibility, demand on the move-to site or economic feasibility, among others. Also, the economic or environmental effects on the move-from site may be examined. He cautioned, however, that an evaluation will not even happen if an applicant has not provided all the information needed to properly apply all the criteria required by law. Rather, an incomplete application will be rejected, which happened to the application submitted by the Augustin Plains Ranch.

Questions and comments from the committee included:

- removal of water rights from a basin can be harmful to the communities that no longer have water rights;
- the use of desalination technology by El Paso to meet water needs, rather than transferring it in from other basins;

- Rio Rancho's return flow plan and the city's consumptive use;
- the OSE tries to prevent speculative uses of water;
- some water from Otero Mesa goes to Mexico;
- policymakers need to focus on regional, long-term solutions for water;
- the potential for geologic instability as aquifers are depleted;
- ways to study the life expectancy of aquifers and the likelihood that they will become empty at some point;
- desalination may not necessarily work for many New Mexico aquifers; and
- OSE authority over deep wells.

There being no further business, the committee adjourned at 12:35 p.m.