

**MINUTES OF MEETING**  
**BRAZOS G REGIONAL WATER PLANNING GROUP**  
 March 23, 2004

In accordance with notice sent to each member of the Brazos G Regional Water Planning Group and posted in accordance with the Texas Open Meetings Act (copy attached as **Exhibit A**), a meeting of the Brazos G Regional Water Planning Group convened at 10:05 a.m., Tuesday, March 23, 2004, in the central office of the Brazos River Authority, 4600 Cobbs Drive, Waco, Texas. Attendance was as follows:

**VOTING MEMBERS PRESENT**

Tony Jones, Chair  
 Mike Morrison, Vice Chair  
 Kent Rindy, (Alternate for Phil Ford)  
 Truman Blum  
 Mark Bryson  
 Scott Diermann  
 Tim Fambrough  
 Horace Grace  
 A.V. Jones  
 Terry Kelley  
 Scott Mack  
 Kristina McMahan, Alternate for  
     Jim Nuse  
 Stephen Stark  
 Wiley Stem  
 Kent Watson

**VOTING MEMBERS ABSENT**

Jon Burrows  
 Phil Ford, Secretary/Treasurer  
 Jim Nuse  
 Steve Sanford  
 Chaunce Thompson

**NON-VOTING MEMBERS PRESENT**

Amador Hernandez  
 Cindy Loeffler, Alternate for Melissa Mullins  
 Terry Lopas  
 David Meesey  
 Julia Marsden  
 Mike McGuire  
 Susan Morgan  
 Paul Zweiacker

**NON-VOTING MEMBERS ABSENT**

Jim Clarno  
 John Grant  
 Melissa Mullins

**OTHERS PARTICIPATING**

Barney Austin, TWDB  
 Teresa Clark, Brazos River Authority  
 David Dunn, HDR Engineering  
 Kimberly Goolsby, Brazos River Authority  
 Stuart Henry, Attorney  
 Monty Humble, Attorney, Vinson & Elkins  
     representing Mesa  
 Robert H. Huston, Chairman,  
     TWCA Reuse Committee  
 Tim Jahn, Brazos River Authority  
 Grady Reed, HDR Engineering  
 Lisa Tschirhart, Brazos River Authority  
 David Wheelock, Brazos River Authority

**PUBLIC PRESENT**

See attached sign-in sheet (**Exhibit B**)

**Invocation** – At the request of Chair Jones, Dr. Mack gave the invocation.

**Notice of Meeting** –

Chair Jones noted that each member of the Brazos G Regional Water Planning Group received notice of this meeting pursuant to the bylaws (copy of agenda attached as **Exhibit C**). He indicated that the public meeting notice was properly posted as required by the law and confirmations of timely posting were received.

**Attendance and Announcements** –

Chair Jones said Phil Ford would not be able to attend the meeting and has designated Kent Rindy as his alternate and Jim Nuse would not be able to attend the meeting and had designated Kristina McMahan as his alternate.

Chair Jones noted the presence of a quorum.

Chair Jones noted the availability of a hard copy of the meeting materials for public review. He said that the public can also view and download the meeting materials from the Brazos G website at [www.brazosgwater.org](http://www.brazosgwater.org).

**Consider Approval of Draft Minutes of February 11, 2004, Meeting** –

Chair Jones said the draft minutes of the February 11, 2004, quarterly meeting were distributed to each member pursuant to the bylaws. He asked if there were any changes or questions regarding the minutes.

It was then moved by Judge Fambrough and seconded by Mr. Blum:

**THAT THE MINUTES OF THE FEBRUARY 11, 2004,  
BRAZOS G REGIONAL WATER PLANNING  
GROUP MEETING BE APPROVED AS PREPARED  
IN PRELIMINARY FORM.**

The **MOTION CARRIED** with no dissenting votes.

**Briefing from Brazos River Authority on Basin Projects** –

Chair Jones introduced Terry Lopas, Special Projects Manager for the Brazos River Authority currently assigned to the Mesa Water Project.

Mr. Lopas introduced Mr. Monty Humble with the law firm of Vinson & Elkins to give a brief presentation on the Mesa Water Project. A copy of Mr. Humble's presentation is attached as **Exhibit D**.

In response to a question from Dr. Mack, Mr. Humble said the Mesa Water Company is a private corporation whose sole stock holder is Boone Pickens. When the project reaches the point where contracts could be executed, there are several options that could be available ranging from the buyer taking project ownership to a public/private partnership arrangement or a private operation.

Mr. Grace asked if the information presented had been peer reviewed, considered by the Texas Water Development Board and what scientist conducted the study. Mr. Humble said the statistical information in the presentation is straight from the 2001 Water Plan. In terms of the hydrology, the information provided on the Ogallala slide is from the Texas Water Development Board. The County hydrology slide was produced by private hydrologist, R. W. Hardin and Associates. The information was considered in the contested permit hearings by the Panhandle Groundwater Conservation District. The public was given the opportunity to present contradictory information or cross examine Mr. Hardin. Presentations were made to the staff of the Texas Water Development Board, Agriculture Commissioner, Texas Parks and Wildlife Department, and various members of the legislature and their staff's, and to the best of his knowledge, no one has questioned the science.

Mr. Stem asked if Mesa is proposing to do both projects; San Antonio and North Texas or one or the other. Mr. Humble said they would like to have two buyers.

Mr. Stem asked what amount of carriage loss are they considering down to Milam County. Mr. Humble said the State Water Availability Model assumes approximately a 13 percent transport evaporation loss in the river for that segment. Mesa believes that number is an average loss that applies to all of the water in the river and the incremental loss is significantly below that amount. In the bed and banks permitting process, that issue will be fully explored but they will be seeking to establish that the transportation loss is well below 13 percent.

Mr. Morrison asked what discussions have been held with potential customers or various communities who would be involved. Mr. Humble said presentations have been made to the North Texas Municipal Water District, Tarrant Regional Water District, various members of Dallas Water Utilities, the Dallas City Council and the San Antonio Water System. He said the most extensive discussions have been with Tarrant Regional Water District and San Antonio Water System.

Mr. Kelley asked if there have been enough inferences made to determine if the added instream flow would have a beneficial effect on the sulfates and chlorides content. Mr. Humble said it would affect the chloride content on the upper Brazos above Possum Kingdom. He noted the Texas Parks and Wildlife had informed them of several species in that area that are dependent on the chloride content as a barrier to predators coming upstream from Possum Kingdom. He said they have also explored routing into Possum Kingdom itself and it would tend to dilute the flows into the existing lakes. Mr. Lopas said if the water were

released into the reservoir itself, the size of the reservoir and amount of water would not have too great of an affect. If it is upstream of the reservoir, the issues of salinity would have an affect on the instream flows and endangered species, which would have to be investigated. If it came downstream into the channel itself it could have more of a positive affect. The problem would be regulating the control of water and the possibility of it going into the reservoir is more likely.

Mr. Grace asked how the Group should consider this in the regional planning. Mr. Meesey said the timing is right and the availability discussions are about to be complete. The next step will be surplus/deficit balancing and then water management strategies. Mr. Meesey said now is the time to do something with this information.

Mr. Kelley asked if there is a difference in the net affect in the San Antonio scenario with the inflow and the outflow. Mr. Lopas said that would be answered based on what the market requirements are as far as how we have to flow the water, the volume, and what the deliverability rate will be. Until there is specific information, it will be difficult to determine the exact answer.

Mr. Kelley commented if the deal is with San Antonio, it is the supply capacity that would be provided by Mesa and transporting the water through the Brazos system. Mr. Humble said more or less that is true, but there are some impacts on the dynamics of Possum Kingdom; when you put water in, it may have the affect of increasing the firm yield.

Mr. Grace said it would be helpful to know whether the state has approved the figures and science when the presentations are made. Mr. Humble said they have tried to be very open with their numbers and invite people to review their figures and compare them to the water plan figures and stated they would be delighted to do that for this group as well.

Mr. Stem said as this is currently proposed, this would just be a pass through of 200,000 acre-feet of water. Mr. Humble said that is correct. Mr. Stem noted there is no additional water available as it is proposed in the Brazos Basin because of this. Mr. Lopas said at this time there is not, we are just considering what it would take to convey the water from point A to point B. Mr. Stem noted if San Antonio were to only receive 150,000 acre-feet, potentially there could be 50,000 acre-feet available. Mr. Humble said that could be a possibility. He said San Antonio owns groundwater rights in Milam and Lee Counties in the Simsboro Aquifer and if this project is executed, the pipeline would run right by there and undoubtedly those fields would be developed to produce water as well.

## Public Input –

### Public Questions and Comments on Agenda Items or Water Planning Issues (limited to 5 minutes each) –

Chair Jones said the Regional Water Planning Group is limited in its ability to participate in discussions or deliberations by the provisions of the Open Meetings Act. The Group cannot deliberate or discuss issues that are not posted on the meeting notice.

Chair Jones noted the public will have an opportunity to speak on agenda items after they are presented and before any action item.

Chair Jones said he had received a request with regard to a specific agenda item and asked if there was anyone else who would like to address the Group on other agenda items or water planning issues and there were none.

## Program –

### Consider Recommendation from the Executive Committee for Appointment of a New Voting Member Representing Municipalities and Discuss Upcoming Term Expiration –

Chair Jones said the Texas Water Development Board legal staff brought to the Group's attention that the Attorney General held, in 1978, secret written ballots violate the Open Meetings Act. The public has to be able to learn how the members of a governmental body voted at a public meeting. The Texas Water Development Board legal staff says this does not strictly prohibit any written ballot, but the results of the ballots including who cast what vote, would have to be read aloud at the meeting in order to be legal. Therefore, the vote held at the last meeting regarding replacing the municipality member (Jim Nuse's position) would need to be redone.

It was moved by Mr. Stem and seconded by Mayor Blum that Tom Clark fill the vacant municipality position on the Brazos G Regional Water Planning Group.

The **MOTION CARRIED** with one dissenting vote (Kent Rindy for Phil Ford).

New member Tom Clark joined the Group at the table beginning his term effective immediately.

In response to a question from Mr. Stem, Ms. Tschirhart said generally the way the bylaws are written is if someone fills an expired term and the term is the voting members second term, that person automatically upon approval of the

Group has the right to serve two more terms. This term does not count against the term limitations set forth in the bylaws.

Ms. Clark reminded the Group to consider Mr. Clark's next term, which would be his first full five year term and whether or not the Group wants to solicit for that position when the term is up at the end of 2004, or bypass that and approve Mr. Clark for the first five year term.

It was moved by Mr. Stem and seconded by Mayor Blum that Mr. Clark's term be extended to include the first five-year term.

The **MOTION CARRIED** with no dissenting votes. Mr. Clark abstained from voting.

**Consider Designation of Brazos G Voting Members as Liaisons to Adjacent Regions –**

**Region K (formerly Jim Nuse)**

It was moved by Mayor Blum and seconded by Mr. Morrison that Mr. Clark be the Region G liaison for Region K.

The **MOTION CARRIED** with no dissenting votes. Mr. Clark abstained from voting.

**Region O (formerly Steve Sanford)**

It was moved by Mr. Morrison and seconded by Mr. Diermann that Judge Fambrough be the Region G liaison for Region O.

The **MOTION CARRIED** with no dissenting votes.

**Accept Region B Liaison, Mike McGuire, as a Non-Voting Member –**

It was moved by Mr. Watson and seconded by Mr. Clark that the Group accept Mr. McGuire as a non-voting member liaison for Region B.

The **MOTION CARRIED** with no dissenting votes.

**Featured Educational Briefing –****“Aspects of Return Flows and Reuse”**

Chair Jones asked Mr. Dunn to introduce the guest speakers and requested the speakers be seated at the table at the front of the room.

Mr. Dunn introduced two well respected veterans of the water industry to speak to the Group. He noted the discussion will be about reuse, which is a subject that the Group has previously shown an interest in. Special dispensation has been requested from the Texas Water Development Board but the Group has not received an official response regarding how to incorporate reuse and return flows into the water availability analysis. As a result of those conversations, several members requested there be an educational briefing on the subject of reuse and return flows in general. He noted the Texas Water Conservation Association currently has a working group that is trying to develop a policy for that particular organization and that it is such a complicated process, they are having difficulty reaching an agreement within the members of that committee.

Mr. Dunn introduced Mr. Stuart Henry and noted he would be the second speaker. He said Mr. Henry is an attorney specializing in water and environmental law for over 30 years and is a staunch supporter of environmental causes.

Mr. Dunn introduced Mr. Bob Huston. Mr. Huston started the civil engineering and environmental firm of Espey Huston Associates in 1972 with four employees, and by the mid-1980s the firm had grown to over 1,000 people with offices in eight or nine states and two countries with Mr. Huston selling the firm in 1989. Espey Huston was one of the first consulting firms to specialize in water and the environment. Most recently Mr. Huston was appointed by Governor Bush as Chairman of the Texas Commission of Environmental Quality. During his tenure with the Texas Commission of Environmental Quality, he successfully guided the agency through its Sunset Review which resulted in the reauthorization of the agency for another 12 years. Mr. Huston also transformed the working relationship between the agency and EPA Region VI to one of a cooperative joint environmental protection rather than an antagonistic situation. Mr. Huston is currently serving as Chairman of the Texas Water Conservation Association's Reuse Committee.

Mr. Huston noted that Mr. Dunn is serving as chairman of a committee that was put together within the Texas Water Conservation Association to try to develop a position for the association, and to take to state leadership on the subject of reuse. If you look at the water planning document, you will see approximately seven percent statewide of the new water for the next 50 years is expected to come from reuse. He said in his personal opinion, that amount is

underestimated. It is underestimated for one reason and one reason only and that is technology is moving very rapidly.

Mr. Huston said when you begin to drill down within the individual regional plans, it gets even more interesting. There are approximately nine out of the sixteen regions that are projecting some level of reuse for the planning of additional supplies over the next 50 years. Region C is projecting reuse will constitute 35 to 40 percent of their total additional water over the next 50 years. Three other regions, one of which is Region G, is projecting approximately 10 to 15 percent of the new supplies will come from reuse. Statewide new water reuse is estimated to constitute over 400,000 acre-feet. The numbers are fairly impressive. In fact, if you look around the state at projects that are being developed today, reuse is clearly on the upswing. There are projects literally all over the state of Texas that are looking to reuse as the source of supply. Texas is one of about four states (Florida, Texas, Arizona, and California) in the nation that constitute a large portion of 75 to 80 percent of reuse in the country. It is interesting to look at what has happened to reuse. It wasn't all that many years ago that what we were trying to do was get rid of the effluent; it was waste disposal.

Mr. Huston said it is interesting to look at the State of Florida. Florida statistically today has a higher level of reuse than any state in the nation. In the early days, the method of wastewater disposal in the State of Florida was land application irrigation. All of a sudden they are the largest reuser in the nation. The level of wastewater treatment has increased dramatically over the last 20 to 25 years because we had to clean up our rivers and streams, and do a much better job as a nation in treatment to protect our waters which ended up being our environment and our water supply. Technology has and is moving very rapidly to the point of where it is opening the door to consideration of reuse of wastewater in many different ways, whether it be direct reuse in a separate purple pipe distribution system for irrigation purposes or whether it be commingled and becomes a part of our water supply. He noted the reason we are underestimating the importance of this particular conservation measure in our future planning is because the technology is moving very rapidly and the cost curves are beginning to cross to where this is a viable opportunity for additional water supplies.

Mr. Huston said he would like to speak about what the Texas Water Conservation Association committee is attempting to achieve. The committee has a membership across the state attempting to develop a consensus policy with regard to the reuse. First, the committee is looking at both direct reuse of wastewater where it would be supplied to an end user directly from the wastewater treatment plant, and they are looking at indirect use where that water might be discharged to a water course and then picked up at some point downstream. Currently, the law with respect to direct reuse is fairly clear. It gets complicated with respect to indirect projects where a so called bed and banks permit is required from the Texas Commission on Environmental Quality. The

committee is attempting to look at this not from a position of who is going to be the short-term winner or loser because there are numerous debates where there could clearly be a short-term winner or loser. The committee is trying to look at this from a long-term water planning standpoint of what would be good state policy with regard to reuse.

Mr. Huston said the committee is attempting to not make quite as much distinction between direct and indirect reuse that exists today. There is a point downstream below the point where in an indirect project the water has been picked back up. Downstream from that point he would suggest the environment does not know if it was a direct versus and indirect project. Therefore, there are a large number of things in common about direct and indirect the committee is trying to deal with in addition to the differences that exist between the two. The committee is sensitive to the overall effect this has on downstream water rights. Clearly there are some downstream water rights that have been issued in reliance on a certain level of return flow and they would potentially be affected by a new reuse project. Sometimes those have found their way into various permits and sometimes they have found their way into effluent discharge permits that require a certain level of discharge of return flow. There are numerous combinations that exist in permitting today. The committee's position early on was that those need to be honored. We are not trying to turn the clock back on deals done. The committee is also having a discussion regarding taking that further. If in fact decisions were made on downstream water rights that were issued because of the basis for the analysis, is it conducted in granting those water rights or were certain assumptions made about return flows and level of reuse. Those assumptions did not find their way directly into a permit. The committee believes those should be honored in some way. If the technical basis for a permit being issued embodied some assumptions that were made by the State of Texas, whatever agency in the past it happened to be, it is a good idea that those be honored as well. The committee is not trying to undo authorized reuse projects.

Mr. Huston said the committee recognizes the decision the State makes on reuse policy will in fact have an affect on the environmental flow discussion, but the committee is trying to be careful to position themselves in a way to not suggest that reuse is the environmental flow issue. The committee thinks there is a definite relationship between the two and the decisions on reuse need to roll up to the environmental flow discussion. The committee is hesitant to start down a path that suggests that reuse can somehow be the environmental flows silver bullet. The committee is trying to understand the relationship between reuse and environmental flows but not suggest that they are exactly the same discussion.

Mr. Huston said senior and junior water rights downstream from a reuse project is very much on the table with this committee and is at the heart of the difficulty of the committee discussion. The committee will attempt to bring a policy position back to the Texas Water Conservation Association at its early June meeting.

The committee's goal is to make as much a consensus position as possible within the association. It is going to be important in our long-term water planning in this state. It is not a question of if; it is a question of how.

Mr. Henry said he would like to make some comments about return flows with particular emphasis to the results that would occur if either extreme of return flows were taken. He said he has done a large amount of water rights and water quality litigation over the past 30 years and a great deal of it in the Brazos Basin. It was clear some years ago due to municipal discharges that cities began to seriously take into consideration the increased water quality limits put on their effluent discharges and they would start looking at how to recoup some of those costs. In terms of environmental baselines in several of the rivers, were it not for the return flows of many municipalities, there would be a lot more severe environmental impact than there was. Fish and wildlife tend to like water that is even a little dirty as opposed to no water. He noted that is not a facetious comment.

Mr. Henry said one thing that is critical in the aspect of return flows that will need to be considered and will be difficult, is the actual permitting. For example, one could not look at any particular basin and make a judgment that those return flows are in fact subject to reappropriation. One cannot rely on looking at the face of the permit either. Often times the face of a water right permit will be shorthand and not much information. One would have to look at the application and look at the actual testimony in a particular water right in order to determine whether in fact the return flow was anticipated. An example or hypothetical would be several permitting processes in the state where a municipality received a significant new appropriation. There was an assumption in the modeling by both the applicant as well as by the Texas Water Rights Commission that indeed the return flows would prevent a downstream water right from being adversely affected and quite often if you look at the face of the permit, you may see that shown and you may not. To some degree will depend on the history of the Texas Water Rights Commission and the Texas Water Commission during the past 30 to 40 years. He told the Group that as a water lawyer, water to the extent that it is in fact already appropriated is a water right embedded in the original appropriation. If on the other hand there is a downstream water right and not impairing water rights the return flows were used to insure that, then in fact you may have a senior downstream water right holder that may in fact question whether an upstream municipality (for example) could reappropriate that 60 percent return flow. Through the 30 to 40 years of permitting, return flows were critical and municipalities received from 30/60 discharges up to 20/20 discharges and began spending significant amounts of funds and was considered indirect reuse if not direct reuse. Many cities currently are considering direct reuse for some of the large water uses including golf courses and some industrial processes.

Mr. Henry said he had not reviewed the data on the Brazos Basin but he would suggest to the Group that there are several adjacent water basins if the water that is returned to the river is not counted, the amount of water that is available will be significantly underestimated in that basin for future use. This would subject the regional group in terms of their estimates of needs to overstating the case. There are some river basins (for example the Trinity) where there is a significant amount of return flow that is in fact base flow of the Trinity from sewage effluent. If a regional plan were to discount that, the Trinity would be dry the majority of the time, at least in the upper portions.

Mr. Henry said he is concerned that you have to take a cursory look at the permitting of some of the large dischargers to determine whether it should be in the water availability or not. It depends on whether you are in the upper or lower basin. In the upper basin it will be more valuable than in the lower basin. The further west, it will be more valuable than east for just the state.

Mr. Henry said the environment, both the bay and estuary inflows, and the environmental benefits of the instream flows, have been major beneficiaries of what he would consider to be at least Texas waste. Waste is broadly defined as the return flows. Ironically the basis for cleaning up our discharges has been the propagation of the Fish and Wildlife Department. He suggested that in looking at some of the old and large water rights of some of the large municipalities in Texas beginning in the 1970s, there is language that suggested the return flows were not only for downstream water rights but for minimum instream uses. The Texas Water Commission and Texas Water Rights Commission in the 1970s and early 1980s, in order to mollify environmental concerns, would have releases out of reservoir projects that were not only to satisfy downstream water rights but to satisfy instream needs. There are also several reservoirs on the coast that had a benefit of releases in order to preserve and protect instream freshwater inflows to the bay and estuaries.

Mr. Henry said he does not believe the State has a free hand either legally or from a policy perspective to totally use the amount of water that is being returned in terms of sewage effluent to consumption. He said he does not know where the line should be drawn but it is critical in some areas more so than in others. He said it needs to be taken into consideration in terms of water available, particularly if the quantities are great like they are in some basins. He noted he agrees with Chairman Huston that it is not a matter of if; it is a matter of when.

Mr. Henry said he would suggest that return flows are a big issue and where the line is drawn between consumption versus leaving the water in the river for the consumption and use by fish and wildlife, is an urgent matter in this State and is a prime consideration of the water policies that need to be addressed by the regional groups.

Mr. Henry and Mr. Huston called for questions.

Mr. Stem noted the Region G RWPG has requested Texas Water Development Board to include return flows in the water availability model and was denied. The Group has again requested but he is not sure where the Group stands with their second request. Mr. Henry said that to the extent you can determine on the face of the permit or in the application whether in fact a determination was made about impairment of downstream water rights where return flows are a practical and legal matter and may not be available for further appropriation for reuse by the discharger. He said he did not know what it would take, but it should be taken into consideration. If there is a 50 million gallon per day discharge that is a sizable amount of water in that segment of the river and if in fact it is apparent on the face of the permit or in the application or something of record, it may not be subject to appropriation and perhaps should not be included in the WAM. He noted the basic Statutory Provision 11134 for water rights in Texas was changed. To make an application for a water right, it must be consistent with the regional plan. He said from a litigator's point of view if the plan is outsized and unreasonable in terms of reality, it will not carry the weight it should. Mr. Huston said it is too simplistic to say that there is a black and white answer to that question, either all inclusive in the WAM or all out of the WAM. He said he does not believe that is a good long-term policy viewpoint. He commented he does not know how easy or difficult it will be to try to accomplish, at least on the major water rights permits in any given basin where return flows fit in at the time those decisions were made, but an attempt should be made to do that so as to start with a reasonable baseline.

Mr. Grace said reuse should not have anything to do with instream flows. He said that in his opinion, instream flows should be appropriated just like water is appropriated for municipalities and irrigation. Reuse should be tied strictly to industrial use and possibly some agricultural or residential who could use that type of water. Mr. Henry said traditionally Texas has kept from appropriating water which deemed to be necessary to satisfy either instream needs (primarily environmental flows) or downstream water rights. The way the system is set up in Texas, keeping a minimum amount of water in the river has not traditionally been by appropriation, but simply by the reserve water from appropriation in the public trust. By the same token, if you assume there is a certain amount of water available for reuse, the difficult part is determining how much is available for reuse. That may be an environmental determination in the sense that it is a new appropriation. For planning purposes, if you are going to make return flows available for further appropriation for purposes that there is that much extra water available in the river, the line has to be drawn to where you make sure there is enough for minimum instream flows or you have to provide for minimum instream flows in some other way. Mr. Huston commented that the Reuse Committee at TWCA is discussing if we could consider some overall guideline that might be applied as opposed to trying to do it in every single permit.

Mayor Blum said in addition to the funds provided to study the instream environmental flows, the legislature directed the Texas Commission on

Environmental Quality to reevaluate each of the major basins as far as the amount of permits issued and the loading. He clarified by saying that when you request a permit, one of the items considered is the loading that is already on the river; how much is committed; did the legislature request that be reviewed. Mr. Huston said a study commission was established by the last legislature on the environmental flows issue. Mr. Huston said he is aware of discussions of that within the WAM process but was aware of a specific agenda that was established by the legislature. Mr. Dunn said within Senate Bill 1 there is a requirement that they evaluate the effects of return flows on water availability that was done at TCEQ as a part of the water availability modeling process. They set up essentially eight different runs in each river basin. There were three primary runs that looked at how return flows affect water availability in the basin. Run three is what the TCEQ staff has chosen for permitting new perpetual water rights that assume there are no return flows in the basin except for those that are specifically required by a water right. Run 1 was an assumption that every water right returns water on the same percentage basis that they are currently returning from their full authorized use. Run 2 assumes they are returning at half of that rate. In response to a question from Mayor Blum, Mr. Dunn said the basis on which TCEQ makes a decision on a permit is using Run 3. Mr. Huston said he thinks Run 1 and Run 3 bound the problem. The good policy decision lies in the middle, taking into account the reality of what we are facing from the future water supply or meeting water needs over the long-term.

Dr. Mack said it seems that in past dealings with the Texas Water Development Board, the current policy is that return flows are needed to maintain the environmental minimum standards. He asked if that is a correct assumption. Mr. Henry said it depends on the river segment and on what portion of the river segment is being considered. The closer you get to west of IH35 and the closer you get to the lower reaches, return flows become more critical. There is not an accurate simple answer, it is basin specific. From a planning perspective you have to make some arbitrary decisions.

Dr. Mack said the comment was made that if the Group plans for reuse inappropriately, a litigator would be all over that. He said his comment is that it is prudent that the Group should plan for a certain amount of reuse. He said the Group's frustration has been that the way we have gone about trying to get permission for that from the Texas Water Development Board has resulted in a no response. He asked if it would be a more appropriate scenario to find out who the major dischargers are into our river basin and deal with them individually rather than making a blanket statement that the Group wants to use reuse. Mr. Henry said the magnitude of the problem depends on how much the shortfall is. Obviously there are some major dischargers in the Brazos Basin and that could be a significant quantity. Those municipalities may in fact know whether they think they have the water rights to in fact go to reuse without new appropriation or whether they are constrained by virtue of downstream water rights. Mr. Huston commented looking at the major players within any given region and

introducing some level of long-term certainty into the equation most likely would get a lot of attention.

In response to an example from Mr. Grace, Mr. Henry said the law is that if the entity got the water right based on satisfying a downstream senior right through its return flows, then the entity does not have an unabridged right to sell that water.

Mr. Grace said he would like to see this region looking at the major dischargers in the region. If the region can guarantee 100,000 AF of water being discharged and if it is not going down for any user, then the region should be able to make a policy recommendation that we use that 100,000 AF of water in this region for availability. Mr. Henry said he believes that is water that is available and in his opinion any planning group should take into consideration, give the reality of it, because if it is a significant amount of water the regional plan is vulnerable to criticism that they overestimated the amount of needed water and that they are proposing to build projects far in advance of need. Mr. Huston agreed that it is a big issue and there is a little controversy associated with it.

Mr. Bryson noted the Group has been told of the plan that is due in a couple years and that return flows cannot be included as available in basin. He said the Texas Water Development Board has told the Group, no, on several occasions. The Group is trying to address that issue by requesting additional funds to look at individual areas, and as a water management strategy use return flow to meet that water management strategy need. He noted this would not be available area wide but it would be targeted. Mr. Henry said as a practical matter, the water plan this region develops will not make a big impact or have a lot of momentum if it is unreasonable and unrealistic in all the things that are needed. The most vulnerable portion of the water plan and the regional plan is overestimating what you need and overlooking available water and underestimating the benefits of conservation. Mr. Huston said he believes that the Texas Water Development Board is taking the best position they can against what they understand the law to say and the policy of the State. He said he thinks the policy needs to change but he does not expect that it will happen because the Texas Water Development Board starts to change the answer to the Region's question. Mr. Huston said he would suggest that the Region look at specific projects in the short-term that make sense within the planning of the Group and then forward the projects and in essence let them stand on their merits. He said his committee thinks this is a very important decision that needs to be made by the State and then how it is applied given the differences that clearly exist from east to west across this State.

Chair Jones expressed appreciation on behalf of the Group to Mr. Huston and Mr. Henry.

**Recess –**

Chair Jones recessed the meeting at 12:00 p.m. The meeting reconvened at 1:02 p.m.

**Status Report from David Wheelock on the TWDB Water Conservation Task Force –**

Chair Jones called on Mr. Wheelock who is a member of the Texas Water Development Board Water Conservation Task Force to give a status report. A copy of Mr. Wheelock's presentation is attached as **Exhibit E**.

After comments from the Group, Chair Jones requested that a presentation be made at the next meeting of the Group April 14, 2004.

**Update from HDR on Water Availability and Needs Projections –**

Chair Jones called on Mr. Dunn of HDR Engineering to present this matter to the Group.

Mr. Dunn said in terms of determining the amount of groundwater, the Group voted at the last meeting to adopt the recommendations for groundwater availability on a county-by-county basis and aquifer-by-aquifer basis. HDR has completed the process for taking the county estimates and prorating them amongst the individual water user groups within the region within each county, which is complete in draft form and will be presented at the April meeting.

Mr. Dunn said with respect to surface water, HDR has completed the modeling as the Group directed and that the Texas Water Development Board has allowed them to perform the modeling. HDR has taken the TCEQ Run 3 WAM, that does not have return flows with two modifications; including three specific subordination agreements between a downstream senior and upstream junior right. Those are actual contracts in two instances and one is more of an agreement. HDR has redistributed multi-use rights (rights that are permitted for municipal, industrial, and irrigation multiple uses) within the rights to what is believed to be their actual use. In the TCEQ WAM, if a water right has multiple uses, it is all assigned to the highest priority use, which in this case, is municipal use. HDR has completed modifying the reservoir EACs to update them to year 2000 sedimentation conditions and year 2060 sedimentation conditions. HDR is in the process of distributing the water availability numbers from the model to the individual water user groups. That process is complete in draft form and will also be presented at the April Group meeting. He said the Group may wish to take action at the April 14, 2004, meeting to adopt those formally as a Group or take them under advisement and wait until the June meeting to adopt them.

Mr. Dunn said with respect to the surface water availability issue, the Group has discussed the return flow that was written from the Group requesting that the Texas Water Development Board give the Brazos G RWPG leeway to adding return flows and make those return flows available on a priority basis to existing water rights. The request was turned down at the initial meeting with the Texas Water Development Board but a formal letter has not yet been received. He said Mr. Meesey has informed him there may be an alternative approach that may get the Group at least part of the way there. The Group had initially intended to utilize return flows in the model to make an assumption for all of the larger dischargers (1 to 2 million gallons per day or larger) and make an assumption about what level would be returned and put that water into the model made available on a priority basis to all the water rights in the basin. The initial request was denied by the Texas Water Development Board by saying that what the Group could do was look at the reuse in three different ways; one, is direct reuse; two, indirect reuse; or three, the Group can go to the larger wastewater dischargers in the basin and get some form of letter or documentation as to what discharges are appropriate to put into the model. This would be made available to water rights on a first-in-time and first-in-right basis and will tend to boost the overall availability in the basin. This will work well for the water rights that are on the larger streams, but for the smaller dischargers (1-2 mgd range) and water rights that are on tributary streams downstream from those dischargers, that will not do any good in helping their shortages. At least we will get part of the way there with the larger dischargers and some of the larger water rights on the larger river courses.

Mr. Meesey said that is something the Texas Water Development Board has said they would consider because they have made that exception before. The one that comes to mind is San Antonio, and there you have one massive discharger that is a little more doable and the Board agreed to it. He said he would suggest the Group ask if they are going to make this binding.

Mr. Rindy asked Mr. Meesey to restate how the process works with respect to the cities getting the letters in. Mr. Meesey said the most feasible process would be to funnel through the administrative entity which is Brazos River Authority for Region G. He noted they are not looking for something binding; they are looking for something that gives them more to go on for this planning cycle. He said he has been told they will most likely open this up for full comment and discussion in the next planning cycle.

### **Presentations Concerning Streamflow Assessment Methodologies:**

Mr. Dunn said this agenda item concerns one of the requirements in the Scope of Work and in the planning guidelines set forth by the legislature for regional water planning. The planning groups are to make a determination as to what effect the plan has on instream flows and quantify that effect on a cumulative basis. There

are a variety of ways available to make that determination, most of which involve use of the water availability models. The Group will receive three presentations; one from the Texas Water Development Board; one from Texas Parks and Wildlife; and one from HDR Engineering.

#### **Texas Water Development Board –**

Chair Jones called on Mr. Meesey and Dr. Austin to present Texas Water Development Board's recommendation regarding this matter. A copy of the Texas Water Development Board presentation is attached as **Exhibit F**.

#### **Texas Parks and Wildlife Department –**

Chair Jones called on Ms. Loeffler, Water Resources Branch Chief for the Texas Parks and Wildlife Department to present their recommendation. A copy of the Ms. Loeffler's presentation is attached as **Exhibit G**.

#### **Recess –**

Chair Jones recessed the meeting at 2:20 p.m. The meeting reconvened at 2:30 p.m.

Mr. Morrison noted in the earlier discussion of environmental flows that it was not something that could be an appropriated right, but when you did obtain rights to water, you had to take into account what damage it might do to the instream flow. He said to him that would imply that somebody has in mind what is a minimally acceptable instream flow. If that is the case, then there is a question because there are two state agencies that are taking somewhat different approaches to determining what the minimal acceptable instream flow is once everything is said and done.

Ms. Loeffler said she believes there could possibly be another level of that question. Currently for all of Texas, we do not have the definitive answer for all of our rivers and streams what the appropriate level of flow is. There are some ongoing studies that include all three agencies to go out and complete that work and that information is several years out. As far as what we do in the meantime, there are ways to estimate the needs.

Mr. Morrison said when the Group went through this process in the last cycle, the Group to the best of its ability put together water management strategies for the region. That information was submitted for review and the Group received responses from the Texas Water Development Board and Texas Parks and Wildlife that there were certain things that the Group had not considered, or with Texas Parks and Wildlife that the Group had not considered adequately. He said that a recommended strategy will be assessed for instream flow, then the Group will determine the impact of the recommended strategy based on some model.

That assessment will not necessarily be to the standard of the Texas Parks and Wildlife or the Texas Water Development Board. Are we heading down a path and recommending a strategy based on a water availability model that will provide an instream flow, that for lack of a better term, "feels good" to the Group. He said that once all is completed then submitted but it doesn't meet the standard set by other state agencies, then the Group has to try again.

Ms. Loeffler said Mr. Dunn plans to address some of this in his presentation. It is very important for the agencies and Group to stay in communication on these issues. She said it is not their intent to wait until the end of the process and determine that it is not adequate. It is their intent to see that the planning group considers all of the options and select the best ones for meeting future water needs while minimizing effects on fish and wildlife.

Dr. Austin noted that the instream flow program which was set up by SB 2 is just beginning. He said it is a comprehensive methodology that considers everything including hydrological alteration. The Texas Water Development Board proposal is a tool to assess the impact on streamflow of these strategies, nothing else. It is purely an assessment of the impact to streamflow from the proposed strategies.

Ms. Loeffler said the benchmark she referred to where a percentage of the median flows is used similar to what the Texas Commission on Environmental Quality uses if they have no other information.

Dr. Austin said the methodology that the Texas Water Development Board put forward is just an assessment of streamflows. They do not believe the water availability models should be used for an environmental assessment per se. They believe they should be used for the purpose for which they are designed which is to assess streamflow in the rivers.

Mr. Mack said that if the Texas Water Development Board does not believe this should be used for environmental analysis, what reason should the Group evaluate the effects on the streamflow. Dr. Austin said it is a useful tool for looking at the impacts of each of the strategies and perhaps providing a methodology by which you would choose one strategy over another.

Mr. Dunn said currently Texas Parks and Wildlife and the Texas Water Development Board are involved in at least two statewide studies to determine what instream flow needs are to support wildlife and habitat and also for bay and estuary inflow needs. Those studies are not complete and will not be complete in time for this planning. The Texas Water Development Board presentation today was that this is how the plan overall with everything included in the plan that this is the effect that it will have on flows and not make any value judgment as to whether that is good or bad or whether it meets some standard. The Texas Parks and Wildlife Department has taken it one step further in that they have

come up with a benchmark that is commonly called the Lyons Method which is what the Texas Commission on Environmental Quality typically uses to determine how much water a new project has to leave in the stream to be granted a water rights permit. The Texas Parks and Wildlife Department wants to use that as a benchmark to compare the flows after the plan is implemented and compare it against the benchmark. Texas Water Development Board is not comparing against a benchmark. Each agency is just comparing flows against each other.

Mr. Dunn said it gets more complicated when we evaluate our water management strategies. We have to use the consensus criteria for environmental flow needs. This methodology was developed on a consensus basis between Texas Parks and Wildlife Department, Texas Water Development Board, and Texas Commission on Environmental Quality for water planning purposes for the 1997 State Water Plan. Mr. Meesey noted several technical advisory groups around the State also participated. Mr. Dunn said those are the flows that HDR plans to evaluate the water management strategies against.

Ms. Loeffler said this discussion has been something that has been a challenge for many years in Texas. She said there is a legislative committee, the Environmental Flows Study Commission that is looking at some of these issues about how best to protect environmental flows.

Dr. Mack asked how realistic it is that there will be a number in the future and is that number going to accurately portray what is needed in the river. Dr. Austin said the National Academy of Sciences is reviewing the Texas Water Development Board methodology; their report will be available in October. Texas Water Development Board is currently conducting preliminary work and expects to begin using the methodology in October conducting instream flow studies on priority sub-basins. The middle Brazos is one of the sub-basins; the schedule of completion for the six priority sub-basins is by 2010.

Mr. Dunn said this all fits into the planning process. He noted he had updated the Group on where we are with respect to the needs assessment. Once the needs are determined for the basin, HDR will present to the Group water management strategies that are currently in the existing plan as well as new strategies that the Group has requested be considered that could be used to meet those needs. The strategies will have to be evaluated against the Consensus Criteria for Environmental Flow Needs (CCEFN). Once the plan is developed and the water management strategies have been decided upon, they will all be used in conjunction to determine what effect the overall plan has on instream flows.

#### HDR –

Chair Jones requested Mr. Dunn prepare a presentation for the June meeting that reviews the original objective and the future direction.

Chair Jones called on Mr. Dunn of HDR Engineering to present their recommendation regarding this matter. A copy of Mr. Dunn's presentation is attached as **Exhibit H**.

Mr. Dunn said he would recommend one of two alternatives. One would be to compare the Brazos G water supply assessment which is the Water Availability Model against that same model but including the water management strategies, or do the same comparison but include the return flows that have been discussed. He said he would also like to get the Groups approval on the statistics to present graphically as to how we will include that information in the plan to show the effects of the plan on instream flows at various locations within the river basin. He noted there will be coordination with Texas Parks and Wildlife Department and Texas Water Development Board so that the same models and assumptions are used.

In response to a question from Mr. Morrison, Mr. Dunn said he would recommend there not be any flows against any benchmark, because people will begin to look to those as a defacto standard if it is included in the regional plan. Mr. Morrison asked how the various strategies should be assessed. If it is not going to meet a know threshold of one of the regulatory agencies it will be difficult to implement this particular strategy. Mr. Dunn said that will be included in the individual water management strategy evaluations. Each strategy has to be evaluated individually and to determine what flows that strategy has to pass through to meet those standards that will be the CCEFNN.

Mr. Dunn said the Texas Water Development Board has requested recommendations for locations to assess flows. He said he selected seven points in the Brazos Basin, six are within Region G and one is in Region H. He noted that Region G and Region H will have to coordinate our uses of the model as well because they have to assess instream impacts within Region H, water availability within Region H and impacts of Region G's water management strategies in their region as well. The locations are as follows: Brazos River at South Bend, which is just upstream of Possum Kingdom reservoir; Brazos River at Aquilla, which is right downstream of Lake Whitney; Bosque River at Lake Waco, which will cover the Bosque River watershed; Little River at Cameron, which will cover the Little River watershed, (he noted that this gauge location is upstream of the Little River reservoir so it will not capture any changes caused by the Little River reservoir); Brazos River at Bryan, which will capture any changes in the overall flow due to the Little River reservoir; Brazos River at Hempstead, downstream of the Millican Reservoir, (there is not gauge on the Navasota that is downstream of any of the proposed Millican Reservoir sites, furthest downstream point in Region G); and Brazos River at Richmond, commonly used as an index gauge by most agencies for outflows from the Brazos River Basin.

Mr. Morrison said there are three possible reservoir sites: Double Mountain Reservoir, Breckenridge, and South Bend and how will they be assessed using the model. Mr. Dunn said he is assuming that all three reservoirs will not be in the plan at one time. He said it is most likely that only one of the reservoirs will make it into the plan.

Mr. Dunn asked if the Group is comfortable with making a decision on what comparisons should be made, how the comparisons should be presented, where the comparisons should be done, and where the Group would request that the Texas Water Development Board to do their comparisons when they do their methodology.

Chair Jones noted there was one request to speak before any decisions are made; he called on Ms. Kaderka of the National Wildlife Federation to speak.

Ms. Kaderka requested the Group not make any decisions at this meeting. She noted that she had heard several comments regarding frustration and how to assess environmental impacts. She said they had been critics during the last process regarding the lack of environmental assessments in the regional and state water plans. She said what they did not realize at the time was that the Group did not have the tools or guidance from the Texas Water Development Board to do that. There has been a legislative session since that time where expectations have been clarified and there is a need to do a quantitative assessment of environmental impacts.

Ms. Kaderka said the National Wildlife Federation will continue to maintain that it is very important for there to be a real environmental assessment. She commended the work being done by the three agencies that are river specific or site specific. She commented that those types of studies take a very long time to complete. She said the National Wildlife Federation has argued that the regional planning groups need some type of desktop method to assess environmental impacts that is appropriate for the planning process. The National Wildlife Federation supports the type of approach presented by the Texas Parks and Wildlife Department. She requested when the decision is made about how the impacts will be assessed and how to meet the expectations of the Texas Water Development Board, the Group include some type of assessment. She said she disagrees with Mr. Dunn in saying not to use benchmarks because people may start taking them seriously.

Ms. Kaderka requested the Group postpone any decisions about handling this information until the Group's April meeting. She said the National Wildlife Federation will complete a side-by-side assessment in writing. She also requested the opportunity for their staff scientist to be able to make a presentation about this issue.

Mr. Morrison asked Ms. Loeffler, in terms of review and Texas Parks and Wildlife, if the methodology presented by HDR met Texas Parks and Wildlife Department's threshold requirement for this Group to do what it is supposed to be doing. Ms. Loeffler said she would be on the side with Ms. Kaderka, but after seeing it today and in writing, she would say she had an answer at that moment. She said from the Texas Parks and Wildlife standpoint, they are going to be interested in looking at the benchmark type of idea. Mr. Morrison said the question is based on the presentation and their discussions with Mr. Dunn. Is there a comfort level that if the Group pursues this avenue and when we reach the end that Texas Parks and Wildlife will be able to say, yes this was an acceptable approach for the planning process. She said she would have to remain neutral about the Group and said she did not believe that it would hurt to have three more weeks.

Mr. Clark asked if it would be beneficial to appoint a committee regarding this matter. He expressed a concern that the Group has not heard from the Brazos River Authority who would likely have input regarding some of the ideas and monitoring points.

Mr. Grace noted that the Brazos River Authority in the beginning stages of planning played a significant role in providing the Group input on issues. He noted that lately the Group has not received information regarding the Brazos River Authority's position on some of the issues. He said from his viewpoint, he would like to see the region step up on environmental issues.

Mr. Bryson said that from a water management strategy perspective, the Group will be doing an environmental analysis look, which is not confirmed, but on a project-by-project basis that will be considered. What we are currently talking about is the overall impacts of the plan, it is completely different. From what he is hearing in this discussion, we are interchanging the two things and making them the same, but they are different. The project-by-project review is one thing and the overall assessment and impacts analysis is another.

Mr. Morrison asked how the overall impact of the strategies can be assessed if, embedded in that plan, there may be projects that are going to have difficulty meeting the expected environmental thresholds, which would mean that they would perhaps be a viable project. Mr. Bryson said if you take those out, it will change the overall impacts analysis.

Mr. Bryson said if the Group wants to conduct an overall environmental impact that is one of the options Mr. Dunn presented.

Mayor Blum moved that any action on this item be deferred until the April Group meeting. He requested that detail be provided, not just a recommendation.

Chair Jones appointed the following committee to consider this matter and then make a recommendation to the Group: Mike Morrison to serve as committee Chair, Tom Clark, Phil Ford, Mark Bryson, Horace Grace, and Scott Mack. Wiley Stem requested that he be included on the committee.

Mr. Dunn noted a decision is not necessary for Brazos G purposes right now. Texas Parks and Wildlife Department and Texas Water Development Board have requested comments and recommendations sooner than what he would have brought this to the Group. Mr. Dunn said that of primary importance is deciding on the control points.

Mr. Morrison requested names, addresses and email addresses of those who plan to participate from Texas Parks and Wildlife Department and Texas Water Development Board so that schedules can be coordinated.

Mr. Dunn said the only time critical item is the locations. Mr. Meesey noted this item has been put off in the past and there is not a great deal of time left. Mr. Dunn said that the reason the item was moved to this meeting was due to the subject matter corresponding with the educational briefing and other issues on this agenda.

Mr. Morrison and Mr. Clark said they would be in favor of the points if Brazos River Authority is in agreement with those points.

Mr. Meadows requested that a point be added upstream of the point at Aquilla possibly the Glen Rose gauge.

It was moved by Mr. Clark and seconded by Mr. Grace to accept the proposed seven gauges including the addition of the Glen Rose gauge, for a total of seven points as locations to assess flows.

The **MOTION CARRIED** with no dissenting votes.

### **Briefing from Brazos River Authority on Basin Projects –**

Chair Jones called on Mr. Rindy to introduce Mr. Jahn, the Upper Basin Business Development Manager for the Brazos River Authority to give this presentation. A copy of Mr. Jahn's presentation is attached as **Exhibit I**.

### **Discuss Request from the Far West Texas Water Planning Group**

Chair Jones postponed this discussion until the April meeting because of time constraints.

**Status Report on Solicitation of New Voting Members** – Chair Jones postponed this discussion until the April meeting because of time constraints.

**Confirmation of Next Meeting Date** –

Chair Jones noted the next regularly scheduled meeting is Wednesday, April 14, 2004.

**New Business to be Considered at Next Meeting** –

Chair Jones asked if anyone had any suggestions for new business at the next meeting.

Chair Jones requested Mr. Grace give a briefing on the Water Marketing Conference at the next meeting.

Dr. Mack commented the Group received a presentation from Mesa at this meeting; he noted that it opens up a number of issues that the Group has not had a chance to discuss or take a position on. He said in a future meeting he would like to have some information discussions regarding those types of issues.

Mr. Grace said he would like to have information regarding water marketing.

Ms. Clark said that since the Instream Flow Workgroup is going to be moved to a later date, would the Water Policy Workgroup like to have a meeting at 9:00 a.m. prior to the regular Group meeting in April.

The Group requested Ms. Clark look at the amount of information available and make that determination as to whether it would be beneficial to have a meeting.

**Adjournment** – There being no further business before the Group, Chair Jones adjourned the meeting at 4:23 p.m.

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**PHILLIP J. FORD**  
Secretary/Treasurer

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**TONY JONES**  
Chair