



## Minutes for Workshop of the Hays Trinity Groundwater Conservation District

Date: Thursday, March 31, 2011  
Time: 6:00 pm  
Place: Wimberley Community Center  
Located: 14068 Ranch Road 12, Wimberley, Texas 78676

### 6:04 pm: Workshop Opens

**Board Present:** Jimmy K. Skipton-President & David G. Baker-Vice President

**6:08 pm:** Joan Jemigan arrived

**Board Absent:** Mark A. Key-Secretary/Treasurer & Greg F. Nesbitt

**Staff Present:** Rick Broun-General Manager, Tressy Gumbert-Administrative Assistant, & Al Broun-District Geologist, P.G. 4845

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MAG = Managed Available Groundwater  
TWDB = Texas Water Development Board  
District = Hays Trinity Groundwater Conservation District  
GMA9 = Groundwater Management Area 9

### Agenda Item:

#### 1. Review Version 2 of MAG for the GMA9 as presented to the District by the TWDB

- a. Clarify calculations and methodology used to determine Exempt Use
  - i. HDR Engineering – Tony Bagwell
    - Presented map of planning regions.
    - PEC provided number of electric connections within a GIS coverage which was used as a planning basis for population forecast
    - Data was divided up into different planning regions such as Regional Water Planning Areas L & K and Groundwater Districts.
    - There were 3 forecasts created: Hi-Range, Mid-Range, & NA-Range
    - Presented Graph and chart of HDR forecasts of Managed Available Groundwater within the HTGCD – GMA9 and explained method HDR used to calculate exempt use and MAG for each forecast.
    - Permit Policies should be set to allow for exempt growth.
    - Numbers presented in forecasts are gross overall numbers for entire district however the characteristics of the aquifer changes between areas. South part of district has a thicker saturated thickness than the north part.
    - A “one size” policy may not fit the entire District. The board may want to consider adopting a subarea policy?
    - The Hi-Range forecast is based on an historical trend for growth over the past 30 years
    - A link to HDR’s study is available on the Hays County Website.

#### Board: Questions, Answers and Comments:

- Q. Did the HTGCD Board request HDR to submit their numbers to the TWDB? (Jimmy Skipton)  
A. No the District did not request HDR to submit their numbers to TWDB. TWDB had somehow acquired the numbers and contacted HDR with questions pertaining to the study forecasts. (Tony Bagwell)
- Q. HDR has current (2010) pumping number estimate as 3311 ac-ft/year. Did that number come from the District? (David Baker)  
A. No, 3011 ac-ft/year came from the information on electric meters provided by PEC to HDR. (Tony Bagwell)
- Q. How does HDR forecasts tie to the 2010 Census? (David Baker)  
A. HDR calculated the numbers they used by subtracting the western portion of Hays County from the Hays County Census number (Tony Bagwell)
- Q. What was the per capita estimate used by HDR? (David Baker)  
A. Per capita used was 110 gpd. (Tony Bagwell)
- Q. Did HDR take rainwater collection systems into account? (Jimmy Skipton)  
A. No, rainwater collection systems were not taken into account. (Tony Bagwell)

Comment: 98% of wells (estimate) in the District are considered exempt. Calculating water use on those exempt wells is challenging. There is a broad range between the "low-case and hi-case" usage numbers for the MAG. The current Management Plan states 3714 ac-ft, compared to 9155 ac-ft, stated on the forecast. (David Baker)

Point of Information: The 2005 Management Plan did not include the lower Trinity, 3714 is production from the upper and middle Trinity (Al Broun)

ii. **Texas Water Development Board (TWDB) – Bill Hutchison**

- Presentation on "Exempt Use and Managed Available Groundwater".
- In GMA9's case the DFC is defined in terms of "drawdown".
- "Drawdown" is used as a means to estimate the (DFC) state of the groundwater. Drawdown can be measured but is difficult to measure flow.
- The DFC adopted by GMA9 was based on Scenario 6 of GAM Task 10-005. There were a total of 7 Scenarios reviewed.
- Task 10-005 drawdown-numbers for GMA9 are broken down by Groundwater District. Overall drawdown for HTGCD is 19 feet.
- Exempt use is not regulated by Groundwater Conservation Districts
- Enabling Legislation and rules of districts result in various definitions of what is Exempt Use.
- MAG=Total Pumping – Exempt Use
- To come up with estimated exempt use the TWDB used a standardized approach based on population and growth. Data used in standardized approach included 2000 census block, 2006 & 2007 water use reports, and 87-105 per capita.
- TWDB submitted the draft MAG and solicited comments in regards to the reports from the districts.
- A Board Member from Hays Trinity Groundwater Conservation District sent HDR's numbers to TWDB. TWDB published the numbers provided to them in the first version of the MAG not knowing the numbers were not approved by the HTGCD Board.

**Board: Questions, Answers and Comments:**


- Q. GMA9 has 6-8 weeks to provide feedback to TWDB. How will the DFC protest affect the MAG process? (Jimmy Skipton)
- A. If the DFC is found to be unreasonable it will go back to GMA9 to be reprocessed. After review by the Groundwater Districts and the GMA 9 Board, modifications may be made to the DFC and re-submitted to the TWDB. The TWDB will review the proposed changes and, if acceptable, they will modify the MAF (Bill Hutchison)
- Q. Are district estimates documented? (Joan Jemigan)
- A. Yes. (Refers to the estimate of Exempt Use) There are three kinds of District's involved in the process 1) Districts who believe TWDB numbers are accurate and choose to use those numbers, 2) Districts like HTGCD, who have a good handle on exempt use and don't completely agree with TWDB's standard approach so they provide their own numbers, and 3) Districts who feel TWDB number are incorrect however, choose to use them anyway. (Bill Hutchison)
- Q. What is your opinion of HDR's survey and its accuracy? (David Baker)
- A. Estimates like HDR's that are done using hard counts are more accurate. (Bill Hutchison)
- Q. If CCN numbers change can DFC and MAG numbers change? (Jimmy Skipton)
- A. Yes, there are a couple of scenarios: 1) DFC changes therefore MAG has to change and 2) DFC doesn't change but MAG calculations change based on updated exempt use or changes in legislation. (Bill Hutchison)
- Q. How do you advise a board on reconciling such a huge variance in the estimated numbers? (David Baker)
- A. Models look at regions they are not the best tool if you are interested in a particular well or spring. Models were designed to provide information as a starting point for the decision makers. It is up to the Groundwater Board to set policies and make final decisions.

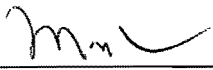
**Public: Questions, Answers and Comments:**

- C. Joe Day made observations and comments in regards to calibrating TWDB's models, HTGCD's permitting scheme, exempt wells, and rainwater harvesting.
- Q. What is the difference between drawdown and decline? What is the difference in drawdown and mining? (David Glenn)
- A. Drawdown and decline are basically the same thing. The difference in drawdown and mining is, drawdown can be measured in a well or series of wells. Mining is a concept of a continuous long term drawdown over a longer period of time. (Bill Hutchison)
- Q. In reference to the 9115 AF flow rate on the model, does the probability change from 2010 to 2060? (David Glenn)
- A. The numbers were assumptions fed into the models to provide meaningful information to the decision makers. For the purpose of the model the objective was to understand the impacts of different levels of pumping. (Bill Hutchison)
- Q. Is it possible that Hays Trinity could have selected a different DFC outside the 30 foot DFC adopted by GMA9? (Jim McMeans)

- A. Yes, there are multiple ways of breaking it down. Common thread is it's an average. The 30 foot drawdown is over the entire GMA9. HTGCD drawdown is 19 foot and can be broken down further by upper, middle and lower Trinity. An average can be done over district, county, aquifer, or GMA. (Bill Hutchison)
- Q. Is it possible for a district to adopt a lower DFC or a spring flow DFC? (David Baker)
- A. Yes if the districts in GMA9 as a group agree to it? (Bill Hutchison)
- Q. To Tony Bagwell with HDR, do agencies you work with normally accept your science based study estimates in preparing their long range plans? (Jim McMeans)
- A. The Board is made up of elected officials and it is up to their discretion. There have been instances when Boards have chosen to not use HDR numbers. (Tony Bagwell)
- Q. Was worse case scenario looked at when doing model runs? (Linda kay Rogers)
- A. Yes, we looked at 387 50-year runs all conditions were looked at. (Bill Hutchison)
- C. Exempt use of 3311 ac-ft/year for 2010 goes up to 8763 ac-ft/year for 2060 an increase of 5452 ac-ft/year. I do not believe it is possible to reach HDR's prediction of 8763. (Al Broun)
- Q. Can the District manage the MAG internally by aquifer? (Al Broun)
- A. Districts can decide how they want to break it down if an overall average was adopted by the GMA. (Bill Hutchison)

8:15 pm: Meeting Adjourn

Approved:  \_\_\_\_\_, President 5-19, 2011

Approved:  \_\_\_\_\_, Secretary/Treasurer 5/19, 2011