

MINUTES
MEETING OF THE NEW MEXICO/TEXAS WATER COMMISSION
MANAGEMENT ADVISORY COMMITTEE (MAC) AND
THE REGIONAL SUSTAINABLE WATER PROJECT
STEERING COMMITTEE (SC)

TEXAS A&M
1380 A&M CIRCLE
EL PASO, TEXAS 79927

NOVEMBER 15, 2002
10:00 AM - NOON

Welcome

John Burkstaller chaired and opened the meeting on behalf of Ari Michelsen, who was not present at the start of the meeting. A copy of the sign-in sheet is attached as **Exhibit "A"**. Those members attending from the Commission's MAC/SC were as follows:

John Burkstaller, EPWU
Gary Esslinger, EBID
Dr. Ari Michelsen – Texas A&M
Gene Paulk – City of Las Cruces
Tony Tarquin - UTEP

Karl Wood – NMSU
Ed Archuleta - EPWU
Doug Echlin – IBWC
Conrad Keyes - PdNWC

John Burkstaller, Gary Esslinger, and Gene Paulk were present at the start of the meeting. The remaining MAC/SC members arrived within ½ hour thereafter.

I. Review and Approval of Minutes from MAC/SC Meeting on 10/15/02 (MAC/SC).

Hard copies of the October 15 MAC/SC Meeting Minutes were made available with the handouts. John Burkstaller stated that because a quorum was not present, that approval of the minutes be deferred until the next meeting.

II. Progress of the Coordinated Database Project (Zhuping Sheng, TAMU)

Zhuping Sheng provided a power point presentation (copy attached as **Exhibit "B"**) on the PdNWC Coordinated Database/GIS project. Zhuping reviewed the development of the work plan, and then briefed the group on the progress to date. The workplan was finalized by project staff and technical committee members on October 23, 2002. The initial task of the workplan was researching the format of existing websites which provide environmental, water resource and GIS data. The research provided significant information which would assist in the development of the website. A basic concept of the architecture and functionality of the pilot web page has been determined. An ArcIMS map will provide an overall view of the watershed area, and pre-clipped tiles of this map will be implemented as image maps. These image maps will be populated with "hotzones", representing gauging stations and other data collection points, which can be clicked-on to retrieve a pop-up menu of available data for the station. The basic metadata (the big seven meta-data elements) for each data source will be shown in the pop-up menu. Further steps involve data compilation and prioritization, development of the HTML scripts and assembly of all the required elements toward a functional web page prototype. The principal investigators hope to have the preliminary research completed by the

end of November, in accordance with work plan schedule.

During the presentation, John Burkstaller suggested to Ed Fierro that he talk to the EPWU Lab personnel about the possible sources of data they may have available for use in the Coordinated Database Project.

After the presentation, Mike Landis commented that the Texas Natural Resources Information Center (TNRIS) group of the Texas Water Development Board was getting ready to do some work on this region of west Texas. He offered to provide Mr. Sheng with the name of a representative from TNRIS. Mr. Sheng replied that Dr. Srinu already had some contacts with TWDB, but welcomed Mr. Landis' information on additional contacts.

Conrad Keyes advised that he had met with Carl Hurst and Chris Schaefer of the U.S. Army Corps of Engineers (COE) yesterday in Albuquerque. They are going to forward the Coordinated Database Proposal that the Watershed Council sent to the COE to their Regional Office and see if funding from COE is available for the Project.

III. Progress Report by the Paso del Norte Watershed Council (PdNWC) (Ed Kosak, Watershed Council Coordinator)

Ed Kosak provided a progress report on the EPA Initiative Proposal (EPA Proposal, copy attached as **Exhibit "C"**) along with an outline of a PdNWC progress report. He emphasized that the EPA Proposal handed out is a Draft Proposal at this point, and will still be undergoing revisions. Following is a short summary of his progress report:

* The current version of the EPA Proposal was completed and submitted to the offices of the Texas and New Mexico Governors. At that same time, EBID was provided with a copy. A meeting was held in Las Cruces among John Hernandez and Phil King, representing EBID, and Watershed Council representatives to discuss EBID's concerns about the proposal. Mr. Hernandez went over a written list of several legal and technical concerns the EBID had with the Proposal. Council representatives discussed what could be done to address their concerns and satisfy their needs so that they could support the project. As a result of this meeting, it was determined that the Proposal would need some major revisions. Mr. Kosak stated that the plan is to have the revisions completed by next Monday, November 18, 2002.

* Brian Hanson, U.S. Fish & Wildlife Service, is in the process of investigating the potential of preparing a Biological Management Plan for our reach of the Rio Grande.

* Ed Kosak is continuing to pursue additional grant funding sources, such as the Land and Water Conservation Fund, the USDA Natural Resources Conservation Service, and various other foundations.

* The PdNWC web site is up and running - its internet address is "wri.nmsu.edu". Final suggestions are being made for the Council's Business Plan.

* Dr. Zhuping Sheng from the Texas A&M Agricultural Research and Extension Center was unanimously voted in as a member of the PdNWC Executive Committee on October 29, 2002. At this Council meeting, Chris Brown gave the same Powerpoint Presentation given by Mr. Sheng this morning with some small changes.

* Ed Kosak attended the 47th Annual New Mexico Water Resources Research Institute Conference in

Ruidoso. While there, he made some good contacts for the Watershed Council, passed out some business cards, and hosted a display about the Watershed Council. He also attended a work session for the Wetlands Project in Las Cruces. This Wetlands Project was entered by Kevin Bixby as a possible pilot restoration project in the EPA Proposal.

Conrad added that he was in the Governor's office in Sante Fe on Tuesday and met with David Miller and David McCumber, who is Chief of Staff for Governor Johnson's office. They have sent the EPA Proposal to the Secretary of the Environment Department and also to the Secretary of National Resources. He mentioned that there should be some type of joint support letter from those groups coming to the PdNWC, along with input on the proposal. This letter should be received by Ed Kosak sometime today.

IV. Update on Rio Grande Project 2003 Water Supply and Allocation Process (Wayne Treers, U.s. Bureau of Reclamation)

Wayne Treers distributed handouts (copy attached as **Exhibit "D"**) for his discussion. He began by announcing that there is a substantial amount of snow in all of the basins for the Rio Grande Project. He referred to the first two pages of the handouts, which show snow water equivalent in the basins. All of the basins show snow levels well above the average for this time of the year, which is good news. Precipitation has picked up considerably in the upper part of the basin over the last few weeks.

According to the Palmer Drought Index, as of November 9, 2002, the Middle Rio Grande region in New Mexico has been experiencing somewhat of a wet spell. Also, the northern New Mexico and southern Colorado portions of the basin have returned to near normal conditions as a result of increased precipitation within the last few weeks. The Seasonal Drought Outlook handout shows a prediction of "drought to persist or intensify" for southern New Mexico and southwest Texas. However, southern Colorado and northern New Mexico, where most of the runoff for the Rio Grande Project originates, are in the zone designated as "drought ongoing, some improvement". Mr. Treers stated that this region is in a period of transition.

Mr. Treers advised that inflows at San Marcial have improved, and therefore Reclamation has bumped up their December forecast for San Marcial flows. Mr. Treers went on to explain the allocation forecast computations for the remainder of this year and next year based on 100%, 50%, and 25% runoff scenarios. Based on preliminary numbers from the Compact accounting, it appears that Colorado and New Mexico will be gaining about another 120,000 AF of credits this year. Wayne stated that the storage levels are so low in Caballo and Elephant Butte Reservoirs that, under Article 7 of the Rio Grande Compact, neither New Mexico nor Colorado can store water in post-Compact reservoirs because usable storage (excluding credit water) is currently below the 400,000 acre foot minimum. He also does not foresee usable storage going above 400,000 AF at anytime next year.

After the presentation, Edd Fifer commented that Reclamation needs to go beyond making projections of future allotments, but instead should take some chances and declare an official allotment early in the year and not adjust it afterwards, so that farmers can plan for the planting of their crops. Mr. Treers replied that he has to rely on NRCS precipitation forecasts when making his projections. These forecasts get more accurate as the spring approaches and give him a better feel for what the final runoff figures will be. However, the problem he has is with the timing for the relinquishment of credits by Colorado and New Mexico. This is a moving target and he has to make educated guesses on the amount and timing of these relinquishments. Dave Brosman commented that EPWU would like to have an official allotment that it can rely on by March 1st. It could create a problem for EPWU if, for example, Reclamation suddenly increases their allotment on June 1st from 2.0 AF to 3.0 AF per acre, because EPWU will already have set an operating schedule and budget for its water plants. In addition, the City may be in a Stage II drought response stage by next Spring, and

EPWU has been advising its water users that the City will be in a drought during 2003. If Reclamation increases its allotment during the summer, it would then be difficult for EPWU to advise its customers that a drought no longer exists, and could reflect poorly on the prediction capabilities of the Utility and the other entities involved in setting the allocation.

Mr. Brosman suggested that Reclamation consider taking some risk and possibly declaring a higher allotment on March 1st than what would have been computed based only on the water currently stored in the dam. This concept was echoed by Mr. Archuleta, who further emphasized the EPWU needs to know early in the year what the final allocation will be, and not have Reclamation change their allocation at the end of every month throughout the summer. He added that EPWU can't do adequate planning under the current system. Mr. Treers stated that, by regulation, he can only allocate what is physically in the dam at that time. He can, however, make all the projections he wants, and that projections are all he can offer. Mr. Archuleta asked if he can at least advise on when they will start releasing water. Mr. Treers answered that right now they are talking about March 15, and went on to further explain how he makes the forecasts and why he can't make official allocations based on projections. Compact Commissioner Joe Hanson agreed with Mr. Treers, and stated that Mr. Treers was doing exactly what he was supposed to do. He added that it's not a perfect system, but it's the best that Wayne can do under the circumstances. Mr. Archuleta expressed his concern that there are members of the public that still do not believe that there is a drought occurring, and that conveying this concept is a difficult communications issue.

Gary Esslinger advised that a meeting of the Engineering Advisors is scheduled for next month, and suggested that relinquishment of credits be discussed at that meeting to hopefully get a better idea of how the credits will be handled. Mr. Hanson advised that he would likely accept any relinquishment of credits, but that at this point he has no idea under what terms and conditions he would do so. The most he can say now is that the terms and conditions will have to be negotiated with Colorado and New Mexico. Herman Settemeyer pointed out that even if credits are relinquished, Colorado and New Mexico can then store the same amount in upstream reservoirs. Therefore, relinquishment of credits only affects the timing of when water is available for allocation by Texas, and not the final amount that can be allocated. Mr. Esslinger stated that he understood this, but that he still thought discussions on this topic should be initiated as early as possible.

Mr. Keyes suggested that more people should attend the URGWOM meetings so they can see how the model works and hopefully this information will prove beneficial. He stated that only Valerie Provencio of EPWU was present to represent the Rio Grande Project at the last URGWOM meeting. Some MAC members advised that they do not receive notification of the meetings. Mr. Keyes advised that the URGWOM Steering Committee meets the second Tuesday of every month, and that he believes that they sent out notices to various entities who have an interest in URGWOM. (The URGWOM website address is <http://www.spa.usace.army.mil/urgwom/>, and the contact number for obtaining information on meeting dates and times is (505) 342-3348).

Gary Esslinger suggested that someone from Reclamation give a presentation at the next MAC meeting concerning the work and problems associated with construction of the pilot channel at Elephant Butte Reservoir. Gary Esslinger stated that he took a tour yesterday of the pilot channel and delta north of Elephant Butte. Gary added that while Reclamation talks about flow measurement at the San Marcial gauge, he would like to know how Reclamation can assure itself that the flows passing San Marcial actually get to Elephant Butte Reservoir. This is a concern when one considers all the losses that are currently incurred as the water flows through the delta, especially now that the north edge of the reservoir has receded so far south and low flows are occurring. Mr. Treers replied that he understood Mr. Esslinger's concern, and explained that Reclamation has almost 87 years of records that verify that what is showing up at San Marcial is also showing up at Elephant Butte. He asked Bert Cortez whether someone from Reclamation could give a presentation on this topic at the

next MAC meeting. Mr. Cortez replied that he would contact their Albuquerque office to work on a presentation for the next meeting.

V. Presentation on Rio Grande Compact Commission Storage Credit Accounting Methods (Herman Settemeyer / Texas Engineering Advisor from TCEQ)

Herman Settemeyer gave a slide presentation about the Rio Grande Compact's credit accounting procedures (copy attached as **Exhibit "E"**). The accounting of water deliveries is based on gauged stream flows, reservoir storage, and index supply schedules. Colorado and New Mexico are both allowed to accrue credits and, to a limited extent, debits. As of January 1st of this year, Colorado had a credit of 10,100 acre-feet and New Mexico had a credit of 155,700 acre-feet. In computing annual credit, any credit in excess of 150,000 acre-feet is taken as that amount. In Colorado, no annual debit can exceed 100,000 acre-feet, and their total debit cannot exceed 100,000 acre feet of water. In the case of New Mexico, no annual debit can exceed 150,000 acre-feet while their total cannot exceed 200,000 acre-feet. Mr. Settemeyer displayed a map of the Rio Grande basin showing where various gauges were located. He then presented several slides to explain the measurements and calculation used for determining the delivery obligations of Colorado and New Mexico, and gave examples of a typical calculations for each. Mr. Settemeyer noted that the "Rio Grande at Del Norte" index starts at 200,000 AF, but that they estimate that next year's index flows at this gauging point are estimated to be 150,000 AF. Therefore, the Engineering Advisors will have to determine how to compute Colorado's delivery obligation under these circumstances.

Mr. Settemeyer advised that credits are stored at Elephant Butte and are charged evaporation losses in proportion to the total storage in the reservoir. He added that New Mexico and Colorado both essentially "pay" for any increase in storage they accrue in post-Compact reservoirs in the year that they actually stored the water. For example, this year New Mexico started the year with about 80,000 to 90,000 AF of water in El Vado Reservoir. They actually "paid" for that water last year. So once they release that water for use downstream, that water will show up downstream but they will already have "paid" for it. New Mexico is charged for all evaporation and seepage losses at Elephant Butte reservoir. Mr. Settemeyer noted that New Mexico would probably accumulate about 85,000 AF of additional credits this year, ending up with a total credit of about 240,000 AF on January 1st, 2003.

Ari Michelsen asked about the formal process used in relinquishing credits. Mr. Settemeyer explained that this must be done formally at a meeting of the Rio Grande Compact Commission, but that it can be done at any time during a special meeting of the Commission, not just at their annual meeting. He added that historically New Mexico and Colorado have never been in a credit situation when the reservoir has been below 400,000 AF of storage, so that next year the Commission will be "treading new ground" in this regard.

VI. Drought Related Effects on River Flow Salinity (Dr. Miyamoto, Texas A&M Research Center)

Ari Michelsen introduced Dr. Miyamoto. Dr. Miyamoto is a professor in Soil and Crop Sciences at Texas A&M who is internationally recognized for his work in salinity and salinity management. Dr. Miyamoto gave a PowerPoint presentation on drought related events on salinity in the river (copy attached as **Exhibit "F"**). Dr. Miyamoto presented various charts and equations aimed at determining the relationship between Rio Grande flows and water salinity levels, with a focus on how salinity levels increase during drought periods. His presentation ended with four major findings:

- Salinity can increase to over 1000 ppm during May and especially Sept., depending on the actual irrigation demands and reservoir release.

- The minimum flow required to keep salinity below 1000 ppm as well as the base flow required to avoid a sharp increase in salinity were suggested.
- Prolonged low flow increases salt storage in river banks and riparian zones, which is subject to flushing during high flow.
- Detailed study of salinization processes is needed for addressing salinity control strategies.

After the presentation Mike Landis asked whether, in view of the serious salinity issues at Amistad Reservoir, similar salinity studies had been done on the Pecos River,. Dr. Miyamoto replied that they have set up monitoring stations in three or four locations along the Pecos and that they would be working on a similar study.

Dave Brosman reiterated his concerns over the poor water quality that is expected next year. Although there will likely be good quality water for a short time period in March, water quality is expected to deteriorate in late April and May and also in September, to the extent that EPWU will not be able to divert water into their plants. He also emphasized that EPWU cannot be starting and stopping its water plants on short notice in response to fluctuations in water quality. EPWU's current plan is to operate its plants only during those periods in which the District's farm orders are projected to be large enough to produce good quality water.

VII. Other Business

Now that a quorum was present, Ari Michelsen made a motion to approve the October 15, 2002 MAC Minutes, subject to the written corrections previously noted by Tony Tarquin and handed to Ed Fierro by Dr. Tarquin at the beginning of the meeting. The motion was seconded and passed unanimously.

X. Schedule Next Meeting/Location

The next MAC/SC meeting was scheduled for January 17, 2003 in Las Cruces at the EBID offices at 9:00 am. One recommended agenda item for the next meeting will be a presentation by the Bureau of Recreation on the pilot channel work as requested by Gary Esslinger.

The meeting adjourned at Noon.