

(Now What?...continued from page 2)

the process of appealing DFCs, in addition to the provisions of Chapter 36, Texas Water Code that also address this process.

Finally, now that DFCs have been adopted, the members of GMA #2 must continue to meet at least once a year as specified by statute. We must continue to discuss the data that is collected each year, and determine if the DFCs are being met. Also, it is required that DFCs be established at least once every five years. As more information is gathered, we may find that revisiting the DFCs is warranted before the mandatory 5 year period.

Summarizing, we now have adopted DFCs for GMA #2. The TWDB is reviewing the submission packet for administrative completeness, and will send us availability numbers using groundwater models and the DFCs. A person with a legally defined interest in groundwater from GMA #2 has a year to appeal the approval of DFCs. Meanwhile, districts must update management plans and rules (if needed) to demonstrate the methods used for achieving the DFCs. 🇺🇸

Calendar of Events

September 6	Labor Day Holiday Office Closed
September 7	Board Meeting 8:30 am District Office
September 16	Terry County Farm Tour
October 5	Board Meeting 8:30 am District Office
November 2	Board Meeting 8:30 am District Office

SOUTH PLAINS GROUNDWATER NEWS is published by the SOUTH PLAINS UNDERGROUND WATER CONSERVATION DISTRICT, PO Box 986, 802 Tahoka Road, Brownfield, TX 79316. Directors: Doyle Moss, Scott Hamm, Matt Hogue, Larry Yowell, Dan A. Day, Jr.; General Manager: Jason Coleman; Administrative Assistant: Lindy Harris; Education Coordinator: Crystal Hogue. Subscriptions are free upon request. Phone: (806) 637-7467 FAX: (806) 637-43 E-mail: spuwcd@spuwcd.org Web: www.spuwcd.org

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 986
BROWNFIELD, TX



SOUTH PLAINS UNDERGROUND WATER
CONSERVATION DISTRICT
PO BOX 986
BROWNFIELD, TX 79316

ADDRESS SERVICE REQUESTED



**Visit us at
www.spuwcd.org**

In this issue...

- GMA #2 Adopts DFC
- July...A Wet Month in 2010
- After the DFCs...Now What?
- 2011 Calendar Art Winners Receive Awards

GROUNDWATER SOUTH PLAINS NEWS

AUGUST 2010 VOLUME 17, NUMBER 4

GMA #2 ADOPTS DESIRED FUTURE CONDITIONS FOR GROUNDWATER RESOURCES

The relevant aquifers for GMA #2 include Ogallala, Edwards-Trinity (High Plains), and the Dockum (partially). Groundwater Availability Model (GAM) runs from the Texas Water Development Board (TWDB) were performed for each of these aquifers. Specifically, GAM Task 10-023 includes a simulation of conditions for the Ogallala and Edwards-Trinity (High Plains) aquifers. GAM Task 10-025 contains results from several conditions of the Dockum aquifer.

Ogallala and Edwards-Trinity (High Plains)

As stated earlier, GAM Task 10-023 contains the scenario used for adopting desired future conditions in the Ogallala and Edwards-Trinity (High Plains) aquifers. Specifically, Scenario 3 in the report contains the conditions that the group adopted. In Scenario 3, the counties within High Plains UWCD are given a condition equaling 50% of 2010 saturated thickness in the year 2060, or 50% remaining in 50 years (50/50). For the other counties (mainly south of the High Plains UWCD) a condition of meeting an average yearly drawdown is shown. Since 2006, the members of GMA #2 had discussed a method for adopting DFCs based on water level measurements and a certain amount of yearly change. Because this yearly data is well established, readily obtained and understood, the members felt that using it as a basis for adopting a goal was prudent. The period 1998-2007 was used for establishing an average yearly change for each county within the management area. That 10-year period was selected because it includes the most extensive number of observation wells, plus it was the most current data when the joint planning began. In August 2009, High Plains UWCD informed the other members of GMA #2 that the 50/50 concept was recently adopted by its Board of Directors. The other members were asked to consider the feasibility of this goal for the other districts of GMA #2. After reviewing the data from that simulation in a March 2010 meeting, the other members agreed that the 50/50 concept did not meet local approval and differed greatly from the average drawdown approach the group had discussed for the past 3 years. Hence, the TWDB then performed GAM Task 10-023 which, in Scenario 3, represents the 50/50 goal for High Plains UWCD and the average yearly drawdown goal for the other districts. The report from GAM Task 10-023 is available at www.gma2.org.

Dockum


The Dockum aquifer is designated a minor aquifer by the TWDB. It underlies most of GMA #2, although it is used only in a few counties of the management area at this time. High TDS prohibits the use of this aquifer in

(GMA #2 ...continued on page 2)

(GMA #2...continued from page 1)

many areas of GMA #2, particularly the southern portion. GAM Task 10-025 was used for adoption of a desired future condition of the Dockum aquifer for GMA #2. In this GAM report, the specific scenario used for adoption of DFCs is found in Table A-8. This table shows the average drawdown by county when pumping is 160% of the base pumping scenario. The base pumping scenario is the same as the pumping for the last year of the historical calibration period in the model (1997). Using this prescribed condition, the GMA #2 average drawdown for the period 2010-2060 is 40 feet. Based on comments from members and TWDB staff, the Dockum is considered relevant only for the High Plains UWCD and Llano Estacado UWCD at this time. The other members stated that the Dockum aquifer is not relevant for their areas currently. The report from GAM Task 10-025 is available at www.gma2.org.

Conclusions and Summary

High Plains UWCD adopted a DFC for the Ogallala and Edwards-Trinity (High Plains) of 50% remaining in 50 years. The other six districts adopted a DFC for the same aquifers that allows a certain amount of yearly drawdown based on averages from the period 1998-2007. These conditions are physically possible and are represented by GAM Task 10-023, Scenario 3. High Plains UWCD and Llano Estacado UWCD adopted a DFC for the Dockum where the average drawdown for GMA #2 is 40 feet for the period 2010-2060. This condition is shown in more detail in Table A-8 from GAM Task 10-025. The other member districts stated that the Dockum is not a relevant aquifer in their respective geds at this time. 

After the DFCs...Now What?

Since 2006, members of GMA #2 have worked toward adopting desired future conditions (DFCs) for groundwater resources of the area. On August 5, 2010, the group officially adopted DFCs for the relevant aquifers of this management area. Now that the adoption has occurred, though, what happens next?

First, let us review the exact DFC adopted for the South Plains UWCD. The desired future condition for the Ogallala and Edwards-Trinity (High Plains) aquifers is based on an allowable amount of yearly drawdown. The allowable amount is not to exceed the average of -1.15 ft/yr, which was calculated from the 10-year period 1998-2007. All other districts of GMA #2, except High Plains UWCD, adopted a similar goal of limiting drawdown to the 10-year average. All of High Plains UWCD, as well as Briscoe and Swisher counties adopted a DFC of maintaining 50% of 2010 saturated thickness in the year 2060.

Once the meeting concluded on August 5, the members submitted the adopted DFCs to the Texas Water Development Board (TWDB) in Austin. The TWDB requires a packet of information be submitted to show that the process occurred at an open meeting, and that proper legal notice was given of the open meeting. TWDB staff will acknowledge the receipt of an administratively complete package within 20

business days of receipt. An administratively complete submission packet means that the members of GMA #2 have supplied all of the information to TWDB that is required by statute, rule, or both.

Next, the TWDB will take the adopted DFCs and generate water availability numbers using the groundwater availability models. Right now, it takes about 6 months for the TWDB to deliver these numbers. It is important that we remember the availability numbers are estimates of groundwater usage that are allowable to meet the desired future condition. This number is also referred to in the statute as "Managed Available Groundwater".

Also required of districts is that their groundwater management plans address in a quantitative manner the desired future conditions of the groundwater resources. That means that, at some point, we must include goals for meeting the DFCs in our management plan and identify performance standards that will be used to achieve the goal. Furthermore, the District must have rules that are designed to achieve the DFCs.

A person with a legally defined interest in groundwater within GMA #2 may file a petition appealing the approval of DFCs within one year of the adoption. The TWDB has a set of rules that address

(Now What?...continued on page 4)

2011 Calendar Art Winners Receive Awards

Local fourth and fifth graders competed in the South Plains Underground Water Conservation District's fourth annual calendar artwork contest. The students were given a presentation by the Education Coordinator regarding water conservation. The students were then asked to take that information and create a detailed picture illustrating what they believed to be an important water conservation message for the public. This year over 300 entries were submitted and local judges enjoyed looking at the colorful and creative messages that the 4th and 5th graders from


three Terry County Elementary Schools created.

The grand prize winner in this year's contest was Makayla Perez, of Brownfield's Oak-Grove Elementary, who received a \$50 cash prize and a certificate for her accomplishment. Her entry will be featured on the cover of the South Plains UWCD 2011 calendar.

Other winners received a \$25 cash prize and their artwork will be published on monthly pages of the calendar. They include Oak Grove Elementary students Erick Gonzales, Justin Garcia and Jasminne Garcia. Wellman-Union winners include

Hunter Neil, Elisabeth Peters and Karli Lambert. Meadow's Burluson Elementary winners include Robert Sanchez, Katlen Garcia, Gabriella Soto, Eadon Hunt, Aliyah Castillo and Helen Griesbrecht.

The South Plains UWCD thanks all the students who participated in this year's contest. We look forward to the continuation of this program. The 2011 South Plains UWCD calendars will be available to the public November 30th.

You can also view this year's winning artwork on the SPUWCD Educational Website at www.Savingh2o.org. 


JULY...A WET MONTH IN 2010

Rain totals from 35 gages within the District varied from 7" to 15" for the month of July. A good bit of that rain occurred during the first week of the month. A number of reports from producers included flooded fields, roads and even some wells during this event. Water wells located in low lying areas were especially prone to damage as some cave-ins were also reported. Interestingly, the majority of standing water has now disappeared as hot temperatures and thirsty crops have been the norm for August.

As a comparison, we include data from both 2009 and 2010 in the following table. This data is acquired from the District's network of rain gages each month, and represents an average of all reporting sites.

Average Rainfall from District Gages

	Jan.	Feb.	March	April	May	June	July
2009	.02"	.32"	.11"	.36"	.90"	4.02"	2.71"
2010	1.52"	2.27"	1.70"	3.18"	.50"	2.32"	11.04"

Rainfall contour maps are created each month using this data and are available on the District web site (www.spuwcd.org). Our neighboring groundwater conservation districts in Gaines and Yoakum counties also supply data that is used for the contour maps. 



Save Water—Save Money

- Each minute shaved from your shower time saves ten gallons of water.
- Low-flow shower heads maintain the velocity of water, but reduce the amount of water used.
- Only run the dishwasher when it's full. It uses about 15 gallons of water per load, regardless of whether it is full.
- Use a layer of organic mulch around plants to reduce evaporation and save water.