

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

2015 JUN -4 PM 4:39

CHIEF CLERKS OFFICE

PETITION FOR INQUIRY

Submitted to the Texas Commission on Environmental Quality

4 June 2015

1

Curtis Chubb, Ph.D.
Landowner
Milam County, Texas

PETITION FOR INQUIRY

CERTIFIED STATEMENT DESCRIBING WHY I BELIEVE THAT AN INQUIRY BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY IS NECESSARY

[Submitted in fulfillment of Texas Administrative Code Rule 293.23 (d)]

I am filing this *Petition for Inquiry* (Texas Water Code Section 36.1082) for the following three reasons:

1. The rules adopted by the Post Oak Savannah Groundwater Conservation District (District) are not designed to achieve the desired future conditions (DFCs) adopted by GMA 12 during the joint planning process.
2. The groundwater in the management area is not adequately protected by the rules adopted by the District.
3. The groundwater in the management area is not adequately protected due to the failure of the District to enforce substantial compliance with its rules.

The District has failed to both develop and enforce rules that will allow the DFCs to be achieved and our groundwater to be protected. The evidence supporting my concerns is provided within the *Petition for Inquiry*.

I believe that without corrective action, the District’s groundwater management decisions will culminate in a future where people who live within the District’s boundaries will be unable to access groundwater.

Over the past eight years, I have published editorials, purchased advertisements in local newspapers, made oral presentations to the District’s board, and sent emails to the District’s directors concerning the District’s extreme overpermitting of our groundwater due to their disregard of the modeled available groundwater (MAG).

In every case, my efforts were completely ignored.

The Texas Legislature has worked diligently to craft laws to ensure that groundwater districts fulfill their duty to conserve and protect our aquifers. Some of those laws require groundwater districts managing a common aquifer to jointly determine DFCs – which are then used by the Texas Water Development Board to estimate the amounts of groundwater that can be annually pumped (called MAG) that will allow the DFCs to be achieved.

I present evidence in the petition supporting the conclusion that the District has ignored the MAG to such an extent that the permitted production volume dwarfs the MAG – yet the

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
 2015 JUN -11 11:41 AM
 CHIEF CLERK'S OFFICE

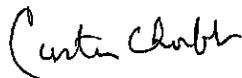
permitting continues unabated. In short, the District's groundwater management philosophy is deeply flawed.

The Texas Legislature also saw fit to provide a legal avenue for local citizens to alert the State of Texas if they believe that a groundwater district's rules and actions will not allow the DFCs to be achieved and do not protect the groundwater – that legal avenue is a *Petition for Inquiry*. This petition allows me to share my concerns with those who have the authority to correct the District's problems.

This *Petition for Inquiry* is not a frivolous action on my part – I have spent considerable amounts of time and money in efforts to have the District change their policies. And my concern is not of a short-term nature; I am concerned about ensuring groundwater will be available to future generations who wish to live in Milam and Burleson Counties.

Because of the District's refusal to listen to alternative viewpoints over several years and their continuation of the extreme overpermitting of our groundwater resources, I now find myself in a situation where I have no other recourse besides submitting this *Petition for Inquiry*.

I believe that after studying the evidence presented in the petition, the Texas Commission on Environmental Quality will share my concerns and will act to require the District to institute and enforce rules that will conserve and protect our groundwater for future generations.



Curtis Chubb, Ph.D.
830 County Road 330
Milano, Texas 76556
512/455-9180

texas.rain@centurylink.net



June 4, 2015



PETITION FOR INQUIRY

To: Texas Commission on Environmental Quality

From: Curtis Chubb of Milam County, Texas

Date: 4 June 2015

BASIC INFORMATION:

Affected person status:

According to Texas Water Code Section 36.1082(a), I qualify for “affected person” status for filing this petition because I own land in **Groundwater Management Area 12 (GMA 12)**.

I own about 90 acres on County Road 330 in Milam County.

Reasons for filing this petition requesting an inquiry:

I am filing this *Petition for Inquiry* for the following three reasons listed in Texas Water Code Section 36.1082(b) and modified to fit my situation:

1. The rules adopted by the **Post Oak Savannah Groundwater Conservation District (District)** are not designed to achieve the **desired future conditions (DFCs)** adopted by GMA 12 during the joint planning process.
2. The groundwater in the management area is not adequately protected by the rules adopted by the District.
3. The groundwater in the management area is not adequately protected due to the failure of the District to enforce substantial compliance with its rules.

I believe that the failure of the District to protect our groundwater is due to a combination of the three reasons cited above.

Curtis Chubb, Ph.D.
830 County Road 330
Milano, Texas 76556
512/455-9180
texas.rain@centurylink.net

INTRODUCTION:

Over the past eight years, I have written editorials, made oral presentations to the District's board, and sent emails to the District's directors concerning the District's extreme overpermitting due to their disregard of the **modeled available groundwater (MAG)**.

In every case, I was completely ignored.

I now feel as if there is no other recourse besides submitting this *Petition for Inquiry*.

I believe that the state's efforts to require groundwater districts to adopt DFCs were designed to ensure that groundwater districts fulfill their duty to conserve and protect the aquifers.

The District has failed to both develop and enforce rules that will allow the DFCs to be achieved and our groundwater to be protected. The evidence supporting my concerns is provided below.

I believe that the District has made groundwater management decisions that will culminate in a future where people who live within the District's boundaries will be unable to access groundwater.

I hope that the Texas Commission on Environmental Quality will act to require the District to institute and enforce rules that will conserve and protect our groundwater for future generations.

OVERVIEW:

In the following paragraphs, I present evidence supporting the following claims: 1) that the District's rules are not designed to achieve the DFCs; 2) that the District's rules do not adequately protect our groundwater; and 3) that the District does not enforce substantial compliance with Rule 7.6.

Part 1 of the discussion will highlight problems with specific rules.

In *Part 2* of the discussion, I present an actual example of how the District's rules and actions fail to protect our groundwater and will not allow the DFCs to be achieved.

The example in *Part 2* is how water-marketer Blue Water Systems plans to pump unsustainable amounts of groundwater by taking full advantage of both the problems with the District's rules and the District's failure to enforce specific rules.

Blue Water Systems is a major water marketer to which the District has granted permits to produce and export 71,000 acre-feet/year of Simsboro and Carrizo Aquifer groundwater.

In *Part 2* of the discussion, I use the published plans of Blue Water Systems to provide an actual example of how the District's rules fail to protect our groundwater.

NOTES:

1. The *Petition for Inquiry* has six appendices:
 - Appendix 1 = Rule 5.1.2.
 - Appendix 2 = The District's Permits and Pumping July 2013 File:
 - NOTE: This is an Excel File and is on the enclosed disc ONLY.
 - NOTE: The Carrizo Aquifer is labeled as the Carrizo-Wilcox Aquifer in the file.
 - Appendix 3 = Table 8-1 from District's Management Plan (source of MAG values).
 - Appendix 4 = GMA 12 Predictive Pumping PowerPoint Presentation/Feb. 25, 2015.
 - Appendix 5 = Table 7-1 from District's Management Plan (DFCs).
 - Appendix 6 = Section 16 of the District's Rules Downloaded May 2015.
2. The District's Rules can be accessed at the District's website: <http://www.posgcd.org>.
3. In addition to this hard copy, the entire *Petition for Inquiry* has been copied to the enclosed disc.

BASIS FOR THE PETITION – Part 1:

Rule 5.1.2:

Rule 5.1.2 grants everyone within the District the right to apply for production permits to pump up to 2 acre-feet/year/acre (See Appendix 1).

Rule 5.1.2 is unrealistic since the District encompasses 1,088,000 acres. If production permits based on Rule 5.1.2 were issued for every acre of land within the District, the total groundwater production would equal 2.2 million acre-feet/year – a production rate which would neither achieve the DFCs nor protect our groundwater.

The unrealistic production rate of 2 acre-feet/year/acre has resulted in the District issuing production permits which exceed MAG by 116% - see Figure 1.

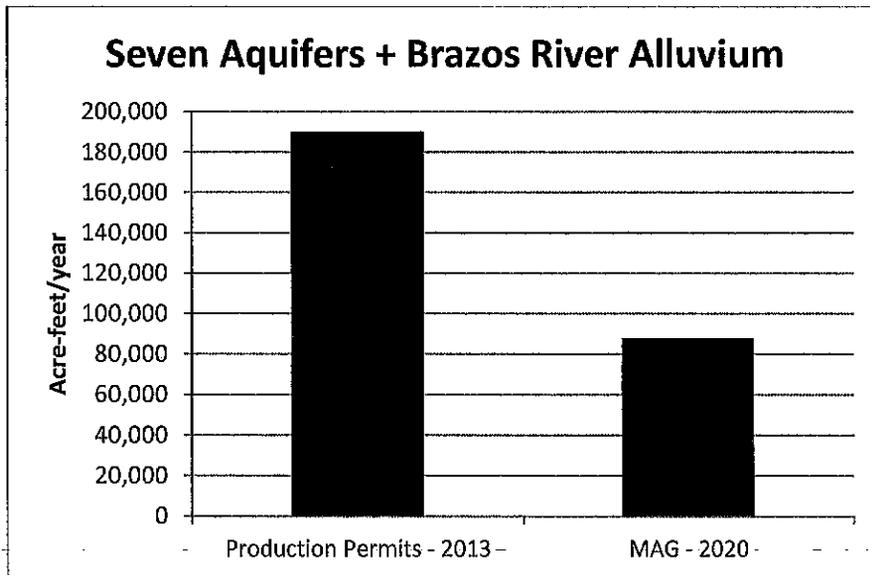


Figure 1: Comparison of Production Permits and MAG totals for seven aquifers (Carizzo, Calvert Bluff, Simsboro, Hooper, Queen City, Sparta, and Yegua-Jackson) and the Brazos River Alluvium within the District. The Production Permits total was calculated from data contained in the District's Permits and Pumping July 2013 File (See Appendix 2). MAG-2020 was determined from the GAM Runs and GTA Assessment cited for Table 8-1 of the District's Management Plan (See Appendix 3).

Please note that “MAG-2020” is the MAG for 2020 and was selected for the graphs because it is closest in time to today.

MAG is defined as “the amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition established under Section 36.108.” (Texas Water Code Section 36.001)

Furthermore, Texas Water Code Section 36.1132 states that “... A district, to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition [DFC] under Section 36.108...”

I submit that the District has recklessly used Rule 5.1.2 to issue production permits which exceed MAG (*I define as overpermitting*) to such an extent that the DFCs for the Simsboro and Carrizo Aquifers will not be achieved.

Figure 2 demonstrates that the Production Permits exceed MAG-2020 by 169% for the Simsboro Aquifer and 294% for the Carrizo Aquifer.

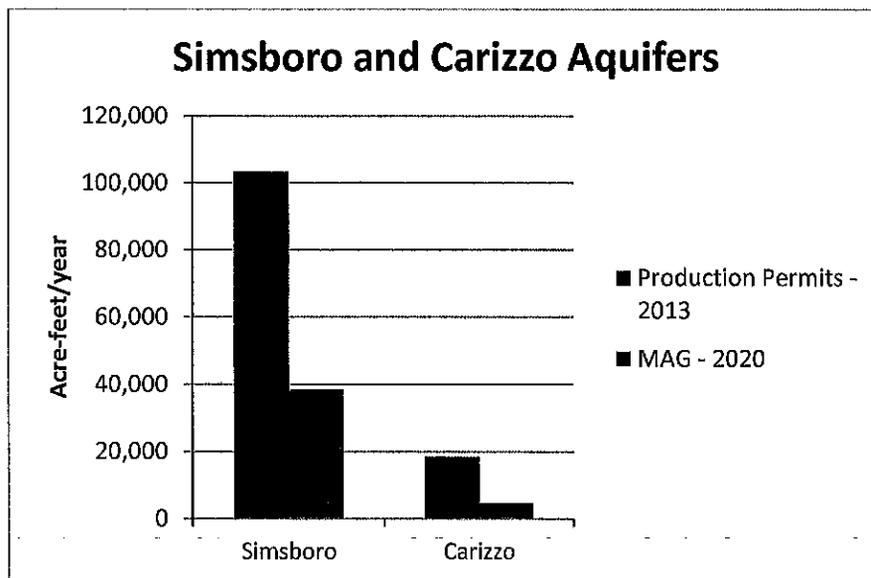


Figure 2: Comparison of Production Permits and MAG for the Simsboro and Carrizo Aquifers within the District. The Production Permits totals were calculated using the District's Permits and Pumping July 2013 File (See Appendix 2). MAG-2020 was determined from the GAM Runs and GTA Assessment cited for Table 8-1 of the District's Management Plan (See Appendix 3).

NOTE: The Production Permits totals for the two aquifers may be higher than displayed because the source aquifer for 10,291 acre-feet/year of production permits is not identified in the District's Permits and Pumping July 2013 File.

A recent PowerPoint presentation by LBG-Guyton to GMA 12 provided strong support for my argument that if not corrected the District’s overpermitting of the Simsboro and Carizzo Aquifers will prevent the adopted DFCs from being achieved and will not protect our groundwater. The presentation was delivered on February 25, 2015 (See Appendix 4).

In the February 25 presentation, predictive pumping scenarios 1 and 3 roughly approximated the District’s current production permits for the Simsboro and Carizzo Aquifers.

Both scenarios 1 and 3 predicted that the 2070 drawdowns would exceed the 2060 DFCs by at least 59% for the Simsboro Aquifer and 71% for the Carizzo Aquifer – see Figure 3.

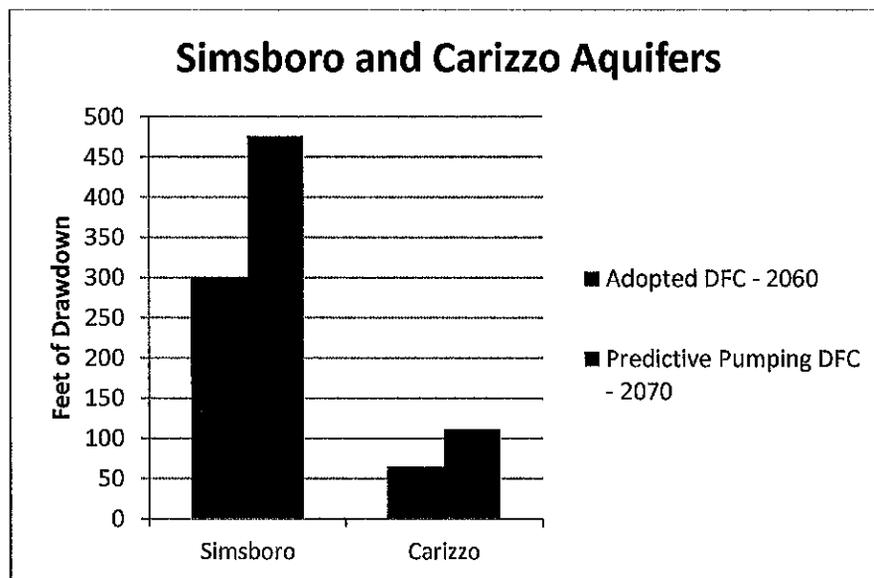


Figure 3: Comparison of ‘Adopted DFC–2060’ and a DFC based on predictive pumping (See last two pages of Appendix 4). The adopted DFCs for 2060 for the Simsboro and Carizzo Aquifers are 300-foot and 65-foot drawdowns, respectively (See Appendix 5).

The overpermitting problem is exacerbated by wells operating with *historic use permits* since the District’s rules do not address how the historic use permit wells will be regulated to achieve the DFCs and protect our groundwater.

Historic use permit wells account for more than 36% of the total permitted production and 20% and 14% of the production permitted for Simsboro and Carizzo Aquifer wells, respectively (See Appendix 2).

Almost every rule which references a “historic use permit” includes a statement that the historic use wells are exempt from the rule.

The exception is Rule 7.1.8 which only states: “Historic use permits are issued for an indefinite term, until modified or revoked by the Board after notice and hearing.”

There is no historic permit-related rule that defines the steps that the District will take when action is needed to achieve the DFCs and protect the groundwater.

Rule 7.6:

The District has adopted an “approve all permits” philosophy which was summarized in an article written by District General Manager Gary Westbrook and published in the September 6, 2012, edition of *The Cameron Herald*. He wrote:

“Under these Rules of this District, anyone who has the land can obtain the permit for that amount of water [the 2 acre-feet/year/acre as stated in Rule 5.1.2], regardless of who that person or entity is. No matter how large or small their acreage, everyone who desires to produce groundwater has that right protected and is treated the same.”

The general manager was also quoted in the January 8, 2009 edition of *The Bastrop Advertiser* as saying: “Anybody who asks gets a permit.”

The District’s attorney also voiced a similar conclusion – but his remarks also highlighted that the fear of lawsuits was the driver in the “approve all permits” philosophy. In an article published in the December 11, 2008, edition of *The Cameron Herald* and written by me, the following exchange was reported for the meeting where water-marketer Blue Water Systems was granted permits to pump and export 56,000 acre-feet/year of Simsboro groundwater:

“[Director] Ware then said: “If I understand Barney right, there’s really nothing we can do.”

Post Oak attorney Barney Knight responded: “Under our own rules, we have no basis for defending a lawsuit if the permits are denied.”

The “approve all permits” philosophy is not supported by Rule 7.6 which lists what has to be considered when deciding whether or not to grant a permit request. Rule 7.6 states:

“In deciding whether or not to issue a well, drilling, transport, permit amendment or operating permit, and in setting the terms of the permit, the Board will consider Chapter 36, Texas Water Code, the District Act and Rules of the Post Oak Savannah Groundwater Conservation District rules, the application, and all other relevant factors, including, but not limited to, (1) the management plan; (2) the quality, quantity, and availability of alternative water supplies; (3) the impact on other landowners and well owners from a grant or denial of the permit, or the terms prescribed by the permit including whether

the well will interfere with the production of water from exempt, existing or previously permitted wells and surface water resources; (4) whether the permit will result in a beneficial use and not cause or contribute to waste; and (5) if the applicant has existing production permits that are underutilized and fails to document a substantial need for additional permits to increase production. If no person notifies the general manager of their intent to contest the application, and if the general manager does not contest the application, the application will be presented directly to the Board for a final decision. The Board may grant or deny the application, in whole or in part, table or continue the application to hear additional evidence, or refer the application to the hearings examiner for a complete hearing. Applications will not be considered administratively complete until all applicable fees are paid to the District.”

Although Rule 7.6 clearly provides the directors with the authority to deny a permit for several reasons, to the best of my knowledge there has been no permit request denied except for instances where a historic use permit was denied. Based on the published comments of the District’s general manager and attorney cited above, Rule 7.6 has been pre-empted by the “approve all permits” philosophy of the District.

In addition, Rule 7.6 is deficient since it does not reference DFC or MAG as factors to be considered for approving a permit application.

Other groundwater districts have rules which do require consideration of DFCs and MAGs when deciding whether or not to grant a production permit request. For example, Lost Pines Groundwater Conservation District Rule 5.2.C.8 requires the following to be considered when considering a permit application: “...whether granting the application is consistent with the District’s duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition, considering: (a) the Modeled Available Groundwater determined by the TWDB executive administrator...”

In summary:

1. The exclusion of the requirement to consider DFCs and MAGs in Rule 7.6 renders Rule 7.6 ineffective in assisting the District to achieve the adopted DFCs.
2. The enforcement of Rule 7.6 would have decreased the present overpermitting of the Simsboro and Carizzo Aquifers.
3. Since requiring compliance with Rule 7.6 was sidelined because of the District’s “approve all permits” philosophy, our groundwater is not adequately protected.

Section 16 of the Rules:

The mantra of the District consists of two parts:

- The first part is that by “approving all permits,” lawsuits are avoided and an illusion of protecting private property rights is provided.
- The second part of the mantra is that “we can always cutback the pumping.”

The mantra is why other groundwater conservation districts refer to the District’s rules as a “train wreck waiting to happen.” I agree with this prediction.

Section 16 of the rules presents the District’s plans for cutting back production.

Because the District does not limit the number of 2 acre-feet/year/acre production permits that they grant, one would assume that Section 16 would be a pristine example of response planning.

Instead, Section 16 is so convoluted and poorly written, it is almost impossible to understand what the District plans to do when the aquifers drop to red-flag levels – or when they plan to do it. There is no clear path included in Section 16 for how the District is going to respond when the overpermitting comes home to roost.

So, I will highlight some of what I consider the main problems – and ask you to read Section 16 (*See Appendix 6*) in its entirety to understand why I believe that Section 16 rules are not designed to achieve the DFCs and protect our groundwater.

Rule 16.4:

Rule 16.4 contains information about the District’s threshold levels for action.

Total estimated annual production is one of the triggers that the District plans to use to determine when to initiate their undefined actions to protect the aquifers.

Although the District requires meters on non-exempt wells, they appear to rely on well owners to report groundwater production to the District as required by Rule 7.15.

Rule 7.15 states:

“Within 15 days of January 31 of each year, each permittee must submit a report to the District, on a form provided by the District, stating the following: (1) the name of the permittee; (2) the operating permit number; (3) the well numbers of each well for which the permittee holds a permit; (4) the total amount of groundwater produced by each well

or well system during each month of the immediately preceding calendar year; (5) the total amount of groundwater produced by each well and well system during the immediately preceding calendar year; (6) the purposes for which the water was used; and (7) any other information requested by the District.”

Based on the groundwater production data recorded in the District's Permits and Pumping July 2013 File (*See Appendix 2*), I have concerns about the reliability of using “total estimated annual production” as a trigger for action to protect the groundwater.

My study of the production data in the July 2013 File found the following:

1. There are 720 wells on the permitted list – but only 460 on the production list.
2. Of the 460 wells on the production list – only 326 had reported production.
3. Together, the results presented in 1 and 2 mean that only 326 of the 720 (45%) wells on the permitted list pumped any groundwater in 2012.
4. Total 2012 production for all aquifers was 28,909 acre-feet even though 190,200 acre-feet were permitted for all aquifers – which mean that only 15% of the permitted production was actually pumped in 2012.

These results do not make sense and raise serious doubts about the efficacy of using “total estimated annual production” as a parameter for any action, much less for the protection of our groundwater.

The other methods listed to determine the “thresholds” for action also have serious drawbacks.

For example, although monitoring wells are mentioned as being used to determine “average groundwater drawdown,” there is no specific information about either how many or the locations of the monitoring wells that will be used to determine the drawdowns.

Also, there are undefined actions with undefined time limits linked to the thresholds for action.

Other critical details are omitted including:

- The specific actions planned for reducing the pumping when the first two threshold levels are exceeded.
- The person responsible for tracking the different thresholds mentioned in Rule 16.4 and the person responsible for initiating action.

Rule 16.4 reads as a preliminary draft even though the District has been in existence since 2003. It does not map definable responses, leaves the aquifers exposed to undesirable consequences, and is not designed to achieve the DFCs.

Rule 16.7:

Although not clear, I believe that Rule 16.7 contains the District's plans for responding when the DFC is nearly reached which is identified as "Threshold 3" in Rule 16.4.

Sections 3 and 4 of Rule 16.7 lay out planned responses by the District:

"RULE 16.7 - PERMIT LIMITATIONS AND REDUCTIONS. The maximum allowable production of water authorized by a permit may be limited, adjusted and reduced as follows: ...

3. The volume of water authorized by permit to be produced in a Management Zone may be reduced by up to two percent per year with the reduction beginning twelve months after a decision by the Board that such reduction is reasonably required for the conservation and preservation of groundwater, or the protection of the aquifer or groundwater users, within the Management Zone; and
4. If the Board finds it is necessary to reduce the maximum allowable production per acre, or the permitted production for any Management Zone, more quickly than is provided in Rule 16.7(3), to preserve and conserve groundwater or protect groundwater users within a Management Zone, or to implement reductions required under Rule 16.5, the Board shall establish a schedule for a phased reduction in the maximum allowable production or permitted production for the zone."

I argue that this rule will be ineffective in achieving the DFCs and protecting our groundwater.

BASIS FOR THE PETITION – Part 2:

In contrast to the District's jumbled rules and undefined responses to red-flag water level decreases, water-marketer Blue Water Systems has a defined response plan with a crystal clear goal of producing the amount of groundwater that they desire. And they plan to use all of the problems with the District's rules discussed above to achieve their goal.

Importantly, Blue Water Systems' plans as discussed below support my conclusion that the District's rules do not allow the DFCs to be achieved and do not protect our groundwater.

Rule 5.1.2 (the 2 acre-feet/year/acre rule) allowed Blue Water Systems to acquire permits to pump the entire Simsboro and Carizzo Aquifers' MAGs by only having to lease the groundwater rights of 3% of the land within the District's boundaries.

By leasing 35,500 of the 1,088,000 acres within the District's boundaries, they were granted permits to pump 71,000 acre-feet/year of Simsboro and Carizzo groundwater. That means that about 1,000,000 acres of groundwater rights remain in the District for landowners to use, lease, or sell.

Blue Water Systems has a contract with San Antonio Water System which requires them to pump 50,000 acre-feet/year of Simsboro and Carizzo groundwater on the first day of pumping groundwater from the District to San Antonio. This means that the 2020 MAGs for the Simsboro and Carizzo Aquifers will be exceeded on the first day of pumping which is planned for 2019.

If Sections 1.a and 2.a of Rule 16.4 are used, one would state that Threshold Levels 1 and 2 would be exceeded on Day One of the pumping to San Antonio. Those two sections state that if "total estimated annual production" is greater than 70% or 85% of MAG, Threshold Levels 1 and 2, respectively, is breached. In this situation, there is no ambiguity about the "total estimated annual production" since one entity will be pumping the 50,000 acre-feet of groundwater.

However, it is not certain that the District will conclude that Thresholds 1 and 2 would be exceeded in this case because there are a total of seven triggering events outlined in Rule 16.4 – and there is no provision to explain which triggering event takes precedence.

Now, let's go one step further and assume that the District decides that the drawdowns exceed "Threshold Level 3" and they implement Rule 16.7 to reduce pumping by the maximum of 2%.

The District's action would decrease the production permits to 1.96 acre-feet/year/acre which would reduce Blue Water Systems' total production by 1,420 acre-feet/year from their 35,500 acres of groundwater leases.

Even though the drawdowns would be nearing the DFCs and the District had determined that "Threshold Level 3" had been breached, Blue Water Systems is depending on the District to continue their "approve all permits" policy instead of enforcing Rule 7.6.

In fact, District General Manager Gary Westbrook confirmed that the District will "approve all permits" even when pumping is being cutback when he wrote in the September 6, 2012, edition of *The Cameron Herald*:

"The District's Rules provide for the reduction and curtailment of permits, as cited above, to achieve the protection of these water levels, and even after reduction or curtailment begins, any person applying for a permit will be able to produce the same amount of water per acre as those holding pre-existing permits at that time."

So, to make up for the loss of 1,420 acre-feet/year of groundwater production, Blue Water Systems would use 724 of their "excess" 36,000 acres of groundwater leases to apply for new production permits (724 acres X 1.96 acre-feet/year/acre = 1,420 acre-feet/year).

And the District would approve them in line with their "approve all permits" policy.

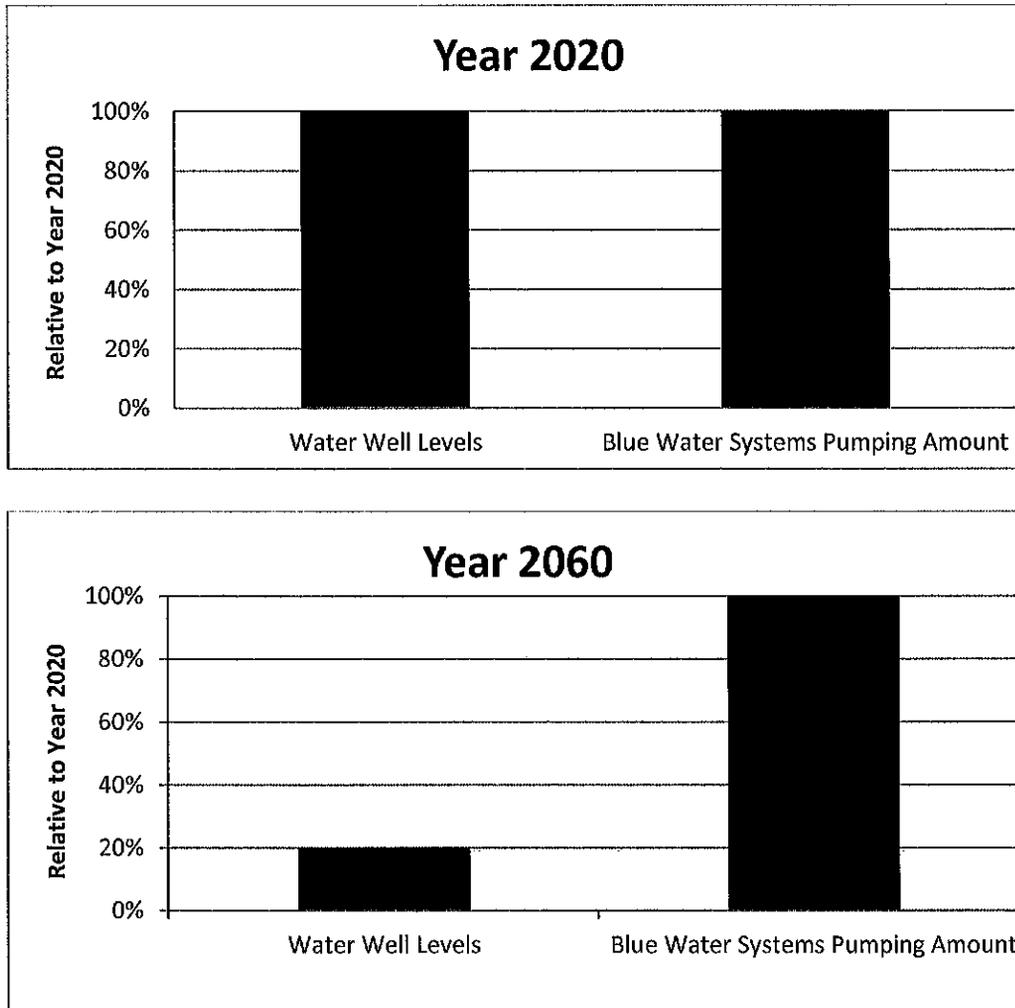
This sequence of actions could be used repeatedly by Blue Water Systems and anyone else in the District to compensate for any pumping cutback. These actions would allow anyone including Blue Water Systems to continue pumping their targeted amount of groundwater even while the aquifers are being depleted.

If the District's rules and their enforcement are not modified, *Figure 4* conceptually illustrates what could happen to the water well levels and Blue Water Systems pumping over a period of forty years.

Figure 4:

The Scenario: From 2020 to 2060, the following sequence of events is repeated continuously: overpumping of the aquifers → well levels drop → District cuts back pumping → Blue Water Systems requests more pumping permits using new groundwater leases → District approves the new permit requests → repeat.

The end-result: The aquifers are not protected but Blue Water Systems' pumping is protected.



Blue Water Systems actually included a statement of their successful lobbying of the District in their July 2011 proposal sent to San Antonio Water System. The proposal was named the "Vista Ridge Regional Supply Project" and submitted by a partnership of Blue Water Systems and Abengoa. I accessed the proposal by using a public information request.

In their proposal, Blue Water Systems stressed that they made sure that the District was doing things the right way:

“Over the past nine years, Consortium member BlueWater has worked closely with POSGCD [the District] to ensure its policies support the reliability and value of the permits granted.” (Page 26 of proposal)

On Page 30 of the \$3.4 billion proposal, they provided clear confirmation that the District’s rules and groundwater management policies are exactly what Blue Water Systems wanted:

“Although the POSGCD [the District] allocation rate is not expected to change within the foreseeable future, POSGCD rules allow a maximum reduction in the allocation rate of no more than two percent per year. Any such future reduction in the allocation rate by POSGCD would have little impact of the Vista Ridge RSP [Vista Ridge Regional Supply Project] to maintain their permitted production rate because of the magnitude of this excess acreage. POSGCD allows water rights holders to apply for permits at any time, even during times of allocation reduction. Therefore, were a reduction to be imposed, the Vista Ridge Consortium would apply for additional production permits using a portion of their excess groundwater lease holdings.”

I cannot summarize the problems we are facing any better than this excerpt.

CONCLUDING NOTES:

If the District had created rules to allow everyone the right to pump a sustainable amount of groundwater, this *Petition for Inquiry* would not have been needed.

For example, if the District had divided the MAG for the Simsboro by the number of acres above the Simsboro and used the quotient as the amount of acre-feet that one could annually pump per acre, they could have maintained their “approve all permits” policy, preserved landowners’ rights to pump groundwater, AND achieved the DFC while protecting our groundwater. All of the convoluted Section 16 rules could have been deleted because the MAG would have been the maximum amount of an aquifer’s groundwater that could have been pumped from the entire District.

Instead, the District has failed to correct its institutional problems – and has turned a deaf ear to my and others’ repeated requests to change the rules and groundwater management policies. In my mind, I have no other recourse than to submit this *Petition for Inquiry* to ensure that our aquifers are conserved and protected for future generations.

Appendices

Appendix 1

Appendix 1:

Rule 5.1.2

SECTION 5. PRODUCTION LIMITATIONS.

RULE 5.1. MAXIMUM ALLOWABLE PRODUCTION.

1. A non-exempt well or well system may not be drilled and equipped for the production of a cumulative total of more than 10 gallons per minute (GPM) per contiguous acre owned or controlled by the well owner or operator, and each well having a production capacity of 1000 gpm. or more, shall have monitoring equipment reasonably required by the District and be capable for use as a monitoring well. [Amended July 12, 2005]
2. Excluding wells operated pursuant to an historic use permit, in no event may a non-exempt well or well system be operated such that the total annual production exceeds 2 acre feet of water per contiguous acre owned or controlled by the landowner, well owner, or well operator, as applicable. If the production of water for a Management Zone reaches the level at which reductions in the permitted amounts are made under Section 16, the maximum amount of groundwater that is authorized by a permit within that Management Zone shall be reduced by the percentage amount that the permitted production is reduced for that Management Zone under Section 16, unless the Board finds the reduced production will likely be for a limited period. [Amended April 8, 2008]

Appendix 2

- 1. The District's Permits and Pumping July 2013 File.*
- 2. This is an Excel File and is on the enclosed disc ONLY.*
- 3. The Carizzo Aquifer is labeled as the Carrizo-Wilcox Aquifer.*

POSGCD - Permitted - Water Use Report 7-19-13 DRAFT-WORK IN PROGRESS

Well/Date W/O	owner	indec	long_dec	well_depth	poscd_acquirer	Permit	Permit_Type	Annual
1276	Bud Adams Ranches	30.7992	-96.1079		1	278	2	88.75
1277	Bud Adams Ranches	30.779901	-97.099386		1	279	2	30
1278	Bud Adams Ranches	30.7889	-97.1113		1	280	2	52
1279	Bud Adams Ranches	30.7562	-97.0245		1	281	2	52
1280	Bud Adams Ranches	30.7767	-96.1063		1	282	2	74
1281	Bud Adams Ranches	30.7892	-96.1064		1	283	2	29
1282	Bud Adams Ranches	30.7775	-96.1106		1	284	2	5
1283	Calvin L. Cobb	30.856	-96.856		1	285	2	260
1284	Calvin L. Cobb	30.8516	-96.8586		1	286	2	70
1195	Sandyr M. Scarnardo # 1	30.5735	-96.5469		5	27	2	80
1196	Sandyr M. Scarnardo # 2	30.5793	-96.5404		5	28	2	60
1081	Texas A & M Farm Irrigation	30.52266667	-96.42316667	60	5	32	2	210
1199	Matilda Scarnardo	30.658575	-96.328648		5	37	2	44.33
1200	Matilda Scarnardo	30.658575	-96.328648		5	38	2	44.33
1201	Matilda Scarnardo	30.658575	-96.328648		5	39	2	44.33
1202	Matilda Scarnardo	30.658575	-96.328648		5	40	2	44.33
1203	Matilda Scarnardo	30.658575	-96.328648		5	41	2	44.33
1204	Matilda Scarnardo	30.525	-96.4522	71	5	42	2	44.33
1205	Jerry P. Scarnardo	30.5248	-96.4646		5	43	2	
1206	Jerry P. Scarnardo	30.5567	-96.4692		5	44	2	31
1530	Andrew G. Scarnardo - BB #4	30.566	-96.4293		5	46	2	268.5
1531	Andrew G. Scarnardo - BB #3	30.5609	-96.4358		5	47	2	268.5
1532	Andrew G. Scarnardo - BB #2	30.554	-96.4378		5	48	2	268.5
1533	Andrew G. Scarnardo - BB #1	30.5665	-96.4378		5	49	2	268.5
1534	Andrew G. Scarnardo - H #8	30.9155	-96.9873		5	50	2	154.02
1535	Andrew G. Scarnardo - H #7	30.994	-96.9182		5	51	2	115.06
1536	Andrew G. Scarnardo - H #6	30.9768	-96.9102		5	52	2	115.06
1537	Andrew G. Scarnardo - H #5	30.9122	-96.9735		5	53	2	115.06
1538	Andrew G. Scarnardo - H #4	30.9702	-96.9012		5	54	2	115.06
1539	Andrew G. Scarnardo - H #3	30.9762	-96.9015		5	55	2	115.06
1540	Andrew G. Scarnardo - H #2	30.5864	-96.5371		5	56	2	76.5
1541	Andrew G. Scarnardo - H #1	30.5894	-96.5431		5	57	2	76.5
1542	Matilda Scarnardo # M10	30.689792	-96.5546		5	58	2	154
1543	Matilda Scarnardo # M9	30.689792	-96.5546		5	59	2	110
1544	Matilda Scarnardo # M6	30.689792	-96.5546		5	60	2	110
1545	Matilda Scarnardo # M8	30.689792	-96.5546		5	61	2	110
1546	Matilda Scarnardo # M7	30.689792	-96.5546		5	62	2	110
1547	Matilda Scarnardo # M5	30.689792	-96.5546		5	63	2	110
1548	Matilda Scarnardo # M4	30.689792	-96.5546		5	64	2	110
1549	Matilda Scarnardo # M3	30.689792	-96.5546		5	65	2	75
1550	Matilda Scarnardo # M2	30.689792	-96.5546		5	66	2	75
1551	Matilda Scarnardo # M1	30.689792	-96.5546		5	67	2	75
1552	Aileen G. Ferguson - Well #1	30.169517	-97.85466		5	68	2	80
1553	Aileen G. Ferguson - Well #2	30.169517	-97.85466		5	69	2	119
1554	Aileen G. Ferguson - Well #3	30.169517	-97.85466		5	70	2	110
1084	Pete Scarnardo - 15B-HQ	30.57838333	-96.48815		5	71	2	62
1085	Pete Scarnardo - 15C-BHQ	30.58456667	-96.4884	60	5	72	2	62
1086	Pete Scarnardo - 15D-BHQ	30.58611667	-96.48708333	60	5	73	2	62
1087	Pete Scarnardo - 15E-BHQ	30.58951667	-96.48745	60	5	74	2	62
1088	Pete Scarnardo - 15F-BHQ	30.58798333	-96.48931667	60	5	75	2	62
1089	Pete Scarnardo - Well # 14 A	30.57611667	-96.48935	62	5	76	2	66.66
1090	Pete Scarnardo - Well # 14 B	30.57416667	-96.49331667	61	5	77	2	66.66
1091	Pete Scarnardo - Well # 14 C	30.57273333	-96.49598333	65	5	78	2	66.66
1092	Pete Scarnardo - 11-40 A/C OLD	30.58548333	-96.51435	60	5	79	2	75
1093	Pete Scarnardo - 12-40 A/C NEW	30.58445	-96.51555	60	5	80	2	75
1094	Pete Scarnardo - Well # 13 A	30.57555	-96.51281667	60	5	81	2	75
1095	Joe A. Scarnardo - Well # 3C-Restivo South	30.57825	-96.50725	60	5	83	2	65
1096	Joe A. Scarnardo - Well # 3B-Rest. North	30.57843333	-96.51253333	60	5	84	2	65
1097	Joe A. Scarnardo - Well # 3A-East	30.58478333	-96.50566667	52	5	85	2	65

Not yet entered in database and/or not completed
 Entered in database but not completed

1098	Joe A. Scannardo - Well # 3D-Res. West	30.57665	-96.51283333	60	5	86	2	65
1099	Joe A. Scannardo - Well # 4 Strip	30.57041667	-96.45943333	60	5	87	2	160
1100	Joe A. Scannardo - Well # 2 Gravel Pit	30.59531667	-96.4846	60	5	88	2	146.66
1101	Joe A. Scannardo - Well # 5 Big Barn	30.59441667	-96.4821	71	5	89	2	146.66
1102	Joe A. Scannardo - Well # 6X Big Barn	30.59415	-96.47933333	60	5	90	2	146.66
1103	Joe A. Scannardo - Well # 15A HQ	30.58946667	-96.49266667	60	5	91	2	26
1104	Sam Campise, LTD - Well # 8 Campise	30.59923333	-96.46371667	5	5	92	2	160
1105	Campise Farms - Well # 16 CVC	30.571415	-96.48333333	5	5	93	2	48
1106	Sam Campise - Well # 7A Lobelia CR262	30.57383333	-96.48081667	5	5	94	2	60
1107	Sam Campise, LTD - Well # 7B Lobelia	30.57356667	-96.47813333	5	5	95	2	60
1108	Sam Campise, LTD - Well # 7C Lobelia	30.57315	-96.47561667	5	5	96	2	60
1109	Finley Company	30.48861	-96.375554	58	5	97	2	60
1110	Finley Company	0	0	0	5	98	2	80
1111	Finley Company	0	0	0	5	99	2	170
1112	Finley Company	30.4829	-96.3765	0	5	100	2	60
1113	Finley Company	0	0	0	5	101	2	60
1114	Finley Company	0	0	0	5	102	2	60
1115	Finley Company	0	0	0	5	103	2	60
1116	Finley Company	0	0	0	5	104	2	60
1117	David M. Eslik	30.5173	-96.5019	55	5	104	2	139
1118	Lori Nemeic	30.54731	-96.442213	5	5	113	2	2
1119	Texas Agriflora Research Farm Serv.	30.522	-96.4011	2	5	123	2	2
1120	Texas Agriflora Research Farm Serv.	30.5469	-96.4398	5	5	124	2	4.5
1121	Texas Agriflora Research Farm Serv.	30.614915	-96.351884	5	5	125	2	60
1122	Texas Agriflora Research Farm Serv.	30.614915	-96.351884	5	5	126	2	4.5
1123	Texas Agriflora Research Farm Serv.	30.5233	-96.4016	70	5	127	2	6
1124	Texas Agriflora Research Farm Serv.	30.5073	-96.4223	57	5	128	2	40
1125	Texas Agriflora Research Farm Serv.	30.552	-96.4261	60	5	129	2	2
1126	Meivin L. Poldrack	30.817875	-96.988483	5	5	131	2	125
1127	Meivin L. Poldrack	30.817875	-96.988483	5	5	132	2	125
1128	Meivin L. Poldrack	30.817875	-96.988483	5	5	133	2	27
1129	Meivin L. Poldrack	30.817875	-96.988483	5	5	134	2	27
1130	Meivin L. Poldrack	30.817875	-96.988483	5	5	135	2	125
1131	John S. Malazzo	30.535401	-96.741198	144	5	144	2	238
1132	John S. Malazzo	30.535401	-96.741198	145	5	145	2	186
1133	John S. Malazzo	30.5584	-96.4711	146	5	146	2	277
1134	John S. Malazzo	30.535401	-96.741198	147	5	147	2	235
1135	John S. Malazzo	30.535401	-96.741198	148	5	148	2	116
1136	John S. Malazzo	30.535401	-96.741198	149	5	149	2	125
1137	John S. Malazzo	30.535401	-96.741198	150	5	150	2	161
1138	John S. Malazzo	30.535401	-96.741198	151	5	151	2	192
1139	John S. Malazzo	30.535401	-96.741198	152	5	152	2	74
1140	John S. Malazzo	30.535401	-96.741198	153	5	153	2	90
1141	John S. Malazzo	30.535401	-96.741198	154	5	154	2	26
1142	John S. Malazzo	30.590276	-96.516	155	5	155	2	163
1143	John S. Malazzo	30.590276	-96.516	156	5	156	2	220
1144	John S. Malazzo	30.590276	-96.516	157	5	157	2	54
1145	John S. Malazzo	30.590276	-96.516	158	5	158	2	178
1146	John S. Malazzo	30.542499	-96.49361	60	5	159	2	111
1147	John S. Malazzo	30.544444	-96.491944	60	5	160	2	87
1148	John S. Malazzo	30.590276	-96.516	161	5	161	2	71
1149	Mary Altmore	30.5966	-96.5089	162	5	162	2	295
1150	Mary Altmore	29.986684	-95.624694	163	5	163	2	205
1151	Joe S. Campise Trust	30.66506	-96.336431	164	5	164	2	204
1152	Joe S. Campise Trust	30.66506	-96.336431	165	5	165	2	80
1153	Campise Trust	30.66506	-96.336431	167	5	167	2	180
1154	Campise Trust	30.66506	-96.336431	168	5	168	2	72
1155	Sam L. Campise, LTD	30.66506	-96.336431	169	5	169	2	90
1156	Ben Accurso, Sr./Bessie McBee	30.5749	-96.4995	171	5	171	2	130
1157	Ben Accurso, Sr./Bessie McBee	30.58345	-96.489784	172	5	172	2	100
1158	Ben Accurso, Sr./Bessie McBee	30.58345	-96.489784	173	5	173	2	80
1159	Holland Porter	30.53971667	-96.44031667	181	5	181	2	128.5
1160	Holland Porter	30.53755	-96.45843333	182	5	182	2	130

1126	Holland Porter	30.53728333	-96.45118333	62	183	2	87.6
1127	Holland Porter	30.54248333	-96.44848333	55	184	2	49
1128	Holland Porter	30.54435	-96.45105	60	185	5	168.6
1129	Holland Porter	30.54736667	-96.44953333	52	186	2	67
1130	Holland Porter	30.54441	-96.4557	59	187	5	95.8
1131	Holland Porter	30.54643333	-96.45261667	60	188	2	82.2
1132	Holland Porter	30.5405	-96.46145	5	189	5	73.8
1133	Holland Porter	30.53885	-96.46351667	5	190	2	60
1134	Holland Porter	30.53588333	-96.46418333	5	191	2	107.2
1135	Holland Porter	30.53276667	-96.46461667	5	192	2	67.2
1136	Holland Porter	30.531	-96.46206667	55	193	2	134
1137	Holland Porter	30.52701667	-96.46691667	194	194	2	28.6
1138	Holland Porter	30.52956667	-96.46378333	195	195	2	81
1139	Holland Porter	30.53148333	-96.46906667	196	196	2	186
1140	Holland Porter	30.53391667	-96.4713	85	197	2	121
1141	Holland Porter	30.53991667	-96.47365	198	198	2	132
1142	Holland Porter	30.5318	-96.47621667	199	199	2	98
1143	Holland Porter	30.55611667	-96.46408333	53	200	2	126.4
1144	Holland Porter	30.55816667	-96.45905	53	201	2	141.4
1145	Holland Porter	30.55336667	-96.4603333	60	202	2	108.8
1146	Holland Porter	30.55535	-96.45546667	57	203	2	49
1147	Holland Porter	30.55573333	-96.45158333	52	204	2	102.2
1148	Holland Porter	30.55171667	-96.45556667	60	205	2	107.2
1149	Holland Porter	30.55073333	-96.44548333	50	206	2	89.8
1150	Holland Porter	30.5651	-96.45181667	5	207	2	147.6
1151	Ann P. Wilder	30.45851667	-96.3733	208	208	2	167.2
1250	Mitt A. Bush	30.5774	-96.4983	219	219	2	76
1252	Frank A. Bush	30.681445	-96.551266	221	221	2	80
1253	Mary S. Bush Estate	30.681445	-96.551266	222	222	2	156
1254	Mitt A. Bush	30.5712	-96.4425	223	223	2	116
1255	Mitt A. Bush	30.5788	-96.4525	224	224	2	64
1256	Mitt A. Bush	30.5716	-96.4464	225	225	2	200
1257	Mitt A. Bush	30.579	-96.4559	226	226	2	36
8775	Steve Scarnardo			60	228	2	156.2
1154	Steve Scarnardo	30.60521667	-96.52226667	5	229	2	207.36
1155	Steve Scarnardo	30.61276667	-96.5128333	5	230	2	56
1156	Steve Scarnardo	30.59545	-96.49231667	5	231	2	252
1157	Steve Scarnardo	30.59845	-96.49066667	5	232	2	112.7
1158	Steve Scarnardo	30.59618333	-96.49375	5	233	2	131.66
1159	Steve Scarnardo	30.59285	-96.49438333	5	234	2	85.8
1160	Steve Scarnardo	30.59136667	-96.49066667	5	235	2	110
1161	Steve Scarnardo	30.59433333	-96.5011	5	236	2	130
1162	Steve Scarnardo	30.59126667	-96.50303333	5	237	2	149.5
1163	Steve Scarnardo	30.58665	-96.4908	63	238	2	81.4
1260	Vince A. /Michael J. Patranello	30.59525	-96.510519	5	240	2	188
1261	Vince A. /Michael J. Patranello	30.59525	-96.510519	5	241	2	15
1262	Vince A. & Kathy Patranello	30.59525	-96.510519	250	242	2	15
1263	Vince A. & Kathy Patranello	30.59525	-96.510519	250	243	2	15
1264	Vince A. & Kathy Patranello	30.59525	-96.510519	250	244	2	15
1265	Vince A. & Kathy Patranello	0	0	250	245	2	15
1266	Luke V. & Vira S. Patranello Estate	30.59525	-96.510519	5	246	2	107
1267	Luke V. & Vira S. Patranello Estate	30.59525	-96.510519	5	247	2	24
1268	Luke V. & Vira S. Patranello Estate	30.59525	-96.510519	5	248	2	128
1164	Holland Porter	30.56628333	-96.48013333	55	250	2	129
1165	Holland Porter	30.56576667	-96.47036667	53	251	2	76
1166	Holland Porter	30.55791667	-96.47083333	71	252	2	82.2
1167	Holland Porter	30.56116667	-96.46983333	51	253	2	92.2
1168	Holland Porter	30.56548333	-96.45913333	5	254	2	42.6
1169	Holland Porter	30.55868333	-96.467	72	255	2	221.6
1170	Holland Porter	30.564	-96.46125	5	256	2	53.2
1171	Holland Porter	30.5608	-96.4623	66	257	2	91.2
1172	Holland Porter	30.56131667	-96.45811667	5	258	2	159.8

1272	L.L. Lightsey Family LP	0	0	0	70	273	2	240
8399	Frank H. Horak III	30.5615	-96.5901	0		275	2	2
8342	Frank Kevin Scarmardo	0	0	0		288	2	249
8343	Frank Kevin Scarmardo	0	0	0		289	2	249
8344	Frank Kevin Scarmardo	0	0	0		290	2	40
8554	Texas General Land Office	30.52237	-96.388778	0		292	2	250
8555	Texas General Land Office	30.48569	-96.414245	5		292	2	225
8556	Texas General Land Office	30.509374	-96.375883	5		292	2	225
8557	Texas General Land Office	30.50629	-96.377766	5		292	2	225
8558	Texas General Land Office	30.477329	-96.404385	5		292	2	225
8559	Texas General Land Office	30.493555	-96.41117	5		292	2	225
8560	Texas General Land Office	30.50599	-96.421145	5		292	2	225
8561	Texas General Land Office	30.502226	-96.371603	5		292	2	225
8562	Texas General Land Office	30.507103	-96.371339	5		292	2	225
8563	Texas General Land Office	30.512485	-96.377426	5		292	2	225
8565	Texas General Land Office	30.509492	-96.3816	5		292	2	225
8566	Texas General Land Office	30.51897	-96.397533	5		292	2	225
8567	Texas General Land Office	30.525975	-96.395046	5		292	2	225
8568	Texas General Land Office	30.530372	-96.403986	5		292	2	225
8569	Texas General Land Office	30.530627	-96.40012	5		292	2	225
8570	Texas General Land Office	30.470178	-96.396749	5		292	2	225
8571	Texas General Land Office	30.465393	-96.385509	5		292	2	225
8572	Texas General Land Office	30.506538	-96.360947	5		292	2	225
8573	Texas General Land Office	30.528986	-96.390765	5		292	2	225
8574	Texas General Land Office	30.480085	-96.395117	5		292	2	225
8575	Texas General Land Office	30.467364	-96.401388	5		292	2	225
8576	Texas General Land Office	30.479428	-96.396497	5		292	2	225
8577	Texas General Land Office	30.507673	-96.409035	5		292	2	225
8579	Texas General Land Office	30.503009	-96.379724	5		292	2	225
8580	Texas General Land Office	30.506954	-96.397957	5		292	2	225
8581	Texas General Land Office	30.496011	-96.379406	5		292	2	225
8582	Texas General Land Office	30.515365	-96.396243	5		292	2	225
8583	Texas General Land Office	30.511515	-96.401086	5		292	2	225
8584	Texas General Land Office	30.523674	-96.371194	5		292	2	225
8585	Texas General Land Office	30.50352	-96.365609	5		292	2	225
8586	Texas General Land Office	30.50352	-96.365609	5		292	2	225
8587	Texas General Land Office	30.49641	-96.379792	5		292	2	225
8588	Texas General Land Office	30.498961	-96.421656	5		292	2	225
8589	Texas General Land Office	30.505541	-96.397819	5		292	2	225
8590	Texas General Land Office	30.506485	-96.401621	5		292	2	225
8591	Texas General Land Office	30.48397	-96.419239	5		292	2	225
8592	Texas General Land Office	30.483806	-96.407562	5		292	2	225
8593	Texas General Land Office	30.490981	-96.405186	5		292	2	225
8564	Texas General Land Office	30.522292	-96.38104	5		292	2	225
8373	Michael C. Cheney	0	0	0		335	2	140
8425	Edmund G. Sebasta Jr.	30.5721	-96.5504	5		337	2	206
8426	Edmund G. Sebasta Jr.	30.5816	-96.5411	5		338	2	140
8424	Edmund G. Sebasta Jr.	30.5692	-96.5411	60		339	2	125
8363	William Gavranovic	30.4562	-96.3346	60		340	2	890
8365	William Gavranovic	30.4421	-96.3354	60		343	2	800
8366	William Gavranovic	30.4481	-96.3439	56		344	2	710
8367	William Gavranovic	30.4207	-96.354	61		345	2	1140
8355	Bill Scarmardo	0	0	0		346	2	72
8356	Carrabba Bros. Ltd	0	0	0		347	2	80
8357	Carrabba Bros. Ltd	0	0	0		348	2	66
8360	Carrabba Bros. Ltd	0	0	0		349	2	80
8358	Carrabba Bros. Ltd	0	0	0		350	2	104
8359	Carrabba Bros. Ltd	0	0	0		351	2	100
8345	Highland Interest	0	0	0		352	2	120
8661	Highland Interest	0	0	0		353	2	90
8346	Highland Interest	0	0	0		354	2	180
8361	Bill Scarmardo	0	0	0		355	2	72

8347	Highland Interest	0	0	0	5	356	2	176
8348	Betty Lee Carrabba	0	0	0	5	357	2	140
8349	Betty Lee Carrabba	0	0	0	5	358	2	70
8350	Betty Lee Carrabba	0	0	0	5	359	2	80
8351	Betty Lee Carrabba	0	0	0	5	360	2	160
8352	Betty Lee Carrabba	0	0	0	5	361	2	160
8353	Betty Lee Carrabba	0	0	0	5	362	2	80
8354	Betty Lee Carrabba	0	0	0	5	363	2	160
8401	William Gavranovic	31.00984	-96.774999	0	5	365	2	200
8402	William Gavranovic	31.005776	-96.778801	0	5	366	2	200
8403	William Gavranovic	31.007085	-96.781894	0	5	367	2	200
8404	William Gavranovic	31.002566	-96.783714	0	5	368	2	200
8405	William Gavranovic	30.999549	-96.79098	0	5	369	2	Replaced by DO_133
8406	William Gavranovic	30.997956	-96.794171	0	5	370	2	Replaced by DO_134
8407	Woody Meddellan	0	0	0	55	371	2	400
8379	Frank Deterfano	30.6039	-96.5095	0	5	377	2	120
8380	Frank Deterfano	30.6081	-96.5051	0	5	378	2	120
8381	Frank Deterfano	30.6022	-96.5051	0	5	379	2	120
8382	Frank Deterfano	30.6119	-96.5137	0	5	380	2	130
8383	Frank Deterfano	30.6128	-96.4909	0	5	381	2	15
8372	Timothy J. Rabrucker	0	0	0	5	382	2	3
8394	John R. Gleenschlag	30.5391	-96.4805	0	5	388	2	30
8395	John R. Gleenschlag	30.5394	-96.4812	0	5	389	2	30
8396	John R. Gleenschlag	30.5394	-96.4812	0	5	390	2	30
8384	Dewey Betzel Partnership	30.537	-96.4745	0	5	391	2	160
8385	Dewey Betzel Partnership	30.5366	-96.4745	0	5	392	2	180
8386	Dewey Betzel Partnership	30.543	-96.4699	0	5	393	2	40
8413	Portee FLP	30.54	-96.4872	0	5	394	2	64
8414	Portee FLP	30.537	-96.4886	0	5	395	2	100
8415	Portee FLP	30.544721	-96.49861	0	5	396	2	94
8416	Portee FLP	30.5446	-96.4987	0	5	397	2	160
8397	John R. Gleenschlag	30.5275	-96.4389	0	5	398	2	150
8417	Portee FLP	30.5474	-96.4934	0	5	399	2	176
8418	Portee FLP	30.5583	-96.5037	0	5	400	2	80
8419	Portee FLP	30.5512	-96.4917	0	5	401	2	148
8390	John R. Gleenschlag	30.5325	-96.4813	0	5	402	2	150
8391	John R. Gleenschlag	30.5313	-96.4813	0	5	403	2	114
8392	John R. Gleenschlag	30.51	-96.4517	0	5	404	2	100
8666	Evelyn Gleenschlag	30.512675	-96.461018	0	5	405	2	100
8398	John R. Gleenschlag	30.5174	-96.4511	0	5	406	2	102
8399	John R. Gleenschlag	30.5576	-96.4839	0	5	407	2	32
8399	John R. Gleenschlag	30.5174	-96.4517	0	5	408	2	160
8375	Robert J. Henricks	0	0	0	5	412	2	1.7
8374	Frank E. Chmelar	0	0	0	5	414	2	30
8412	Patricia A. Novasad	30.53081	-96.739729	0	5	417	2	785
8411	Thomas N. Novasad Jr.	30.53891	-96.740347	0	5	418	2	298
1066	Milano WSC - Buer Well	30.64821667	-96.85465	0	10	6	2	100
433	Milano WSC - Rita Test	30.69555	-96.614444	0	800	7	2	70
1074	City of Caldwell # 59-27-506	30.5430556	-96.68111111	0	1252	20	2	492.25
1075	City of Caldwell # 59-27-717	30.53027778	-96.71694444	0	1303	21	2	492.25
1076	City of Caldwell # 29-27-714	30.52666667	-96.71388889	0	1314	22	2	492.25
1077	City of Caldwell # 59-27-803	30.5368889	-96.68861111	0	1210	23	2	492.25
1120	Cooks Point Water Supply	30.59583333	-96.6125	0	10	141	2	10
1178	David Shanahan	30.81845	-96.79983333	0	60	263	2	16
1179	David Shanahan	30.8493	-96.80295	0	60	265	2	308
8369	Charlie Crail Jentisch	30.7104	-96.7161	0	510	372	2	15
5558	Cade Lake Water Supply	30.50239	-96.77745	0	980	10	2	122.6
1062	Milano WSC - Well # 1	30.71623333	-96.86343333	0	790	11	2	70
1063	Milano WSC - Well # 2	30.71278	-96.86889	0	800	3	2	70
1064	Milano WSC - Well # 3	30.63228333	-96.78806667	0	1687	11	2	120
457	Milano WSC - Well 4	30.679166	-96.67361	0	2018	5	2	71
256	North Miami WSC	30.884999	-96.78332	0	318	11	2	73.8

1071	North Milam WSC - Well # 5	30.88277778	-96.81638889	347	11	12	2	73.8
1192	Harold E. Baker	30.819915	-96.889518	136	11	24	2	50
1082	Gause Water Supply # 1	30.78722222	-96.71666667	992	11	35	2	49.31
1083	Gause Water Supply # 2	30.78138889	-96.71416667	1210	11	36	2	32.27
1109	Southwest Milam Water Supply Corp.	30.59839333	-96.9673	1090	11	107	2	623
1111	Southwest Milam Water Supply Corp.	30.64305	-96.92645	1000	11	109	2	623
170	Rockdale ISD	30.658333	-97.016666	295	11	114	2	7.8
25	City of Rockdale (Belton)	30.668888	-96.986388	391	11	135	2	354.8
121	City of Rockdale (Texas)	30.663611	-96.999833	390	11	136	2	355.8
1116	City of Rockdale (praseel)	30.65443333	-97.00691667	225	11	137	2	354.8
1117	City of Rockdale (runway)	30.6312	-96.9901	475	11	138	2	354.8
1118	City of Rockdale (airport)	30.63491667	-96.99103333	463	11	139	2	354.8
138	City of Rockdale (Tracy)	30.666888	-96.988833	408	11	140	2	355
1174	David Shanahan	30.64815	-96.96366667	536	11	280	2	139
1175	David Shanahan	30.63163333	-96.95918333	575	11	261	2	438
1176	David Shanahan	30.83891667	-96.8313	370	11	262	2	48
1177	David Shanahan	30.81371667	-96.80793333	560	11	264	2	408
1180	David Shanahan	30.625	-96.96186667	400	11	268	2	161
1181	David Shanahan	30.65003333	-96.96366667	460	11	269	2	48
1182	David Shanahan	30.6274	-96.9704	400	11	270	2	32
1184	David Shanahan	30.64778333	-97.06325	500	11	272	2	161
8544	Alcoa, Inc.	30.58484	-97.0122		11	330	2	250
8494	Alcoa, Inc.	30.57035	-97.03935		11	330	2	250
8495	Alcoa, Inc.	30.56881	-97.0432		11	330	2	250
8496	Alcoa, Inc.	30.56225	-97.04861		11	330	2	250
8497	Alcoa, Inc.	30.55998	-97.05018		11	330	2	250
8498	Alcoa, Inc.	30.55511	-97.04182		11	330	2	250
8499	Alcoa, Inc.	30.55482	-97.04309		11	330	2	250
8500	Alcoa, Inc.	30.5612	-97.04058		11	330	2	250
8501	Alcoa, Inc.	30.50493	-97.06474		11	330	2	250
8502	Alcoa, Inc.	30.5399	-97.06375		11	330	2	250
8503	Alcoa, Inc.	30.53912	-97.06231		11	330	2	250
8504	Alcoa, Inc.	30.54111	-97.05764		11	330	2	250
8505	Alcoa, Inc.	30.57674	-97.02479		11	330	2	250
8506	Alcoa, Inc.	30.57784	-97.02452		11	330	2	250
8507	Alcoa, Inc.	30.57911	-97.02407		11	330	2	250
8508	Alcoa, Inc.	30.57988	-97.02349		11	330	2	250
8509	Alcoa, Inc.	30.57393	-97.02559		11	330	2	250
8510	Alcoa, Inc.	30.57223	-97.02831		11	330	2	250
8511	Alcoa, Inc.				11	330	2	250
8512	Alcoa, Inc.	30.57941	-97.00878		11	330	2	250
8513	Alcoa, Inc.	30.56138	-97.02401		11	330	2	250
8514	Alcoa, Inc.	30.56657	-97.01864		11	330	2	250
8515	Alcoa, Inc.	30.56227	-97.02189		11	330	2	250
8516	Alcoa, Inc.	30.57191	-97.00947		11	330	2	250
8517	Alcoa, Inc.	30.5737	-97.00835		11	330	2	250
8518	Alcoa, Inc.	30.5755	-97.00838		11	330	2	250
8519	Alcoa, Inc.	30.57744	-97.00833		11	330	2	250
8520	Alcoa, Inc.	30.58184	-97.00811		11	330	2	250
8521	Alcoa, Inc.	30.56734	-97.01604		11	330	2	250
8522	Alcoa, Inc.	30.56489	-97.02366	655	11	330	2	250
8523	Alcoa, Inc.	30.56436	-97.0225		11	330	2	250
8524	Alcoa, Inc.	30.5843	-97.01025		11	330	2	250
8525	Alcoa, Inc.	30.58484	-97.01057		11	330	2	250
8526	Alcoa, Inc.	30.57276	-97.00874		11	330	2	250
8527	Alcoa, Inc.	30.57448	-97.00817		11	330	2	250
8528	Alcoa, Inc.	30.58076	-97.00835		11	330	2	250
8529	Alcoa, Inc.	30.51378	-97.07286		11	330	2	250
8530	Alcoa, Inc.	30.5136	-97.07445		11	330	2	250
8531	Alcoa, Inc.	30.51442	-97.07441		11	330	2	250
8532	Alcoa, Inc.	30.51329	-97.07452		11	330	2	250
8533	Alcoa, Inc.	30.51402	-97.07085		11	330	2	250

1121	City of Somerville	30.38	-96.5605556	1612	27	142	2	336
1242	Key Vollethe/C. John Loehr	30.5723	-96.594717	360	27	210	2	1.7
1243	Key Vollethe/C. John Loehr	30.57263	-96.594667	360	27	211	2	1.7
1244	Key Vollethe/C. John Loehr	30.571933	-96.594867	360	27	212	2	1.7
8662	Coppers Hollow Country Club	30.536184	-96.716097	200	27	375	2	74.5
8368	Coppers Hollow Country Club	30.536184	-96.716097	180	27	376	2	1.84
641	Lyons W.S.C.	30.384721	-96.552222	1595	27	53	2	53
1186	North Milam WSC - Well # 1	30.901106	-96.865707	300	28	8	2	73.8
223	North Milam WSC	30.897499	-96.851944	315	28	9	2	73.8
1070	North Milam WSC - Well # 4	30.8977778	-96.8163889	523	28	11	2	73.8
1072	North Milam WSC - Well # 2	30.8269444	-96.91416667	428	28	13	2	44.81
1073	North Milam WSC - Well # 3	30.8269444	-96.91416667	424	28	14	2	78.41
1193	Lloyd Lefefeste - # 1	30.031029	-96.141762	50	28	25	2	109
1194	Lloyd Lefefeste - # 2	30.031029	-96.141762	50	28	26	2	240
1564	Mineva Water Supply Corp.	30.755688	-96.980632	218	28	105	2	16.215
1565	Mineva Water Supply Corp.	30.755688	-96.980632	250	28	106	2	16.215
1110	Southwest Milam Water Supply Corp.	30.67141667	-97.0045	485	28	108	2	623
1173	David Shanahan	30.63158333	-96.97356667	800	28	259	2	378
1270	David Shanahan	32.78127	-96.796926	58	28	266	2	1
1271	David Shanahan	32.78127	-96.796926	61	28	267	2	1
1273	Steve Urban	30.804913	-96.84531	343	28	274	2	50
1555	Pete Scamardo - Well # 13 B	30.658223	-96.342866	60	31	82	2	75
698	Birch Creek Recreation	30.310833	-96.646388	533	31	112	2	16
1113	Dara Hills Civic Association	30.3588933	-96.5683333	710	31	116	2	6.01
1584	Texas AgriLife Research Farm Serv	30.614915	-96.351884	60	31	130	2	2
1236	Brazos Valley Septic & Water, Inc.	30.346277	-96.608333	513	31	176	2	22.67
1237	Brazos Valley Septic & Water, Inc.	30.343333	-96.616666	524	31	177	2	31.4
1238	Brazos Valley Septic & Water, Inc.	0	0	180	31	178	2	6
1239	Brazos Valley Septic & Water, Inc.	30.366111	-96.640833	180	31	179	2	7
1240	Brazos Valley Septic & Water, Inc.	30.356944	-96.570554	480	31	180	2	11
1251	Margaret Halverson	30.66662	-96.342928	60	31	220	2	54
1289	Triple SSS Ranch/L. Schwartz	30.30495	-96.317152	60	31	291	2	90
8362	William Gavranovic	30.45	-96.3469	250	31	341	2	14
8364	William Gavranovic	30.4296	-96.3686	482	31	342	2	8
9013	Calvin L. Cobb	0	0	59	1	14	3	142.028
8440	Bob McClaren	0	0	1	1	16	3	200
8441	Bob McClaren	0	0	1	1	17	3	200
	Brian L. Cobb	0	0	86	1	17	3	250
	Wendall Beckhusen			127	1	127	3	59
	Wendall Beckhusen			128	1	128	3	50
9150	Robert McLaren	30.887167	-96.725194	250	1	149	3	7
	Harold F. Baker	30.81655	-96.87366	130	1	151	3	90
	Weldon L. Deskoed	30.84	-97.202	40	1	156	3	5
8687	Gary G. Steger	30.52851	-96.457783	70	5	11	3	600
8446	Jerry P. Scamardo	30.52851	-96.457783	73	5	23	3	106
8454	John R. Giesenschlag	30.5525	-96.4505	31	5	31	3	5
8459	Campise Trust	30.57266	-96.4811	58	5	36	3	300
8462	Sam Campise - Well # 7B Lobelia	0	0	63	5	39	3	120
8469	John R. Giesenschlag	30.5451	-96.5038	63.5	5	46	3	160
8470	Old River Ranch	30.42	-96.3215	59.5	5	47	3	70.71
8474	John Malazzo Brown Well # 1	30.5735	-96.4766	65.5	5	48	3	104
8475	John Malazzo Brown Well # 2	30.5735	-96.4766	65.5	5	51	3	129
8482	Travis Carraba	30.57133	-96.457266	68.5	5	52	3	129
8711	Luke V. & Vira S. Patranello Estate	30.5837	-96.51685	66	5	67	3	153
8712	Travis Carraba	30.56997	-96.458975	61.5	5	68	3	140
8909	Texas General Land Office	30.4985	-96.466666	63	5	73	3	212
8996	Andrew G. Scamardo	30.55027	-96.43333	57.5	5	79	3	150
8777	Andrew G. Scamardo	30.56924167	-96.43693056	60	5	80	3	150
8994	Travis Carraba	30.5669	96.45	58	5	82	3	110
8784	Texas A&M University	30.544526	-96.438754	470	5	85	3	35
9014	Michael C. Cheney	30.461526	-96.57844	58	5	90	3	50

8992	Carl Buckner	30.41694	-96.36666	54	5	97	3	130
8993	Charles J. Sebesta, Jr.	30.5393	-96.4833	60.5	5	98	3	450
9018	Charles Jamner	30.37722	-96.33694	100	5	112	3	400
8131	W. H. (Bill) Glensenshlag	30.48343	-96.54034	310	5	129	3	30
-	Dasselaar Brothers			56	5	136	3	90
-	William I. Gavronivich			133	5	133	3	200
-	William I. Gavronivich			134	5	134	3	200
9097	Texas General Land Office	30.5	-96.389611	53.5	5	137	3	150
9098	Texas General Land Office	30.5	-96.389611	66	5	142	3	150
-	Steve Scarnardo	30.5792	-96.54036	5	5	152	3	110
-	Steve Scarnardo	30.57938	-96.547016		5	153	3	50
8445	Norman Koch	30.7892	-96.7522	430	10	22	3	25
8468	Joe Moore	30.8324	-96.6707	445	10	45	3	100
8478	Beaver Creek Ranch	30.7348	-96.7923	245	10	55	3	100
8773	Warren Shiley	30.58772	-96.8622	380	10	88	3	10
8934	Daniel & Pamela Tucker	30.35	-96.8	970	10	89	3	65
9093	McLane Ranch	30.64388	-96.798055	635	10	136	3	500
8433	Rockdale Country Club	30.608	-97.036	220	11	6	3	56.45
8434	Rockdale Country Club	30.602	-97.0361	220	11	7	3	56.45
8435	Marlow WSC	30.886	-96.8098	580	11	8	3	451.64
8458	Cullen Mancuso	31.04688	-96.77381	55	11	35	3	120
8460	Emanuel Glockin	30.73596	-96.830306	1140	11	37	3	5.6
9017	Iahn C. Lutz	30.9786	-96.7827	406	11	121	3	20
9134	M. E. Young & Sons	30.84321904	-96.8029212	400	11	144	3	400
-	Alcoa, Inc.			11	11	148	3	25000
-	Walker E. Wentzel			11	11	157	3	30
8450	Harold Lechow, Jr.	30.697	-96.7782	680	12	27	3	5
8451	Antonio E. Cantu	30.565	-96.9623	690	12	28	3	55
8452	Greg Weisport	30.754	-96.7537	550	12	29	3	27.98
8715	Garland Winthigham	30.790277	-96.672222	440	12	72	3	28
-	Darwin Avrett			405	12	108	3	25
9003	John Lechow	30.6975	-96.781388	362	12	114	3	14
9016	44 Farms	30.799883	-96.89845	540	12	118	3	10
8444	MCC Farms	30.3703	-96.7522	430	22	21	3	100
8455	Sue Gove	30.460833	-97.20111	475	22	32	3	20
3479	Harry Vovell	0	0		22	56	3	1
8480	Christopher W. Smith	30.549178	-96.708498		22	57	3	80
8481	Richard C. Stearn	30.738507	-96.809848		22	58	3	40
8488	Garth Dean	30.7112	96.8946	274	22	66	3	80
8493	City Of Somerville	30.3794	96.5617	1655	22	69	3	336
8780	Mickan, Markord, Kokol, LTD	30.83139	-97.211904	47	22	74	3	30
8986	J.J. Lightsey	30.6028	-96.6195		22	105	3	
8987	Jackie M. Odstrcil	30.586111	-96.596111		22	109	3	15
8988	Pete Scarnardo	30.62805	-96.62138		22	115	3	36
9015	Rock Prairie Development	30.548055	-96.54805	400	22	116	3	36
8243	Michael Mashaway	30.5834	-96.6834	700	24	123	3	15
8437	Jimmy L. Horcia	30.5185	-96.5845	884	27	10	3	3
8447	Duc T. Phan	30.414	-96.69633	684	27	24	3	15
8448	Duc T. Phan	30.412333	-96.69466	680	27	25	3	15
8456	Tunks WSC	30.4742	-96.5525	1070	27	33	3	108
8464	Ralph H. Gay	30.6075	-96.5575	370	27	44	3	1.1
8467	Lyons WSC	30.3743	-96.557	1655	27	44	3	33
8828	Kenneth Hronek	30.5917	-96.615	220	27	100	3	28.37
8985	Rockdale I.S.D.	30.64585	-97.04368	430	28	30	3	5.9
8713	Bob McClaren	30.88722	-96.91944	58	28	70	3	300
8714	Bob McClaren	30.88944	-96.92333	57	28	71	3	300
8774	Douglas R. Van Meter	30.93916	-96.84138	120	28	77	3	75
9094	Michelle D. Van Meter	30.560833	-97.165278	315	28	110	3	75
9153	Paula Schmitz	30.67222	-96.981656	336	28	126	3	80
3937	William County Cowboy Church	30.67222	-96.981656	536	28	132	3	13
8690	Moody National Iron Horse Ranch	30.38335	-96.416668	526	31	15	3	12.6
8691	Moody National Iron Horse Ranch	30.38335	-96.416668	526	31	15	3	12.6
8691	Moody National Iron Horse Ranch	30.38335	-96.416668	526	31	15	3	12.6
8691	Moody National Iron Horse Ranch	30.38335	-96.416668	526	31	15	3	12.6

84391	Woody National Iron Horse Ranch	30.3593	-96.4327	200	31	15	3	12.6
8442	Garland Winningham	30.4746	-96.4603	430	31	19	3	50
8443	MCC Farms	30.3717	-96.3908	630	31	20	3	100
8449	Burleson County MUD	30.3966	-96.6572		31	26	3	22.25
8472	John R. Gleenschlag	30.45083	-96.50391	63.5	31	49	3	400
8653	Yegua Water Systems	38.3339	-96.6606	390	31	64	3	18.5
8654	Yegua Water Systems	38.3336	-96.6583		31	64	3	18.6
8655	Yegua Water Systems	30.3203	-95.6639		31	64	3	18.6
	R.D. Jenkins	30.70143	-96.99269			60	3	15
	Calvin R. Coker					61	3	20
	Thomas Novasad					62	3	29
	Robert M. Walsh	30.759285	-96.64782			63	3	20
	Ronald K. Logan					65	3	20
	Lonnie Williams					78	3	80
	Charles Jenner					111	3	5
	Jim D. Eimer					117	3	2
	Deanyville LTD					119	3	60
	Brown Ely, Jr					120	3	350
	Michael Mustaway					122	3	25
	Keith Dehaut					124	3	600
	Rita S. Ferguson					125	3	60
	William Tom					135	3	192
	William McClain					138	3	1343
	William McClain					139	3	1443
	Kenneth Stone					140	3	100
	Deanyville LTD					141	3	4
	Terry Arledge					145	3	400
	Ronald W. Hudson					146	3	75
	M.E. Young & Sons					152	3	150
	Lloyd E. Leffers					153	3	600
	William J. Gavronvic					155	3	354
	JB Bancho					159	3	400
	JB Rancho					160	3	475
	RNR, LLC	30.834305	-96.867063			161	3	39.77
	Fred Keith Dehaut	30.834305	-96.867063			22	4	600
	Troy Arledge	30.448169	-96.31637	70	1	27	4	500
	Gary G. Steger	30.4447833	-96.31793	70	5	11	4	300
	Frank L. Scarmardo	30.57805	-96.4727		5	18	4	100
	Frank L. Scarmardo	30.59028	-96.55563		5	19	4	138
	Michael C. Cheney	30.45	-96.366666	58	5	20	4	40
	Sandy Scarmardo				5	24	4	129
9160	Michael C. Cheney	30.446883	-96.378752		10	21	4	40
8681	Robert Tiernan	30.7819	-97.05408333	43	22	6	4	90
8682	Robert Tiernan			38	22	7	4	90
8684	Chuck's Oilfield Service, LLC			840	22	8	4	6
8685	Chuck's Oilfield Service	30.43225	-96.638792	840	27	9	4	6
	Valentina/Loehr	30.5723	-96.58472	320	27	26	4	290
8679	Burleson County MUD				31	2	4	22.25
8680	Burleson County MUD				31	3	4	22.25
8678	Burleson County MUD				31	4	4	22.25
691	Clay Water Supply	30.394999	-96.345833	533	31	25	4	15
	Matilda Scarmardo					12	4	8
	City of Rockdale					15	4	284.3
8489	Clayton Williams Energy, Inc	30.5517	-96.7522		22	1	5	4.5
8490	Clayton Williams Energy, Inc	30.5428	-96.7512		22	2	5	0.58
8716	Anadarko Petroleum				22	10	5	3.68
8638	Anadarko Petroleum	30.7077	-96.7264		22	11	5	3.68
8640	Anadarko Petroleum	30.6232	-96.5673		22	15	5	3.68
8644	Anadarko Petroleum	30.6212	-96.6016		22	19	5	3.68

8720	Anadarko Petroleum	30.739722	-96.67958			22	21	5	3.68
8721	Anadarko Petroleum	30.75027	-96.630972			22	23	5	3.68
8723	Anadarko Petroleum					22	24	5	1.68
8724	Anadarko Petroleum					22	25	5	3.37
8726	Anadarko Petroleum					22	29	5	3.37
8727	Anadarko Petroleum	30.55189	-96.6036111			22	30	5	3.37
8637	Anadarko Petroleum	30.57279	-96.62540278			22	31	5	3.68
8706	Clayton WilliamsEnergy	30.7333	-96.6335			23	9	5	3.68
8708	Anadarko Petroleum	30.57086	-96.67321			24	28	5	3.37
8636	Anadarko Petroleum	30.6255	-96.5225			27	5	5	3.68
8725	Anadarko petroleum	30.567329	-96.628319			27	26	5	1.68
8707	Anadarko Petroleum	30.56728	-96.6238			27	27	5	3.37
8725	Anadarko petroleum	30.567329	-96.628319		430	27	27	5	
8725	Anadarko petroleum	30.567329	-96.628319			27	27	5	
8594	Blue Water, L.P. CW-1	30.44108	-96.81247			10	1	6	714.28571
8595	Blue Water, L.P. CW-2	30.43564	-96.80366			10	1	6	714.28571
8596	Blue Water, L.P. CW-3	30.42803	-96.80739			10	1	6	714.28571
8597	Blue Water, L.P. CW-4	30.43169	-96.81623			10	1	6	714.28571
8598	Blue Water, L.P. CW-5	30.43037	-96.82592			10	1	6	714.28571
8599	Blue Water, L.P. CW-6	30.42724	-96.83412			10	1	6	714.28571
8600	Blue Water, L.P. CW-7	30.42325	-96.81705			10	1	6	714.28571
8601	Blue Water, L.P. CW-8	30.42052	-96.80807			10	1	6	714.28571
8603	Blue Water, L.P. CW-10	30.41916	-96.81969			10	1	6	714.28571
8604	Blue Water, L.P. CW-11	30.41392	-96.7928			10	1	6	714.28571
8605	Blue Water, L.P. CW-12	30.41116	-96.79682			10	1	6	714.28571
8606	Blue Water, L.P. CW-13	30.44583	-96.7885			10	1	6	714.28571
8607	Blue Water, L.P. CW-14	30.40421	-96.7736			10	1	6	714.28571
8608	Blue Water, L.P. CW-15	30.41001	-96.78026			10	1	6	714.28571
8609	Blue Water, L.P. CW-16	30.40794	-96.77606			10	1	6	714.28571
8610	Blue Water, L.P. CW-17	30.41709	-96.77139			10	1	6	714.28571
8611	Blue Water, L.P. CW-18	30.42121	-96.77545			10	1	6	714.28571
8612	Blue Water, L.P. CW-19	30.43605	-96.7686			10	1	6	714.28571
8613	Blue Water, L.P. CW-20	30.43899	-96.77173			10	1	6	714.28571
8614	Blue Water, L.P. CW-21	30.43989	-96.77173			10	1	6	714.28571
8615	Blue Water, L.P. PW-1	30.5069	-96.82089			11	1	6	2799.65
8616	Blue Water, L.P. PW-2	30.5032	-96.8128			11	1	6	2799.65
8617	Blue Water, L.P. PW-3	30.51464	-96.81067			11	1	6	2799.65
8618	Blue Water, L.P. PW-4	30.49953	-96.80459			11	1	6	2799.65
8619	Blue Water, L.P. PW-5	30.508	-96.8054			11	1	6	2799.65
8620	Blue Water, L.P. PW-6	30.49522	-96.79645			11	1	6	2799.65
8621	Blue Water, L.P. PW-7	30.51578	-96.79897			11	1	6	2799.65
8622	Blue Water, L.P. PW-8	30.50739	-96.79584			11	1	6	2799.65
8623	Blue Water, L.P. PW-9	30.44138	-96.801233			11	1	6	2799.65
8624	Blue Water, L.P. PW-10	30.43638	-96.80358			11	1	6	2799.65
8625	Blue Water, L.P. PW-11	30.42851	-96.80668			11	1	6	2799.65
8626	Blue Water, L.P. PW-12	30.42113	-96.811			11	1	6	2799.65
8627	Blue Water, L.P. PW-13	30.42394	-96.82004			11	1	6	2799.65
8628	Blue Water, L.P. PW-14	30.41266	-96.81705			11	1	6	2799.65
8629	Blue Water, L.P. PW-15	30.42723	-96.83449			11	1	6	2799.65
8630	Blue Water, L.P. PW-16	30.43059	-96.82579			11	1	6	2799.65
8631	Blue Water, L.P. PW-17	30.43181	-96.81632			11	1	6	2799.65
8632	Blue Water, L.P. PW-18	30.41998	-96.7752			11	1	6	2799.65
8633	Blue Water, L.P. PW-19	30.410001	-96.7979			11	1	6	2799.65
8634	Blue Water, L.P. PW-20	30.41145	-96.79644			11	1	6	2799.65
-	Calvin L. Cobb					1	4	7	260
-	John H. Davis					1	12	7	200
-	John H. Davis					1	12	7	200
-	John H. Davis					1	12	7	200
-	William Marsh					1	14	7	100
-	William Marsh					1	14	7	100

POST OAK SAVANNAH GCD - 2012 Reported PRODUCTION (DRAFT- WORK IN PROGRESS)

well/data WID	owner	lat_dec	long_dec	well_depth	poscd	aquifer	Permit	Permit_Type	Annual	PROD_Acft	Year
1062	Milano WSC - Well # 1	30.71623333	-96.86343333	790			11	2	70	70	2012
1063	Milano WSC - Well # 2	30.71278	-96.86889	800			11	3	70	66	2012
1064	Milano WSC - Well # 3	30.63228333	-96.7880667	1687			11	4	120	153	2012
457	Milano WSC - Well 4	30.679166	-96.67361	2018			11	5	71	76	2012
1066	Milano WSC - Buer Well	30.64821667	-96.85465	800			10	6	100	1	2012
433	Milano WSC- Rita Test	30.695555	-96.614444	800			10	7	113	0	2012
1186	North Milam WSC - Well # 1	30.901106	-96.865707	300			28	8	73.8	12	2012
223	North Milam WSC	30.897499	-96.851944	315			28	9	73.8	38	2012
256	North Milam WSC	30.884999	-96.778332	318			11	10	73.8	9	2012
1070	North Milam WSC - Well # 4	30.88777778	-96.81638889	523			28	11	73.8	47	2012
1071	North Milam WSC - Well # 5	30.88777778	-96.81638889	347			11	12	73.8	84	2012
1072	Marlow WSC - Well # 2	30.82694444	-96.91416667	428			28	13	44.81	13	2012
1073	Marlow WSC - Well # 3	30.82694444	-96.91416667	424			28	14	78.41	11	2012
1074	City of Caldwell # 59-27-506	30.54305556	-96.68111111	1252			10	20	492.25	337	2012
1075	City of Caldwell # 59-27-712	30.53027778	-96.71694444	1303			10	21	492.25	215	2012
1076	City of Caldwell # 29-27-714	30.52666667	-96.71388889	1314			10	22	492.25	204	2012
1077	City of Caldwell # 59-27-803	30.53638889	-96.68861111	1210			10	23	492.25	6	2012
1193	Lloyd Leifeste - # 1	30.031029	-96.141762	50			28	25	109	108	2012
1194	Lloyd Leifeste - # 2	30.031029	-96.141762	50			28	26	240	124	2012
1195	Sandyr M. Scamardo # 1	30.5735	-96.5469	30.5735			5	27	80	35	2012
1196	Sandyr M. Scamardo # 2	30.5793	-96.5404	30.5793			5	28	60	13	2012
1078	Texas A&M Farm Irrigation	30.52185	-96.42341667	30.52185			22	29	150	145	2012
1079	Texas A&M Farm Irrigation	30.5131	-96.43543333	30.5131			22	30	5.5	0	2012
1080	Texas A & M Farm Irrigation	30.5106	-96.43286667	30.5106			22	31	210	0	2012
1081	Texas A & M Farm Irrigation	30.52266667	-96.42316667	60			5	32	210	11	2012
1197	Nathan C. Ausley	30.4811	-96.8721	370			24	33	77	0	2012
713	Burleson County M.U.D. #1	30.316388	-96.636944	1706			34	34	72.6	0	2012
1082	Gause Water Supply # 1	30.78722222	-96.71666667	992			11	35	49.31	47	2012
1083	Gause Water Supply # 2	30.78138889	-96.71416667	1210			11	36	32.27	10	2012
1199	Matilda Scamardo	30.658575	-96.328648	30.658575			5	37	44.33	41	2012
1200	Matilda Scamardo	30.658575	-96.328648	30.658575			5	38	44.33	7	2012
1201	Matilda Scamardo	30.658575	-96.328648	30.658575			5	39	44.33	35	2012
1202	Matilda Scamardo	30.658575	-96.328648	30.658575			5	40	44.33	10	2012
1203	Matilda Scamardo	30.658575	-96.328648	30.658575			5	41	44.33	28	2012
1204	Matilda Scamardo	30.525	-96.4522	71			5	42	44.33	34	2012
1206	Jerry P. Scamardo	30.5567	-96.4692	30.5567			5	44	31	0	2012
1552	Allen G. Ferguson - Well # 1	30.169517	-97.85466	30.169517			5	68	80	0	2012
1553	Allen G. Ferguson - Well # 2	30.169517	-97.85466	30.169517			5	69	119	0	2012
1554	Allen G. Ferguson - Well # 3	30.169517	-97.85466	30.169517			5	70	110	0	2012
1084	Pete Scamardo - 15B-HQ	30.57838333	-96.48815	30.57838333			5	71	62	46	2012
1085	Pete Scamardo - 15C-BHQ	30.58456667	-96.4884	30.58456667			5	72	62	46	2012
1086	Pete Scamardo - 15D-BHQ	30.58611667	-96.48708333	30.58611667			5	73	62	46	2012
1087	Pete Scamardo - 15E-BHQ	30.58951667	-96.48745	30.58951667			5	74	62	46	2012
1088	Pete Scamardo - 15F-BHQ	30.58798333	-96.48931667	30.58798333			5	75	62	46	2012
1089	Pete Scamardo - Well # 14 A	30.57611667	-96.48935	30.57611667			5	76	66.66	67	2012
1090	Pete Scamardo - Well # 14 B	30.57416667	-96.49331667	30.57416667			5	77	66.66	51	2012
1091	Pete Scamardo - Well # 14 C	30.57273333	-96.49598333	30.57273333			5	78	66.66	51	2012
1092	Pete Scamardo - 11- 40 A/C OLD	30.58548333	-96.51435	30.58548333			5	79	75	55	2012
1093	Pete Scamardo - 12- 40 A/C NEW	30.58445	-96.51555	30.58445			5	80	75	55	2012
1094	Pete Scamardo - Well # 13 A	30.57555	-96.51281667	30.57555			5	81	75	55	2012
1555	Pete Scamardo - Well # 13 B	30.658223	-96.342866	30.658223			31	82	75	55	2012
1095	Joe A. Scamardo - Well # 3C-Restivo South	30.57825	-96.50725	60			5	83	65	48	2012

1096	Joe A. Scarnardo - Well # 38-Res. North	30.57843333	-96.51253333	60	5	84	2	65	48	2012
1097	Joe A. Scarnardo - Well # 3A-East	30.58478333	-96.50566667	52	5	85	2	65	48	2012
1098	Joe A. Scarnardo - Well # 3D-Res. West	30.57665	-96.51283333	60	5	86	2	65	48	2012
1099	Joe A. Scarnardo - Well # 4 Strip	30.57041667	-96.49443333	60	5	87	2	160	120	2012
1100	Joe A. Scarnardo - Well # 2 Gravel Pit	30.59631667	-96.48446	60	5	88	2	146.66	111	2012
1101	Joe A. Scarnardo - Well # 5 Big Barn	30.59441667	-96.4821	71	5	89	2	146.66	111	2012
1102	Joe A. Scarnardo - Well # 6 X-Big Barn	30.59415	-96.47953333	60	5	90	2	146.66	111	2012
1103	Joe A. Scarnardo - Well # 154-HQ	30.58946667	-96.49286667	60	5	91	2	26	20	2012
1104	Sam Campise, LTD - Well # 8 Campisc	30.59323333	-96.46371667	92	5	92	2	160	120	2012
1105	Campise Farms- Well # 16 CVC	30.57415	-96.48333333	93	5	93	2	48	36	2012
1106	Sam Campise - Well # 7A Lobella CR262	30.5758333	-96.48081667	94	5	94	2	60	45	2012
1108	Sam Campise, LTD - Well # 7C Lobella	30.57315	-96.47561667	96	5	96	2	60	45	2012
1156	Minerva Water Supply Corp.	30.755888	-96.980632	218	28	105	2	16.215	11	2012
1155	Minerva Water Supply Corp.	30.755888	-96.980632	250	28	106	2	16.215	11	2012
1109	Southwest Milam Water Supply Corp.	30.59383333	-96.9673	1030	11	107	2	623	549	2012
1110	Southwest Milam Water Supply Corp.	30.67141667	-97.0045	485	28	108	2	623	207	2012
1111	Southwest Milam Water Supply Corp.	30.64305	-96.925645	1000	11	109	2	623	471	2012
1112	Southwest Milam Water Supply Corp.	30.73016667	-96.82733333	598	12	110	2	623	137	2012
698	Birch Creek Recreation	30.310833	-96.646388	533	31	112	2	16	0	2012
1568	David M. Eslik	30.5173	-96.5019	55	5	113	2	139	0	2012
170	Rockdale I.S.D.	30.658333	-97.016666	295	11	114	2	7.8	1	2012
1113	Clara Hills Civic Association	30.6538	-97.0177	285	22	115	2	28.31	2	2012
1571	Center Line Water Supply Corp.	30.35388889	-96.56833333	710	31	116	2	6.01	5	2012
1576	3-D Fresh Water Facility	30.500252	-96.62367	820	27	122	2	7.45	2	2012
1577	Texas Agrilife Research Farm Serv.	30.522	-96.4011	5	5	123	2	2	0	2012
1578	Texas Agrilife Research Farm Serv.	30.5469	-96.4398	5	5	124	2	4.5	0	2012
1579	Texas Agrilife research farm Serv.	30.614915	-96.351884	5	5	125	2	60	25	2012
1580	Texas Agrilife Research Farm Serv.	30.614915	-96.351884	5	5	126	2	4.5	0	2012
1581	Texas Agrilife Research Farm Serv.	30.5233	-96.4016	70	5	127	2	6	6	2012
1582	Texas Agrilife Research Farm Serv.	30.5073	-96.4223	57	5	128	2	40	33	2012
1583	Texas Agrilife Research Farm Serv	30.552	-96.4261	60	5	129	2	2	0	2012
1584	Texas Agrilife Research Farm Serv	30.614915	-96.351884	60	31	130	2	2	2	2012
1585	Melvin L. Poldrack	30.817875	-96.988483	5	5	131	2	125	0	2012
1586	Melvin L. Poldrack	30.817875	-96.988483	5	5	132	2	125	1	2012
1587	Melvin L. Poldrack	30.817875	-96.988483	5	5	133	2	27	0	2012
1588	Melvin L. Poldrack	30.817875	-96.988483	5	5	134	2	27	0	2012
25	City of Rockdale (Belton)	30.668888	-96.986388	391	11	135	2	354.8	0	2012
1121	City of Rockdale (Texas)	30.663611	-96.995833	390	11	136	2	355.8	482	2012
1116	City of Rockdale (praesel)	30.63443333	-97.00691667	225	11	137	2	354.8	0	2012
1117	City of Rockdale (runway)	30.6312	-96.9901	475	11	138	2	354.8	113	2012
1118	City of Rockdale (airport)	30.63491667	-96.99103333	463	11	139	2	354.8	44	2012
138	City of Rockdale (Tracy)	30.666388	-96.995833	408	11	140	2	355	435	2012
1120	Cooks Point Water Supply	30.59583333	-96.6125	1252	10	141	2	10	4	2012
1121	City of Somerville	30.38	-96.56055556	1612	27	142	2	336	129	2012
1589	John S. Malazzo	30.535401	-96.741198	5	5	144	2	238	235	2012
1590	John S. Malazzo	30.535401	-96.741198	5	5	145	2	186	185	2012
1207	John S. Malazzo	30.5584	-96.4711	5	5	146	2	277	270	2012
1208	John S. Malazzo	30.535401	-96.741198	5	5	147	2	235	225	2012
1209	John S. Malazzo	30.535401	-96.741198	5	5	148	2	116	110	2012
1210	John S. Malazzo	30.535401	-96.741198	5	5	149	2	125	120	2012
1211	John S. Malazzo	30.535401	-96.741198	5	5	150	2	161	160	2012
1212	John S. Malazzo	30.535401	-96.741198	5	5	151	2	192	190	2012
1213	John S. Malazzo	30.535401	-96.741198	5	5	152	2	74	74	2012

1214	John S. Malazzo	30.535401	-96.741198	153	154	2	2	90	85	2012
1215	John S. Malazzo	30.535401	-96.741198	154	154	2	2	26	26	2012
1223	Mary Altmore	30.59666	-96.5089	162	162	2	2	295	280	2012
1224	Mary Altmore	29.986684	-95.624694	163	163	2	2	205	205	2012
1225	Joe S. Campise Trust	30.66506	-96.336431	164	164	2	2	204	0	2012
1226	Joe S. Campise Trust	30.66506	-96.336431	165	165	2	2	80	0	2012
1228	Campise Trust	30.66506	-96.336431	167	167	2	2	180	175	2012
1229	Campise Trust	30.66506	-96.336431	168	168	2	2	72	0	2012
1230	Sam J. Campise, LTD	30.66506	-96.336431	169	169	2	2	90	90	2012
1232	Ben Accurso, Sr./Bessie McBee	30.5749	-96.4995	171	171	2	2	130	120	2012
1233	Ben Accurso, Sr./Bessie McBee	30.58345	-96.489784	172	172	2	2	100	95	2012
1234	Ben Accurso, Sr./Bessie McBee	30.58345	-96.489784	173	173	2	2	80	80	2012
1123	Cooks Point Community Svcs	30.59361111	-96.60861111	175	175	2	2	1	0	2012
1236	Brazos Valley Septic & Water, Inc.	30.345277	-96.608333	513	176	2	2	22.67	11	2012
1237	Brazos Valley Septic & Water, Inc.	30.343333	-96.616666	524	177	2	2	31.4	19	2012
1238	Brazos Valley Septic & Water, Inc.	0	0	180	178	2	2	6	3	2012
1239	Brazos Valley Septic & Water, Inc.	30.366111	-96.640833	180	179	2	2	7	1	2012
1240	Brazos Valley Septic & Water, Inc.	30.356944	-96.570554	480	180	2	2	11	6	2012
1241	Denetrio Garcia	30.46395	-96.691029	400	209	2	2	4.5	1	2012
1152	T.A. Peek	30.51533333	-96.837	360	213	2	2	33	0	2012
1247	Floyd R. Byrd	30.701404	-96.982749	2	216	2	2	3	2	2012
1250	Mitt A. Bush	30.5774	-96.4983	2	219	2	2	76	57	2012
1251	Margaret Halvorson	30.66652	-96.342928	60	220	2	2	54	42	2012
1252	Frank A. Bush	30.681445	-96.551266	5	221	2	2	80	117	2012
1253	Mary S. Bush Estate	30.681445	-96.551266	5	222	2	2	156	87	2012
1254	Mitt A. Bush	30.5712	-96.4425	223	223	2	2	116	87	2012
1255	Mitt A. Bush	30.5788	-96.4525	5	224	2	2	64	48	2012
1256	Mitt A. Bush	30.5746	-96.4464	5	225	2	2	200	150	2012
1257	Mitt A. Bush	30.579	-96.4559	5	226	2	2	36	27	2012
8668	Robert C. Lewis			1200	227	2	2	2.25	4	2012
8775	Steve Scarnardo	30.60521667	-96.52226667	60	228	2	2	156.2	69	2012
1154	Steve Scarnardo	30.61276667	-96.53128333	5	229	2	2	207.36	73	2012
1155	Steve Scarnardo	30.59545	-96.49231667	5	230	2	2	56	41	2012
1156	Steve Scarnardo	30.59845	-96.49606667	5	231	2	2	252	119	2012
1157	Steve Scarnardo	30.59618333	-96.49375	5	232	2	2	112.7	47	2012
1158	Steve Scarnardo	30.59618333	-96.49375	5	233	2	2	131.66	57	2012
1159	Steve Scarnardo	30.59285	-96.49438333	5	234	2	2	85.8	38	2012
1160	Steve Scarnardo	30.59136667	-96.49066667	5	235	2	2	110	48	2012
1161	Steve Scarnardo	30.59433333	-96.5011	5	236	2	2	130	57	2012
1162	Steve Scarnardo	30.59126667	-96.50303333	5	237	2	2	149.5	66	2012
1163	Steve Scarnardo	30.58665	-96.4908	63	238	2	2	81.4	36	2012
1164	Holland Porter	30.56628333	-96.48013333	55	250	2	2	129	124	2012
1165	Holland Porter	30.5676667	-96.47008333	53	251	2	2	76	51	2012
1166	Holland Porter	30.55791667	-96.47008333	71	252	2	2	82.2	58	2012
1167	Holland Porter	30.56116667	-96.46968333	51	253	2	2	42.6	15	2012
1168	Holland Porter	30.56548333	-96.45913333	5	254	2	2	97.2	58	2012
1169	Holland Porter	30.55868333	-96.467	72	255	2	2	221.6	212	2012
1170	Holland Porter	30.564	-96.46125	5	256	2	2	53.2	21	2012
1171	Holland Porter	30.5608	-96.4623	66	257	2	2	91.2	149	2012
1172	Holland Porter	30.56131667	-96.45811667	5	258	2	2	159.8	192	2012
1173	David Shanahan	30.63158333	-96.97356667	800	259	2	2	378	6	2012
1174	David Shanahan	30.64815	-96.96336667	536	260	2	2	139	0	2012
1175	David Shanahan	30.63163333	-96.95918333	575	261	2	2	438	15	2012
1176	David Shanahan	30.83891667	-96.8313	370	262	2	2	48	7	2012

1178	David Shanahan	30.81845	-96.79983333	60	10	263	2	16	152	2012
1177	David Shanahan	30.81371667	-96.80793333	560	11	264	2	408	1	2012
1179	David Shanahan	30.84493	-96.80295	60	28	265	2	308	170	2012
1270	David Shanahan	32.78127	-96.796926	58	28	266	2	1	0	2012
1271	David Shanahan	32.78127	-96.796926	61	28	267	2	1	0	2012
1180	David Shanahan	30.625	-96.96186667	400	11	268	2	161	4	2012
1181	David Shanahan	30.65003333	-96.96336667	460	11	269	2	48	2	2012
1182	David Shanahan	30.6274	-96.9704	400	11	270	2	32	1	2012
1183	David Shanahan	30.839	-96.82921667	500	22	271	2	16	1	2012
1184	David Shanahan	30.64783333	-97.06325	500	11	272	2	161	1	2012
1272	J.J. Lightsey Family LP	0	0	70	5	273	2	240	215	2012
1273	Steve Urban	30.904913	-96.84531	343	28	274	2	50	30	2012
1276	Bud Adams Ranches	30.7892	-96.1079	278	1	278	2	88.75	82	2012
1277	Bud Adams Ranches	30.779901	-97.099386	278	1	279	2	30	29	2012
1278	Bud Adams Ranches	30.7889	-97.1113	280	1	280	2	52	48	2012
1279	Bud Adams Ranches	30.7562	-97.0245	281	1	281	2	52	49	2012
1280	Bud Adams Ranches	30.7767	-96.1063	282	1	282	2	74	69	2012
1281	Bud Adams Ranches	30.7892	-96.1064	283	1	283	2	29	26	2012
1282	Bud Adams Ranches	30.7775	-96.1106	284	1	284	2	5	5	2012
1283	Calvin L. Cobb	30.856	-96.856	285	1	285	2	260	75	2012
1284	Calvin L. Cobb	30.8516	-96.8586	286	1	286	2	70	35	2012
8554	Texas General Land Office	30.52237	-96.388778	292	5	292	2	250	0	2012
8555	Texas General Land Office	30.48569	-96.414245	292	5	292	2	225	92	2012
8556	Texas General Land Office	30.508374	-96.375883	292	5	292	2	225	4	2012
8557	Texas General Land Office	30.50629	-96.377766	292	5	292	2	225	0	2012
8558	Texas General Land Office	30.477329	-96.404385	292	5	292	2	225	38	2012
8559	Texas General Land Office	30.493555	-96.41117	292	5	292	2	225	2	2012
8560	Texas General Land Office	30.50599	-96.421145	292	5	292	2	225	45	2012
8561	Texas General Land Office	30.502226	-96.371603	292	5	292	2	225	37	2012
8562	Texas General Land Office	30.507103	-96.371339	292	5	292	2	225	23	2012
8563	Texas General Land Office	30.512485	-96.377426	292	5	292	2	225	19	2012
8564	Texas General Land Office	30.522292	-96.38104	292	5	292	2	225	0	2012
8565	Texas General Land Office	30.509492	-96.3816	292	5	292	2	225	0	2012
8566	Texas General Land Office	30.51837	-96.397533	292	5	292	2	225	10	2012
8567	Texas General Land Office	30.525975	-96.395046	292	5	292	2	225	76	2012
8568	Texas General Land Office	30.530372	-96.403986	292	5	292	2	225	12	2012
8569	Texas General Land Office	30.530627	-96.40012	292	5	292	2	225	12	2012
8570	Texas General Land Office	30.470178	-96.396749	292	5	292	2	225	79	2012
8571	Texas General Land Office	30.463593	-96.385509	292	5	292	2	225	62	2012
8572	Texas General Land Office	30.506538	-96.360947	292	5	292	2	225	34	2012
8573	Texas General Land Office	30.528986	-96.390765	292	5	292	2	225	55	2012
8574	Texas General Land Office	30.480085	-96.395117	292	5	292	2	225	44	2012
8575	Texas General Land Office	30.467364	-96.401388	292	5	292	2	225	45	2012
8576	Texas General Land Office	30.479428	-96.396497	292	5	292	2	225	30	2012
8577	Texas General Land Office	30.507673	-96.409035	292	5	292	2	225	111	2012
8579	Texas General Land Office	30.506904	-96.379724	292	5	292	2	225	52	2012
8580	Texas General Land Office	30.506954	-96.397957	292	5	292	2	225	97	2012
8581	Texas General Land Office	30.496011	-96.378406	292	5	292	2	225	52	2012
8582	Texas General Land Office	30.515365	-96.396243	292	5	292	2	225	49	2012
8583	Texas General Land Office	30.511515	-96.401086	292	5	292	2	225	84	2012
8584	Texas General Land Office	30.523674	-96.371194	292	5	292	2	225	100	2012
8585	Texas General Land Office	30.521274	-96.3743	292	5	292	2	225	67	2012
8587	Texas General Land Office	30.49641	-96.379792	292	5	292	2	225	80	2012
8588	Texas General Land Office	30.498961	-96.421656	292	5	292	2	225	37	2012

8589	Texas General Land Office	30.505541	-96.397819		5	292	2	225	26	2012
8590	Texas General Land Office	30.506485	-96.401621		5	292	2	225	36	2012
8591	Texas General Land Office	30.48587	-96.419239		5	292	2	225	49	2012
8592	Texas General Land Office	30.483806	-96.407562		5	292	2	225	18	2012
8593	Texas General Land Office	30.49081	-96.405186		5	292	2	225	107	2012
8544	Alcoa, Inc.	30.58484	-97.0122		11	330	2	250	493	2012
8545	Alcoa, Inc.	30.58484	-97.0122	200	12	330	2	250	0	2012
8494	Alcoa, Inc.	30.57033	-97.03935		11	330	2	250	31	2012
8495	Alcoa, Inc.	30.56881	-97.04432		11	330	2	250	32	2012
8496	Alcoa, Inc.	30.56225	-97.04861		11	330	2	250	127	2012
8497	Alcoa, Inc.	30.55998	-97.05018		11	330	2	250	117	2012
8498	Alcoa, Inc.	30.55511	-97.04182		11	330	2	250	50	2012
8499	Alcoa, Inc.	30.55482	-97.04309		11	330	2	250	49	2012
8500	Alcoa, Inc.	30.5612	-97.04058		11	250	2	250	767	2012
8501	Alcoa, Inc.	30.50493	-97.06474		11	330	2	250	0	2012
8502	Alcoa, Inc.	30.5399	-97.06375		11	330	2	250	0	2012
8503	Alcoa, Inc.	30.53912	-97.06231		11	330	2	250	0	2012
8504	Alcoa, Inc.	30.54111	-97.05764		11	330	2	250	0	2012
8505	Alcoa, Inc.	30.57674	-97.02479		11	330	2	250	0	2012
8506	Alcoa, Inc.	30.57784	-97.02452		11	330	2	250	299	2012
8507	Alcoa, Inc.	30.57911	-97.02407		11	330	2	250	330	2012
8508	Alcoa, Inc.	30.57988	-97.02349		11	330	2	250	216	2012
8509	Alcoa, Inc.	30.57393	-97.02559		11	330	2	250	358	2012
8510	Alcoa, Inc.	30.57223	-97.02831		11	330	2	250	335	2012
8511	Alcoa, Inc.				11	330	2	250	504	2012
8512	Alcoa, Inc.	30.57941	-97.00878		11	330	2	250	295	2012
8513	Alcoa, Inc.	30.56138	-97.02401		11	330	2	250	202	2012
8514	Alcoa, Inc.	30.56657	-97.01864		11	330	2	250	102	2012
8515	Alcoa, Inc.	30.56227	-97.02189		11	330	2	250	190	2012
8516	Alcoa, Inc.	30.57191	-97.00947		11	330	2	250	34	2012
8517	Alcoa, Inc.	30.5737	-97.00835		11	330	2	250	350	2012
8518	Alcoa, Inc.	30.5755	-97.00838		11	330	2	250	152	2012
8519	Alcoa, Inc.	30.57744	-97.00833		11	330	2	250	484	2012
8520	Alcoa, Inc.	30.58184	-97.00811		11	330	2	250	483	2012
8521	Alcoa, Inc.	30.56734	-97.01604		11	330	2	250	124	2012
8522	Alcoa, Inc.	30.56489	-97.02366	655	11	330	2	250	190	2012
8523	Alcoa, Inc.	30.56436	-97.0225		11	330	2	250	0	2012
8524	Alcoa, Inc.	30.5843	-97.01025		11	330	2	250	486	2012
8525	Alcoa, Inc.	30.58484	-97.01057		11	330	2	250	486	2012
8526	Alcoa, Inc.	30.57276	-97.00874		11	330	2	250	210	2012
8527	Alcoa, Inc.	30.57448	-97.00817		11	330	2	250	242	2012
8528	Alcoa, Inc.	30.58076	-97.00835		11	330	2	250	286	2012
8530	Alcoa, Inc.	30.51536	-97.07445		11	330	2	250	0	2012
8531	Alcoa, Inc.	30.51442	-97.07441		11	330	2	250	0	2012
8532	Alcoa, Inc.	30.51329	-97.07452		11	330	2	250	0	2012
8533	Alcoa, Inc.	30.51402	-97.07085		11	330	2	250	0	2012
8534	Alcoa, Inc.	30.51804	-97.06758		11	330	2	250	0	2012
8535	Alcoa, Inc.	30.51959	-97.06777		11	330	2	250	0	2012
8536	Alcoa, Inc.	30.5212	-97.06688		11	330	2	250	0	2012
8537	Alcoa, Inc.	30.52283	-97.06653		11	330	2	250	0	2012
8538	Alcoa, Inc.	30.52264	-97.06762		11	330	2	250	0	2012
8539	Alcoa, Inc.	30.51527	-97.07801		11	330	2	250	0	2012
8540	Alcoa, Inc.	30.51867	-97.07272		11	330	2	250	0	2012
8541	Alcoa, Inc.	30.51614	-97.07222		11	330	2	250	0	2012

8542	Alcoa, Inc.	30.51738	-97.07004		11	330	2	250	0	2012
8543	Alcoa, Inc.	30.51388	-97.07195		11	330	2	250	0	2012
8546	Alcoa, Inc.	30.561666	-97.06611	182	11	330	2	250	0	2012
8548	Alcoa, Inc.	30.55942	-97.06879		11	330	2	250	0	2012
8549	Alcoa, Inc.	30.50352	-97.10667		11	330	2	250	42	2012
8550	Alcoa, Inc.	30.50301	-97.10691		11	330	2	250	30	2012
8551	Alcoa, Inc.	30.52158	-97.1015		11	330	2	250	0	2012
8552	Alcoa, Inc.	30.50569	-97.10631		11	330	2	250	0	2012
8553	Alcoa, Inc.	30.55158	-97.07546		11	330	2	250	0	2012
9163	Alcoa, Inc.	30.56478	-97.0474		11	330	2	250	32	2012
8373	Michael C. Cheney	0	0		5	335	2	140	43	2012
8420	Somerville ISD	0	0	260	22	336	2	14.2	0	2012
8425	Edmund G. Sebesta Jr.	30.5721	-96.5504		5	337	2	206	75	2012
8426	Edmund G. Sebesta Jr.	30.5816	-96.5411		5	338	2	140	90	2012
8424	Edmund G. Sebesta Jr.	30.5692	-96.5411	60	5	339	2	125	60	2012
8363	William Gavranovic	30.4562	-96.3348	60	31	340	2	890	410	2012
8362	William Gavranovic	30.45	-96.3469	250	31	341	2	14	10	2012
8364	William Gavranovic	30.4296	-96.3686	482	31	342	2	8	2	2012
8365	William Gavranovic	30.421	-96.3554	60	5	343	2	800	189	2012
8366	William Gavranovic	30.4481	-96.3439	56	5	344	2	710	37	2012
8367	William Gavranovic	30.4207	-96.354	61	5	345	2	1140	362	2012
8355	Bill Scarmardo	0	0		5	346	2	72	0	2012
8356	Carrabba Bros. Ltd	0	0		5	347	2	80	71	2012
8357	Carrabba Bros. Ltd	0	0		5	348	2	66	56	2012
8360	Carrabba Bros. Ltd	0	0		5	349	2	80	70	2012
8358	Carrabba Bros. Ltd	0	0		5	350	2	104	103	2012
8359	Carrabba Bros. Ltd	0	0		5	351	2	100	95	2012
8345	Highland Interest	0	0		5	352	2	120	100	2012
8661	Highland Interest	0	0		5	353	2	90	85	2012
8346	Highland Interest	0	0		5	354	2	180	135	2012
8361	Bill Scarmardo	0	0		5	355	2	72	71	2012
8347	Highland Interest	0	0		5	356	2	176	95	2012
8348	Highland Interest	0	0		5	357	2	140	70	2012
8349	Betty Lee Carrabba	0	0		5	358	2	70	68	2012
8350	Betty Lee Carrabba	0	0		5	359	2	80	0	2012
8351	Betty Lee Carrabba	0	0		5	360	2	160	120	2012
8352	Betty Lee Carrabba	0	0		5	361	2	160	145	2012
8353	Betty Lee Carrabba	0	0		5	362	2	80	73	2012
8354	Betty Lee Carrabba	0	0		5	363	2	160	145	2012
8376	Rudy G. Loehr	0	0		22	364	2	10	2	2012
8401	William Gavranovic	31.00804	-96.774999		5	365	2	200	0	2012
8402	William Gavranovic	31.005776	-96.778801		5	366	2	200	0	2012
8403	William Gavranovic	31.007085	-96.781894		5	367	2	200	0	2012
8404	William Gavranovic	31.002566	-96.783714		5	368	2	200	0	2012
8405	William Gavranovic	30.999549	-96.79098		5	369	2	200	26	2012
8406	William Gavranovic	30.997956	-96.794171		5	370	2	200	0	2012
8378	Henry J. Bonorden	30.7092	-96.7116	72	24	374	2	15	6	2012
8662	Copperas Hollow Country Club	30.556184	-96.716097	200	27	375	2	74.5	48	2012
8368	Copperas Hollow Country Club	30.556184	-96.716097	180	27	376	2	1.84	2	2012
8372	Timothy J. Rabrocker	0	0		5	382	2	3	3	2012
8422	Son Vu	30.7767	-96.7753		22	385	2	50	0	2012
8423	Son Vu	0	0		22	386	2	50	5	2012
8421	Son Vu	30.778	-96.7804		22	387	2	40	6	2012
8666	Evelyn Glensschlag	30.512675	-96.461018		5	405	2	100	25	2012

8408	Mickan, Merkord, Kokei Ltd	30.82735495	-97.20377191	48	22	409	2	200	85	2012
8409	Mickan, Merkord, Kokei Ltd	30.827014	-97.207594	48	22	410	2	200	85	2012
8410	Mickan, Merkord, Kokei Ltd	30.82856555	-97.2065606	48	22	411	2	50	0	2012
8375	Robert J. Henricks	0	0	5	412	412	2	1.7	0	2012
8400	Robert Knight	30.9037	-97.0186	70	22	413	2	0.17	0	2012
8374	Frank E. Cinnear	0	0	350	5	414	2	30	10	2012
8388	Wayne Edwards	30.3552	-96.7173	3988	11	415	2	62	26	2012
8389	Wayne Edwards	30.3607	-96.7154	500	22	416	2	46	28	2012
8377	William N. Graham	30.69023	-96.826337	690	22	419	2	48	48	2012
1935	Milano ISD	30.71476	-96.86386	690	11	460	2	14.93	7	2012
641	Lyons W.S.C.	30.384721	-96.552222	1595	27	53	2	53	30	2012
8433	Rockdale Country Club	30.608	-97.036	220	11	6	3	56.45	25	2012
8434	Rockdale Country Club	30.602	-97.0361	7	11	8	3	56.45	0	2012
8435	Marlow WSC	30.886	-96.8098	580	11	7	3	451.64	32	2012
8687	Garry G. Steger			70	5	11	3	600	0	2012
9013	Calvin L. Cobb				1	14	3	142.028	0	2012
8440	Bob McClaren	0	0	59	1	16	3	200	105	2012
8441	Bob McClaren	0	0		1	17	3	200	1	2012
8442	Garland Wmningham	30.47486	-96.46063	430	31	19	3	50	3	2012
8443	MCC Farms	30.3717	-96.3908	630	31	20	3	100	3	2012
8444	MCC Farms	30.3703	-96.7522	430	22	21	3	100	3	2012
8445	Norman Koch	30.7882	-96.7522	430	10	22	3	25	10	2012
8446	Jerry P. Scarnardo	30.57851	-96.457783	73	5	23	3	106	11	2012
8447	Duc T. Phan	30.414	-96.696533	684	27	24	3	15	4	2012
8448	Duc T. Phan	30.412333	-96.69466	680	27	25	3	15	0	2012
8449	Burleson County MUD	30.3366	-96.6572	680	31	26	3	22.25	12	2012
8450	Harold Loehow, Jr.	30.697	-96.7782	680	12	27	3	5	1	2012
8451	Antonio E. Cantu	30.5665	-96.9623	690	12	28	3	55	11	2012
8985	Rockdale I.S.D.	30.64585	-97.04368	430	28	30	3	5.9	1	2012
8455	Sue Gove	30.460833	-97.20111	475	22	32	3	20	1	2012
8456	Tunis WSC	30.4742	-96.5525	1070	27	33	3	108	86	2012
8458	Cullen Mancuso	31.04668	-96.77381	55	11	35	3	120	0	2012
8459	Campise Trust	30.57266	-96.4811	58	5	36	3	300	0	2012
8462	Sam Campise - Well # 7B Lobella	0	0	63	5	39	3	120	90	2012
8467	Lyons WSC	30.3743	-96.557	1655	27	44	3	53	27	2012
8468	Joe Moore	30.8324	-96.6707	445	10	45	3	10	5	2012
8471	Sam J. Campise	30.5735	-96.4766	65.5	5	48	3	104	96	2012
8474	John Malazzo Brown Well # 1	30.5766	-96.51526	68.5	5	51	3	129	125	2012
8475	John Malazzo Brown Well # 2	30.57666	-96.515266	68.5	5	52	3	129	0	2012
8479	Harry Vowell	0	0		22	56	3	1	1	2012
8480	Christopher W. Smith	30.549178	-96.708498		22	57	3	80	17	2012
8481	Richard C. Stocum	30.730507	-96.809848		22	58	3	40	1	2012
8482	Travis Carrabba	30.571733	-96.457266	58	5	59	3	120	110	2012
8653	Yegua Water Systems	30.3339	-96.6606	390	31	64	3	18.6	26	2012
8654	Yegua Water Systems	30.3336	-96.6583		31	64	3	18.6	0	2012
8655	Yegua Water Systems	30.3203	-96.6639		31	64	3	18.6	18	2012
8488	Garth Doan	30.7112	96.8946	274	22	66	3	80	0	2012
8712	Travis Carrabba	30.565997	-96.438975	61.5	5	68	3	140	120	2012
8493	City Of Somerville	30.3794	96.5617	1655	22	69	3	336	111	2012
8713	Bob McClaren	30.88722	-96.91944	58	28	70	3	300	0	2012
8714	Bob McClaren	30.88944	-96.92333	57	28	71	3	300	0	2012
8715	Garland Wmningham	30.790277	-96.767222	440	12	72	3	28	1	2012
9099	Texas General Land Office	30.4985	-96.3626666	63	5	73	3	212	5	2012
8780	Mickan, Merkord, Kokei, LTD	30.83139	-97.211904	47	22	74	3	200	85	2012

8772	Douglas R Van Meter	30.9366667	-96.8419444	120	28	77	3	75	2	2012
8994	Travis Carrabba	30.5669	96.45	58	5	82	3	110	100	2012
8784	Texas A&M University	30.544526	-96.438754	470	5	85	3	35	4	2012
8934	Daniel & Pamela Tucker	30.55	-96.8	970	10	89	3	65	20	2012
9014	Michael C. Cheney	30.461526	-96.37844	58	5	90	3	50	0	2012
8992	Carl Buckner	30.41694	-96.366666	54	5	92	3	130	0	2012
8993	Charles J. Sebesta, Jr.	30.5333	-96.4833	60.5	5	98	3	450	155	2012
8986	J.J. Lightsey	30.6028	-96.6195		22	105	3	30	24	2012
8987	Jackie M. Odstrcil	30.586111	-96.596111		22	109	3	15	2	2012
9094	Michelle D. Van Meter	30.93916	-96.84138	315	28	110	3	75	3	2012
9018	Charles Janner	30.37722	-96.33694	100	5	112	3	400	1	2012
9003	John Lockrow	30.6975	-96.781388	362	12	114	3	14	3	2012
9016	44 Farris	30.799883	-96.83845	540	12	118	3	10	5	2012
8243	Michael Mushaway	30.5834	-96.6834	400	24	123	3	15	8	2012
8131	W.H. (Bill) Giesenschlag	30.48343	-96.54034	310	7.5	129	3	30	6	2012
8997	Milam County Cowboy Church	30.67222	-96.981666	536	28	132	3	10	0	2012
9093	Madame Ranch	30.641388	-96.7980555	635	10	136	3	500	100	2012
9097	Texas General Land Office	30.5	-96.36694	53.5	5	137	3	150	0	2012
9098	Texas General Land Office	30.5	-96.383611	66	5	142	3	150	13	2012
8679	Burleson County MUD				31	2	4	22.25	17	2012
8680	Burleson County MUD				31	3	4	22.25	13	2012
8678	Burleson County MUD				31	4	4	22.25	14	2012
8686	Gary G. Steger	30.448169	-96.318637	70	5	10	4	300	0	2012
8995	Michael C. Cheney	30.45	96.3666666	58	5	20	4	40	0	2012
9160	Michael C. Cheney	30.446683	-96.378752		10	21	4	40	0	2012
691	Clay Water Supply	30.394999	-96.345833	553	31	25	4	15	15	2012
8394	Blue Water, L.P. CW-1	30.44108	-96.81247		10	1	6	714.28571	0	2012
8595	Blue Water, L.P. CW-2	30.43564	-96.80366		10	1	6	714.28571	0	2012
8596	Blue Water, L.P. CW-3	30.42803	-96.80739		10	1	6	714.28571	0	2012
8597	Blue Water, L.P. CW-4	30.43169	-96.81623		10	1	6	714.28571	0	2012
8598	Blue Water, L.P. CW-5	30.43037	-96.82592		10	1	6	714.28571	0	2012
8599	Blue Water, L.P. CW-6	30.42724	-96.83412		10	1	6	714.28571	0	2012
8600	Blue Water, L.P. CW-7	30.41233	-96.81705		10	1	6	714.28571	0	2012
8601	Blue Water, L.P. CW-8	30.42325	-96.81969		10	1	6	714.28571	0	2012
8602	Blue Water, L.P. CW-9	30.42052	-96.81123		10	1	6	714.28571	0	2012
8603	Blue Water, L.P. CW-10	30.41916	-96.80807		10	1	6	714.28571	0	2012
8604	Blue Water, L.P. CW-11	30.41392	-96.7928		10	1	6	714.28571	0	2012
8605	Blue Water, L.P. CW-12	30.41116	-96.79682		10	1	6	714.28571	0	2012
8606	Blue Water, L.P. CW-13	30.44583	-96.76865		10	1	6	714.28571	0	2012
8607	Blue Water, L.P. CW-14	30.40421	-96.7786		10	1	6	714.28571	0	2012
8608	Blue Water, L.P. CW-15	30.41001	-96.78026		10	1	6	714.28571	0	2012
8609	Blue Water, L.P. CW-16	30.40794	-96.77606		10	1	6	714.28571	0	2012
8610	Blue Water, L.P. CW-17	30.41709	-96.77139		10	1	6	714.28571	0	2012
8611	Blue Water, L.P. CW-18	30.42121	-96.77545		10	1	6	714.28571	0	2012
8612	Blue Water, L.P. CW-19	30.41838	-96.7668		10	1	6	714.28571	0	2012
8613	Blue Water, L.P. CW-20	30.43605	-96.76393		10	1	6	714.28571	0	2012
8614	Blue Water, L.P. CW-21	30.43899	-96.77173		10	1	6	714.28571	0	2012
8615	Blue Water, L.P. PW-1	30.5069	-96.82089		11	1	6	2799.65	1224	2012
8616	Blue Water, L.P. PW-2	30.5032	-96.8128		11	1	6	2799.65	0	2012
8617	Blue Water, L.P. PW-3	30.51464	-96.81067		11	1	6	2799.65	0	2012
8618	Blue Water, L.P. PW-4	30.49953	-96.80459		11	1	6	2799.65	0	2012
8619	Blue Water, L.P. PW-5	30.508	-96.8054		11	1	6	2799.65	0	2012
8620	Blue Water, L.P. PW-6	30.49522	-96.79645		11	1	6	2799.65	0	2012
8621	Blue Water, L.P. PW-7	30.51578	-96.79897		11	1	6	2799.65	0	2012

8622	Blue Water, L.P. PW-8	30.50739	-96.79584			11	1	6	2799.65	0	2012
8623	Blue Water, L.P. PW-9	30.44138	-96.801233			11	1	6	2799.65	0	2012
8624	Blue Water, L.P. PW-10	30.43638	-96.80358			11	1	6	2799.65	0	2012
8625	Blue Water, L.P. PW-11	30.42851	-96.80668			11	1	6	2799.65	0	2012
8626	Blue Water, L.P. PW-12	30.42113	-96.811			11	1	6	2799.65	0	2012
8627	Blue Water, L.P. PW-13	30.42394	-96.82004			11	1	6	2799.65	0	2012
8628	Blue Water, L.P. PW-14	30.41266	-96.81705			11	1	6	2799.65	0	2012
8629	Blue Water, L.P. PW-15	30.42723	-96.83449			11	1	6	2799.65	0	2012
8630	Blue Water, L.P. PW-16	30.43059	-96.8379			11	1	6	2799.65	0	2012
8631	Blue Water, L.P. PW-17	30.43181	-96.81632			11	1	6	2799.65	0	2012
8632	Blue Water, L.P. PW-18	30.41998	-96.7752			11	1	6	2799.65	0	2012
8633	Blue Water, L.P. PW-19	30.41001	-96.77979			11	1	6	2799.65	0	2012
8634	Blue Water, L.P. PW-20	30.41145	-96.79644			11	1	6	2799.65	0	2012
8491	Royalty Pecan Farms	30.6036	-96.5369	470		27	1	7	190.667	126	2012
8778	Royalty Pecan Farms	30.60805556	-96.54027778	400		27	1	7	190.67	92	2012
8779	Royalty Pecan Farms	30.60828333	-96.5402	400		27	1	7	190.667	124	2012
8990	Royalty Pecan Farms, Ltd.	30.596	-96.541133	470		27	1	7	30	0	2012
8991	Royalty Pecan Farms	30.60839	-96.5407194	450		27	1	7	30	0	2012
8648	David L. Couch	30.9091	-96.8788	180		22	3	7	175	5	2012
8649	David L. Couch	30.9042	-96.8772	320		22	3	7	175	4	2012
1061	Deanville Water Supply Corporation 2	30.45	-96.78333333	797		24	10	7	101.25	115	2012
1573	Deanville Water Supply Corporation 3	30.432499	-96.76388	784		24	10	7	101.25	57	2012
1574	Deanville Water Supply Corporation 3	0	0	784		22	10	7	101.25	76	2012
1575	Deanville Water Supply Corporation 4	30.525554	-96.72666	1300		10	10	7	101.25	66	2012
647	Snook well #2	30.489166	-96.465	1267		27	11	7	90	83	2012
648	Snook well #3	30.48861	-96.465555	619		31	11	7	90	49	2012
8769	Ban R. Vavra	30.5275	-96.6325	830		24	1	8	5.5	0	2012
5558	Cade Lake Water Supply	30.50239	-96.77745	980		10	1	9	123	23	2012

welldata.WID	Unique identification number created by each database entry. Used by the District for well identification
owner_1	Owner of well
lat_dec	Latitude location of well in Decimal Degrees
long_dec	Longitude location of well in Decimal Degrees
well_depth	Depth of well in feet. As indicated from driller's logs, when applicable
posgcd_aquifer	Aquifer code assigned to each well based on location and depth. See "Aquifer_id" table for keying
Permit	Permit number as assigned by the District
Permit_Type	Classification of Permit as assigned by the District. See "Permit_Type" table for keying
Annual	Total annual amount Permitted in Acre-feet
PROD_ACFE	Annual production reported to District by well owner in Acre-feet
Year	Year Production value was reported

id_code	aquifer_id
1	LITTLE RIVER ALLUVIUM
2	SMALL ALLUVIUM
5	BRAZOS RIVER ALLUVIUM
10	CARRIZO-WILCOX
11	SIMSBORO
12	CALVERT BLUFF
15	TRINITY
22	NONE
23	REKLAW
24	QUEEN CITY
26	WECHES
27	SPARTA
28	HOOPER
31	YEGUA - JACKSON

Permit_Type_ID	Abbreviation	Description
1	EW	Exempt Well
2	HU	Historical Use Well
3	DO	Drilling and Operating Well
4	O	Operating
5	OG	Oil and Gas Water Well
6	DO_AM	Drilling and Operating Amended and Multiple
7	DOM	Drilling and Operating Multiple
8	LP	Limited Production
9	R	Resolution

Appendix 3

Appendix 3:

Table 8-1. Modeled Available Groundwater Values Calculated for 2060 by the TWDB based on the DFCs adopted by GMA 8 and 12

Aquifer	Acre-ft/year (AFY)
Brazos River Alluvium	
Declared a Non-relevant Aquifer in GMA 8	NA
In Milam and Burleson County and in GMA 12	25,138 ¹
Aquifers in Trinity GAM	
Paluxy	0 ²
Glen Rose	149 ²
Hensel	36 ²
Hosston	103 ²
Subtotal	288
Aquifers in the Queen City/Sparta GAM	
Sparta	6,734 ³
Queen City	502 ⁴
Carrizo	7,059 ⁵
Upper Wilcox (Calvert Bluff Fm)	1,038 ⁵
Middle Wilcox (Simsboro Fm)	48,501 ⁵
Lower Wilcox (Hooper Fm)	4,422 ⁵
Subtotal	68,256
Yegua-Jackson Aquifer	12,923 ⁶
Total	106,605

¹ GTA AQUIFER ASSESSMENT 10-20 MAG(Bradley,2011)

² GAM RUN 10-063 MAG(Oliver and Bradley, 2011)

³ GAM RUN 10-046 MAG(Oliver, 2012a)

⁴ GAM RUN 10-045 MAG(Oliver, 2012b)

⁵ GAM RUN 10-044 MAG(Oliver, 2012c)

⁶ GAM RUN 10-060MAG(Oliver, 2012d)

NOTES:

- Table 8-1 is from the District's Management Plan adopted October 9, 2012.
- MAGs displayed in Table 8-1 are for the year 2060.

Appendix 4

Update of Preliminary Groundwater Modeling Results

PRESENTED TO:
GROUNDWATER MANAGEMENT AREA 12

FEBRUARY 25, 2015



Model Simulations

- ▶ Assemble data to update groundwater pumping in model from 1999 through 2010 for GMA 12.
- ▶ Utilize Central Queen City-Sparta GAM extended to 2070 for simulations.
- ▶ Comparison of results to current desired future conditions.



Model Simulations (cont'd)

Predictive Scenario 1 (PS1)

- ▶ Perform model simulation from 2000 to 2070 based on current permits within the GCDs being fully utilized beginning in 2015.
- ▶ Develop estimates of average drawdown in 2070 from 2000 by aquifer and GCD.



Model Simulations (cont'd)

Predictive Scenario 2 (PS2)

- ▶ Utilizing current permits within each GCD, estimate the ramp up in pumping beginning in 2015 to 2070. Gradual increases in pumping mainly controlled by increases in public supply water usage.
- ▶ Perform simulation to calculate average drawdown in 2070 from 2000.



Model Simulations (cont'd)

Predictive Scenario 3 (PS3)

- ▶ Update of PS1
- ▶ Updated pumping numbers by LPGCD and FCGCD
- ▶ Confirmed pumping numbers by BVGCD and METGCD
- ▶ POSGCD pumping numbers remain preliminary
- ▶ Perform simulation to calculate average drawdown in 2070 from 2000.



Model Simulations (cont'd)

Predictive Scenario 4 (PS4)

- ▶ Update of PS2
- ▶ Updated pumping numbers by LPGCD and FCGCD
- ▶ Confirmed pumping numbers by BVGCD and METGCD
- ▶ POSGCD pumping numbers remain preliminary
- ▶ Perform simulation to calculate average drawdown in 2070 from 2000.



Current MAGS

From 2010 planning

Year 2060 Managed Available Groundwater in Acre-Feet

District	Brazos River Alluvium								Total
	Carrizo	Calvert Bluff	Simsboro	Hooper	Queen City	Sparta	Yegua-Jackson		
Brazos Valley	-	5,496	1,755	96,185	316	529	7,923	7,071	119,275
Fayette County	-	1,000	-	-	-	570	3,729	5,762	11,061
Lost Pines	-	12,052	3,985	37,249	2,592	1,133	1,877	-	58,888
Mid-East Texas	-	11,088	3,912	7,170	827	974	3,334	1,122	28,427
Post Oak Savannah	25,138	7,059	1,038	48,501	4,422	502	6,734	12,923	106,377
GMA 12	-	36,695	10,690	189,105	8,157	3,688	23,597	26,878	323,968



Predictive Scenario 1 Pumping

Year 2070 in Acre-Feet

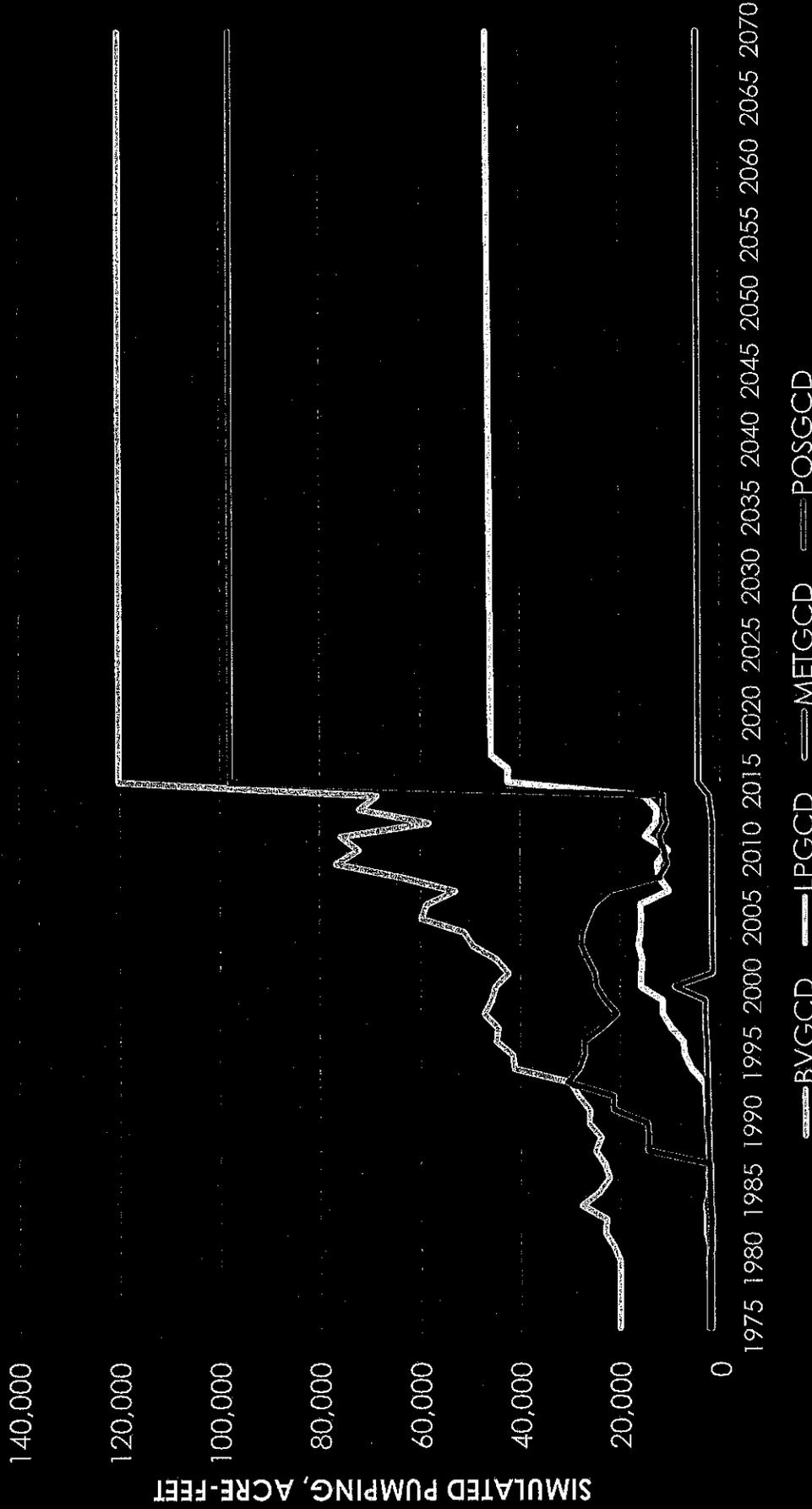
District	Calvert			Queen		Total	
	Carrizo	Bluff	Simsboro	Hooper	City		Sparta
Brazos Valley	4,748	3,184	120,252	1,831	1,157	9,228	140,400
Fayette County	1,000	-	-	-	1,857	7,249	10,107
Lost Pines	17,091	4,056	46,621	673	2,648	872	71,962
Mid-East Texas	2,852	6,345	4,380	5,550	1,249	5,112	25,488
Post Oak Savannah	17,841	1,486	98,079	5,321	385	1,862	124,974
GMA 12	43,533	15,071	269,333	13,375	7,296	24,322	372,931

Preliminary



Predictive Scenario 1

Simsboro Pumping



Preliminary



Predictive Scenario 2 Pumping

Year 2070 in Acre-Feet

District	Calvert			Queen			Total
	Carrizo	Bluff	Simsboro	Hooper	City	Sparta	
Brazos Valley	4,748	3,184	120,252	1,831	1,157	9,228	140,400
Fayette County	1,000	-	-	-	1,857	7,249	10,107
Lost Pines	11,509	3,906	45,213	673	1,084	565	62,949
Mid-East Texas	2,851	6,305	4,342	5,527	1,245	5,093	25,363
Post Oak Savannah	9,604	575	70,926	3,059	490	1,577	86,231
GMA 12	29,712	13,970	240,734	11,090	5,833	23,712	325,051

Preliminary



Predictive Scenario 2

Simsboro Pumping



Preliminary



Predictive Scenario 3 Pumping

Year 2070 in Acre-Feet

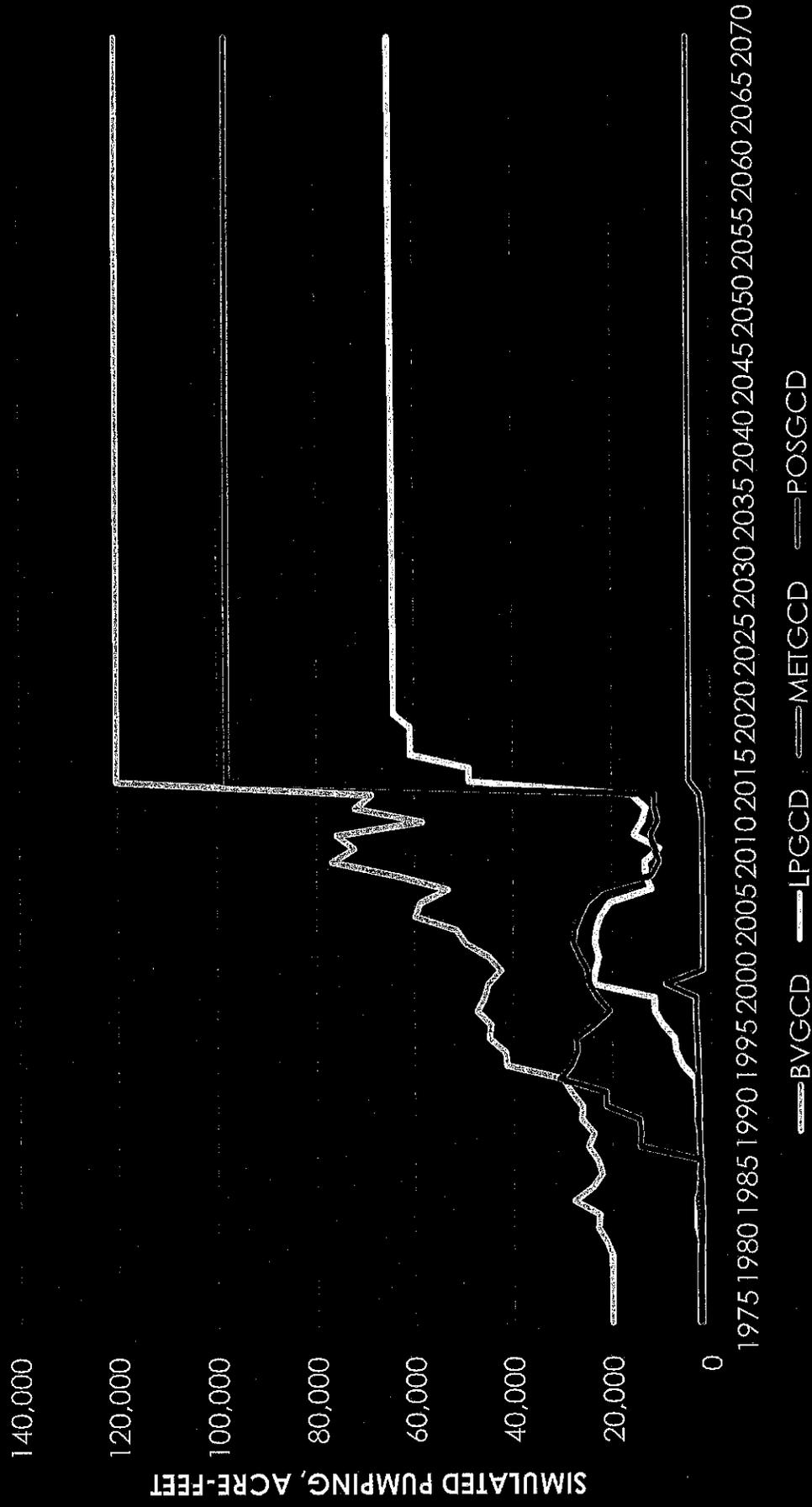
District	Carrizo	Calvert Bluff	Simsboro	Hooper	Queen City	Sparta	Total
Brazos Valley	4,765	3,207	120,262	1,832	1,158	9,259	140,485
Fayette County	1,985	-	-	-	2,709	2,802	7,496
Lost Pines	17,092	4,057	64,926	673	2,648	872	90,269
Mid-East Texas	2,852	6,345	4,380	5,550	1,249	5,112	25,488
Post Oak Savannah	17,841	1,486	98,079	5,321	385	1,862	124,974
GMA 12	44,536	15,095	287,648	13,376	8,149	19,907	388,711

Preliminary



Predictive Scenario 3

Simsboro Pumping



Preliminary



Predictive Scenario 4 Pumping

Year 2070 in Acre-Feet

District	Carrizo	Calvert Bluff	Simsboro	Hooper	Queen City	Sparta	Total
Brazos Valley	4,765	3,197	120,262	1,832	1,158	9,259	140,475
Fayette County	1,985	-	-	-	2,709	2,802	7,496
Lost Pines	11,510	3,906	62,828	673	1,084	565	80,565
Mid-East Texas	2,851	6,305	4,342	5,527	1,245	5,093	25,363
Post Oak Savannah	9,604	575	70,926	3,059	490	1,577	86,231
GMA 12	30,715	13,983	258,358	11,091	6,686	19,297	340,130

Preliminary



Predictive Scenario 4

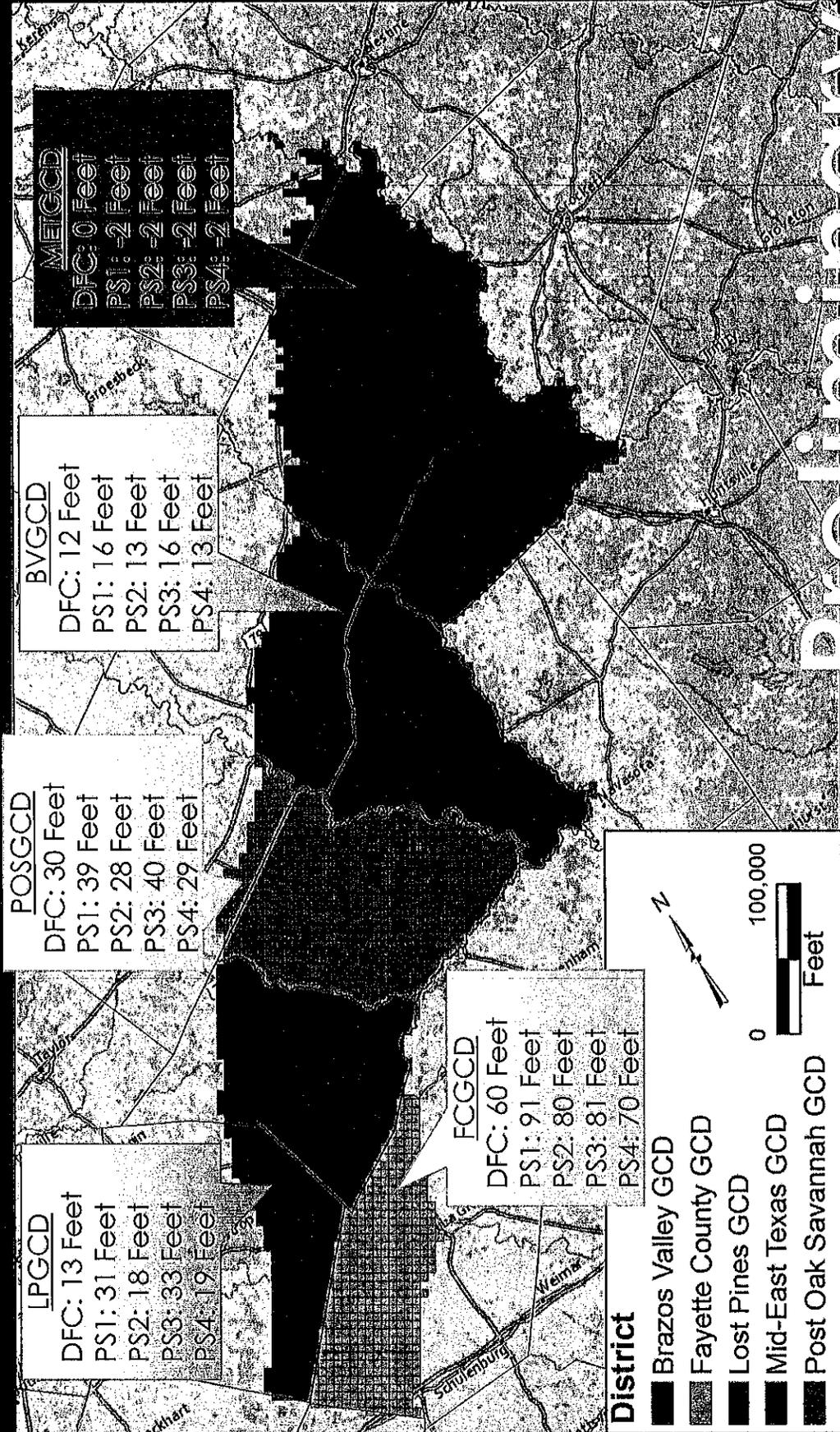
Simsboro Pumping



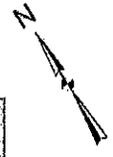
Preliminary



Queen City Aquifer (Layer 3) Average Drawdown - 2000 to 2070



Preliminary

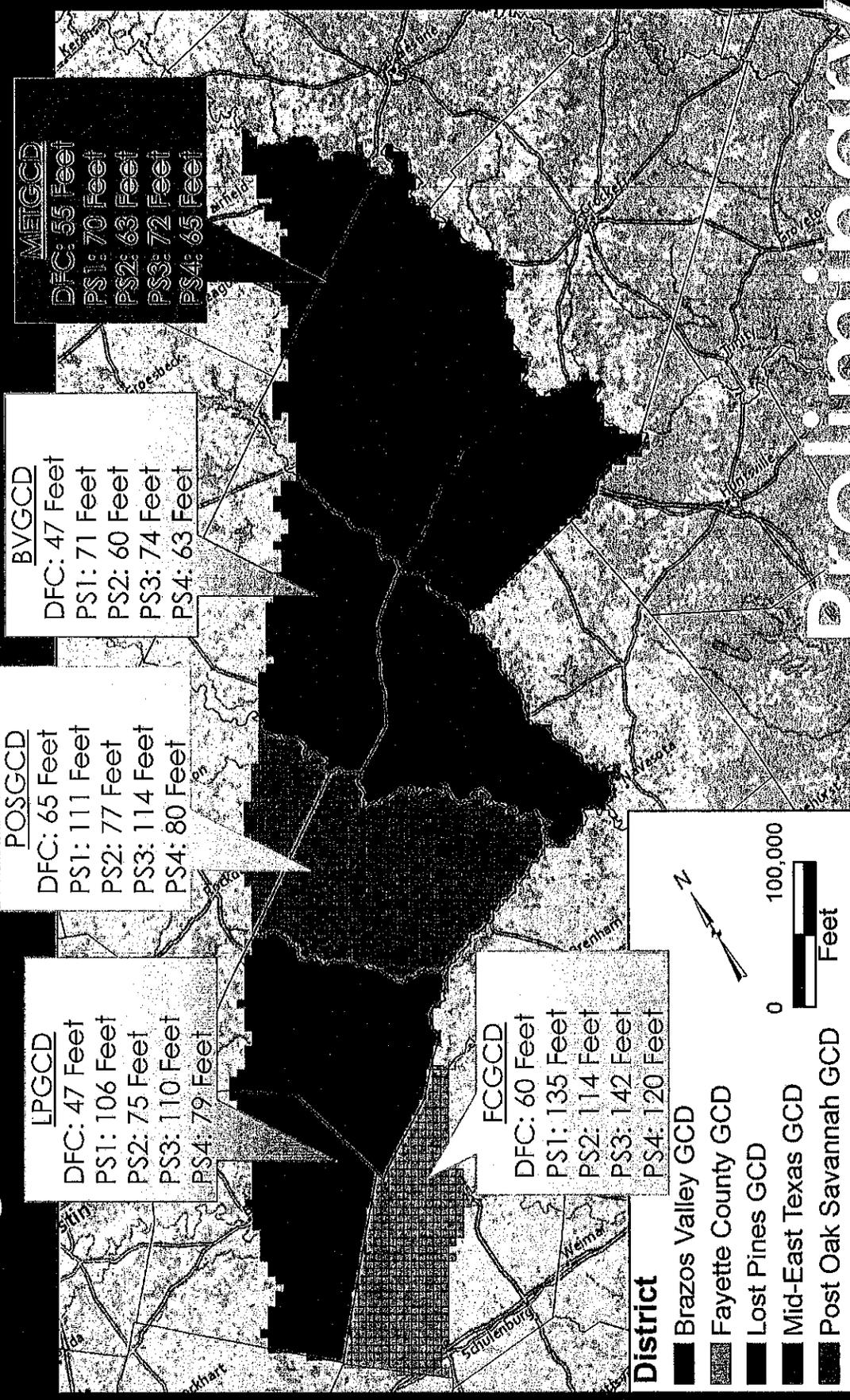


0 100,000 Feet



Carrizo Aquifer (Layer 5)

Average Drawdown – 2000 to 2070



Preliminary



Simsboro Aquifer (Layer 7)

Average Drawdown - 2000 to 2070

LPGCD

DFC: 237 Feet
 PS1: 375 Feet
 PS2: 292 Feet
 PS3: 422 Feet
 PS4: 340 Feet

POSGCD

DFC: 300 Feet
 PS1: 476 Feet
 PS2: 382 Feet
 PS3: 512 Feet
 PS4: 420 Feet

BVGCD

DFC: 270 Feet
 PS1: 409 Feet
 PS2: 365 Feet
 PS3: 425 Feet
 PS4: 382 Feet

METGCD

DFC: 115 Feet
 PS1: 174 Feet
 PS2: 156 Feet
 PS3: 180 Feet
 PS4: 163 Feet

FCGCD

DFC: N/A
 PS1: 363 Feet
 PS2: 298 Feet
 PS3: 402 Feet
 PS4: 338 Feet

District

-  Brazos Valley GCD
-  Fayette County GCD
-  Lost Pines GCD
-  Mid-East Texas GCD
-  Post Oak Savannah GCD



preliminary



Appendix 5

Appendix 5:

Table 7-1. Adopted DFCs based on the Average Threshold that occurs between January 2000 and December 2059

Aquifer	Drawdown (ft)
Sparta	30
Queen City	30
Carrizo	65
Upper Wilcox (Calvert Bluff Fm)	140
Middle Wilcox (Simsboro Fm)	300
Lower Wilcox (Hooper Fm)	180
Yegua-Jackson	100

NOTE: Table 7-1 is from the District's Management Plan adopted October 9, 2012.

Appendix 6

Appendix 6:

NOTE: Section 16 of the District's rules.

SECTION 16. MANAGEMENT OF WATER AVAILABILITY AND PRODUCTION

RULE 16.1. MANAGEMENT ZONES. Groundwater availability will be conserved, preserved and protected by well spacing, permit requirements, and/or limiting water drawdown levels within the Management Zones listed in Section 5 of the Management Plan. [Amended June 12, 2012]

RULE 16.2. GENERAL. All permits issued by the District that authorize the production of water shall be subject to the terms, conditions and provisions of this Section 16. All other terms, conditions and provisions of these rules shall be and remain in full force and effect. Any conflict between this Section 16 and any other Rule will be resolved by the Board upon a written request being made.

RULE 16.3. MONITORING OF GROUNDWATER. The District will monitor estimated total annual production, water quality, and the water levels. An analysis of the monitoring data will be reported at least once every three years. If, within a Management Zone, the drawdown based on monitored groundwater levels, or total estimated annual production, or projected average water level drawdowns, reach a threshold established in Rule 16.4, then, as determined appropriate by the Board, the District will give notice to well permittees in the affected Management Zone(s) as provided in Rule 16.4. The District will take action as found appropriate by the Board, based on the analysis of measured water levels, projected average water level drawdowns, permitted production, current and projected total estimated annual production and relevant hydrogeologic and water resource information including, but not limited to surface water availability and drought conditions, and review and evaluate the current and predicted water availability. The District may reduce both the maximum acre feet of water per acre of land for which the District may issue a permit and/or the volume of water authorized to be produced under any permit issued by the District for a Management Zone, as a result of the groundwater availability, total estimated annual production, or groundwater level drawdown within a Management Zone. The District may also adopt rule changes for a Management Zone if production in that Management Zone is shown to adversely impact groundwater conditions in another Management Zone. [Amended July 12, 2005] [Amended June 12, 2012]

RULE 16.4. ACTIONS BASED ON MONITORING RESULTS. Monitoring and threshold levels will be used to initiate appropriate responses designed to help achieve the DFCs, conserve and preserve groundwater availability and protect groundwater users. Three threshold levels are adopted to help guide these actions. Each threshold level provides for an increased level of response based on the change in production or water levels associated with a Management Zone. The threshold levels are: Level 1; Level 2; and Level 3. [Amended June 12, 2012]

1. Threshold Level 1. Threshold Level 1 will be reached, and additional study and investigation may be undertaken as appropriate, at such time as: [Amended June 12, 2012]

a. Total estimated annual production is greater than 70% of the Modeled Available Groundwater (MAG) value listed in Section 8 of the Management Plan;

b. An average groundwater drawdown, calculated from monitored water levels for an aquifer, is greater than 60% of the average groundwater drawdown adopted as a DFC for that aquifer in Section 7 of the Management Plan;

c. An average groundwater drawdown, calculated from monitored water levels, for a Shallow Management Zone is greater than 60% of the threshold value for average drawdown in that Shallow Management Zone listed in Section 7 of the Management Plan; or

d. Projected average water level drawdowns, calculated with a District approved methodology, indicate that a DFC for 2060 that is listed in Section 7 of the Management Plan will be exceeded within 15 years.

2. Threshold Level 2. Threshold Level 2 will be reached, and a review of the Management Plan, rules and regulations may be initiated, at such time as: [Amended June 12, 2012]

a. Total estimated annual production is greater than 85% of the Modeled Available (MAG) value listed in Section 8 of the Management Plan;

b. Average groundwater drawdown, calculated from monitored water levels, for an aquifer is greater than 80% of the average groundwater drawdown adopted as a DFC for that aquifer in Section 7 of the Management Plan; or

c. An average groundwater drawdown, calculated from monitored water levels, for a Shallow Management Zone is greater than 80% of the threshold value for average drawdown in that Shallow Management Zones listed in Section 7 of the Management Plan;

3. Threshold Level 3. Threshold Level 3 will be reached, and the Board will consider amendments to the Management Plan rules and regulations at such time as an average groundwater drawdown, calculated from monitored water levels, for an aquifer is greater than 95% of an average groundwater drawdown adopted as a

DFC for that aquifer in Section 7 of the Management Plan. [Amended June 12, 2012]

4. The threshold levels will be administered and applied separately to each Management Zone. As part of the evaluations and determinations, the District will consider the pumping-induced impacts to groundwater resources that occur between or among management zones. The evaluation will determine if pumping or production in one management zone is contributing to adverse impacts to groundwater conditions in another management zone. [Amended June 12, 2012]

a. If Threshold Level 1 is exceeded, the District may consider performing studies to provide information on aquifer properties, aquifer recharge, aquifer and surface water interactions, and aquifer pumping. The results may be used to improve the models, tools, and methodologies used to analyze data and predict future groundwater levels and availability.

b. If Threshold Level 2 is exceeded, the District may re-evaluate the Management Plan and rules regarding management zones, recharge estimates, the collection and analysis of monitoring data, and proposed changes to DFCs for consideration in the joint planning process.

c. If Threshold Level 3 is exceeded, the District will conduct a public hearing to discuss the status of the aquifers and develop a Level 3 Response Action Work Plan focused on achieving the District's goals and objectives, including the DFCs. The work plan will be completed within 6 months after the first public hearing and will be made available to the public through the District's web site.

i. The notice will include the cause for the notice, the fact that an additional review, evaluation and study is being made, and that a reduction of the maximum allowable production per acre and/or the permitted production may be approved following the review and evaluation. [Amended July 12, 2005]

ii. The general manager, in consultation with the district geohydrologist, will review and evaluate the permit applications pending, the permits issued and the records of the District, any estimates of total production by exempt wells, and increase the frequency or locations of water drawdown monitoring within the Management Zone. If the notice is due to the average drawdown based on monitored water levels then an evaluation of the reasons for the drawdown will be included in the review. [Amended July 12, 2005] [Amended June 12, 2012]

iii. The general manager will promptly report to the Board that notices have been, or are being, given and the event that required the notice to be given. The general manager will advise the Board of the plan for review and evaluation recommended under (b) and, if the plan will be implemented over a period of

more than one month, during the evaluation, review, study and any additional monitoring period, the general manager will keep the Board advised of the progress of the review and evaluation. Upon completion of the review, evaluation and any additional monitoring, the general manager and district geohydrologist will make a final report to the Board, together with their recommendation for action.

- iv. If the general manager, in consultation with the district geohydrologist, finds the evaluation, study, review and/or monitoring supports a recommendation that an adjustment of permitted production is recommended for a Management Zone or another Management Zone in which threshold level 3 was reached, the recommendation shall be consistent with the finding and provide supporting documentation for the limitation. [Added July 12, 2005] [Amended June 12, 2012]
- v. The general manager may, after consultation with the district geohydrologist and in combination with or in addition to the above, recommend any action or combination of actions set forth in Rule 16.4. [Amended June 12, 2012]

5. The terms, provisions and the actions provided for in this Rule 16.4 are in addition to and not in lieu of the terms, conditions and provisions of any other rule or provision of this Section 16. This rule does not limit the authority of the Board to act pursuant to any other rule. The Board shall have the discretion to take any action authorized by this Section 16. [Amended June 12, 2012]

RULE 16.5. REDUCTIONS REQUIRED BY REGULATORY ACTION. Notwithstanding any other term or provision of these rules, the Board may proportionately reduce the maximum amount of water that may be permitted per acre and volume of water authorized to be produced under any permit issued by the Board, and may adjust the thresholds established in Rule 16.4, as required by state law or by a regional plan or an area or regional agreement mandated by state law and which, by authority of state law, requires water availability or production to be limited or regulated based on water availability within a geographic area that includes land in more than one groundwater conservation district. In the event permitted production or water level drawdown will be reduced by reason of any such state law or regulation, the District will give notices as provided in Rule 16.4, hold one or more public hearings on the resulting limitations, and, to the extent permitted by state law, or the regional plan or agreement, implement any such reductions in a manner and over a period consistent with this Section 16. [Amended June 12, 2012]

RULE 16.6. ADJUSTING MAXIMUM PRODUCTION PERMITTED. The maximum groundwater production permitted per acre, the permitted production under any permit issued by the District, and the water drawdown level for a Management Zone may be adjusted as follows: [Amended July 12, 2005]

- 1. If the water drawdown level within a Management Zone, or in an adjacent zone in which the water drawdown level is impacted by production in such Management Zone, exceeds the water drawdown Threshold Level 3 in Rule 16.4, the maximum water production permitted per acre for the Management Zone and the water authorized to be produced under any permit

issued by the District for that zone may be reduced. The required reduction will be determined by the Board based on the evaluation and the evidence received by the Board. The production in one Management Zone may be reduced to the extent that production in that Management Zone is impacting water drawdown levels in an another zone. [Amended July 12, 2005] [Amended June 12, 2012]

2. The maximum allowable production of 2 acre feet of groundwater per acre of land, provided in Rule 5.1.2, may be reduced, and the maximum allowable production may be established or reduced for any one, or more than one, Management Zone(s). [Amended July 12, 2005]
3. Production authorized under permits issued by the District for any Management Zone may be reduced on a schedule to, when considered together with future permits for which the authorized production per acre will be at the lower maximum allowable production per acre, generally over a period not to exceed 40 years, reduce groundwater production by an amount required to return the water level in the Management Zone to levels deemed acceptable by the Board based on evidence provided by the general manager, in consultation with the district geohydrologist. [Amended July 12, 2005] [Amended June 12, 2012]
4. The Board may adjust permitted production within a Management Zone, based upon the results of a review, evaluation, study, and monitoring, and any evidence presented at a public hearing, if it finds the adjustment is appropriate. [Amended July 12, 2005] [Amended June 12, 2012]

RULE 16.7. PERMIT LIMITATIONS AND REDUCTIONS. The maximum allowable production of water authorized by a permit may be limited, adjusted and reduced as follows:

1. If the maximum allowable production of 2 acre feet of groundwater per acre of contiguous land is reduced for a Management Zone, or if any such reduced maximum of allowable production is thereafter reduced again, a new permit may not be issued for the production of more water than is established under this Section 16 as the maximum allowable production of water per acre of land for the Management Zone; [Amended June 12, 2012]
2. Excluding production authorized by a historic use permit, and production authorized by wells exempt under Rule 7.10(1), the production of water authorized by any permit issued by the District for the production of water is subject to limitation, adjustment and reduction;
3. The volume of water authorized by permit to be produced in a Management Zone may be reduced by up to two percent per year with the reduction beginning twelve months after a decision by the Board that such reduction is reasonably required for the conservation and preservation of groundwater, or the protection of the aquifer or groundwater users, within the Management Zone; and [Amended June 12, 2012]
4. If the Board finds it is necessary to reduce the maximum allowable production per acre, or the permitted production for any Management Zone, more quickly than is provided in Rule 16.7(3), to preserve and conserve groundwater or protect groundwater users within a Management Zone, or to implement reductions required under Rule 16.5, the Board shall

establish a schedule for a phased reduction in the maximum allowable production or permitted production for the zone. [Amended July 12, 2005]

RULE 16.8. EXCEPTIONS. The following are exceptions to the rules set forth in this Section 16 for the limitation and reduction of production:

1. After a reduction of the maximum allowable permitted production per acre in a Management Zone, the maximum allowable production per acre of land for which a permit may be issued in the Management Zone shall not exceed the maximum allowable production per acre as modified or established under this Section 16; [Amended July 12, 2005]
2. Within the Trinity Zone groundwater availability will be preserved and conserved, and groundwater users will be protected, by well spacing and the maximum allowable production per acre provided in Rule 5.1.2;
3. The Queen City-Sparta and Yegua-Jackson Zones are recharge based zones with relatively low to moderate yield domestic and small municipal wells, and, in lieu of limiting water drawdown levels in this zone, during droughts permitted production may be temporarily reduced to protect groundwater users; and [Amended June 12, 2012]
4. The Board may, in addition to or in combination with any action authorized in this Section 16, take any action authorized in Section 17. [Added June 12, 2012]

RULE 16.9 NOTICE AND HEARINGS. A limitation, adjustment or reduction of the maximum allowable production of water per acre, or of the volume of water authorized to be produced under permits issued by the District, may be adopted by the Board at any time after written notice is given to the permit holders as provided in Rule 16.4 and a public hearing held, for which twenty days, or more, notice of such public hearing is published in one or more newspapers of general circulation in Milam County and Burleson County, Texas.

RULE 16.10. REHEARING. The owner or the operator of a well or well field for which permitted production is being reduced pursuant to this Section 16 may request a rehearing on a decision by the Board to reduce permitted production by more than ten percent in any five year period, or to make a reduction that exceeds two percent in any one year period. Except as otherwise specifically provided herein any such motion for rehearing must be in writing, state the nature of material additional evidence to be presented, and filed in the district office within thirty days after the date of the Board decision that is being appealed. Such rehearing request will not stay or abate the required reduction or production while the request is pending.