

LLANO ESTACADO REGIONAL WATER PLANNING GROUP MEETING
JULY 23, 2003

10:00 A.M.

1. CALL TO ORDER AND WELCOME

Chairman H. P. Brown Jr. called the meeting to order at 10:00 a.m. in the A. Wayne Wyatt Board Room of the High Plains Underground Water Conservation District No. 1 office, 2930 Avenue Q, Lubbock, Texas. Notice of today's meeting has been provided to each member and has been filed in accordance with the Texas Open Meetings Act at the following locations: *Lubbock County Courthouse, Administrative Offices of the High Plains Underground Water Conservation District No. 1, and the regional water planning group web site at www.llanoplan.org.*

2. ROLL CALL OF MEMBERS & ESTABLISH QUORUM

The following Llano Estacado Water Planning Group members were in attendance: Delaine Baucum, Bruce Blalack, H.P. Brown Jr., Ches Carthel, Jim Conkwright, Delmon Ellison, Harvey Everheart, Terry Lopas, Richard Leonard, Don McElroy, Gene Montgomery, Henry Rieff, Jim Steiert, and S.M. True Jr.

Unable to attend (excused absences): Those unable to attend today's meeting were: Dallas Brewer, Bill Harbin, Bob Josserand, Kent Satterwhite, and Jerry Webster.

Absent members (unexcused absences): None.

There was a quorum of the Llano Estacado Regional Water Planning Group members in attendance (14 of 19 members or 73.6% attendance). **A total of 32 persons were in attendance.**

Others in attendance: Dr. Herb Grubb of HDR Engineering Inc., Temple McKinnon with the Texas Water Development Board, Melissa Mullins with the Texas Parks and Wildlife Department, David Turnbough with Sandy Land Underground Water Conservation District, Steve Stevens with Mesa Water, Inc., Bruce Rigler, Don McReynolds and Judy Reeves with High Plains Underground Water Conservation District No. 1, Kevin Hopson with Daniel B. Stephens and Associates, Dr. Robert Mace with the Texas Water Development Board, Ben Weinheimer with Texas Cattle Feeders Association, Ronald Bertram with Texas Department of Agriculture, Cleon Namkin with the USDA-NRCS, and Jason Coleman with the South Plains Underground Water Conservation District. Carmon McCain of the High Plains Water District staff was present to take minutes of the meeting.

CHAIRMAN'S REMARKS

Chairman Brown expressed his personal appreciation to Mr. McCain for preparing today's meeting handouts and for taking/preparing the minutes of each Llano Estacado Regional Water Planning Group meeting.

3. APPROVAL OF MINUTES OF THE FEBRUARY 4, 2003 LERWPG MEETING.

The minutes of the February 4, 2003 LERWPG meeting were provided to members for review prior to today's meeting. There being no additions or corrections, a motion was made by S. M. True and seconded by Jim Conkwright that the minutes of the February 4, 2003 LERWPG meeting be approved as printed. (Copies of these minutes had been distributed by e-mail / hard copy to members prior to this meeting.) **All voted "aye," and the motion unanimously passed.**

4. APPROVAL OF THE TREASURER'S REPORT.

The Llano Estacado Regional Water Planning Group financial statement for the period February-June 2003 was provided to members for review prior to today's meeting. The report shows an ending balance of \$47,778.70. A motion to accept the report as printed was made by Delmon Ellison Jr. and seconded by Henry Rieff. **All voted "aye," and the motion unanimously passed.**

5. RESIGNATION OF DR. LLOYD URBAN AND DR. JOHN ABERNATHY

Copies of the resignation letters from Dr. Lloyd Urban and Dr. John Abernathy were provided to members prior to today's meeting. A motion was made by Harvey Everheart and seconded by Terry Lopas that these resignations be accepted with regret. **All voted "aye," and the motion unanimously passed.**

Chairman Brown said that it would be best for the regional water planning group members to suggest individuals as possible replacement members. With that in mind, Jim Conkwright has contacted Dr. Marvin Cepica, acting dean of the Texas Tech University College of Agricultural Sciences and Natural Resources. Dr. Cepica has suggested Dr. Sukant Misra as a possible replacement for Dr. Abernathy on the regional water planning group.

Chairman Brown asked that members submit names and biographies of replacement members to Mr. McCain. He also added that while Drs. Abernathy and Urban were from Texas Tech, there is nothing dictating that replacements be from TTU. Others may come from West Texas A&M or other universities. In addition, Dr. Urban nominated Dr. Ken Rainwater, director of the Texas Tech Water Resources Center as his replacement. Chairman Brown suggested that no action be taken on this agenda item today. Members should send biographical information about potential members to Mr. McCain.

6. APPOINTMENT OF A PLANNING GROUP MEMBER AS SECRETARY-TREASURER.

Currently, the three-member Executive Committee (*Chairman, Vice-Chairman, and Secretary-Treasurer*) is authorized to draft checks on the regional water planning group account. Following Dr. Urban's resignation as Secretary-Treasurer and Mr. Carthel's vacation, Chairman Brown asked that Mr. Conkwright be added as an authorized signatory on the account. He reminded the group that all checks drawn on the account must have two signatures. A motion was made by Don McElroy and seconded by Harvey Everheart that Mr. Conkwright be appointed as Secretary-Treasurer of the Llano Estacado Regional Water Planning Group. **All voted "aye," and the motion unanimously passed.**

AGENDA ITEMS

Mr. Ellison respectfully requested that the regional water planning group deal with today's action items before noon. Due to the lengthy agenda, some may have to leave at noon as they do from time-to-time. He would like to see the group address the action items—especially Agenda item # 18. Mr. Brown and the planning group members voiced no objection to Mr. Ellison's request. (*The items will now be considered in a different order than that printed on today's formal meeting agenda.*)

18. DISCUSSION OF SELECTION OF MEMBERS TO THE WATER CONSERVATION IMPLEMENTATION TASK FORCE AS PER SENATE BILL 1094, AND RECOMMENDATION TO THE TWDB OF MEMBER(S) TO REPRESENT REGIONAL WATER PLANNING GROUPS ON THE WATER CONSERVATION IMPLEMENTATION TASK FORCE AS PER SB 1094.

A copy of Senate Bill 1094 was provided to members for their review prior to today's meeting. This legislation by Senator Robert Duncan of Lubbock establishes a Water Conservation Implementation Task Force to evaluate

matters regarding water conservation. The Texas Water Development Board shall select members of the water conservation implementation task force to represent the following entities and interest groups: Texas Commission on Environmental Quality; Department of Agriculture; Parks and Wildlife Department; State Soil and Water Conservation Board; regional water planning groups; federal agencies; municipalities; ground water conservation districts; river authorities; environmental groups; irrigation districts; industries; institutional water users; professional organizations focused on water conservation; and higher education.

Chairman Brown expressed his concern that agriculture was not listed as an interest group. Mr. Ellison said he was concerned also—especially since the task force will identify and select best management practices for agricultural water use. He also is concerned with language in the cover letter from TWDB Executive Administrator J. Kevin Ward that states "...membership on the task force will be limited in numbers to about 20 members and selections will have to be based on levels of support for nominees and their individual qualifications." Mr. Ellison said he visited with Chairman Brown and asked him to consider being the nominee to represent the Llano Estacado Regional Water Planning Group. Mr. Ellison said that Mr. Brown is a multi-faceted individual who resides in the City of Lubbock and represents agriculture, cattle feeding, and the regional water planning process. He covers a lot of the bases that need to be represented here. A motion was made by Mr. Ellison and seconded by Mr. McElroy to nominate Chairman Brown as the LERWPG's candidate for the water conservation task force. He also asked that a letter of support for Mr. Brown be drafted and signed by the regional water planning group members.

Mr. Carthel said he agreed with Mr. Ellison's comments and supports Mr. Brown's nomination. **All voted "aye," and the motion unanimously passed.**

Mr. Montgomery has been suggested as a nominee to represent the oil and gas industry. Mr. Ellison said he would be willing to support Mr. Montgomery as well. It would be great to have two members of the LERWPG as representatives on the task force.

Mr. Lopas asked about the reimbursement for the representative. Chairman Brown said this would be addressed in one of the next action items.

Chairman Brown asked the group to consider drafting a letter of support from the LERWPG for Mr. Montgomery as an oil and gas industry representative. A motion to draft a letter of support for Mr. Montgomery was made by Mr. McElroy and seconded by Mr. Ellison. **All voted "aye," and the motion unanimously passed.**

Ms. Baucum questioned as to whether an alternate nominee is needed. Ms. McKinnon said it would be appropriate to have a nominee and an alternate, in case the nominee could not attend a meeting. Chairman Brown suggested that this be deferred until it is decided who is nominated to the task force.

Dr. Grubb suggested that the group offer its nominee and an alternate now due to the tight deadline schedule. Ms. McKinnon concurred.

A motion was made by Mr. Conkwright and seconded by Mr. Lopas that, in addition to Chairman Brown's nomination, the LERWPG recommend that the named person on the task force have the flexibility to select a member of the regional water planning group serve as his representative whenever he cannot attend the task force called meetings. **All voted "aye," and the motion unanimously passed.**

The nomination will be submitted as quickly as possible with letters of support from various individuals and organizations to follow.

10. THE LERWPG WILL CONSIDER DRAFT REIMBURSEMENT POLICY/FORMS FOR USE BY ITS MEMBERS

Chairman Brown asked Mr. Conkwright to discuss the draft reimbursement policy / forms for use by the LERWPG members. He said the forms and policy are patterned exactly after those used in Region A. (*A copy of the draft policy and form was provided to the members for review in advance of today's meeting.*) The group asked that the policy be amended to read, "The Llano Estacado Regional Water Planning Group will issue a check to the member after the completed Expense Report has been reviewed by the Executive Committee, the mileage and rates have been verified, and has received approval of the LERWPG Chairman or Vice-Chairman." In addition, Mr. Montgomery asked that just a blank be used in place of the mileage reimbursement amount currently shown on the form. This would save future modifications to the form whenever the rate changes. A motion to accept these recommended changes was made by Mr. Conkwright and seconded by Mr. Lopas. **All voted "aye," and the motion unanimously passed.**

8. THE LERWPG WILL CONSIDER APPOINTMENT OF CHES CARTEL AS A NON-VOTING LIAISON BETWEEN REGION B AND REGION O.

Chairman Brown said it was his understanding that Mr. Carthel has agreed to serve as a non-voting liaison between Region B and Region O. A motion to designate Mr. Carthel as such was made by Mr. True and seconded by Ms. Baucum. **All voted "aye," and the motion unanimously passed.** Chairman Brown expressed his appreciation to Mr. Carthel for his willingness to serve in this capacity.

9. THE LERWPG WILL CONSIDER POSSIBLE AMENDMENT TO "OFFICERS AND DUTIES OF OFFICERS" CONTAINED IN ARTICLE III ("MEMBERSHIP/GOVERNING BODY") OF THE LERWPG BY-LAWS.

A copy of the proposed amendment to "Officers and Duties Of Officers," contained in Article III of the Llano Estacado Regional Water Planning Group By-Laws was provided to members for review prior to today's meeting. Chairman Brown stated that the proposed amendment is somewhat self-explanatory and now offers a provision in the By-laws for successor officers. A subcommittee consisting of Judge Dallas Brewer, Kent Satterwhite, and former TWDB Project Manager Comer A. Tuck Jr. drafted the proposed language. A motion was made by Ches Carthel and seconded by Delmon Ellison Jr. to accept the proposed amendment to the LERWPG By-Laws as presented. **All voted "aye," and the motion unanimously passed.** Mr. Conkwright suggested that the document be revised to list the office of Secretary as Secretary-Treasurer. It was the consensus of the members to do so.

11. THE LERWPG WILL CONSIDER A SUBCOMMITTEE REPORT RESPONDING TO AN INTERREGIONAL COORDINATION DOCUMENT BETWEEN REGION A AND REGION O.

Chairman Brown then called on Mr. Montgomery, who explained that a subcommittee (*Mr. Montgomery, Mr. Conkwright, and Dr. Urban*) had been formed to draft a planning group interregional scope of work consistent with what had been provided to the LERWPG by Region A. A copy of the two-page draft document had been provided to members prior to today's meeting. This document includes a definition of "coordination," which basically allows the LERWPG to opt in or opt out of regional coordination activities—so that the group is not forced to participate in an activity against their will. Chairman Brown said he found the document to be most agreeable—especially with the ability to opt in or opt out of activities. A motion was made by Delmon Ellison Jr. and seconded by Harvey Everheart to accept the document as presented. **All members voted "aye," and the motion was unanimously approved.** Chairman Brown commended Mr. Montgomery and the subcommittee for their work.

17. THE LERWPG WILL CONSIDER ADOPTING A RESOLUTION SUPPORTING THE CANADIAN RIVER MUNICIPAL WATER AUTHORITY (CRMWA) DESALINATION PROJECT.

A copy of the proposed amendment had been provided to members in advance of today's meeting. Chairman Brown told the group that Mr. Satterwhite was attending a meeting in California today, which is addressing such issues. Mr. Carthel said the project could help reduce chloride levels in Lake Meredith water. He added that any support the LERWPG could give to the project would be greatly appreciated. A motion was made by Mr. Carthel and seconded by Mr. Conkwright to adopt the resolution as presented. **All members voted "aye," and the motion was unanimously approved.**

16. THE LERWPG WILL CONSIDER CALLING A PUBLIC HEARING TO AMEND THE 2001 LLANO ESTACADO REGIONAL WATER MANAGEMENT PLAN TO INCLUDE A WATER MANAGEMENT STRATEGY TO SUPPLY WATER FROM LAKE ALAN HENRY TO THE LAKE ALAN HENRY WATER DISTRICT CREATED DURING THE 78TH REGULAR TEXAS LEGISLATIVE SESSION.

Mr. Carthel reported that there was discussion at the previous meeting about the potential formation of a water supply district in southeastern Garza County and southwestern Kent County—primarily around Lake Alan Henry. This district would serve communities and subdivisions around and adjacent to the lake. Legislation creating the district was passed during the 78th Regular Texas Legislative Session and was signed by Governor Perry. Dr. Grubb has prepared a draft revision to the Llano Estacado Regional Water Management Plan to accommodate the creation of the district and the sale of surface water from Lake Alan Henry to the water supply district. The current plan only designates Lake Alan Henry as a water supply source for the City of Lubbock solely. The plan must be amended to accommodate the sale of water to others in order to make the regional plan and this activity consistent with each other.

The draft document has received cursory review by the Lubbock City Council. It has not been approved nor has city staff been given approval to move forward on it. In essence, the City Council has asked that city staff delay submission of the plan amendment until the formation of the water supply district is official. It has been approved to be formed, the temporary directors have been named, but voters in that area have not formally approved the district. Once that occurs, then the City of Lubbock would request an amendment to the regional plan. **Since no action is needed today, it was the consensus of the RWPG members that this agenda item be tabled.** Dr. Grubb noted that HDR Engineering Inc., prepared the draft revision of the Llano Estacado Regional Water Management Plan at the City of Lubbock's expense.

MORNING RECESS

Chairman Brown called a 10-minute recess at 11:10 a.m.

The meeting reconvened at 11:25 a.m. All RWPG members were present with the exception of Mr. Ellison, who left the meeting at 11:21 a.m.

12. THE LERWPG WILL CONSIDER WATER DEMAND PROJECTIONS REVIEW REPORT AND CONSIDER SUBMISSION OF REQUESTS TO TWDB FOR CHANGES TO TWDB WATER DEMAND PROJECTIONS TO BE USED IN THE 2006 LWRWPG PLAN.

Dr. Grubb reported that the water demand projections issued by the TWDB have been reviewed and summarized into a review report sent to the RWPG members in advance of today's meeting. After discussion and review, it is his recommendation that the LERWPG submit this document to the TWDB as the RWPG's review and request that they accept these new water demand projection numbers for the respective water user groups.

This part of the planning process began with population projections to determine how many people are in each county/city. These data were issued last year and submitted for review. Once established, the reported water use by municipalities and water supply corporations/districts can be used to determine per capita water use for individual systems. Using these per capita data, water demand projections can be made for individual towns and cities. These water demand figures were also made for the other water user groups in the region, including agriculture, counties, electric generation, environment, industry, municipalities, public sector, river authorities, small business, water districts, and water suppliers. The population demand figures were sent out for review/comment first by cities and county judges, followed later by the water demand projections. Some responders failed to note that the water demand projections are based on the population demand figures for their town/city. It may have been easier to reconcile—had both sets of projections been sent for review/comment at the same time.

Once the demand projections are decided, then the planning process becomes a quantification of how much water supply each city or other water user group has available now and then projecting existing supplies into the future.

The current procedure is to compare supply and demand, identify needs, report shortage/needs to cities, and then conduct a public hearing to determine water management strategies to meet shortages and needs. In the past, the RWPG sat around the table and determined the strategies. This round of regional water planning requires a public process to identify strategies for consideration and evaluation.

Dr. Grubb then discussed the water demand projections review report. Dr. Grubb noted that several had questions about the irrigation water demand projections being too high. A subcommittee was appointed to review these data and they have submitted revisions to the LERWPG for consideration. These recommendations are included in today's meeting handout.

Mr. Montgomery has reviewed the water demand projections for secondary recovery use in oil and gas operations. He has revisions to these data as well.

Mr. Ben Weinheimer with Texas Cattle Feeders Association has offered revisions to livestock water demand projections. A draft report was provided to LERWPG members in advance of today's meeting.

The City of Post submitted a letter stating that a pipeline and storage tank is now in place to move water from Slaton's portion of the CRMWA allocation for use in Post. This is important in terms of their future water supply.

The City of Levelland questioned the per capita figures from the TWDB. Levelland believes their per capita use is 153-155 gallons of water per person per day--rather than the 138 gallons of water per person per day as suggested by the TWDB. This would shift their water demand curve upward.

The City of Smyer expressed concern that no water demand projections were made for their municipality. Due to population, they are included in "county—other."

The City of Ransom Canyon and Wolfforth pose some problems. Both raise questions about population projections and subsequent water demand projections. Both feel that the population projections are too low—however, neither responded during the review of the draft population projections. TWDB staff believes "county—other" numbers for Lubbock County should cover this, but the TWDB must make this technical change. Dr. Grubb said he believes Wolfforth population should receive special review by the LERWPG.

The population demand projections were approved on March 19, 2003. Dr. Grubb recommends that the municipal water demand revisions be forwarded to the TWDB.

New sets of projections are shown for mining water use. Mr. Montgomery added that the 2001 regional water management plan projections are based on 1995 actual use survey. There is nothing imaginable that would support the 2006 mining water use projections ("growth curve") as developed by the TWDB. Mr. Montgomery says he is not seeing a growth curve in water demand in the oil and gas industry since it is a mature industry. An Oxy Permian study indicates there is a 20 to 30 percent decrease in fresh water use since the previous plan. The oil and gas industry is reusing water in West Texas. Of the 420,000 acre-feet of fresh water used in the 96 counties of West Texas, approximately 381,000 acre-feet are recycled and 39,000 acre-feet are disposed of. The water being disposed of is very poor quality (100,000 to 400,000 total dissolved solids). The Texas Railroad Commission and the Texas Commission on Environmental Quality both require the oil and gas industry to use fresh water as an injection fluid only as a last alternative. It must be demonstrated to both agencies that there is no commercially available or chemically compatible water that can be used as an injection fluid.

LUNCH BREAK

Chairman Brown called a recess for lunch at 11:50 a.m.

RECONVENE MEETING FOR CONTINUATION OF AGENDA ITEM # 12.

The regional water planning group meeting reconvened at 12:35 p.m.

Chairman Brown asked the group to review the livestock water demand use projections since Mr. Weinheimer has another meeting in Lubbock this afternoon. Dr. Grubb reviewed the livestock report as prepared by the Texas Cattle Feeders Association. The same procedures and same data were used to prepare the report for both Region A and Region O. The same beginning database and survey are used by both entities—but the TWDB had some feedlots located in the wrong counties. The summary compares 2001-2006 projections and requests necessary revisions.

Mr. Weinheimer agreed that some of the cattle feedlots were in the wrong location. The numbers were also adjusted to reflect normal operation and typical occupancy. He added that the TWDB had estimated that there are almost ½ million head of swine in the region. He said he was unsure how they derived the number. A value of about 500 head of swine per county was assigned. Horse inventory data were adjusted and related back to the population of the region.

The irrigation subcommittee, chaired by Clyde Crumley, reviewed the proposed irrigation water demand projections. Dr. Grubb stated that these projections include dry season, dry weather years. If these are used as the annual number for the next 60 years, then there will be some wet years when that amount of water is not pumped. If one runs the dry weather demand projections for the aquifer during the next 60 years, then this overstatement would indicate water decline at a much greater rate. This would have a number of undesirable effects.

Rather than this, Dr. Grubb recommends that the group use the longer-term average from 1985 to 2000. This would include some wet years, dry years, and changes in the Federal farm program. The committee recommends that the LERWPG not object to the TWDB's demand projections as it now exists (2006 curve). However, the committee also recommends that when simulating demand during running of the GAM models, that the 1985-2000 curve be used as the simulation of average annual water use in the counties in the region. Region L made a similar request and it received favorable response from the TWDB.

Subcommittee member Jason Coleman shared the subcommittee's thoughts on how they made their recommendation to the LERWPG. While this appears to be a simple question—it does have many different angles. It is the committee's desire to present the most accurate, most reasonable, and most likely scenario for consideration by the LERWPG.

Mr. Weinheimer left the meeting at 1:05 p.m.

Mr. Blalack and Mr. Carthel have reviewed the municipal water use demand figures for the City of Lubbock and they appear to be consistent. The data for the smaller cities may be more optimistic as there will not be as much new construction (homes) as in the City of Lubbock.

As a point of clarification, Chairman Brown stated that it was his understanding that the mining demands for the region need revision; the livestock data provided by the TWDB was found to be lacking and needs revision; and the irrigation demand projections need revision. In addition, the cities with population demand projection issues need to be addressed as well. It is his understanding that each of these issues will be addressed in the preamble pages of the water demand projection report.

A motion was made by Mr. Conkwright and seconded by Mr. Carthel to adopt the water demand projections review report and to request revisions to the projections by the TWDB. **All members voted "aye," and the motion was unanimously approved.**

13. REPORT FROM CONSULTANT HERB GRUBB WITH HDR ENGINEERING, INC.

In addition to the demand review report, Dr. Grubb has begun updating information pertaining to ground water districts and surface water providers in the region. He has also completed a preliminary review of the Southern Ogallala aquifer GAM model.

14. REPORT FROM LERWPG PROJECT MANAGER TEMPLE MCKINNON WITH THE TWDB

Ms. McKinnon said she was glad to be at today's meeting as it is the first one held since she was appointed project manager for the LERWPG.

A RWPG chairs meeting was held in Austin on July 15. A letter was sent from Bill Mullican to the respective chairs outlining what the TWDB sees as a process to initiate and define their policy recommendations for the regional water plan. TWDB staff will help develop background information on issues. TWDB staff has developed an initial list of nine large categories and 80 smaller sub-topics. This list is open to additional issues that LERWPG members might be concerned with. This is to help promote an open dialogue during the next couple of years for legislative review. The TWDB is working to develop an interactive web site and hopes to have it functional in the next two weeks.

Chairman Brown said he and Mr. McElroy have had several discussions about this during the past few weeks. Mr. McElroy wondered if there has been a starting point established from which to base water conservation savings in the agricultural sector. Can a target for conservation or savings be established if we do not know the starting point data?

There was considerable discussion among the group members as to whether or not the agricultural sector has an idea of the amount of water it pumps for crop production. Some stated that the first step in being responsible is to be accountable for water use by knowing how much water is actually being pumped on the crop. The big debate around the table for many years has been whether or not to meter irrigation wells.

If metering is adopted, then many people will fear control and possible allocation of their water resources. However, if metering does not take place, then people with money, power, and voting power will meter wells for us. While not being a proponent of metering, some planning group members said they were looking at this realistically. It is not a matter of metering happening—but when it will happen. The rule of capture in Texas is under attack as never before. Other states already have metering and allocation of water resources to sustain life

of the aquifer.

Some stated that they felt the High Plains Underground Water Conservation District and its local control of ground water have helped deter state intervention in ground water issues. Everyone must be proactive in addressing water issues in the next few years, as there will be many changes in the future.

During the morning break, Ms. McKinnon phoned back to Austin to speak with Bill Mullican. It was determined that RWPG funding is not eligible for use to reimburse expenditures associated with the water conservation implementation task force.

Ms. McKinnon noted that there are four underground water conservation districts in Region O that are coming up for recertification of their management plans. There is a requirement that these districts coordinate with the regional water planning groups to review the plans and make sure there are no conflicts between the two entities.

She also noted that the TWDB Office of Water Planning has undergone reorganization in recent months.

Mr. Montgomery, Ms. Baucum, and Ms. Mullins left the meeting at 1:40 p.m.

15. REPORT ON GROUND WATER AVAILABILITY MODELING (GAM) BY DR. ROBERT MACE OF THE TWDB.

Dr. Robert Mace reported that the southern Ogallala aquifer GAM model has been completed and that a copy of the report has been posted to the TWDB web site. Digital copies of the report and the model files have been sent to the ground water conservation districts.

There was a one-month review process as the model was being completed. Stakeholders and others offered several good comments. Some of these included:

How was the Edwards-Trinity Plateau included in the Ogallala model? The Edwards-Trinity Plateau extends beneath the southern portion of the Ogallala. The TWDB received a comment wondering if that was the best method to handle this. As a result, the consultant made some changes in response to the question.

Why doesn't the model perfectly match actual depth-to-water level measurements? When the models are developed, there are a lot of data that are attempted to be matched to water levels. Generally, it is never exact. It could be matched exactly—however, Dr. Mace says that is problematic. When calibrating the model, he says they “train” it to match what the aquifer is doing. This is based upon real data as much as possible. The real data takes the modeling process so far—but Mace says the modelers do not know everything about the aquifer. It could be made perfect—but then artificial data must be created to do so. Common modeling protocol is to go as far as the data will allow and then stop at that point. As more data becomes available, it will be added to the model to get even farther. Use of artificial data can cause severe problems in predictions as compared to a model using real data. Current modeling is within 20 to 30 feet of actual water level measurements. Dr. Mace says that continued funding from the state legislature will allow review of the model every five years and additional refinements that hopefully will bring the model closer to actual aquifer conditions.

There was also concern about the model showing rising water levels in Dawson and Terry Counties. The model shows rising water levels as it goes into the future. Because of this, Dr. Mace says there appears to be a disconnect between historical water demands and predicted water demands. Mr. Everheart commented that the demand numbers appear to be “way off.” Dr. Mace said he anticipates that the next round of demands would be more appropriate and that the problem should resolve itself.

There was a concern about a special “what-if run” of the model. There are some areas in the aquifer where

water levels are decreasing—so a consultant posed a question about “ramping back” pumpage in the model and its effect upon water levels. Dr. Mace said there was concern that this could reflect a state policy where the state comes in and tells people to turn their wells off. He assured the group that this was not the case or intent of the Texas Water Development Board. The run was simply to show a potential application of the model.

Ground water conservation districts and regional water planning groups may request runs of the southern Ogallala GAM model. Dr. Mace has an informative flyer available describing use of the GAM.

Dr. Grubb questioned if the demand numbers determined by the LERWPG would be fed into the GAM model to project future water supply and demand. Dr. Mace agreed. The product output depends upon what the regional water planning group desires. These could include water level maps, volumes of water in storage, or other data.

Mr. Conkwright said the High Plains Underground Water Conservation District still has some concerns about the base of the aquifer figures. They also disagree with some of the “wet and dry” cells that are seen for some of the extremes. The district realizes and concurs that much of this information is based upon site-specific information. The High Plains Water District will use the GAM and will also use the option to use its own data for inclusion in its management plan. Mr. Conkwright said that the High Plains Water District would have a new computer program installed by late summer or early fall that will allow the district's data to be more user-friendly. He added that the GAM is a work in progress and that it is to everyone's benefit to continually improve the model.

Mr. Everheart expressed his concern over rising water levels and increased volume of water in storage in Dawson County. He asked if there is a potential legal problem between what the GAM shows and water district rules/regulation. Dr. Mace stated that there is no regulatory power assigned to the GAM. There is a requirement that ground water conservation districts use GAM information in developing their management plans. There is also a requirement in TWDB rules that regional water planning groups consider GAM information or consider better site-specific information, if available. It depends on what information is usable. He added that the numbers in the model for the predictor run are much lower than they should be. The resulting water level rises are believed to be incorrect and the Mesa Underground Water Conservation District has data to support this.

Mr. Everheart said he believes there are similar problems in other water planning regions in the state. There are some GAMs that overlap in areas and there appears to be some discrepancies in the amount of water that the districts say is there and what the GAM says is available. Dr. Mace commented that some of the GAMs in the Gulf Coast region were divided into multiple areas with substantial overlap. This was done because the model would have been too large otherwise. Each modeling team has different methods and there are some discrepancies in the overlaps. This will need to be reconciled very carefully.

Mr. Rieff left the meeting at 2:00 p.m.

7. REPORT ON RESULTS OF THE 78TH REGULAR TEXAS LEGISLATIVE SESSION

Mr. Conkwright said many people put a great deal of time and effort into monitoring legislation. As a result, ground water management appeared to have fared well during the session. He said he appreciated Mr. Everheart's leadership as president of the Texas Alliance of Ground Water Districts and the many hours he spent in Austin working with legislators and their staff.

Mr. Conkwright said the Water District supported passage of HB 2888 prohibiting pumpage of ground water to fill “vanity ponds.” However, this proposed legislation died in committee on May 22, 2003. Vanity ponds are becoming a heated issue across the state. A handout outlining some major legislation was distributed to the members.

Mr. Everheart commented that Chapter 36 of the Texas Water Code was not impacted as much as it was thought it could be. He commended Senator Robert Duncan of Lubbock for supporting rural interests and local control of

ground water through strong ground water conservation districts.

Mr. Conkwright, Mr. Everheart, and Ms. McKinnon discussed several other pieces of legislation that passed this session pertaining to "TWDB "clean up," target goals for water conservation plans, office of and fees of office of ground water conservation district director, creation of a water conservation implementation task force, and several desalination bills.

Mr. Richard Bowers, manager of the North Plains Ground Water Conservation District, entered the meeting at 2:10 p.m.

19. OTHER BUSINESS

- **Report From Region A Liaison Kent Satterwhite:** No report was given as Mr. Satterwhite was unable to attend today's meeting.
- **Report On Lake Meredith Water Levels:** In absence of Mr. Satterwhite, Bruce Blalack reported that the Lake Meredith watershed has received very little rainfall since the first of the year. He said he believed that seven inches of rain was received in July, which caused water levels to rise from eight inches to a foot. The lake level is at 66 feet, or three feet above its record low. The situation is not good—but water levels have not decreased that much this summer.
- **Report From Region F Liaison:** Mr. Everheart reported Region F would meet next Monday. He will attend and present Region O's interregional scope of work to the group.
- **Report From Region G Liaison:** Mr. Lopas reported that Region G has a revised web site that is accessible either from the Llano Estacado Regional Water Planning Group web site or the TWDB water planning web site. He added that Region G has recently completed some major by-law revisions pertaining to membership. Ground water conservation districts were added as non-voting members of the regional water planning group. Chairman Brown briefly discussed professional liability insurance for the regional water planning group members similar to that provided by Region G. He asked that Mr. Conkwright and Mr. Lopas work with Ms. Teresa Clark on this matter.
- **Oil and Gas Water Use Report:** Mr. Montgomery left the meeting earlier and therefore, no report was given on oil and gas water use.
- **Miscellaneous:** Chairman Brown told the group that the LERWPG has received notice that the City of Seagraves has implemented Stage One of its drought contingency plan as of July 16, 2003. Water customers are asked to voluntarily limit irrigation of landscaped areas on alternate days. In addition, irrigation of landscaped areas with hose end sprinklers is prohibited during the hours of 10:00 a.m. and 6:00 p.m. Customers are requested to practice water conservation and to minimize/discontinue water use for non-essential purposes. This includes allowing water to spray or run into the streets. Chairman Brown said this might be a precursor to what may become commonplace in the region.
- **Public Comment:** Chairman Brown then asked for public comment from the audience. No public comment was offered.

20. ADJOURN

There being no other business, Chairman Brown adjourned the meeting at 2:25 p.m. He thanked each of the regional water planning group members for their attendance and participation in today's meeting.

The above conveys my understanding of the issues discussed and conclusions reached. I assume this understanding is correct until notice to the contrary is received.

Respectfully submitted,

Jim Conkwright
Secretary-Treasurer