

Groundwater Management Area #1 Meeting
Minutes
May 11, 2010 – 10:30 AM

The Groundwater Management Area Number 1 (GMA #1) Joint Planning Committee (JPC) met on Tuesday, May 11, 2010 in the PRPC Board Room – 1st Floor of the Panhandle Regional Planning Commission, 415 W. Eight Ave., Amarillo, Texas with the following members in attendance:

Voting Members Present:

C.E. Williams sitting in for John R. Spearman, Panhandle Groundwater Conservation District; Daniel Krienke, North Plains Groundwater Conservation District; Jim Conkwright, High Plains Underground Water Conservation District; Beth Sturgeon sitting in for Jim Haley, Hemphill County Underground Water Conservation District.

Other Groundwater Management Area 1 Representatives Present:

Amy Crowell, Panhandle Groundwater Conservation District; Steve Walthour, North Plains Groundwater Conservation District; Janet Guthrie, Hemphill County Underground Water Conservation District; Robert Meyer, High Plains Water District

Others present:

Bruce Rigler	High Plains Water
Dale Hallmark	NPGCD Dumas
Marty Jones	Sprouse Law Firm
Wade Oliver	TWDB
Steve Stevens	Mesa Water
Cole Camp	PGCD
Jonathan Ellis	PRPC
Kent Satterwhite	CRMWA
David Brewer	USDA-ARS
Sherry Stephens	HPWD
Jim Conkwright	HPWD
Cindy Cockerham	Sen. Seliger
Bob Zimmer	NPGCD
Gene Born	NPGCD
Jim Copeland	HPUWD
Bill Mullican	HPWD/PGCD
Ben Weinheimer	TCFA
Jennifer Foster	Sen. Duncan
David Bowser	Livestock Weekly
Alan Abraham	League of Women Voters
Kyle Ingham	PRPC

1. The meeting was called to order at 10:31 a.m. with Chairman Krienke presiding. Chairman Krienke thanked all for attending and invited all to sign in so there might be a record of attendance. Chairman Krienke introduced staff members from Senators Duncan's and Selliger's offices, as well as Wade Oliver from the Texas Water Development Board.

2. **Roll Call/Introductions**

It was determined that a quorum was present.

3. **Consideration of Minutes – The minutes from the November 11, 2009 GMA #1 Meeting**

Mr. Ingham noted where members might find the transcript to the TWDB portion of the meeting. Ms. Guthrie had a correction on the list of those attending. Mr. Conkwright made a motion to approve the minutes. Ms. Sturgeon seconded the motion; the motion carried by unanimous vote.

4. **Discussion and consider – Action as may be necessary in regard to developing a proposed and potential alternative Desired Future Conditions of the Dockum Aquifer in GMA #1**

Mr. Krienke turned things over to Wade Oliver from Texas Water Development Board to inform on Dockum Aquifer Model Modifications and GAM Run 09-014. Mr. Oliver began by informing on some of the changes made to allow for more reasonable predictive simulations. Mr. Oliver showed a map with the official boundary of the Dockum in Texas and the counties it spanned—differentiating between outcrop and subcrop boundaries. Further Mr. Oliver showed the boundaries of the GMA boundaries as they related to the boundaries of the Dockum.

Mr. Oliver elaborated on the difference between the original Dockum model and the modified model. In essence, In the original model there is an active Layer 1 which simulates the Ogallala, on top of which is a general-head boundary. The changes we made were to inactivate Layer 1 and move the general head boundary directly to the top of the Dockum and it eliminates the need for the “dummy layer” which was included in the original model.

Having covered the changes to the model, Mr. Oliver moved onto the requests. The original requests for the Dockum aquifer were 1-foot of drawdown per year on average for GMA 1 between 2010 and 2060. Mr. Oliver added for comparison a run to achieve that same drawdown (51 feet) after 50 years which Mr. Oliver labeled “Scenario 2.” Mr. Oliver indicated on each of these scenarios he had conducted a spread analysis to allow the members to see what happens to the Dockum in terms of drawdown over a range of drawdown scenarios. Among other things this spread analysis showed how the aquifer was responding in various ways including: Recharge, Pumping, Net Change in Storage, Net Inflow from Overlying Aquifers, Outflow to Springs by Evapotranspiration, Net Outflow to Streams, Net Lateral Inflow, and Net Vertical Inflow from Upper Portion of the Dockum Aquifer. Mr. Oliver spoke briefly on what each of the graphs from the spread analysis depicted.

After speaking of the individual pieces of this spread analysis, Mr. Oliver spoke to two custom graphs which he had created. The first depicted the average drawdown through time for pumping in Scenario 1. On this graph it showed three GAM Runs as solid lines, Mr. Oliver noted though only three were depicted seven GAM Runs were utilized to create the prediction. The graph showed the progression in terms of

Average Drawdown and Annual Pumpage for the three GAM Runs: 40 percent of Base Pumping, the Base Scenario 1, and at 190 percent of Base Pumping, and it showed how all three acted over a 50-year period—ten year intervals being identified by the dashed lines.

The second graph shown on Mr. Oliver's conclusion page depicted the constant pumping scenario as well as the addendum. In this second graph, the intermediate GAM Runs not included in the previous graphs were included and essentially the pumping stays constant in regards to the various situations included on the graph. There was discussion between Ms. Guthrie and Mr. Oliver for clarification of items on the graphs.

Mr. Krienke asked for any further comments or questions, there being none offered, Mr. Krienke said that it was his understanding that Bill Mullican was to give a presentation to help clarify some issues as a part of his consulting work for the Panhandle and High Plains water districts.

Mr. Mullican's presentation was titled: "Technical Overview – The Dockum Aquifer and Desired Future Conditions." Mr. Mullican spoke to some of the works his overview was based off of including the individuals who developed these works. First and foremost, Mr. Mullican—in an effort to keep things in perspective—stated that the "number" that was being looked at for the Ogallala DFC's was 3.5 million acre/ft per year and the "number" that we're looking at for Dockum is 20-21 thousand acre/ft per year. Mr. Krienke in order to clarify stated that there should not be a perception that there will be a huge amount of water now available with the creation of a Dockum DFC simply because of the differences in amounts of waters being discussed between the Ogallala and Dockum. Mr. Mullican stated at the onset that taking into account all major works on the Dockum results in not a great deal, i.e. there has not been a great deal of in-depth work on the Dockum.

Some of the issues that Mr. Mullican spoke to at the onset of his presentation in regards to influencing factors on his report included: DFCs for unconfined (Ogallala) vs. confined (Dockum) aquifers; Data available to conduct local/regional studies and develop groundwater availability models is very limited when compared to systems such as the Ogallala Aquifer; Data availability increases as use increases; and Current groundwater law is based on "adaptive management" approach.

Mr. Mullican and members discussed trends from representative hydrographs which were utilized in the TWDB Report 359 as prepared by Robert Bradley and Sanjeev Kalaswad. Mr. Mullican presented a regional cross section for the Dockum and spoke to several phenomena and behaviors unique to counties and why various elements affected the Dockum so. In both cross sections, Mr. Mullican spoke to the interaction and layering of the Ogallala on top of the Dockum. Mr. Mullican proceeded on to speak to a map which indicated water level elevations from the Dockum as depicted in the Bradley and Kalaswad study. Mr. Mullican stated that approximately 1,300 wells were used to develop the model, and he spoke to some areas of brackishness and the affects that the brackish water had on the projections.

Mr. Mullican covered some of Mr. Oliver’s work again and stated after taking into account some of the issues discussed by Mr. Oliver that there were five likely options in regards to a potential DFC for the Dockum. Mr. Mullican broke these options down in terms of Annual Production in acre-feet per year and average GMA #1 Water level decline (in ft) in 2060:

GMA 1 Desired Future Condition	Annual Production in acre-feet per year	Average GMA 1 Water Level Decline in 2060 (ft)
Average of 1 foot decline in water levels per year	13,419 in 2010, increasing to 107,175 in 2060	51
Constant 51 feet of decline in water levels 2010-2060	82,961	51
Average of 25 feet decline in water levels by 2060	12,967	25
Average of 30 feet decline in water levels by 2060	21,226	30
Average of 35 feet decline in water levels by 2060	31,179	35

Mr. Mullican stated that when creating this chart GMA #1 was considered with the assumption that GMA #2 would remain constant and not affect these numbers with fluctuation.

There were some questions for clarification on the source of some of the numbers presented. It was brought up how closely availability numbers were to those detailed in the 2011 Initially Prepared Plan. Further discussion happened on the source of the numbers. Mr. Mullican did say that some of them came from the water use survey which the TWDB utilized for their report.

Mr. Kreinke asked Mr. Mullican if as a consultant for High Plains and Panhandle if he had a recommendation on one of the five paths presented earlier. Mr. Williams stated that they had discussed the 30 foot decline option, he stated that this might give room for new production even to go so far as the 1 foot decline, Mr. Conkwright also stated that this might be favorable considering that the issue must be reconsidered in five years. Mr. Conkwright asked a question regarding the impact of household wells in the Randall area which use Dockum water. Mr. Mullican asked members to be mindful that the average GMA 1 decline of 30% would be GMA wide.

There was further discussion between members for clarification regarding both the presented graphs and the numbers presented. At 11:35 pm, it was decided to take a short break. Before the break, in response to discussion, Mr. Mullican stated he thought it would be a bad idea not to take into consideration possibility of growth in the brackish water areas in the future—such a possibility is included in the IPP.

Also before the break the issue of the Seymour in Wheeler county was sought to be addressed. It was discussed that it was expected to be thrown in with the treatment of the Dockum because it was such a small area, and because as Mr. Mullican stated because it behaves very similar to the Ogallala—it is very patchwork.

The group reconvened at 11:47 pm. Chairman Krienke believed he was hearing a consensus on 30 feet and he asked that the minutes record that we have a consensus to take this back to the Boards of the groundwater conservation districts and then have the managers work on a resolution for the Dockum and Seymour and be prepared to meet back in early June and vote on those resolutions. He asked if that sounds reasonable, he asked if the consensus of this group was ok or if a vote was needed. Mr. Conkwright stated that he was happy with consensus, as was Mr. Williams, as was Ms. Guthrie. It was suggested that perhaps meet on the 1st or 2nd of June for a meeting. After discussion it was decided the 3rd of June at 10:30 am would be an acceptable time for all.

5. Public Comment – Any citizen may address the GMA #1

Chairman Krienke asked if there was anyone wishing to offer a comment. Mr. Ingham stated that both presentations from today's meeting would be on www.panhandlewater.org by the end of the week.

There was discussion between managers on which aquifers should be included within the resolution to be drafted. There was a question about the Blaine being relevant. It was stated that it was necessary to address it somehow. Mr. Williams stated that they will address it. It was stated that something would be done so that it would be consistent with regional water planning.

6. Adjourn.

Hearing no further public comment, Chairman Krienke closed the period of public comment and stated he would entertain a motion to adjourn. Mr. Williams so moved, Ms. Sturgeon seconded. Motion passed by unanimous vote. Meeting adjourned at 11:56 a.m.