Groundwater Management Area 9

Ad Hoc Sub-Committee Response

for the

November 2, 2009 Hearing

by the

Texas Water Development Board

on

Petitions submitted to the Texas Water Development Board by the Plateau Water Planning Group (Region J), Kerr County, and Upper Guadalupe River Authority appealing the Desired Future Conditions set by Groundwater Management Area 9 for the Hickory Aquifer, the Ellenburger Aquifer, and the Edward Group of the Edwards-Trinity (Plateau) Aquifer

Statement of Ad Hoc Sub-Committee Authority to Represent Groundwater Management Area 9

Upon notification by the Texas Water Development Board (TWDB) that a Hearing would be held on the petitions described above, Groundwater Management Area 9 (GMA 9) Coordinator, Ronald G. Fieseler, P.G., suggested that the GMA 9 Committee, in lieu of holding one or more GMA 9 meetings, seek volunteers to serve on a non-quorum, ad hoc sub-committee to prepare a response to the allegations contained in the petitions. It was pointed out that, due to time constraints, such an ad hoc sub-committee could meet multiple times if needed, would allow for more thoughtful contemplation, and allow for a more careful crafting of the response text to address specific petition issues. No one on the GMA 9 Committee objected to the suggestion or requested a GMA 9 meeting. Volunteers were subsequently solicited and an ad hoc sub-committee of four was organized. The ad hoc sub-committee consisted of:

Tommy Mathews, P.G., Board President, Cow Creek Groundwater Conservation District
Doug Wierman, P.G., Board President, Hays-Trinity Groundwater Conservation District
Mary Ellen Summerlin, Director at Large, Headwaters Groundwater Conservation District
Ronald G. Fieseler, P.G., General Manager, Blanco-Pedernales Groundwater Conservation District

The ad hoc sub-committee members have prepared the following response. Since the TWDB has combined the petitions, this response is organized by aquifers and provides responses to the evidence provided by the petitioners.

Hickory Aquifer and Ellenberger Aquifer

DFC approved by GMA 9

"Hickory Aquifer - Allow for an increase in average drawdown of no more than 7 feet."

"Ellenberger Aquifer - Allow for an increase in average drawdown of no more than 2 feet."

Petitioner: Kerr County

Petitioner's Evidence Summaries and **GMA 9 Response (in Bold)**

1. Petitioner alleges that based on Section IV of a TWDB document "A Streetcar Named Desired Future Condition" ("Streetcar") that it is difficult to agree with the DFCs set for either the Hickory Aquifer or the Ellenberger Aquifer.

   Section IV of the referenced document essentially defines a DFC and how it should be developed and approved. GMA 9 asserts that it has met or exceeded the requirements described in "Streetcar" (and for that matter, in Chapter 36.108).

   a. **Using quotes from "Streetcar"...GMA 9 has set DFCs that are *"desired, quantified conditions of groundwater resources (such as water levels, water quality, spring flows, or volumes) at a specified time or times in the future or in perpetuity."* Each DFC is *"a management goal that captures the philosophy and policies addressing how an aquifer will be managed.* Each DFC is what we want the *"aquifer to look like in the future."* Each DFC is *"physically possible."***

   b. **Each DFC was adopted *"by a two-thirds vote of at least two thirds of the districts located in whole or in part in the groundwater management area."* All 9 of the eligible voting GCD members of GMA 9 were present at the time of voting for the DFCs referenced above. The recorded vote on each DFC was 8 votes yes and 1 vote no, as indicated in the attached copy of the minutes of the August 29, 2008 GMA 9 Meeting.**

   c. **GMA 9 actively sought *"the involvement of stakeholders in the joint planning process"*. In fact, one of the methods GMA 9 used to obtain stakeholder input is actually referenced in Section IV of "Streetcar": *"One way of more formally involving stakeholders is to use the approach being used by Groundwater Management Area 9 in cooperation with the Lyndon B. Johnson School of Public Affairs (Eaton and others, 2008). This approach involved identifying stakeholder preferences through videotaped interviews with stakeholders, developing and using a simplified user-interface for the groundwater availability model for the area, and sharing results through various stakeholder meetings."***

      In addition, GMA 9 held 23 Committee Meetings, most of which provided a public comment period for stakeholder input. More significantly, 6 of the 23 meetings were designated "Public Meetings", were held in multiple locations across the GMA, and were specifically designed to inform stakeholders about the DFC process and obtain additional stakeholder input. Finally, even though it is not specifically required by TWDB Rules or Chapter 36.108, on multiple occasions GMA 9 representatives met with representatives of the Hickory Underground Water Conservation District and the Hill Country Underground Water Conservation District to get their input on both the Hickory Aquifer and

the Ellenberger Aquifer, their management goals, strategies, ideas, and data. These two GCDs are located in GMA 7.

d. **The GMA 9 DFC for the Hickory Aquifer was based on the amount of drawdown considered acceptable by the Hickory Underground Water Conservation District and which is actually included in their District's Groundwater Management Plan. This Groundwater Management Plan has been reviewed and approved by the TWDB. The Hickory Aquifer in GMA 9 is primarily located in Blanco County. The Hickory Aquifer extends westward from Blanco County into Gillespie County and from there northwest into the Hickory Underground Water Conservation District. It seemed reasonable and prudent to consult with them regarding a DFC for the Hickory Aquifer, in order to take advantage of their scientific data and management history of the Hickory aquifer system.**

e. **The GMA 9 DFC for the Ellenberger Aquifer was based on discussions about various DFC options, Ellenberger hydrogeological characteristics, pumpage demands, projected growth and demand expectations, and other relevant considerations with Paul Tybor, General Manager for the Hill Country Underground Water Conservation District. The Ellenberger Aquifer in GMA 9 is primarily located in Blanco County. The Ellenberger Aquifer extends westward from Blanco County into Gillespie County. It seemed reasonable and prudent to consult with them regarding a DFC for the Ellenberger Aquifer, in order to take advantage of their scientific data and management history of the Ellenberger aquifer system.**

2. Petitioner alleges that since with little data available and no known wells producing from either the Hickory Aquifer or the Ellenberger Aquifer in Kerr County, it is not possible to set a DFC that is reasonable.

   The assertion by the petitioner that little data is available, and there are no known Hickory Aquifer wells or Ellenberger Aquifer wells in Kerr County does not make the DFCs unreasonable. DFCs are not site specific, but are instead broad-based, forward-looking concepts and regional planning tools. As such, DFCs may be appropriately applied to and are intended to represent and include areas with little or no data. Just because one specific area lacks wells or data, be it a city lot, a large ranch, or a portion of a county, does not mean a GMA designated DFC is unreasonable for that particular area.

3. Petitioner alleges that the DFC is contrary to TWDB Rules and HB 1763. Petitioner states that the DFC must be able to be quantified and enforced by a groundwater conservation district (GCD), and that, for a variety of reasons, it is not possible to adequately monitor either the Hickory Aquifer or the Ellenberger Aquifer in Kerr County.

   The petitioner's allegation that the lack of known Hickory or Ellenberger wells in Kerr County suitable for monitoring makes the adoption of a DFC applicable to Kerr County contrary to TWDB Rules and HB 1763 is inaccurate and without merit. First of all, with no known Hickory Aquifer or Ellenberger Aquifer wells in Kerr County, the local GCD currently has no need to conduct any monitoring of either aquifer. However, if and when one or more wells begin to produce from

either the Hickory Aquifer or Ellenberger Aquifer, then it will be the responsibility of the local GCD to select a method of monitoring the DFC and/or the Managed Available Groundwater (MAG). There are a number of monitoring options available which are commonly in use by GCDs as well as TWDB field staff.

Edwards Group of the Edwards-Trinity (Plateau)

DFC approved by GMA 9

"Allow for no net increase in average drawdown (from current conditions) in the Edwards Group of the Edwards-Trinity (Plateau) Aquifer."

Petitioners: Plateau Water Planning Group (Region J)
Upper Guadalupe River Authority (UGRA)

Petitioners Evidence Summaries and **GMA 9 Response (in Bold)**

Petitioners state that the process is a large part of the appeal. The petitioners allege that based on Section IV of a TWDB document "A Streetcar Named Desired Future Condition" ("Streetcar") that it is difficult to agree with DFC set for the Edwards-Trinity Aquifer.

This evidence and comments provided by the petitioners in their opening paragraphs is essentially identical to that presented above for the Hickory Aquifer and Ellenberger Aquifer. For the sake of brevity, and with the understanding by the TWDB that the responses provided by GMA 9 for the previous two aquifers remains the same for the Edwards-Trinity Aquifer, we will not repeat the previous responses, but incorporate them by reference.

The process used by and followed by GMA 9 was laid out in HB 1763...later codified in Texas Water Code Chapter 36.108. GMA 9 began holding meetings in September 2005 and has worked closely with TWDB staff attending those meetings to ensure that GMA 9 was in compliance in all respects with the requirements of the statute.

However, it is worth noting that the petitioners state that "the process is a large part of the appeal." **Chapter 36.108(l) states:** ***"A person with a legally defined interest...may file a petition with the development board appealing the approval of the desired future conditions of the groundwater resources established under this section. The petition must provide evidence that the districts did not establish a reasonable desired future condition of the groundwater resources in the groundwater management area."*** **It seems clear that petitions and appeals under Chapter 36.108(l) are strictly limited to claims that a DFC is not reasonable. It is the position of GMA 9 that petitions and appeals based on the planning process itself are not covered under 36.108(l).**

Petitioners' numbered evidentiary paragraphs:

1. This paragraph contains multiple allegations:
   a. Petitioners complain that GMA 9 used only the Hill Country Trinity GAM and did not consider the Edwards-Trinity Plateau GAM and that both should have been used to evaluate potential DFCs and set MAGs.

A bit of background information needs to be mentioned first. The GMA 9 Committee held its first meeting on September 20, 2005. At that meeting, they discussed the need for experienced and competent review and advice on existing groundwater-related data, GAMs, local GCD Groundwater Management Plans, Regional Water Plans, and other hydrogeological issues that might come into consideration as GMA 9 became further involved in the planning process. To address this need, GMA 9 organized a Technical Group consisting of groundwater professionals, GCD managers, agency representatives, professional consultants, individuals with technical skills and expertise, and other interested and involved stakeholders. The Technical Group was charged with the task of conducting the reviews described above and subsequently providing GMA 9 with summaries and advice as appropriate.

Regarding the allegation made in (a) above, GMA 9 must point out that the selection of the GAM was not the responsibility of GMA 9. It was entirely up to the TWDB to determine what modeling tool they use to develop a MAG from any given DFC.

Even so, the GMA 9 Technical Group discussed the Edwards-Trinity GAM, water balance equations, and two-dimensional spreadsheet models in addition to the Hill County Trinity GAM. They did this partially because they knew that a portion of Kerr County was not covered under the Hill Country Trinity GAM, because they were aware of modeling-related issues and potential problems surrounding the Cibolo Creek area of GMA 9, and because new data might indicate that one modeling tool might prove to be more appropriate for GMA 9.

The Technical Group also considered the following issues:

(1) GMA 9 was informed early on by TWDB staff members that the Hill Country Trinity GAM would be used to develop MAGs from GMA 9 Trinity Aquifer DFCs.

(2) The Edwards-Trinity GAM was giving GMA 7 some problems and was not even being used for the trial model runs for GMA 7.

(3) The Hill Country Trinity GAM averages, assumptions, approximations, etc. were more likely to be representative of Hill Country hydrogeological conditions than those used in the much larger Edwards-Trinity GAM

The Technical Group could find no grounds for recommending any other modeling tool as an alternative to the TWDB's proposed use of the Hill Country Trinity GAM.

The use of any specific modeling tool to derive a MAG from a DFC was a decision that was made by the TWDB after the DFC was set by GMA 9 and does not affect whether or not the DFC is reasonable.

b. Petitioners note that the Hill Country Trinity GAM had to be averaged in order to make it work for the portion of Kerr County not covered by that GAM and allege that this process resulted in a regional model being modified inappropriately for a site-specific purpose.

In this allegation, the petitioners are complaining about the GAM selection and the GAM adaptation process, not the DFC set by GMA 9. The use of any specific GAM, modified GAM, two dimensional modeling tools, or other processes to evaluate a potential DFC and turn it into a MAG is a decision that is made by the TWDB after the DFC is set by GMA 9. Decisions made by the TWDB do not affect whether or not a DFC set by GMA 9 is reasonable.

c. The petitioners imply that GAM 9 used only the Hill Country Trinity GAM in setting its DFC. They state that the models should be a component in the DFC decision process, but not the only consideration.

GMA 9 is well aware of the need to comply with Chapter 36.108(d). In 23 GMA 9 Committee meetings and 6-8 Technical Group meetings, GMA 9 members gave lengthy consideration to a wide variety of issues during the decision making process, including such issues as protection of base flow to springs, creeks, and rivers, locally unique hydrogeological situations, cooperative efforts with adjacent GMAs and GCDs, stakeholder input, recent data not incorporated in existing models, Regional Water Plans, etc. TWDB staff members were frequently involved in our discussions, as were other agencies, outside firms, and consultants, special interest groups, and members of the general public.

d. The petitioners note that Region J used the Edwards-Trinity GAM in the 2006 Regional Water Plan that was adopted as part of the 2007 State Water Plan.

For the 2006 Regional Water Plan, Region J was using the processes and policies that were in effect prior to the passage of HB 1763. Region J determined the Available Groundwater for their Regional Water Plan and providing those results to their local GCDs. Such a "top-down" approach can result in inappropriate results, inconsistencies, and difficult management scenarios.

Recognizing this, the Texas Legislature mandated changes in the planning process through the passage of HB 1763 in 2005. GCDs are now cooperatively working within their GMA to develop DFCs which will be turned into MAGs. The GCDs will then provide Regional Water Planning

Groups with the MAGs which the Regions will be required to incorporate into their Regional Water Plan. This "bottom-up" development of MAG quantities by local groundwater professionals working cooperatively together should result in more realistic and manageable MAG quantities in both Regional and State Water Plans.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. The petitioners are addressing either the decisions of the TWDB regarding the GAM selection or the GMA process, but not the DFC itself.

2. The petitioners point out that the Edwards-Trinity Aquifer extends far beyond the boundaries of GMA 9 and the actions and decisions in those areas impact GMA 9. They allege that GMA 9 did not consult with GMA 7 contrary to the intent of HB 1763. They further allege that since only two counties out of nine have significant available groundwater in the Edwards-Trinity Aquifer, that the other seven counties have removed local control of the aquifer.

GMA 9 representatives have met personally with the General Managers of the Real-Edwards Conservation and Reclamation District, the Hill Country Underground Water Conservation District, the Kimble County GCD, the Hickory GCD, and other GCDs within GMA 7. Similarly, some of those same General Managers and sometimes GCD Board Members attended GMA 9 meetings.

To answer the question about the failure to consult with GMA 7 being "contrary to HB 1763", the petitioners need to look no farther than their own reference to Section IV of "Streetcar", where it mirrors HB 1763 and says:

> **"Second, if there are multiple desired future conditions in the same aquifer in a groundwater management area, they need to be compatible. ...This TWDB requirement, however, does not apply across groundwater management areas in the same aquifer."**

Next, their argument about 7 GCDs usurping the local control has no merit. According to Chapter 36.108(c) all GCDs located "in whole or in part" within the GMA are members and entitled to vote. The GMA process required under HB 1763 is a regional process based on local control and elected representation.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. The petitioners are once again addressing the processes involved, not the DFC itself.

3. The petitioners express a concern that the available groundwater set by Region J for Kerr and Bandera Counties in its 2006 Regional Water Plan was not considered by GMA 9 when setting the DFC for the Edwards-Trinity Aquifer. Region J used the Edwards-Trinity GAM and a 2005 spring flow report by John Ashworth (LBG-Guyton & Asso.) to derive the Region J available groundwater quantities.

Based on stakeholder input, GMA 9 was fully aware of the concern for protecting spring flow and related impacts on the Edwards-Trinity Aquifer. In fact, the first trial GAM Run requested by GMA 9 addressed spring flow during the drought of record. GMA 9 also looked at the available groundwater quantities in the Regional Water Plans of Regions J, K, and L. Given the difficulties involved in evaluating existing local and regional data and setting a DFC where none had existed before, one of the starting points suggested by several GMA 9 members was to try to develop DFCs that would closely approximate the existing Regional Water Planning Group available groundwater, demand, supply, and population numbers. This was discussed at several meetings and some scenarios were incorporated in various GAM Runs. It was understood that there was no guarantee that the numbers would match; nevertheless, existing Regional Plans were considered.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. The petitioners are simply asking if the Region J 2006 Regional Water Plan was considered.

4. In this section, the petitioners point out that the Hill Country GAM used to determine the MAG for the Edwards-Trinity Aquifer had not been updated in several years, that there was additional data available to the TWDB that should have been incorporated into an update of the GAM before GAM 9 set the DFC, that the best available data should be used for specific areas with the aquifer, and that regional planning cannot be determined based on artificial conditions.

   The Edwards-Trinity Aquifer DFC was set by GMA 9 and the MAG was determined by the TWDB using the GAM of their choosing, in this case, the Hill Country Trinity GAM. GAM 9 had no involvement or say in the choice of GAMs. The TWDB is constantly getting new data and GMA 9 frequently asked TWDB staff members about possible updates. GMA 9 was told that an update was planned but would only change a small portion of the Middle Trinity Layer and add a Lower Trinity Layer. There seemed to be no advantage in waiting months or years for a new version of the GAM when little if any changes would be made to the Edwards-Trinity Layer.

   It has been previously pointed out that the DFC is not site specific and the GAM cannot be updated every time some new site-specific data is sent to the TWDB.

   Regional planning and groundwater models all use artificial conditions to simulate existing conditions or run predictive scenarios. These artificial conditions are calibrated using baseline data sets to ensure an acceptable level of accuracy that can be expected to result in reasonable, predictive model runs.

   None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. The petitioners are addressing the MAG status and/or the processes involved, not the actual DFC.

5. The petitioners allege that since most of the wells ***(i.e. Edwards-Trinity Aquifer wells)*** in Kerr and Bandera Counties are exempted from GCD regulation, that there is no way the

DFC can be regulated or enforced. They further allege there is no way to determine the number of exempt wells or to accurately determine how much groundwater they produce. The petitioners allege that regulation of exempt wells would be contrary to state law and therefore GCDs cannot comply with the DFC set by GMA 9. They allege that a DFC set solely by aquifer drawdown in an area dominated by exempt wells is not reasonable.

Most of this section is incorrect and shows a misunderstanding of groundwater and water well regulation. All wells, exempt and non-exempt, are managed to varying degrees by individual GCD Rules promulgated in accordance with Chapter 36 and any specific GCD enabling legislation. Even the definition of exempt wells is often misstated and can vary based on local GCD Rule options. Although determining the number of exempt wells can be difficult, it can be done in a variety of ways, and certainly, some will likely be missed. Similarly, there are a number of commonly used methods to calculate or estimate exempt pumpage. The results from both efforts can be quite accurate, certainly accurate enough to serve local and regional planning needs.

Regulation of exempt wells is not contrary to state law and is frequently misunderstood. The only exemption such wells have is that the local GCD cannot regulate any pumpage from wells used solely for domestic or livestock watering on more than 10 acres and whose pumping capability does not exceed 25,000 gallons per day. Exempt wells still have to be registered with the local GCD, comply with any well construction standards (state or local), comply with local restrictions during declared drought conditions, must report any change in ownership, type of use, pollution event, or well modification or change in pump size, and comply with various other state or local requirements.

Since GCDs cannot deny an owner of 10 or more acres the right to drill a well used solely for domestic or livestock watering purposed, the DFC for the Edwards-Trinity Aquifer was primarily set to discourage non-exempt use and to protect spring flow. Local GCDs have either already taken steps to restrict non-exempt drilling or plan to do so in the near future. For instance, the Blanco Pedernales GCD Rules prohibit the issuance of a permit for any new non-exempt well that proposes to produce water from the Edwards-Trinity Aquifer. The Headwaters GCD in Kerr County has also had a similar Rule in effect for some time now. On July 1, 2009, the Cow Creek Groundwater Conservation District adopted a Board Order prohibiting the drilling of any new wells that propose to produce water from the Edwards-Trinity Aquifer.

Exempt wells can be difficult to count and/or monitor for local or regional usage, but both can be done in a variety of ways. Local GCDs also have the capability to work with exempt well owners on a cooperative and educational basis, discourage new exempt wells, regulate existing non-exempt wells, and restrict or prohibit new non-exempt wells. Clearly, local GCDs can indeed take numerous and effective steps that will help them comply with DFCs and MAGs.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. The petitioners are generally addressing exempt well usage and how such usage might affect the

GCDs ability to comply with the DFC. The actual, quantified DFC was not even discussed.

6. The petitioners allege that public comments received by GMA 9 at a GMA 9 Meeting held on August 29, 2008 were ignored. The petitioners claim that most, if not all of the 22 persons providing oral comments requested that the DFCs not be set at that meeting and that by waiting, new data could be added to the models and additional data considered including the drought of record. They allege that for GMA 9 to act with seemingly no regard for public comment and input was not the intent of HB 1763.

   The minutes of the August 29, 2008 GMA 9 Meeting (see attached copy) indicate that 6 speakers specifically asked for a delay in setting DFCs and comments from one or two others could be construed as supporting a delay. On the other hand, at least 12 speakers asked the GMA 9 Committee to: set zero drawdown, do the right thing for the aquifer and the environment, consider preservation of spring flow, include climate and rainfall records, require conservation practices and rainwater harvesting. Even though the minutes are abbreviated, they reflect the spirit of the public comments received at that meeting.

   As previously noted, GMA 9 members were well aware that delaying a DFC vote in hopes of adding new data to the Hill Country Trinity GAM was not a workable option because new data is constantly accumulating at a rate faster than the TWDB can incorporate it into existing models. Similarly, the GMA 9 Committee had seen the futility of trying to incorporate the drought of record into a DFC, and was aware of how difficult it might be to do so with the Edwards-Trinity Aquifer and the minor aquifers. Several of the people providing comments were attending their first GMA 9 meeting. They were therefore unaware of the attempts by GMA 9 to consider drought of record in the DFCs and the extensive effort to include public participation and obtain stakeholder input.

   It is worth repeating that GMA 9 held 23 Committee Meetings, most of which provided a public comment period for stakeholder input. More significantly, 6 of the 23 meetings were designated "Public Meetings", were held in multiple locations in the evenings after work, and were specifically designed to inform stakeholders about the DFC process and obtain additional stakeholder input.

   GMA 9 also worked cooperatively with a year-long graduate student Policy Research Project, a joint effort between the University of Texas' LBJ School of Public Affairs and the Jackson School of Geosciences. This study was funded in part by a grant from the TWDB and resulted in the publication titled "What Do Groundwater Users Want?", Policy Research Project Report 161 by the LBJ School of Public Affairs, UT Austin (copy attached). Stakeholder personal interviews, presentations at the 6 Public Meetings, and the analysis of stakeholder input were a major component of this project and publication.

   Thus, the votes on the DFCs followed extensive public input. All public comments were given due consideration, and some were incorporated where it was deemed appropriate. The DFCs were also based on hydrogeological

considerations, Regional Water Planning Group projections, spring flow and other environmental considerations, discussions with GMA 7 members, and input from other valuable sources. The DFCs were not taken lightly or set hastily as the GMA 9 Committee had met 18 times as of the date the DFC votes were taken.

Finally, it must be pointed that HB 1763 does not mandate any form of public input in the GMA process. The only requirement is that GMA meetings must be posted in accordance with the usual GCD requirements.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable.

7. Following an extensive summary of how the Region J 2006 Regional Water Plan established groundwater availability quantities for Kerr and Bandera Counties of 16,410 acre-feet and 17,310 acre-feet respectively, the petitioners allege that GMA 9 did not try to reconcile the differences between the Region J quantities and the DFC set by GMA 9.

GMA 9 was fully aware of the water availability quantities provided in the Region J Regional Water Plan, as well as those presented in the Regional Water Plans for Region K and Region L. While it was appropriate to give due consideration to such quantities, GMA 9 had to give due consideration to other stakeholder input, hydrogeological considerations, trial GAM runs, spring flow and other environmental considerations, discussions with GMA 7 members, and other pertinent factors.

One of the primary considerations that played heavily into the setting of the Edwards-Trinity Aquifer DFC was the widespread support and almost universal insistence to protect base flow to springs, creeks, and rivers. Not only would such protection help the base flow, it would benefit the environment, recreational interests, and help preserve the ambiance and lifestyles so valued in the Texas Hill Country.

It seemed to GMA 9 that the most appropriate way to achieve preservation of base flow to springs, creeks, and rivers consistent with stakeholder input, would be to protect the primary source water, i.e. spring flow from the Edwards-Trinity Aquifer. Since the primary threat to such spring flow would be increased pumpage, the GMA 9 Committee decided it would be prudent, conservative, and appropriate to set a DFC that would discourage drilling of new wells and provide for a minimal MAG quantity that would probably be used primarily for exempt wells. Setting a DFC of "no net increase in average drawdown (from current conditions)" meets those conditions.

This approach resulted in MAGs for Kerr and Bandera Counties of 1,263 acre-feet and 683 acre-feet respectively. These figures are much more conservative than those in the Region J 2006 Regional Water Plan and should provide increased protection of base flow to springs, creeks, and rivers.

However, at a joint meeting between GMA 9 and the petitioners in Kerrville on September 21, 2009, the petitioners actually suggested that the Region J plan incorporating 16,410 and 17,310 acre- feet in Kerr and Bandera Counties would provide better protection than the GMA 9 DFC. When asked to explain how Region J and the UGRA could improve base flow to springs, creeks, and rivers by increasing the water available for well production by more than 12 times the MAG, the petitioners had no clear response.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. GMA 9 did consider the Region J groundwater availability quantities, but other considerations were judged more important than trying to match the Region J numbers.

8. The petitioners note that a DFC must be quantified and enforced by GCDs. They provide a lengthy description of the variability of the Edwards-Trinity Aquifer and how it fluctuates from year to year. The petitioners allege that, with only one monitor well in Kerr and Bandera Counties, it is not possible to adequately monitor the Edwards-Trinity Aquifer. They further complain that "current conditions" were not specifically set, nor was any requirement placed on where or how the aquifer should be monitored. Finally, they allege that the DFC as set is contrary to TWDB Rules and HB 1763.

GMA 9 notes that the presence of only one monitor well in those two counties does not mean the DFC is unreasonable. It may be perfectly suitable. The Edwards Aquifer Authority manages the entire Edwards Aquifer based on water levels in just one well, their J-17 Well. However, if one well happens to prove insufficient, then it will be the responsibility of the local GCDs to consider other monitoring options. Regardless, the local GCD's Groundwater Management Plan must meet the requirements of HB 1763 and Chapter 36.108(d-2) which states:

> ***"Each district in the management area shall ensure that its management plan contains goals and objectives consistent with achieving the desired future conditions of the relevant aquifers as adopted during the joint planning process."***

It is not the responsibility of either GMA 9 or the TWDB to determine local monitoring methods, locations, or other monitoring needs.

GMA 9 notes that "current conditions" were established by the TWDB as part of the MAG determination. As stated in GAM RUN 08-90mag, the TWDB used simulated water level elevations in 2008 as the "current conditions".

Allegations that the DFC set by GMA 9 is contrary to TWDB Rules and HB 1763 are totally without merit. GMA 9 has followed TWDB Rules, Chapter 36.108, and in so doing, complied with HB 1763. GMA 9 must assume that, since the TWDB accepted the submitted DFC and prepared the MAG, that the TWDB was satisfied that GMA 9 had, indeed, met all the appropriate statutory requirements.

None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. Again, the petitioners address processes and not the actual DFC.

9. The petitions allege that the UGRA and Region J were stakeholders and were not considered by GMA 9 during its planning process and setting a DFC and therefore the DFC is not reasonable.

   Four voting members of Region J (David Jeffery, Lee Sweeten, Feather Wilson, and Gene Williams) usually attended GMA 9 Committee meetings and were also members of the GMA 9 Technical Group. The Technical Group met several times to discuss and consider aquifer data of all kinds from a wide variety of sources, including Regional Water Plans. Reports were then made to the GMA 9 Committee. One of these same Region J members, David Jeffery has served as a designated representative of his Board President at GMA 9 Committee meetings.

   GMA 9 held 12 (out of 23) Committee meetings and several Technical Group meetings in either the UGRA Auditorium or the UGRA Board/Classroom. A Headwaters GCD Board Member and designated representative of the HGCD Board President made two presentations to the UGRA Board of Directors about GMA 9 activities, findings and planning processes.

   For either Region J or UGRA to claim they have not been given consideration is absurd. They have had ample opportunity to attend meetings, provide input, and be part of the stakeholder process. In fact, more than half of the GMA 9 meetings were held in either their own facility and/or home town.

   None of the allegations or arguments made by the petitioners within this section provides any evidence that shows the DFC is not reasonable. For one final time, it bears repeating - the petitioners are appealing the processes, not the actual DFC.

Summary

- The petitioners have provided no substantive evidence to prove that the DFCs set by GMA 9 are not reasonable.
- They have argued extensively about the processes involved, many of which are legislative or statutory mandates with which GMA 9 must comply. Some of the allegations made about GMA 9 activities and processes are actually TWDB responsibilities.
- The petitioners alleged that some activities, processes, and decisions of GMA 9 were contrary to TWDB Rules and HB 1763. GMA 9 has shown in this response that such allegations are totally without merit.
- GMA 9 has met or exceeded all the requirements for setting DFCs, including holding open and public meetings, encouraging and obtaining stakeholder input, obtaining hydrogeological data on the various aquifers under consideration, coordinating with and

giving due consideration to other local and regional authorities, and complying with the TWDB Rules and Chapter 36.108.

- In view of the comments provided above and since the petitioners provided no immediate or substantive evidence that the DFCs set by GAM 9 are not reasonable, GMA 9 hereby requests that the TWDB deny the petitions submitted to the Texas Water Development Board by the Plateau Water Planning Group (Region J), Kerr County, and the Upper Guadalupe River Authority appealing the DFCs set by GMA 9 for the Hickory Aquifer, the Ellenburger Aquifer, and the Edward Group of the Edwards-Trinity (Plateau) Aquifer.

This response to the above described petitions appealing certain DFCs set by GMA 9 was submitted to the Texas Water Development Board at a Hearing held in Kerrville, Texas on November 2, 2009. This response was prepared and submitted on behalf of GMA 9 by:

Ronald G. Fieseler, P.G.
General Manager, Blanco-Pedernales Groundwater Conservation District
GMA 9 Coordinator and Presenter of this Response

Thomas O. Mathews, II, P.G.
Board President, Cow Creek Groundwater Conservation District

Douglas A. Wierman, P.G.
Board President, Hays-Trinity Groundwater Conservation District

Mary Ellen Summerlin
Director, Headwaters Groundwater Conservation District
Designated Representative of HGCD Board President Diane McMahon