

March 17, 2005 Regular Meeting Minutes

Roll Call Of Members and Establish Quorum.

The following Llano Estacado Water Planning Group members were in attendance: Chairman H.P. Brown Jr.; Vice-Chairman Ches Carthel; Secretary-Treasurer Jim Conkwright; and members Bruce Blalack, Judge Dallas Brewer, Delmon Ellison Jr., Harvey Everheart, Bill Harbin, Richard Leonard, Terry Lopas, Don McElroy, Gene Montgomery, Dr. Ken Rainwater, and Jim Steiert. Non-voting members in attendance were Joan Glass of the Texas Parks and Wildlife Department; Dr. Herb Grubb of HDR Engineering, Steve Jones of the Texas Department of Agriculture; Malcolm Laing with the Texas Commission on Environmental Quality; and Temple McKinnon of the Texas Water Development Board (TWDB)

Unable to attend (excused absences): Those unable to attend today's meeting were: Delaine Baucum (illness in family); (ill); Don James, (meeting conflict); Mayor Bob Josserand (out-of-town); Dr. Sukant Misra, meeting conflict); and Kent Satterwhite (meeting conflict).

Absent members (unexcused absences): Jerry Webster.

There was a quorum of the Llano Estacado Regional Water Planning Group members in attendance (14 of 20 members or 70% attendance). A total of 36 persons attended today's meeting.

Others in attendance: Tom Adams, City of Lubbock; Melanie Barnes of Lubbock; JoAnn Beard, City of Smyer; L.C. Childers, Mayor of Wolfforth; Clyde Crumley, Llano Estacado Water District; Wendy Gordon, Texas Parks and Wildlife Department; Darryl Jackson of Andrews; Mike McGuire, Region B liaison; Cleon Namken, USDA-NRCS; Jerry Patton, City of Silverton; Frankie Pittman, City of Wolfforth; Dr. Judy Reeves and Bruce Rigler, High Plains Water District; Jim Stefanov, U.S. Geological Survey in Austin; and Fred Vera, City of Lamesa.

Carmon McCain of the High Plains Water District staff was also present to serve as recording secretary for the meeting.

ACTION ITEMS:

Approval of the January 20, 2005 meeting minutes.

The minutes of the January 20, 2005 LERWPG meeting were provided to members by e-mail / hard copy for review prior to today's meeting. However, there were some last minute changes made to the minutes by Chairman Brown and Dr. Grubb. Mr. McCain distributed a new set of minutes to the LERWPG members and explained each of the changes made. There being no other additions or corrections, a motion was made by Delmon Ellison Jr. and seconded by Jim Steiert that the revised copy of the minutes of the January 20, 2005 LERWPG meeting be approved as printed. **All voted "aye," and the motion was unanimously approved.**

Approval of the Treasurer's Report.

The Llano Estacado Regional Water Planning Group financial statement for the period ending February 28, 2005 was provided to members for review prior to today's meeting. Mr. Conkwright said the report shows an ending balance of \$110,132.09. A motion to accept the

report as printed was made by Jim Conkwright and seconded by Harvey Everheart. **All voted “aye,” and the motion was unanimously approved.**

Chairman Brown asked that the group consider Agenda Item # 12 at this time.

The LERWPG will hear a report from a Texas Parks and Wildlife Department representative regarding in-stream flows and unique river segments in Region O.

Dr. Wendy S. Gordon of the Texas Parks and Wildlife Department (TPWD) reviewed the maps, “Major Surface Water Features of Region O,” and “Ecologically Significant River and Stream Segments of Region O.” There are three stream segments in Briscoe County that are identified by Texas Parks and Wildlife Department as being ecologically significant. Two of these, the North Prong and the South Prong of the Little Red River, are associated with Caprock Canyons State Park. The other segment is the Prairie Dog Fork of the Red River.

Dr. Gordon also discussed the March 16 TPWD memo pertaining to in-stream flows in Region O. This memo reviews the environmental impacts of various hydraulic structures on natural flow regimes. Lake Alan Henry is one such example in Region O. It currently serves as a potential water supply for the City of Lubbock—but diversion of water from the reservoir could have impacts upon its downstream sections.

In order to quantify and preserve local flow patterns required for survival of aquatic species, two aspects of instream flow requirements (minimum flow necessary to maintain fish habitat and degree of flow alteration) were explored at three diversion points near the reservoir. These points on the Brazos River were located upstream from Lake Alan Henry, downstream from Lake Alan Henry, and at Aspermont.

For this study, Dr. Gordon explained that three typical low flows (10%, 25% and 50%) were calculated for each scenario at the three locations and compared to the minimum flow criteria. These criteria were established using the Lyons method. According to the study, water diversions from the dam can significantly reduce the downstream regulated flows. At the point above the reservoir, median flows can satisfy the Lyons criteria under both current and full-use scenarios. In contrast, under low-flow conditions, instream flow criteria are not met below the reservoir. The flows increase again at the third downstream station due to tributaries of the Brazos River.

Dr. Gordon also explained that the station above the reservoir is determined to be a low-flow alteration site since the reservoir gravity release can only affect its downstream sections. In contrast, the high-flow alterations at the second section may be attributed to the large water diversion from the reservoir. A further comparison between the two downstream stations indicates that the contributions of the tributaries can reduce the degree of hydrologic alteration by increasing instream flows to the main stem of the Brazos River.

Malcolm Laing of the TCEQ had questions about the Aspermont diversion point as well as the impact of upstream discharge of treated wastewater. Dr. Gordon does not have these data available, as she was not the one who ran the model.

Chairman Brown asked about the source of spring flow data for this study. Dr. Gordon replied that it was the U.S. Geological Survey. Jim Stefanov with the U.S. Geological Survey in Austin explained that the TPWD did the best they could with a lack of data. Ms. Joan Glass with the TPWD concurred by stating that it was difficult to collect data at the Lake Alan Henry gauging station since it was either dry all the time or the flow was so small that it could not be determined.

Chairman Brown and Dr. Rainwater questioned the Lyons criteria. What exactly are they? Are they hypothetical? Chairman Brown asked the Texas Parks and Wildlife Department representatives to provide a written explanation of the criteria for distribution to the planning group members. Dr. Grubb explained that the Lyons Criteria were developed in Colorado and were relative to trout and other cold-water fish.

Mr. Steiert questioned the advantages and disadvantages of designating unique river segments within Region O. Dr. Gordon explained that, subject to legislative approval, the designation would prohibit reservoir construction within the designated area. Many questioned whether or not a reservoir would be built within a state park to begin with.

Jim Conkwright asked if use of these data could force additional water releases from reservoirs to protect species habitat.

Chairman Brown commented that the LERWPG could not base its recommendations on hypothetical data, which it appears that the Lyons criteria are. Ms. Glass said the Lyons criteria were developed in Colorado and their use in Texas have been objected to by many. There is a need to develop state-specific criteria for Texas.

Don McElroy suggested that the LERWPG table this item, as there is not enough information to base a decision upon. Chairman Brown stated that this agenda item is for informational purposes only and no action was needed at today's meeting.

Later in the meeting (after the morning break), a motion was made by Ches Carthel and seconded by Mr. McElroy that the LERWPG officially reject use of the TPWD in-flow alteration analysis, as it is not appropriate to water planning in Region O. **All members voted, "Aye," and the motion was unanimously approved.** Mr. Laing then asked if alternative methodology would be substituted. Chairman Brown instructed Mr. Carthel to dialog with Texas Tech University regarding the matter.

Chairman Brown then asked the LERWPG to consider Agenda Item # 7.

The LERWPG will hear a report from the environmental committee.

The environmental committee consists of Jim Steiert, Chairman; Jason Coleman; Joan Glass; Bill Harbin; and Dr. Ken Rainwater.

Mr. Steiert briefly explained the handout discussing springs and seeps in Region O. Mr. McElroy had contacted Mr. Steiert to tell him that some of the spring flow in Bailey County has been rejuvenated due to above-average rainfall in 2004.

In the 1981 privately published paper, "Springs of Texas," Gunnar Brune cited pumpage from the Ogallala aquifer as the main reason for spring flow decline. Mr. Steiert noted that silting of springs as well as invasive brush species are also contributors to spring flow decline. Since most springs are located on private property, all the LERWPG can do is encourage good land management by landowners.

Mr. Steiert then presented the environmental committee's policy recommendations. He discussed each point in the document and asked that recommendation # 6 be stricken since not enough is known about the designation of unique stream segments in the region at this time.

He added that the Black-Tailed Prairie Dog was being considered as either a threatened or endangered species. However, a working group of various agencies dispelled that myth. The Black-Tailed Prairie Dog was found to be more abundant than originally thought and the issue has been put to rest.

Mr. Carthel asked if policy recommendation # 4 (elimination of salt cedar) could be modified to include the White River and Lake Alan Henry watersheds. Mr. Steiert said he encouraged the planning group to add their comments/concerns to the document.

Chairman Brown noted that the bold face type in Mr. Steiert's document indicated anecdotal data that helps update Mr. Brune's treatise, which is 30 years old. Chairman Brown commended Mr. Steiert for his dedicated work on this project.

Gene Montgomery said he was under the impression that the environmental committee did not have a recommendation to bring to the policy committee. Now, with Mr. Steiert's committee report, there is a need to incorporate the two. Dr. Grubb recommended that the two committees give their reports and that appropriate modifications be made. The committees need to report back to the LERWPG at a future meeting. Mr. Steiert's report will be included as an appendix to the 2006 regional water plan.

Break and Reconvene

Chairman Brown called a brief recess at 11:15 a.m. The meeting was reconvened at 11:25 a.m.

The LERWPG will hear a report from the by-laws subcommittee regarding procedures to add new members (other than filling vacancies) to the regional water planning group.

Terry Lopas reviewed the current LERWPG by-laws relating to membership/governing body and then explained the proposed revisions as recommended by the by-laws subcommittee.

The first revision would delete Paragraph 2, Article III ("Membership and Governing Body") and would replace it as follows:

"The voting membership at all time shall have at least one person representing each of the following interests: public, counties, small municipalities (less than 10,000 population), medium-sized municipalities (10,000 to less than 30,000 population), large municipalities (30,000 and above), industries, agriculture, environment, small business, electric generating utilities, river authorities, municipal water supply districts, water utilities, and underground water conservation districts. More than one individual may be appointed to each category. All categories shall be defined consistently with Texas Water Code Section 16.053(c)."

The next revision would delete the last sentence of Paragraph 5, Article III and replacing it with the following:

"In addition to selecting new voting members to fill vacancies caused by removal or the expiration of a term, the voting members may add additional members at their discretion to ensure adequate representation of the interests comprising Region O by generally utilizing the selection process set forth in this article. If such a member is added, the existing voting members shall determine by a two-thirds vote of the voting members present, the exact applicability of the membership term provisions and restrictions to the new members at the time of the new member's selection."

The final revision would delete Paragraph 6, Article III in its entirety and replace it with the following:

“Solicitation shall be initiated by a voting member as stated herein above and such solicitation shall identify the particular intent of which nominations are sought, state the conditions of membership, delineate the method of submitting nomination, and establish a deadline for submission of nominations. All solicitations shall go to the Executive Committee for evaluation. The Executive Committee shall bring their recommendations to the voting members at the next regularly scheduled meeting. A two-thirds vote of the voting members present of the planning group shall be required to add a member to the planning group.”

The proposed solicitation process for nominees, as explained by Mr. Lopas, would include gathering all information required in the solicitation notice and submitting it to the LERWPG. A nomination packet should include a cover letter from the nominee, explaining how the nominee is qualified to serve on the LERWPG; a resume; and six letters of support. The solicitation process should also include by-law solicitation requirements, identification of the interest sought, a statement of conditions of membership, a delineation of the method to submit nominations, and a deadline for submission of nominations. Additional information would include the term of vacancy and the history/purpose of the LERWPG. It is expected that there would be a cutoff date 30 days prior to the Executive Committee meeting to review the nominees.

Considerable discussion followed. Ms. Melanie Barnes of the League of Women Voters of Lubbock County asked questions as to what was meant by “exact applicability of the membership term provisions and restrictions to the new members...” Mr. Lopas explained that this dealt specifically with a person serving the remainder of an unexpired term (vacancy).

Ms. Temple McKinnon of the Texas Water Development Board in Austin reported that TWDB legal staff have reviewed the proposed revisions and have found them to be in compliance with the TWDB rules and the LERWPG by-laws.

Mr. Conkwright suggested a revision to the requirement pertaining to the required number letters of recommendation/support. He suggested that the requirements be revised to read “a minimum of two letters or a maximum of six letters.”

Mr. Laing recommended that at least one recommendation letter be from a member of the regional water planning group. Mr. Lopas noted that this was already included in the proposed revisions.

It was noted that the size delineation for the municipalities should be amended to include those entities with a population of 30,000. As it is currently written, those with 30,000 are not included.

Chairman Brown said the LERWPG has been approached with the following additions and filling of vacancies: Greg Ingham with the City of Plainview to represent mid-sized municipalities; Melanie Barnes of the Lubbock County League of Women Voters to represent the public; and Doug Hutcheson of Wolfforth Place Water System to replace Henry Rieff as the water utility member.

A motion to approve the by-laws committee's recommendation with today's amendments was made by Mr. Carthel and seconded by Mr. Ellison. **All members voted, “Aye,” and the motion was unanimously approved.**

Lunch Break and Reconvene

Chairman Brown called a recess for lunch at 12:07 p.m. The meeting was reconvened at 12:45 p.m. Mr. Carthel left the meeting at this time.

The LERWPG will hear a report from the agricultural water conservation committee.

Mr. Conkwright said the agricultural water conservation committee met February 16. The committee consists of Jim Conkwright, Chairman; Delaine Baucum; Delmon Ellison Jr.; Harvey Everheart; Curtis Griffin; Dr. Herb Grubb; Dr. Dan Krieg; Richard Leonard; and Dr. Sukant Misra.

A copy of the committee's report was mailed to the LERWPG members prior to this meeting; however, last-minute revisions by Chairman Brown resulted in a revised report being distributed to the membership at this time.

He added that there has been a great deal of discussion regarding the agricultural water supply and demand figures to be included in the 2006 plan. In fact, several interested parties met with Dr. Grubb at 9 a.m. this morning to discuss this issue. He concluded by stating that the written material in the agricultural water conservation subcommittee report fairly well describes irrigated agriculture within Region O. Mr. Conkwright invited Dr. Grubb to continue the report.

Dr. Grubb began by stating that the TWDB rules require calculation of needs (shortages) in the region. If water supplies do not meet demand, then water conservation must be considered as a strategy in the water management plan. At the last LERWPG meeting, Dr. Grubb asked for advice as how agricultural water conservation should be addressed in order to meet water needs. As a result, the agricultural water conservation subcommittee was formed.

Dr. Grubb reviewed the draft document, "Irrigation Water Conservation—Region O." He added that if this document were approved, then it would be included as the irrigated agriculture portion of the 2006 plan. He called the group's attention to Section 2, which includes the table of projected irrigation water demands, irrigation water supplies, and irrigation water needs (shortages). He stated that the LERWPG has gone through the review process of these numbers. While many are not happy with them, this is where the group finds itself at this point in the planning process.

He added that the regional water planning groups are directed to use as many of the agricultural water conservation best management practices as possible that were outlined by the water conservation implementation task force. Most of these practices were either invented or readily adopted by producers within the Texas High Plains region. The LERWPG needs to look at the 2001 recommended practices to determine if they are still applicable to the 2006 regional water plan (i.e. precipitation enhancement). Dr. Grubb noted that the last center pivot inventory was conducted in 1998. At that time, 73 percent of the irrigated acreage in the region was utilizing either LESA or LEPA pivots. The remaining producers are currently delayed in adopting this technology because of cost or do not plan to do so.

Considerable discussion followed. From the producer's perspective, Mr. Ellison said he is doing all he can to conserve water because his supply equals his demand.

Mr. Everheart commented that he does not agree with the numbers—but there is no real scientific data to disprove them. Cities can promote low-flow fixtures and other strategies to

reduce water use--but it is not that easy in irrigated agriculture. Also, he noted that there is quite a bit of confusion as to the definition of irrigated acreage versus dryland.

Mr. McElroy expressed concern about proceeding with the current supply and demand figures. He asked if the LERWPG could proceed as follows: review the current supply and demand figures as per TWDB rules, submit the initially-prepared plan by the June 1 deadline, let the TWDB review the plan, and then work on improved data during the TWDB's 120-day review period.

The LERWPG must submit something to the TWDB in order to keep on the recommended timeline. Ms. McKinnon reported extensions are only for 60 days, and this time is deducted from the TWDB's 120-day review period.. Mr. McElroy asked if there were any penalties that could be imposed for not filing a plan.

Chairman Brown questioned who would read the plan. He surmised that a good-natured state government employee would read the plan containing these data, think that ground water is being mismanaged in this portion of the state, and would work to change rules and regulations to limit water use within Region O.

Mr. Ellison asked the group if they were willing to let agriculture take the blame for not having the plan filed on time because the numbers are bad. He said he doesn't agree with these data, but what is the science that is being put forward? It was noted that several other RWPGs are facing similar problems with their data as well.

Dr. Grubb said he had concerns with the supply/demand numbers from the first time he saw them. While it is important to put the best information available out to the public, he stated that the 2006 regional water plan really would have no different conclusion than was contained in the 2001 plan. In essence, the region will use half of its water supply during the next 50 years.

Chairman Brown asked if the respective water district managers could develop better data for each of their districts within the next 30 days for consideration by the group. He asked Dr. Grubb and Dr. Ken Rainwater to test these data. Dr. Rainwater said there is a "quick and dirty" calculation that could be used to determine if the new data are in the same proximity as these numbers.

After contacting the TWDB by telephone, Ms. McKinnon reported that the High Plains Underground Water Conservation District has a signed contract with the TWDB that states the June 1 deadline will be met. Extensions are no more than 60 days. Any extension will cut into the TWDB's 120-day review of the initially prepared water management plan. There is a statutory requirement that all 16 regional water plans will be completed and submitted to the TWDB no later than January 1, 2006.

Mr. Conkwright stated that the TWDB is agreeable to use of the best available data. He has visited with Dr. Robert Mace regarding the software currently used for GAM modeling. This software tends to build in "dry cell" phenomenon. The High Plains Water District has offered to purchase new software for the TWDB; however, there may not be time for an additional GAM run, even if the software was purchased.

Mr. Ellison called the question. Dr. Rainwater expressed his concern about approving a document that he just received. Chairman Brown noted that he asked for the revisions to the document that was previously mailed to the group. The first paragraph of the document as mailed was deleted due to a political statement. There were no changes to data contained in the tables within this section.

Mr. Everheart said he has an increasing concern that the numbers contained in the plan may be the "Bible" that ground water conservation districts and their management plans will be held up to. If strategies cannot be met, then the legislature might consider dissolving the ground water conservation districts. The ground water conservation districts in Region O have the best data in the state of Texas, but the draft supply/demand tables do not reflect that. Mr. McElroy concurred.

Dr. Grubb commented that the demand numbers are locked in at this time; however, the supply numbers are still negotiable. Mr. Ellison commented that he does not like the numbers, but the LERWPG may have missed their opportunity to address them.

As a member of the public, Ms. Barnes commented that the group might wish to state in the plan that they are uncomfortable with the supply/demand numbers. As better data are developed, they will be used next time to develop better numbers as the group becomes more comfortable with the regional water planning process. Dr. Rainwater concurred stating that this is a limitation of a stakeholder-driven process.

Mr. Ellison again called for the question. A motion was made by Mr. Ellison and seconded by Judge Dallas Brewer to approve the document as presented at this time with the inclusion of Mr. Montgomery's written statement that the supply numbers be modified, if possible, prior to the April 21, 2005 LERWPG meeting. Each district has the option to develop better supply data for consideration by the planning group, if so desired.

Chairman Brown asked that those in favor raise their right hand. All members raised their right hand and the motion was passed unanimously.

Break and Reconvene

Chairman Brown called a brief recess at 2:20 p.m. The meeting was reconvened at 2:35 p.m. Mr. Ellison left the meeting at this time.

The LERWPG will hear a report from the policy committee.

The policy committee consists of Bob Josserand, Chairman; Judge Dallas Brewer; Ches Carthel; Clyde Crumley; Dr. Don Ethridge; Don McElroy; Gene Montgomery; and Kent Satterwhite.

In the absence of Mr. Josserand, Mr. Montgomery suggested that the policy committee report be postponed so that the recommendations from the environmental committee are considered for possible inclusion in the policy committee report. He also added that he is concerned about taking an approach that the region "has done all it can" for agricultural water conservation. If one producer still uses a high-pressure, above-line center pivot, then the region has not done all it can do for conservation.

No action was taken on this agenda item. Mr. Montgomery will have a report for the April 21 meeting.

Technical Consultant Dr. Herb Grubb with HDR Engineering will present drafts of the following Sections of the Initially Prepared 2006 Regional Water Planning Report:

Dr. Grubb distributed and explained the March 16 document, "Llano Estacado Water Planning Region Committee and Municipal Water User Group meetings." He noted that the environmental and agricultural water conservation committees met February 16. The mayors and city managers met with Dr. Grubb on Feb. 17 to review municipal water needs assessments and the municipal water conservation strategy. Approximately 14 municipalities were represented at this meeting. Participants reviewed water supply information and provided corrections/additional information for updating the water management strategies for the 2006 regional water plan. Chairman Brown commended Dr. Grubb for working "one on one" with the representatives of these municipalities. Mr. Conkwright also thanked the local USDA-Natural Resources Conservation Service staff for their participation in the agricultural water conservation committee meeting as well.

Dr. Grubb then discussed the March 8 TWDB document, "Submittal and Review of Initially Prepared 2006 Regional Water Plans. He noted that the plan must be submitted to the TWDB in electronic and paper formats by June 1, 2005. The RWPG must certify that the plan is complete and that it has been adopted by the RWPG.

Dr. Grubb then discussed the document, "Llano Estacado Region: Regional Water Plan Table Of Contents, Water Conservation (Municipal) and Water Supply For Cities With Projected Needs."

He offered the following comments:

Regional Water Plan Table of Contents:

Section 1: The planning area description has been written. There will be some final revisions to the draft document based upon information provided by Mr. Steiert.

Section 2: The population and water demand projections were discussed earlier in today's meeting. A draft document has been provided to the LERWPG members.

Section 3: The water supply analysis was discussed earlier in today's meeting. A draft document has been provided to the LERWPG members.

Section 4: The first portion of the draft section, "Discussion, identification, evaluation, and selection of water management strategies based on needs," was provided to members at the Jan. 20, 2005 meeting. Section 4.2 (*Water Needs Projections By Major Water Providers*) was sent to the city managers and mayors in advance of the Feb. 17 meeting with cities. Section 4.3 (*Social and economic impacts of not meeting projected water needs*) is being calculated by the TWDB. Section 4.4 contains the water management strategies for the Llano Estacado Region. The municipal water conservation and irrigated agriculture water conservation strategies have been completed. Section 4.4.2 (*Water Supply From Nearby Ground Water Sources For Cities Projected To Need Additional Water Supply*) is in draft form and will be discussed later in this meeting. Section 4.4.3 (*Region-Wide Water Management Strategies*) is also in draft form. Dr. Grubb said that he inadvertently left out Lake Alan Henry as a regional water management strategy. There will be two strategies involving Lake Alan Henry. One, it will be considered as a future water supply for the City of Lubbock, and two, the Lake Alan Henry Water Supply District will supply water to areas around the lake. Section 4.43 contains the same basic information as was contained in the 2001 regional water management plan. This needs to be updated. This will be provided in draft form for the April LERWPG meeting.

Section 5: This is to be written. (*Impacts of Water Management Strategies on Key Parameters of Water Quality and the Impacts of Moving Water From Rural and Agricultural Areas.*)

Section 6: This is to be written. (*Consolidated Water Conservation and Drought Management Recommendations for the Regional Water Plan.*)

Section 7: This is to be written. (*Description of how the Regional Plan is Consistent with Long-Term Protection of the State's Water Resources, Agricultural Resources, and Natural Resources.*)

Section 8: This is to be written based upon today's discussion. (*Description of unique stream segments/reservoir sites/legislative recommendations.*)

Section 9: This is to be written in the fall after the initially prepared plan has been finalized.
(Report to the Legislature on Water Infrastructure Funding Recommendations.)

Section 10: This is to be written. *(Adoption of Plan.)*

List of References and appendices: These are to be written.

This gives the LERWPG members an idea of the status of work remaining to complete the initially prepared plan. Dr. Grubb also discussed the timeline for distributing the plan and receiving public comments on the plan.

Dr. Grubb reviewed the draft document, "Section 4—Municipal Water Conservation." At the Jan. 20 meeting, this document was presented in draft form based on a goal of 140 gallons of water per person per day. After considerable deliberation, the LERWPG decided to adopt the goal of reducing per capita water use by 1 percent per year for those municipalities having a projected water need (shortage) until the year 2000 regional average of 172 gallons per person per day is reached.

Section 4.1.1: For purposes of developing the 2006 regional water plan, the LERWPG adopted a municipal water conservation goal of reducing per capital water use by one percent per year for those WUGs that have projected needs (shortages) and that had per capital water use in year 2000 that was greater than the Llano Estacado region average per capita water use in 2000. The 72 municipal water user groups in Region O are listed in Table 4.1-3. There are 37 WUGs in the region that have water needs and conservation strategies will be needed for them. Dr. Grubb then discussed Table 4.1-4, which shows projected per capita water use with low-flow plumbing fixtures. He noted that the City of Seminole explained how their number came to be 305 gallons per person per day in 2000. They serve several areas outside of town and it is likely that the number is biased, since accurate calculations were not used. He then discussed the table, "Water Conservation Potentials of Plumbing Retrofit, Clothes Washer Retrofit, and Lawn Watering." The first 45 listings have zeros, meaning that conservation goals were achieved through use of low-flow plumbing fixtures. The remaining listings depict a one percent reduction in water use per year to reach the 172 gallons per person per day

goal. Similar results were noted for the table, "Costs of Plumbing Fixture, Clothes Washer Retrofit, and Lawn Watering."

Section 4.1.1.2: This was approved at today's meeting and will be inserted at this location in the draft document.

Dr. Grubb asked the LERWPG to review these drafts, mark them up, and provide any comments to him by the end of March.

He then discussed Section 4.4.2, "Water Supply From Nearby Groundwater Sources for Cities Projected To Need Additional Municipal Supply." Of the 51, cities, 30 are projected to need additional water from ground water sources. In all but three cases, there is adequate saturated thickness within two to three miles of most cities to support additional water well fields. For the others, there is adequate saturated thickness within 6 to 14 miles. The method of estimating costs and the data and assumptions used in evaluation of this water management strategy are presented in Section. 4.2.2.4.

Dr. Rainwater asked if there was an average depth of the water wells as shown in Table 4.1, "Representative Costs in the Llano Estacado Region." Rainwater said the table shows the cost of drilling a well per foot increases with well diameter. He was curious if there was an average depth of a well associated with these data.

Dr. Grubb completed his report by reviewing the numbers contained in Tables 5.2 through 5.30. He will have the remaining draft sections of the initially prepared plan for review at the April 21 meeting. It is hoped that a complete final draft of the plan can be provided to the members by May 1. The LERWPG may adopt the plan at the May 19 meeting.

Mr. Lopas left the meeting at 3:15 p.m.

COMMITTEE REPORTS AND OTHER INFORMATION:

The LERWPG will hear a status report from Consultant Dr. Herb Grubb with HDR Engineering, Inc.

Dr. Grubb said he had no additional comments at this time.

The LERWPG will hear a status report from LERWPG Project Manager Temple McKinnon of the TWDB.

Ms. McKinnon said most of the items she wished to report on have already been discussed during the meeting.

The LERWPG will hear a report from the following Regional Water Planning Group

Liaisons:

Region A: Kent Satterwhite

Mr. Satterwhite was unable to attend today's meeting. In his absence, Ms. McKinnon reported that the next meeting is April 15. Region A is still working on their supply data.

Region B: Ches Carthel.

Chairman Brown noted that Mr. Carthel had to leave in order to attend another meeting. In his absence, Ms. McKinnon reported that Region B is moving along with their plan at a fast clip. However, Region B does not have to face many of the issues that Region O does.

Region F: Harvey Everheart

Mr. Everheart reported that Region F would meet March 28.

Region G: Terry Lopas / Judge Tim Fambrough

Chairman Brown noted that Mr. Lopas had to leave the meeting in order to make his scheduled flight. In his absence, Chairman Brown shared several issues relative to Region G, as contained in a memo from Teresa Clark to Mr. Lopas. Among these are the Brazos River Authority's system operation permit, water policy recommendations, conflicts with Region G's plan and a ground water conservation district's management plan (Lost Pines GCD), and sub-regional meetings for public input on the initially prepared plan.

Other business

A. Public Comment.

No public comment was offered at this time.

B. Other business.

Chairman Brown reminded the group of the upcoming April 21 and May 19 meetings. He thanked those in attendance for their continued participation in the regional water planning process.

Adjournment

There being no additional business, Chairman Brown adjourned the meeting at 3:28 p.m.

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