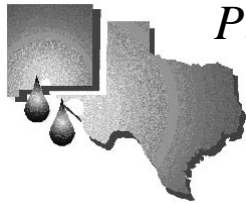


# New Mexico – Texas Water Commission



*Public Entities in Partnership for Sustainable Water Resources*

Water Resources Research Institute, Dept. 3167  
New Mexico State University, Box 30001  
Las Cruces, NM 88003-8001  
Phone: (505) 646-4337  
FAX: (505) 646-6418

El Paso Water Utilities  
Public Service Board  
P.O. Box 511  
El Paso, TX 79961  
Phone: (915) 594-5501  
FAX: (915) 594-5699

## MEETING OF THE NEW MEXICO – TEXAS WATER COMMISSION

**Elephant Butte Irrigation District  
530 S. Melendres  
Las Cruces, NM  
Telephone: (505) 526-6671  
December 3, 2004**

---

### Welcome

Ed Archuleta welcomed everyone and chaired the meeting. A copy of the sign-in-sheet is attached as “**Exhibit “A”**”. Those members attending the meeting were as follows:

Karl Wood – NMSU-WRRI  
Ari Michelsen – TX A&M  
Sue Padilla - DAC  
Tony Tarquin - UTEP  
Ed Archuleta - EPWU  
Tanya Trujillo – City of Las Cruces  
Henry Magallanez - EBID

### **I. Review and Approval of Minutes from October 29, 2004, Commission Meeting (Commission Members)**

Mr. Archuleta asked if anyone had comments on the October 29, 2004 Commission Meeting minutes. The motion to approve the minutes was passed and the minutes were accepted unanimously by the Commission.

### **II. and III. Progress Update of the Paso del Norte Watershed Council (PdNWC) and Presentation on the Draft Business Plan of the PdNWC Technical Working Group (Sue Watts, PdNWC Chair)**

Sue Watts updated the Commission in the place of Nancy Hanks, who was unable to attend. She informed the audience that the Watershed Council had their annual meeting on November 22, and held elections. The three separate working groups are continuing with their draft business plans.

Sue distributed handouts on the progress of the Technical Working Group and provided a Power Point presentation (**attached as Exhibit "B"**) on their draft Business Plan. Sue explained that the Technical Working Group is more advanced because several of their projects have been initiated, and are continuing and ongoing. The goals common to all of the working groups are to:

- Identify the Council's role in current legislative efforts to improve the Rio Grande.
- Compile an inventory of funding sources and grants to match with member needs and objectives.
- Seek and evaluate methods for funding specific projects, plus funding Council administrative expenses.

Sue informed the Commission that the individual working groups endorse the following four respective goals, or objectives.

**Goal A:** The Technical Working Group will "Promote Watershed planning and management and provide recommendations for Salinity Control/Salinity Management."

**Goal B:** The Biological Working Group will "Support restoration and enhancement projects in the watershed".

**Goal C** and **Goal D:** The Educational Working Group will "Facilitate Communication among stakeholders within the Council and will Provide Education and outreach to the Public and to Council members."

Sue briefly described those objectives and tasks that each working group had developed, which members were assigned as project leaders and which agency funded each respective project. Also included in the objectives were anticipated schedules or timelines. Mr. Archuleta requested that the minutes from the meeting include the Treasurer's report for the PdNWC. This is attached as "**Exhibit C**".

The Educational Committee has submitted a proposal in response to an RFP from the "Friends of the Rio Grande Project" for the PdNWC. It is a three page document with a goal of upgrading the current Council web site so that additional information can be utilized to encourage use by local stakeholders interested in water quality in the Paso del Norte Watershed. If awarded, this information will be available in both English and Spanish.

In addition, there were funds available for a scaled three dimensional physical model, called "Enviroscape" which the Educational Work Group hopes to use to educate the public in nonpoint source pollution. Sue concluded by announcing that the next meeting of the PdNWC will be on Friday, January 7, 2005, 1:30 pm at the IBWC in El Paso.

#### **IV. Early Forecast of 2005 Irrigation Season Runoff and Allocation (Wayne Treers, BuRec)**

Wayne Treers provided an early forecast for the Commission and supplied handouts attached as **Exhibit "D"**. Wayne informed the audience that the snow pack is improved this year compared to last year, and that there have been more storms in the upper basin. In addition, the entire basin is improved compared to the last two years. Wayne predicted that the overall precipitation will be better than the year before. The precipitation for the basin shows that drought conditions have improved and may continue to improve from January through April.

Wayne referred to the forecast tables which project a total 2005 release of approximately 764,000 AF based on 95% of a 30 year average runoff condition and including approximately 30,000 AF of relinquished New Mexico credit waters that can now be held at El Vado Lake. The 50% of normal condition yields a total release of approximately 437,000 AF, which is Wayne's most likely case due to a weak El Niño signal observed by the national weather forecasters.

Tony Tarquin asked Wayne if he had ever checked the NOAA predictions for their accuracy. Wayne responded that these predictions are based on natural conditions, are not an exact science, and do not take into account such human activities as water storage in reservoirs and interbasin transfers. Ari Michelson asked for Wayne's forecast for 2005 releases based on the end of year storage for 2004 in Elephant Butte. Wayne estimated 75 to 85 % of a full reply based on his 14.2% allocation using November 2004 storage compared to his 4% allocation based on the November 2003 storage value.

Mr. Archuleta asked that Wayne provide his forecast to the Commission at every other meeting.

**V. and VI. Progress Report on Draft, Linked Proposals by EBID, EPWU, and CLC in Response to BuRec) Water 2025 Challenge Grant RFP (Commission Members) and Discussion of Respective Agency Resolutions and Letters of Support/Endorsement for Challenge Grant Proposals (Commission Members)**

Mike Fahy provided an update on the Bu Rec. Challenge Grant proposals. Mike explained that several meetings were held among the members of EPWU, EBID, PdNWC and the City of Las Cruces. Most of the cost breakdowns by agency have not changed. The only major revision was that the PdNWC will now focus on identifying user needs for the shared data on the GIS Coordinated Database. The intent is to identify who the users are and which data format they require to make access and use of the flow and water quality information more user friendly. In addition the EPWU/EBID/PdNWC proposal calls for installing TDS and flow meters in various agricultural drains on the river, and incorporating the data into the Coordinated Database.

Mike distributed handouts of the Challenge Grant Public announcement, the draft table outlining the respective cash and in kind cost shares of each of the EPWU-PdNWC, EBID and CLC proposals, and the matrix or recommended letters of support and resolutions for the Water 2025 Challenge Grant Program. (**attached as Exhibit "E"**). The BuRec due date is January 21, 2005. Ed Archuleta asked if the EPWU/EBID/PdNWC proposal required resolutions or support letters by the City Council of Las Cruces and the Board of EBID. Henry Magallanez explained that EBID has prepared resolutions and letters supporting the application. This will be on their agenda for the following Wednesday. Cathy Matthews added that the City Council of Las Cruces will meet on this topic in January.

Conrad Keyes asked why the full Congressional Delegation was not included on the matrix of support letters and Mike responded they chose the first three representatives that came to mind. Conrad suggested adding two more New Mexico Congressmen and contacting Ann Watkins from the New Mexico Governor's office.

Ari complimented Mike on all the work he has put into the Challenge Grant.

There was a brief discussion on the areas where the new metering stations would be installed. Kevin Bixby informed the audience that the mouths of the drains are prime locations for wildlife habitat. Henry Magallanez added that the proposed metering stations would have no impact on the ecology of these areas.

Mr. Archuleta asked if all the grants are successful, will the funds come directly to each of EBID, EPWU and the CLC. Mike replied that this is the case. Henry said that the proposals will be submitted separately. The deadline is January 21 and Mr. Archuleta entertained a motion to submit the respective Challenge Grant applications by January 14, 2005. The motion was passed unanimously.

Mr. Archuleta added that EPWU is also submitting a small Challenge Grant Application to fund educational displays at EPWU's Water Resources Learning Center which will be located at the Joint Desalination Project site on Fort Bliss. He closed this segment of the Commission meeting by stating there is still ample time to prepare contact letters requesting support for the grant proposals by the various Congressmen and the Governors' offices, even after the due dates to submit the proposals.

## **VII. Presentation of three-Year Evapotranspiration (ET) Study of Pecan Orchard in Mesilla Valley (Phil King, NMSU)**

Phil King provided a Power Point presentation (**attached as Exhibit "F"**) on the research of evapotranspiration on cotton and alfalfa and pecans. Data was compiled from three irrigation districts from 1986 through 1997. The three districts included EBID, EP#1 and MRGCD. The study goal and objectives of the program were to quantify, using diverse data, the consumptive use of water by crops in the Rincon and Mesilla Valleys and in particular to measure evapotranspiration (ET) of pecans. Various alternative ET tools and methods were employed in accomplishing this, such as:

- Eddy covariance methods
- Light detection and ranging (LIDAR Method)
- Heat pulse technique
- Gas exchange using Stomata Conductance
- Monitoring groundwater use and depths to water table
- Soil moisture measurements
- Meteorological data analysis
- Remote sensing techniques

The actual field of sites evaluated using meteorological and solar radiation techniques included Stahman Pecan Farms and the Leyendecker Plant Science Research Center. The Stahman Farms site is considered nearly an ideal location due to the large areas covered by very mature pecan trees. The study concluded that annual pecan ET ranges from 4.15 to 5.1 feet, alfalfa ranges from 3.52 to 5.53 feet, and cotton ranges from 2.45 to 2.94 feet.

Ari asked who provided funding for this study and Phil responded that the contributor was the Lower Valley Water Users Organization. Mr. Archuleta asked Phil to identify the practical uses for this information. Phil replied that Stahman Farms uses this information to identify daily irrigation rates, and in general this information could be used by a variety of farmers for their conjunctive use of surface and ground water for a variety of crops.

#### **VIII. Preview of EBID-Web Page Access to New EBID/EPWU Conductivity (TDS) Data from Probes Located at River and Agricultural Drain Locations (Gary Esslinger, EBID)**

Ron Mears stood in for Gary for this presentation. Ron is EBID's Web Developer and IT Manager. He provided a live demonstration of the EBID link to their webpage, which is: <http://www.ebid-nm.org/> Ron guided the audience through the process starting from the Home page on the Hydrology section to the Radio Telemetry data. This section shows the latest measurements from River Stations, Canals & Laterals, Farms, Monitoring Wells, Drains, and Wasteways. It shows raw data everyday at fifteen minute intervals. Historical data is archived and can be accessed to compute hourly, daily, monthly or yearly averages. The water quality probe in the river at the Stateline is now operational, and the remaining probes in the Stateline drains will be operational at the start of the 2005 irrigation season.

#### **IX. Other Business:**

Mr. Archuleta requested that a promotional fact sheet or a brochure be prepared describing the intent of the EPWU/PdNWC/EBID proposal and the map locations of the proposed water quality gages. Ron Mears reiterated the need for BuRec funds to cover Quality Assurance/Quality Control for assimilation of new EBID data.

#### **X. Next Meeting/Location**

The next meeting will be at Texas A&M Agricultural Research and Extension Center in El Paso, at 9:00 a.m. on January 6, 2005.