New Mexico – Texas Water Commission

Public Entities in Partnership for Sustainable Water Resources

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Minutes

MEETING OF THE NEW MEXICO-TEXAS WATER COMMISSION

Las Cruces City Council Chambers
200 N. Church Street
Las Cruces, NM

February 19, 2004
9 A.M.

Welcome

Jorge Garcia welcomed everyone and chaired the meeting. Mr. Archuleta attended the meeting as well. A copy of the sign-in sheet is attached as **"Exhibit "A"**. Those members attending from the Commission's MAC/SC were as follows:

Dr. Ari Michelsen – Texas A&M	Karl Wood – NMSU-WRRI
A. Tarquin – UTEP	Mike Fahy – EPWU
Ed Archuleta – EPWU	Armando Cordeo – Dona Ana County
Jorge Garcia - City of Las Cruces	Gary Esslinger - EBID

I. Review and Approval of Minutes from December 18, 2003, Commission Meeting

Mr. Garcia asked if anyone had comments on the revised October 23, 2003 Commission meeting minutes, and on the December 18, 2003 meetings minutes. The minutes were approved unanimously.

II. Progress Report by the Paso del Norte Watershed Council (PdNWC) with Update on Grant Funding Proposals (Nancy Hanks, Watershed Council Coordinator).

Nancy Hanks updated the Commission on the activities of the Paso del Norte Watershed Council (PdNWC). She informed that the Council had met on January 26th and discussed funding.

The two Border 2012 grants have not been responded to as of yet, however Phase II of the Coordinated Database and the Organizational Cooperative grant are going according to plan and

have been signed by all but one agency.

Nancy Hanks provided a power point presentation **(attached as Exhibit "B")** on the Water 2025 Western Water Initiative Challenge Grant Program for Fiscal Year 2004, and the Water Conservation Field Services Program by the Bureau of Reclamation.

- The Western Water Initiative Challenge Grant program is issued from the U.S. Bureau of Reclamation, in Denver, Colorado. Eligible applicants are irrigation and/or water districts in the western U.S.

- The cost share is 50 per cent with a funding amount of up to $300,000 per agreement.

- The applications are due April 8, 2004 and an estimated 15 to 100 agreements are to be awarded by September 2004

- The total amount of the funding is not to exceed $4,000,000 and projects must be completed within 24 months, although multi-year proposals will be considered.

The objectives of the Challenge Grant Request for Proposals (RFP) **(attached as Exhibit "C")** is to invite irrigation and water districts to leverage their money and resources by cost sharing with the Bureau on projects that create water markets such as: providing irrigators and other water users the prospect to rent, lease or sell water for agricultural or urban use and development of a water "bank" account that would provide a mechanism for willing buyers to purchase water from willing sellers.

Examples of eligible projects for improved water management are automation of control structures with associated telemetry equipment for off-site control, implementation of water management programs to remotely monitor and operate key river and canal facilities, and improved water application efficiencies.

Nancy also cited two examples of projects eligible under the canal lining category such as installing new or proven lining material, and converting open canals to a pipeline. She also referred to the installation of advanced water measurement equipment as another example of an eligible project.

The Water Conservation Field Service Program is another U.S. Bureau of Reclamation Project being conducted out of Albuquerque, NM office of the Bureau. It is an on-going program and is open to any type of organization except for private land owners. The proposed activity must have a defined relationship to one or more specific Reclamation water projects, including the Rio Grande Project. Cost share funding is preferred, but not necessary for conservation activities. The funding will be between $2,000 and $25,000 per year, with the stipulation that the projects be completed within three years. Several proposal applications may be submitted, however, only one activity per application is allowed. The application due date is March 30, 2004.

Objectives of the RFP's Conservation **(attached as Exhibit "D")** are to:

- Aid water purveyors, municipalities, water districts, and acequias to develop written water management and conservation plans.
- Implement more efficient water management measures
- Increase technical understanding of unfamiliar water management strategies
- Improve the public's understanding of good water management principles through education, training and research programs.

Some examples of the Water Conservation Field Services Program Projects are:

- *Water Management Planning;* Publication of "Desert Blooms, a SunScape Guide to Plants for a Water Scarce Region" by the City of El Paso
- *Conservation Education;* Rolling River Water Trailer and funding to support the math, engineering and science education of students.
- *Demonstration of Innovative Technologies:* Funding for 13 Water Control Telemetry Stations in the El Paso County Water Improvement District #1
- *Implementation of Conservation Measures;* The Tri-City, Tri-State, Bi-National (El Paso – Las Cruces- Juarez) water Festival, sponsored by the Waste Management Education & Research Consortium (WERC).

Nancy brought extra RFP's of each of the projects for anyone who was interested.

Mr. Keyes, the Bureau of Reclamation Commissioner, was in El Paso for the swearing in of the new International Boundary & Water Commissioner, Arturo Duran. He was there to show support, not only for Commissioner Duran, but also for the Border 2025 program, which has the support of the President and the Vice President of the United States. The program funding for this year is $4 million, with up to $300,000 being the maximum per application, with a 50% local cost share. In-kind service will be accepted as part of the local share. This program is receiving a lot of attention, and the Bureau is hoping for a lot of participation. The Bureau is concentrating on "hot spots" in the area and this portion of the southwest is defiantly in a "hot spot". The Bureau is issuing a challenge to all "hot spot" areas to work together to address these water issues.

After some discussion, the Commission made a motion for Nancy to work on The Western Water Initiative Challenge Grant program which has an April 8th deadline. The intent is to potentially link the SCADA systems of EBID, EPCWID and EPWU. Mike Fahy will work with Nancy, Ari and representatives of EBID and EPCWID on this.

III. Update on the Rio Grande Project 2004 Irrigation Season, Water Supply and Allocation Forecast (Wayne Treers, BuRec)

Wayne Treers provided a power point presentation of the current water supply and allocation forecast **(attached as Exhibit "E").** Following are some major highlights from Wayne's presentation.

Mr. Treers began with the 2004 Upper Rio Grande Climatic Conditions. He explained that many things have changed since he attended the last meeting in December. The snowpack in the Upper Rio Grande and the Rio Chama Basin, which together forms the San Juan Mountains portion of the watershed, is nearly at 100 % of normal snow pack this year. The Southern Colorado portion of the San Juan Mountains is at 108% of normal and the Rio Chama portion is at 98%. The other parts of the basin are not doing quite as well. The Sangre de Cristo Mountain Basin is at 77% of normal and the Jemez River Basin is the lowest of the basins at 62%. This is better than last year, however. Last year the San Juan Mountains portion was running less than 60% to 70% of normal snow pack, the Sangre de Cristo was at 94% and the Jemez River Basin was about the same at 56%.

Wayne reviewed the snowtel site charts. Since October 1 of last year, the snowpack sites in the Southern Colorado portion of the San Juan Mountains, such as the one at Wolf Creek Summit, have been running close to their 30 year averages. The same applies to the snowtel sites in the Rio Chama portion. This is good news for us because 78% of our snowpack run-off comes from this portion of the basin. The other parts of the basin have been running a little below average, with the Jemez being the lowest.

Mr. Treers next discussed how climatic conditions are going to impact the snowpack levels. The winds are starting right on time. They usually start in late February or early March. This year the winds may have even more impact on the snowpack. This is because the NRCS has indicated, based on January measurements, the presence of less dense snow this year, particularly in Northern New Mexico. Colorado is reporting about average density for snow. With this kind of snow pack conditions, as the wind picks up and the temperature increases, greater sublimation of the snowpack occurs. This will lower the run-off for this year. Also, soil moisture measurements show extremely dry conditions in the soil below the snowpack, which will also reduce the efficiency of run-off.

The precipitation in the mountains since last October is doing much better than last year. The upper part of the Basin in the San Juan Mountains was at 104%, down to about 82% of the Rio Chama portion. The Sangre de Cristo Basin has been running at about 76% of normal precipitation and the Jemez River Basin is at 65%. You can see the trend particularly in the mountain ranges in northern New Mexico which is where the precipitation is headed right now. From now until June, not much precipitation is received in the form of rain - most precipitation comes as snow in early April. Wayne commented that precipitation looks somewhat better than it did last year, but he thinks were are headed for the same overall dry pattern.

Precipitation for February is showing below normal (85% of average) for the Rio Grande Project

area, Central New Mexico, and all of Far West Texas. The rest of the basin where the snow is occurring is showing equal chances for above or below normal precipitation. We are in a transition period, or what the weather service calls "El Niño", which gives more precipitation in the winter, and El Niña, which exhibits just the opposite trend (dry winters). The snow pack does seem to be better than during the last 4 or 5 years, however there are climatic conditions that are working against us. The 30 day forecast for precipitation is still forecast for below normal conditions. Temperatures are forecasted for 5 to 10 percent above normal in the basin for the next 90 days.

A review of the Rio Grande daily flow at the gages above Elephant Butte reveals that daily flows at the Otowi Bridge gage have been running below average all winter. The Albuquerque gauge has also been running below normal. Flows at the San Marcial gauging station picked up in late November and early December and stayed close to average, mostly due to the large amount of water sent down from Colorado at the end of the year.

Next Mr. Treers referred to the climatic data through February 1st. It shows an improvement from last year. Last year the January 1 forecast at San Marcial was for 70 % of average. This year, the January 1 forecast at San Marcial is for 79% of average. This is the best forecast in five or six years. There has not been good runoff for several years. In February the forecast in San Marcial went up slightly to 82% of average.

Mr. Treers talked about a discussion he had with NRCS. The NRCS office in Albuquerque and their counterparts in Portland work up a forecast. They share this forecast with the National Weather Service (NWS), which then works up its own forecast. The NRCS and NWS then collaborate and agree on a joint forecast. The Albuquerque and Portland offices of the NRCS wanted to adjust the San Marcial forecast down from February 1st but were out-voted by NWS office. The primary factor was that the San Juan Mountain had above a 100% snow pack in January. This was a big influence for raising the forecast in February 1st. The 30 year average rate of accumulation for snowpack is highest for the time period starting from now until April. The snow pack levels need to stay up with that average rate, and we need to get storms fairly regularly across the basin in order to do so. Therefore, the Albuquerque NRCS office has a tendency to keep the forecast down slightly. For the current forecast, they collaborated and agreed to bump up the forecast based on moisture that was received in February. However, Mr. Treers stated that he received an advance warning from the Albuquerque NRCS office that the February 15th forecast has been released, and it shows that all the gauging stations are going to be down by at least 50,000 AF. It therefore appears that the climatic conditions that Mr. Treers previously talked about are starting to take hold.

Wayne would like to remind the audience that since 1996 at Elephant Butte has had below average runoff and that is the reason why our storage has dropped so dramatically. Last year was the first year in 25 years that we have had less than a full supply, and this year the supply allocation is not going to be much better. The March through July run-off in 2002 at San Marcial was at about 61,000 AF, which was the 9th lowest on record. The annual flow that year was the 7th lowest on record. Last year was not much better with a March through July runoff at about 62,000 AF, making it the 10th lowest on record. Annual flow last year was 207,000 AF (4th lowest on record).

As of February 17th, Elephant Butte Reservoir had gained roughly 14.7 feet in water level and approximately 112 to 113 thousand acre-feet of storage since the gates were closed on September 14th. Inflow to Elephant Butte has gradually been increasing. From September to the end of January it has running at almost 60% of average inflows, which is better than it was last year. In January the flows were running at 62% of average. The flows has picked up in the last few months due to Colorado kicking in quite a bit of water from their potion of the basin. Caballo has 9,630 AF in storage.

Mr. Treers discussed the Rio Grande Credit Waters Status. At the start of year, Colorado had almost 42,000 AF of credit water and New Mexico had 265,000. With evaporation and the relinquishment of 122,500 AF from New Mexico to Texas last April, Colorado ended up with 31,000 AF and New Mexico ended up with almost 100,000AF. This 130,000 AF credit water represents more than 50% of total storage. Based on preliminary numbers from Colorado and New Mexico, Mr. Treers anticipates that Colorado will have under-delivered by about 30,000 AF last year. They will end up with just over 1,000 AF of credit starting this year. New Mexico will have under-delivered about 37,000 AF. Under-deliveries are due to combination of reasons: one has to do with Article 7 being in force so that they can't store water in upstream reservoirs and the other reason is that we had a poor monsoon season last summer. New Mexico depends heavily on that monsoon run-off as it comes in below Cochiti Bridge above Elephant Butte to help them make their deliveries. New Mexico has about 62,000 AF of credit water at the beginning of the year and they relinquish that amount on March 1st. Effectively, on March 1 their will be only about 8,000 AF of water in the reservoir that cannot be made available for allocation.

The most probably forecast for February 1st is for 59% of average runoff at San Marcial. The NRCS unregulated forecast is for 82% of average flows at San Marcial. The upstream regulation shows is that New Mexico is planning to store about 100,000 AF in El Vado this year. Santa Fe is looking at storing roughly 1,000 AF in their two reservoirs. Additional depletions by MRGCD are expected in the Middle Valley of about 10,000 AF. Colorado is planning on making all their deliveries this year, so Mr. Treers is making no adjustments in the forecast for that. Taking all these adjustments into account, the estimated inflows to Elephant Butte are 337,000 AF. The demands are expected to 595,000 AF of releases from Caballo this year, which is not enough for a full supply. By mid-September, storage is expected to be down to 45,000 AF.

Gary asked whether Mr. Treers expects that there will be any injunctions that will stop BuRec from releasing water this year. Mr. Treers replied that technically, the answer is no. He can drop the water levels at e Elephant Butte down to 8,000 AF. However, once storage drop below 100,000 AF, there is some question as to weather BuRec could be prevented from further releases, but short of a court order, they plan to continue releases. Mr. Treers discussed two previous lawsuits filed to prevent low storage levels. Currently, BuRec is keeping residents near the reservoir updated regarding expected lake levels this summer.

Mr. Treers went over the Reservoir Operation tables. The most probable scenario shows 59% of average inflows. Two more scenarios were shown – one using 25% of average inflows and another at 75%. Storage at Elephant Butte Reservoir could as low as 7,000 AF in September under the 25% inflow scenario, and could reach about 49,000 AF in October under the 75%.

Mr. Treers showed the 3 allotments issued so far this season, starting with the November allotment. The last allotment issued for the end of January was for 100,766 AF, or 10.81% of a full supply. The projected allotments for each of the three inflow scenarios were discussed.

Under the most probable scenario, a release of 594,000 AF (58.9% of a full supply) is being projected by the end of August. Under the 25% inflow scenario, releases are projected at 401,000 AF (38.5% of a full supply), which is similar to last year's supply.

The tentative release schedule for the project shows release starting March 15th for both Districts and Mexico, releases shutting down on April 21 for all users, and a 2nd release block starting May 10 for all users. Releases are projected to shut for the season on September 30th.

IV. Presentation of NM Senator Bingaman's "US-Mexico Transboundary Aquifer Assessment Act, S-1957" (Karl Wood, NMSU – WRRI)

Karl Wood provided a brief power point presentation (**see attached Exhibit "F")** describing S-1957 which is supported by Senator Bingaman. The presentation concentrated on describing future problems along the US-Mexico border, such as rapid population growth being the highest nationally, the average per capita income being below the U.S. average, and the fact that economic development is often restricted due to lack of water. He cited ground water as the only major source of available drinking water in many areas.

Karl demonstrated this by showing the location of groundwater resources in the New Mexico border region. He presented maps with storage amounts and recharge levels for the Hueco Bolson, Mesilla Basin, Jornada del Muerto, Mimbres Basin, Hachita-Moscos Basin, Playas Basin and the Animas Basin. Questions concerning these aquifers range from how deep they are, the direction of subsurface flow, how extensive they are, how fast their water levels are declining, what the water quality is at various depths, what the long term availability is, and what the relationship is between surface supplies and aquifer recharge.

The solution to these questions could be solved by this congressionally funded initiative to:

- Develop high-quality, comprehensive, binational groundwater quantity and quality databases
- Assess movement and interaction of water resources
- Analyze trends in groundwater quality, including salinity, nutrients, toxins, and pathogens
- Develop and improve groundwater flow models for bi-national aquifers to facilitate regional water assessment and planning
- Develop land use and specialized geologic maps of both surface and bedrock deposits
- Apply the new data and models to evaluate strategies to enhance supplies and protect water quality.

Karl stated that the primary emphasis will start on the southern New Mexico-Far West Texas-Northern Chihuahuan region. The secondary emphasis will follow in the Arizona- Sonora and California – Baja regions.

The lead agencies slated to perform this work will be New Mexico Resources Research Institute at New Mexico State University, and the Texas Water Resources Research Institute at Texas A&M University. The funding will be from U.S. Senate Bill 1957 of the 108th Congress introduced on November 25, 2003 by Senator Jeff Bingaman. **(See attached Exhibit "G").** The amount of funding is $5 million each year for 10 years.

Karl observed that the responses from the various organizations reviewing the bill as been 100 % positive.

VI. Briefing on February Quarterly MSSC Meeting (Mike Fahy, EPWU)

Mr. Fahy provided an update on the quarterly meeting of the Multi-State Salinity Coalition (MSSC) held on February 13, 2004 at the Metropolitan Water District of Southern California. **(See attached Exhibits "H")** Mr. Fahy informed the audience that there was a strong positive reaction to the 2003 annual Salinity Summit expressed by the attendees from the sixteen states that were represented. There were requests for additional technical content at the next summit as well as a review of Legislative – Congressional funding initiatives, plus interest in a new MSSC web site. The CD describing the summit contents will be available at the end of March.

The target dates for the next summit are the last week of November or the week of December 13th. MSSC members would like two full days of conference with a networking session on the evening of the first day, and would also prefer invited papers complementing the Coalition's needs. The Planning Committee will start organizing the event earlier this year, to allow for an eight month lead to organize the summit.

The goals of the MSSC should be to define Specificity in the Coalition's Missions and Objectives, and to maintain independence from large organizations such as AWWA in order to respond to member needs without delays. There is currently no formal alliance with AWWA. The MSSC would like to request more sponsorship from member agencies, and to approach Congress as a dedicated focus group. Steve Rossi of Phoenix Water obtained consensus to proceed with the existing Steering Committee, and to work on a draft MOU using the prior draft from the original Tri-State Coalition as a basis.

The MSSC's basic functions are to:

- Act as an Information Clearing House
- Track and report to the members on new Legislation
- Consider a Newsletter and a Web Page.
- Rely on a Small Core of Volunteers to carry out the major function of the organization.

The next quarterly meeting will be at El Paso Water Utilities on May 24, 2004. There will be a tentative tour of the Tularosa Basin Desalination Research Facility on May 25th. Some of the suggested agenda topics include a briefing by the new IBWC commissioner, Arturo Duran, a description of brine disposal projects, and a summary update of the numerous projects of the Northern California Salinity Coalition.

V. Other Business

Mr. Archuleta reported hat he and Ari Michelson testified at UTEP on February 3rd at the Senate Select Committee Hearing on Texas Water Policies. Several representatives of EPWU also attended the Senate Subcommittee Hearing on Leasing State Water Rights in Dell City in February 11th.

Mr. Archuleta also explained that EPWU has arranged to purchase 29,000 acres of water rights land overlying the Capitan Reef Aquifer south and east of Dell Valley, and that EPWU's position is to support public ownership of water recourses rather than the private ownership concept being proposed in Texas by the Rio Nuevo group, and other similar private organizations.

Mr. Archuleta asked whether New Mexico legislation was passed that would require domestic wells to be permitted. Karl Wood replied that anyone who wanted a domestic well can now basically have one. There was a bill proposed to provide the State Engineer some control, however, this provision has been "watered down" to the point where domestic pumping is not regulated below the rate of approximaley1/3 AFY.

Mr. Archuleta suggested that it is time to re-invite El Paso County Water Improvement District #1 (EPCWID) back to the Commission. Ari volunteered to make the initial contact and ask EPCWID to return to the Commission.

VI. Schedule Next Meeting/Location

The next Commission meeting will be held at the Dona Ana County Courthouse in Las Cruces, New Mexico on April 1, 2004 at 9 am. The meeting of February 19th was adjourned at 10:55 a.m.