

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

**September 1-2, 2005**  
**Workforce Training Center**  
**Albuquerque**

The fourth meeting of the Water and Natural Resources Committee was called to order at 10:10 a.m. on Thursday, September 1, 2005, by Senator Carlos R. Cisneros, chair.

**PRESENT**

Sen. Carlos R. Cisneros, Chair  
Rep. Joe M Stell, Vice Chair  
Sen. Sue Wilson Beffort (September 2)  
Rep. Ray Begaye  
Rep. Joseph Cervantes (September 2)  
Sen. Dede Feldman  
Sen. Mary Jane M. Garcia  
Rep. Larry A. Larrañaga  
Rep. Kathy A. McCoy  
Sen. Steven P. Neville  
Rep. Andy Nunez  
Sen. Mary Kay Papen  
Sen. H. Diane Snyder  
Rep. Sandra L. Townsend

**ABSENT**

Rep. Dona G. Irwin  
Sen. Cynthia Nava  
Rep. Mimi Stewart  
Rep. Don L. Tripp

**Advisory Members**

Sen. Rod Adair  
Sen. Vernon D. Asbill  
Rep. Anna Marie Crook  
Rep. Candy Spence Ezzell  
Rep. Rhonda S. King  
Rep. Ben Lujan (September 2)  
Rep. James Roger Madalena (September 2)  
Rep. Greg Payne  
Rep. Danice Picraux  
Sen. Nancy Rodriguez  
Sen. John C. Ryan  
Rep. Henry Kiki Saavedra  
Sen. Leonard Tsosie  
Rep. Peter Wirth  
Rep. Eric. A. Youngberg (September 1)

Rep. Richard P. Cheney  
Sen. Clinton D. Harden, Jr.  
Sen. Timothy Z. Jennings  
Sen. Gay G. Kernan  
Sen. Leonard Lee Rawson

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

**Staff**

Gordon Meeks  
Evan Blackstone  
Jeret Fleetwood

**Guests**

The guest list is in the meeting file.

**Thursday, September 1**

**ALBUQUERQUE-BERNALILLO COUNTY WATER UTILITY AUTHORITY STATUS REPORT**

Mark Sanchez, executive director of the Albuquerque-Bernalillo County Water Utility Authority (ABCWUA), updated the committee on the status of the water authority. He began by providing the committee with a brief history of the authority and its makeup and then discussed how the authority provides water and wastewater service to local citizens. Mr. Sanchez pointed out several of the authority's accomplishments, such as odor control projects, conservation efforts, leak detection programs and pipeline construction. He also noted several projects that the authority either has planned or has already begun work on, such as a drinking water project that will treat water from the Rio Grande in an effort to reduce reliance on pumped ground water.

John Stomp, manager of the Water Resources Division of the ABCWUA, provided the committee with information regarding the drinking water project the utility is currently working on. He also discussed the authority's conservation program, noting that the authority has actually been able to exceed its water conservation goals for several years. Mr. Stomp pointed out that such conservation measures will allow the Albuquerque area to continue to grow without drastic increases in water use. Finally, Mr. Stomp discussed the authority's proposed surface water distribution system and the construction of a water treatment plant and transmission lines across the city, all of which should allow the authority to perform its duties even more efficiently.

Mary Murnane of the Bernalillo County Public Works Division provided the committee with an overview of the Valley Utilities Project. She explained that the project, begun six years ago, is focused on providing sewer service to large areas, noting the large number of hookups that have either already taken place or are in progress. Ms. Murnane discussed the status of several smaller projects within the Valley Utilities Project, as well as funding mechanisms for those projects.

Questions and comments included:

- city, state and federal funding commitments;
- source of state funds;
- use of capital outlay funds for projects;

- governance of the ABCWUA;
- the impact of concrete shortage on project construction;
- the condemnation process;
- Native American representation on the ABCWUA;
- use of San Juan/Chama water for ABCWUA projects; and
- the ability of one legislature to bind another to expend money.

On a motion made, seconded and unanimously approved, the minutes of the August 4-5 meeting were approved as submitted.

### WATER USE BUDGETING AND ACCOUNTING

John D'Antonio, state engineer, discussed the importance of New Mexico's water assets and pointed out that the Drought Task Force, assembled two years ago, learned that many of the "communities in crisis" were actually affected more by a lack of water system maintenance than by the drought itself.

Matt Holmes of the New Mexico State Rural Water Association provided the committee with an overview of unaccounted-for water (UAW) and the problems it creates for water systems. He pointed out that while UAW is difficult to clearly define, it does have an impact on water system costs, in part because it produces no revenue. Mr. Holmes went on to divide UAW into apparent losses and real losses, noting that real losses such as leaks within the system, usually account for the largest volume of water lost by utilities.

To help combat losses due to UAW, Mr. Holmes recommended implementation of water auditing and accountability programs. He pointed out that such programs would help make more efficient use of New Mexico's limited water resources, as well as potentially saving large quantities of money and water.

Questions and comments included:

- water use statistics for New Mexico communities;
- aquifer recharge from water system leaks;
- leak detection technology;
- UAW statistics for New Mexico communities; and
- costs associated with water loss programs.

### WATER SYSTEM ASSET MANAGEMENT

Heather Himmelberger, director of the New Mexico Environmental Finance Center, provided the committee with remarks concerning the asset management (AM) approach to utility and water resource management. She explained that the AM approach can help utilities make better decisions and help ensure a system's long-term financial sustainability. Ms. Himmelberger then walked the committee through the five core AM questions, explaining how each one helps utilities to deliver services to their customers while simultaneously considering long-term funding and maintenance strategies. Finally, she noted several geographic areas, such as Orange County, California, and Seattle, Washington, where implementation of AM techniques has been

highly successful.

Questions and comments included:

- whether AM techniques can be tied to water system security.

#### WATER SYSTEM FINANCIAL PLANNING

Blanca Surgeon and Olga Sanchez, both of the Rural Community Assistance Corporation, provided the committee with testimony regarding the importance of water system financial planning. They explained that without a financial plan in place, even small water systems will have a difficult time safeguarding their assets, planning for future events, meeting debt requirements and building enough financial reserves to cover repairs and replacements. Nevertheless, Ms. Surgeon and Ms. Sanchez noted that few water systems have financial plans in place.

Ms. Surgeon and Ms. Sanchez went on to detail the major components of a typical financial plan, such as revenues, expenditures, reserves and cash balances. They also emphasized the importance of written financial controls and annual expense reports to help a well run system safeguard its money and records. Ms. Surgeon and Ms. Sanchez also noted the importance of metering all users on a water system to better understand the costs associated with providing water service. Finally, they pointed out that a well designed financial plan can help build customer support for water rate increases because it gives users some idea about the costs associated with operation and maintenance of the system.

Questions and comments included:

- water rate comparisons between public and private water systems; and
- cross-subsidization of water expenses.

#### WATER RATES AND AFFORDABILITY

Professor Janie Chermak, associate professor of economics at the University of New Mexico (UNM), and Jason Hansen, a graduate student at UNM, provided the committee with a summary of their research regarding the relatively small amount of money that the average New Mexican pays for water. Dr. Chermak and Mr. Hansen began by giving the committee an overview of how water rates fit into the average New Mexican family's monthly budget, pointing out that, in some parts of the state, families spend an average of \$350 a month on groceries, compared to \$22 a month for 6,000 gallons of water. They noted that among necessary expenditures made by the average family each month, such as groceries, home loan interest, health insurance, gasoline and auto repairs, water usually accounts for one of the smallest expenditures.

Dr. Chermak and Mr. Hansen indicated that in Texas the average community's expenditure for water is 1.5 percent of its annual income, compared with .77 percent in New Mexico. They also provided the committee with some idea of how much it would cost the average New Mexican family if water rates were increased. Dr. Chermak and Mr. Hansen illustrated the ability of families to absorb a water rate increase by pointing out that dramatically

rising gasoline costs have done little to alter the driving habits of most New Mexicans. However, they also suggested that increased water rates could lead to better conservation practices, too.

Questions and comments included:

- information from the 2000 census as the source of average New Mexican family data; and
- the impact of rate increases on the poorest New Mexican families.

The committee recessed at 5:15 p.m.

## **Friday, September 2**

### **CONSERVATION FUNDING AND OTHER ENVIRONMENTAL LEGISLATIVE INITIATIVES**

Edward Archuleta of Animal Protection of New Mexico provided the committee with testimony regarding funding of land and wildlife conservation programs in New Mexico. He explained that most western states have dedicated, sustainable funding streams for land and wildlife conservation, while New Mexico makes decisions regarding such funding on a year-to-year basis. Mr. Archuleta also noted that survey data indicate that most New Mexicans support land and wildlife conservation funding. He suggested that New Mexico is not matching the conservation efforts of neighboring states.

Mr. Archuleta went on to discuss New Mexico's conservation needs, indicating that meeting those needs will require a state investment of \$37 million to \$48 million for several years. He also provided the committee with a number of potential revenue streams that would provide the funding required to meet New Mexico's conservation needs. Finally, Mr. Archuleta suggested that if the legislature was unable to provide appropriate sufficient land and wildlife conservation funding in the upcoming legislative session, it would be helpful for the legislature to charge the appropriate interim committee with developing legislation that identifies sustainable conservation funding.

Cynthia Bodine, a New Mexican landowner, discussed the importance of the Surface Owner's Protection Act, which was introduced in the 2005 legislative session but ultimately did not pass. She explained that currently, landowners have little say in where some mining equipment is located on their property.

Dr. Ben Luce, chair of the Coalition for Clean, Affordable Energy, provided the committee with testimony regarding solar energy incentives for New Mexico. He explained that a solar energy incentive would benefit New Mexicans by saving consumers money on heating bills, creating skilled jobs through the production and installation of solar panels and reducing emissions. Dr. Luce also noted that in addition to the governor, recent polling data indicate that most New Mexicans support solar energy development and incentives. He also discussed a proposed state solar energy tax credit, which could be applied to 30 percent of the cost of

installing a solar heating system, as well as more modest federal solar tax credits.

Dr. Luce also indicated that advances in solar technology make it highly unlikely that the problems associated with solar energy in the 1980s will recur. Finally, he provided the committee with information on how a solar heating system would function and the operational costs of solar heating versus conventional heating systems.

Questions and comments included:

- criticism that the Surface Owner's Protection Act was not clearly listed on the agenda.

#### PUBLIC/PRIVATE WATER SYSTEM FINANCING PARTNERSHIPS

Maurice Hobson, lobbyist, provided the committee with an overview of public/private water system financing partnerships. He explained that 60 percent of the U.S. population gets water from private producers, and he noted some of the private water systems that are operating in New Mexico. Mr. Hobson went on to discuss the success of a public/private water system financing partnership in Horizon City, Texas. He explained that the Horizon Regional Municipal Utility District was having water supply problems, as well as difficulty complying with some water quality standards. Mr. Hobson indicated that the Southwest Water Company, a private entity, formed a partnership with the Horizon Regional Municipal Utility District to construct and operate a reverse osmosis facility. He went on to note that the water treated by reverse osmosis could then be blended with well water to help address both water supply and water quality issues, and he showed the committee the relatively low cost of treating 1,000 gallons of water. Finally, Mr. Hobson provided the committee with a basic overview of how the reverse osmosis process works.

Questions and comments included:

- the effect of pumping for reverse osmosis on aquifers.

#### DESALINATION PROSPECTS

Linda Weiss, state director, United States Geological Survey, provided the committee with testimony regarding desalination of ground water in New Mexico. She explained that much of the ground water in New Mexico has saline levels that are too high to be of much use without being treated, but that advances in desalination technology have made such treatment more affordable. Ms. Weiss went on to discuss some of the issues that must be considered before pursuing desalination of ground water, such as the salinity of the source water, yield, the effect that ground-water pumping and treatment will have on adjoining freshwater systems and waste disposal issues. Finally, she showed the committee the areas in New Mexico where ground water has been evaluated for desalination, as well as which aquifers would likely yield the most water.

Questions and comments included:

- suitability of aquifers in Santa Fe County for desalination;
- beneficial uses of salt left over from the desalination process; and
- whether New Mexico should pursue desalination or conduct desalination studies.

The committee adjourned at 12:10 p.m.