

MINUTES OF MEETING
SURFACE WATER AVAILABILITY WORKGROUP
BRAZOS G REGIONAL WATER PLANNING GROUP
 September 17, 2003

In accordance with notice sent to each member of the 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 Surface Water Availability Group convened at 10:00 a.m., Wednesday, September 17, 2003, in the central office of the Brazos River Authority, 4600 Cobbs Drive, Waco, Texas. Attendance was as follows:

MEMBERS PRESENT

Scott Mack, Chair
 Mark Bryson
 Jon Burrows
 Terry Kelley
 Wiley Stem

MEMBER ABSENT

Truman Blum

OTHERS PARTICIPATING

Teresa Clark, Brazos River Authority
 David Dunn, HDR
 Horace Grace, Brazos G RWPG member
 David Meesey, TWDB
 Grady Reed, HDR
 Marcia Russo, Brazos River Authority
 Corey Shockley, HDR
 Lisa Tschirhart, Brazos River Authority

PUBLIC PRESENT

See attached sign-in sheet (Exhibit B)

Notice of Meeting –

Scott Mack conducted the meeting. Mr. Mack said that each Workgroup member of the Regional Water Planning Group received notice of this meeting and a copy of the meeting agenda by e-mail dated August 20, 2003 (copy of agenda attached as Exhibit C). He noted that the public meeting notice had been properly posted as required by law and that confirmations of timely posting were received.

Attendance and Announcements –

Mr. Mack noted that Truman Blum was out of town and could not attend the meeting.

Presentation of preliminary Surface Water Availability estimates

– Mr. Mack introduced David Dunn with HDR to conduct the workshop.

Mr. Dunn proceeded with the PowerPoint presentation (see attached Exhibit D). Following is a summary of his presentation.

Mr. Dunn first discussed the model development and the background of the WRAP model. He discussed the timeline, starting with the Water Rights Adjudication Act of 1967 up to the completion of TCEQ's Brazos WAM in 2001. Mr. Dunn next explained how the model works. He said there are naturalized stream flows with 76 gage locations distributed to more than 1,300 water right locations. He also explained the reservoir evaporation rates of 580 reservoirs, water rights (annual diversion, priority date, other) and return flows (waste water treatment plant effluent).

Mr. Dunn then discussed the major assumptions for the WAM Run 3 Model. They are as follows: full authorized use of existing, perpetual water rights, strict application of prior Appropriation Doctrine, as-permitted reservoir capacities (assume no sedimentation), no return flows, historical period of record from 1940 – 1997, and no contracts or subordination agreements. Mr. Dunn stated that as was the case in the first round of Regional Water Planning, the TWDB will use TCEQ's approved Run 3 of the WAM System for determination of surface water availability.

Mr. Dunn stated that the Water Model would be used as follows. Each water right will be analyzed and assigned to a county. Minimum annual diversion by each right will determine availability. Firm yields of major reservoirs (greater than 5,000 acre-feet) will be determined under separate model runs. BRA contracts to be distributed to points of diversion and non-BRA contracts will be broken out from water right output.

Mr. Dunn then discussed the preliminary model results (see attached Exhibit E for supporting handouts). Mr. Dunn said that the overall surface water availability decreased by 125,000 to 145,000 acre-feet per year. He also said that reservoir yields decreased above Possum Kingdom Reservoir, primarily due to "futile call" (82,000 acre-feet per year reduction overall in the region). Mr. Dunn further stated that irrigation water decreased due to a difference in the methodology required by the TWDB rules (68,000 acre-feet per year reduction) – prior analysis used 75/75 for irrigation of water availability.

A discussion then ensued regarding the definition of "futile call". Mr. Dunn stated that yield studies done in the past did not assume that water would need to be passed in significant amounts downstream. Primarily because there are significant channel loses in the upper part of the basin. He stated if you release fifteen to twenty cubic feet per second of inflows to meet a downstream senior water right it won't make it.

So the assumption is that the water would be held back which is a logical use of that water, to hold it back in the reservoir instead of releasing it downstream to evaporate and seep into the ground. The way the WRAP Model works right now, the downstream senior water rights will call on that water. Even if they have to pass one hundred acre-feet so that downstream water rights get two acre-feet, the Model will do that. That's what someone called a "futile call" situation. They can call on the water and the upstream water right that's junior will have to pass it but it's futile because it won't make it. That's where a lot of these differences between the previous yield estimates and the yield we got from the WRAP Model stem from.

Mr. Kelley questioned the meaning of futile call. He asked Mr. Dunn if the 82,000 acre-feet was a reduction overall in the region or was he referring only to the upper region? Mr. Dunn said that it was the Brazos G Region. He stated that he basically summed up the reservoir and water availability yields for the major reservoirs and compared it to 2001 and it was approximately an 82,000 acre-feet reduction. One of the members asked if that 82,000 acre-feet above Possum Kingdom was considered a futile call. Mr. Dunn replied that a large portion of it was. Mr. Dunn further stated that some of it is due to futile call and some of it is due to differences in the hydrology that was assumed on those reservoirs.

Another member asked if it was the same as Lake Alan Henry in 2001. The 2000 yield was estimated at 26,100 acre-feet and after the 2006 Plan it's 9,000 acre-feet. Mr. Dunn said that Lake Alan Henry is pretty much a futile call situation. He further stated if you look at Hubbard Creek Reservoir it sees a fairly substantial reduction in the yield estimates (approximately half as much) primarily due to the differences in the way the reservoir was modeled previously in the yield estimates and the way it is modeled in the WAM. Therefore, Hubbard Creek Reservoir is not necessarily a futile call. Mr. Dunn stated that there are differences in the reservoir inflows that were estimated and assumed versus what the naturalized flows are that HDR used in the WAM. Therefore, there are a couple of building blocks that create these differences.

Mr. Burrows asked if a futile call is when you're downstream and you have something and the right is upstream, it just won't make it downstream. He asked why it wouldn't make it. Mr. Dunn stated a good example would be the Guadalupe/San Antonio River Basin where you have the Edwards outcrop. He said you can have as much as 500 cubic feet per second or more flowing into the upstream side of the outcrop and downstream there's nothing. It all goes into the aquifer. A water right downstream may try to call on that water but it's just not going to make it. So why not let someone upstream of the outcrop divert. Mr. Dunn stated this "channel loss" also happens a lot in the Upper Basin.

Mr. Dunn then said we may want to approach the TWDB about relaxing the prior Appropriation Doctrine in futile call situations where it doesn't make sense for Lake Alan Henry to pass 100 acre-feet in a month down to the Possum Kingdom Reservoir if only a few acre-feet will make it. Mr. Dunn further stated that right now the Water Right Model that TCEQ uses does not take into account the agreement between Lubbock and the BRA for the effect on the Possum Kingdom yield of Lake Alan Henry passing those flows – that's not in the current water right model.

Mr. Dunn then discussed the following plans for future model development. Complete breakout of individual water rights to their respective counties and water user groups (WUG's). Complete year 2060 yield analysis for major reservoirs. The possibility of relaxing prior Appropriation Doctrine in "futile call" situations as well as relaxing the criteria used for irrigation water availability (75/75 versus minimum annual diversion).

Another issue discussed was re-use and return flows. Mr. Dunn stated that he would like to put return flows into the Model at some appropriate level. Mr. Mack asked if it was logical to assume that municipalities and large return flow groups may, at some time, seek a credit for their water. Mr. Meesey said yes. He stated that re-use could be used as a water management strategy to meet the need, but in terms of the Model, it was taken out. Mr. Meesey further stated that one hundred percent re-use was not a realistic assumption. He stated there is a legal argument in regard to return flow that the TWDB hasn't gotten into yet. He said that legally each water right holder is allowed to use one hundred percent of their water, unless there is a discharge requirement in their permit. Therefore, legally, it is their water and for appropriative purposes TCEQ is required to take that off the table. Mr. Dunn stated that the TWDB may be able to assume a certain level of re-use as a water management strategy. Mr. Dunn stated there are two types of re-use. One in which there is a need and you assume a flange to flange from the treatment plant to that need, the other, is to assume some level of basin-wide re-use. Therefore in the overall water management strategy, there would be some level of re-use basin-wide.

The Group then discussed bringing a proposal to the RWPG at the November meeting to include the issues discussed today, including futile call and return flow issues. Ms. Tschirhart stated that the Surface Water Availability Group could come up with a summary as well as a letter backing their concerns. Therefore, if the RWPG is in agreement with the Surface Water Availability Group's conclusions, the letter could be signed by Chair Jones at the November meeting.

Discuss Surface Water Availability Workgroup continuing as a Water Policy Issues Workgroup –

The Group discussed the fact that other RWPG members may want to participate in this new workgroup, therefore, it was agreed that this item be presented to the RWPG at the November meeting.

New business to be considered at next meeting – Mr. Mack stated that this would be the final meeting of the Surface Water Availability Workgroup, therefore there was no new business to be considered.

Adjournment – There being no further business before the Group, Mr. Mack adjourned the meeting at 11:50 a.m.

SCOTT MACK

Surface Water Availability Workgroup

DRAFT