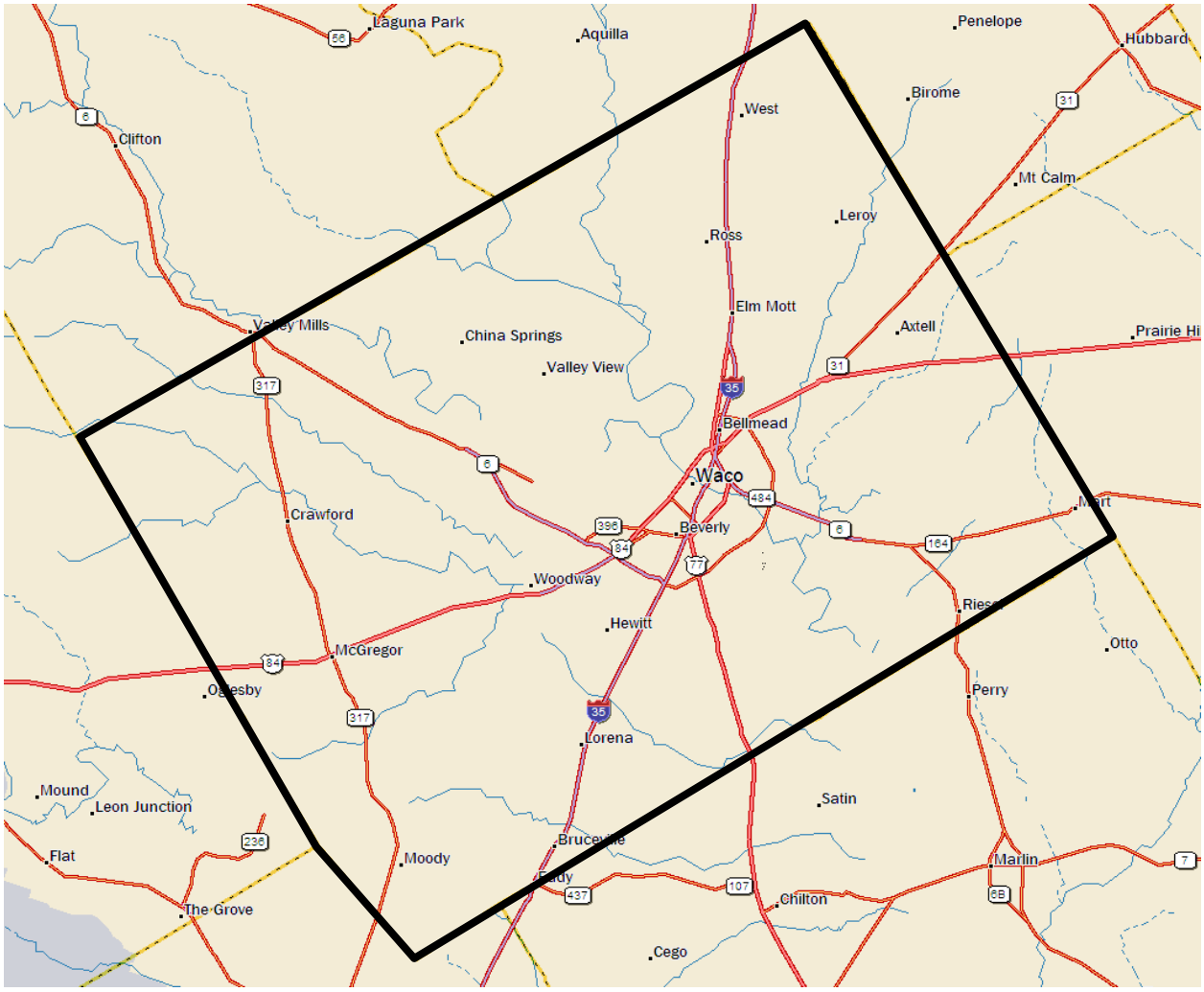
Southern Trinity Groundwater Conservation District

Groundwater Management Plan



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10. Appendices

1. Introduction

This plan will become effective upon adoption by the District's Board of Directors and approval as administratively complete by the Texas Water Development Board. The plan will remain in effect for five (5) years after the date of approval unless amended or replaced sooner.

1.1. Background and Purpose

The District was created by legislation in the 80th Texas Legislature in 2007 (SB1985), and amended by the 81st Texas Legislature in 2009 (SB2513) and by the 82nd Texas Legislature in 2011 (HB801). The purpose of the District is to conserve, preserve, protect, recharge and prevent the waste of groundwater and to control subsidence caused by groundwater withdrawals, consistent with Section 59, Article XVI, Texas Constitution and Chapter 36, Texas Water Code.

1.2. Groundwater Resources

The District has within its boundaries the Trinity, the Woodbine, and the Brazos River Alluvium aquifers. The following paragraphs describe the aquifers and their approximate locations within the District. The relationship to confining units and other groundwater resources within the District are also discussed. Appendix 10.1 contains a chart of showing the geological cross-section passing through the District from Northwest to Southwest. This cross-section shows the out crop and recharge area of the Trinity Aquifer.

1.2.1. Trinity Aquifer

The Trinity Aquifer is located throughout McLennan County as a confined aquifer. Its recharge area occurs outside the District to the north and west. There are a number of named, geologic formations that, collectively, are considered to comprise the Trinity Aquifer. To the west of McLennan County, the aquifer is designated the Twin Mountains formation where the sands crop out on the surface and receive recharge from precipitation. To the north where the Glen Rose formation is absent, the Trinity Aquifer is called the Antlers formation and to the south it is designated the Travis Peak. The portion of the Trinity Aquifer with in the District has three water bearing strata: the Paluxy, the Hensell and the Hosston. The aquifer dips to the southeast becoming deeper below the surface in the eastern part of the district. The increase in depth to the southeast is accentuated by the Balcones Fault Zone, which consists primarily of normal faults downthrown to the southeast. As the aquifer dips to the southeast the Hensell and Hosston become divided by several formations including the Pearsall, Cow Creek, Hammett and Sligo.

The Paluxy, Glen Rose, Pearsall, Cow Creek, Hammett and Sligo formations are not major contributors to aquifer production but they are included with the Hensell and Hosston formations as the Trinity Aquifer in the District. The Paluxy formation only occurs in the western part of the District. The outcrop of the Paluxy occurs outside of the District boundaries to the north and west. There is very little or no use of groundwater in the portion of Paluxy within McLennan County.

1.2.2.1 Management Zones

Figure 1.1 below shows the geographic location of the Hensell Management Zone (Hensell MZ) and Figure 1.2 shows the geographic location of the Hosston Management Zone (Hosston MZ). Permitted groundwater wells located in the Hensell MZ predominately withdraw groundwater from the Hensell (upper) stratum of the Trinity Aquifer and wells located in the Hosston MZ predominate withdraw groundwater from the Hosston (lower) stratum of the Trinity Aquifer. Some wells in both management zones may withdraw water from both the upper and lower strata.

The District groundwater level monitoring program has shown that the annual rate of decline for wells located in the Hensell MZ is greater than that in the Hosston MZ and that management of each the aquifers may require different limitations on the amount of annual production allowed from each respective stratum.

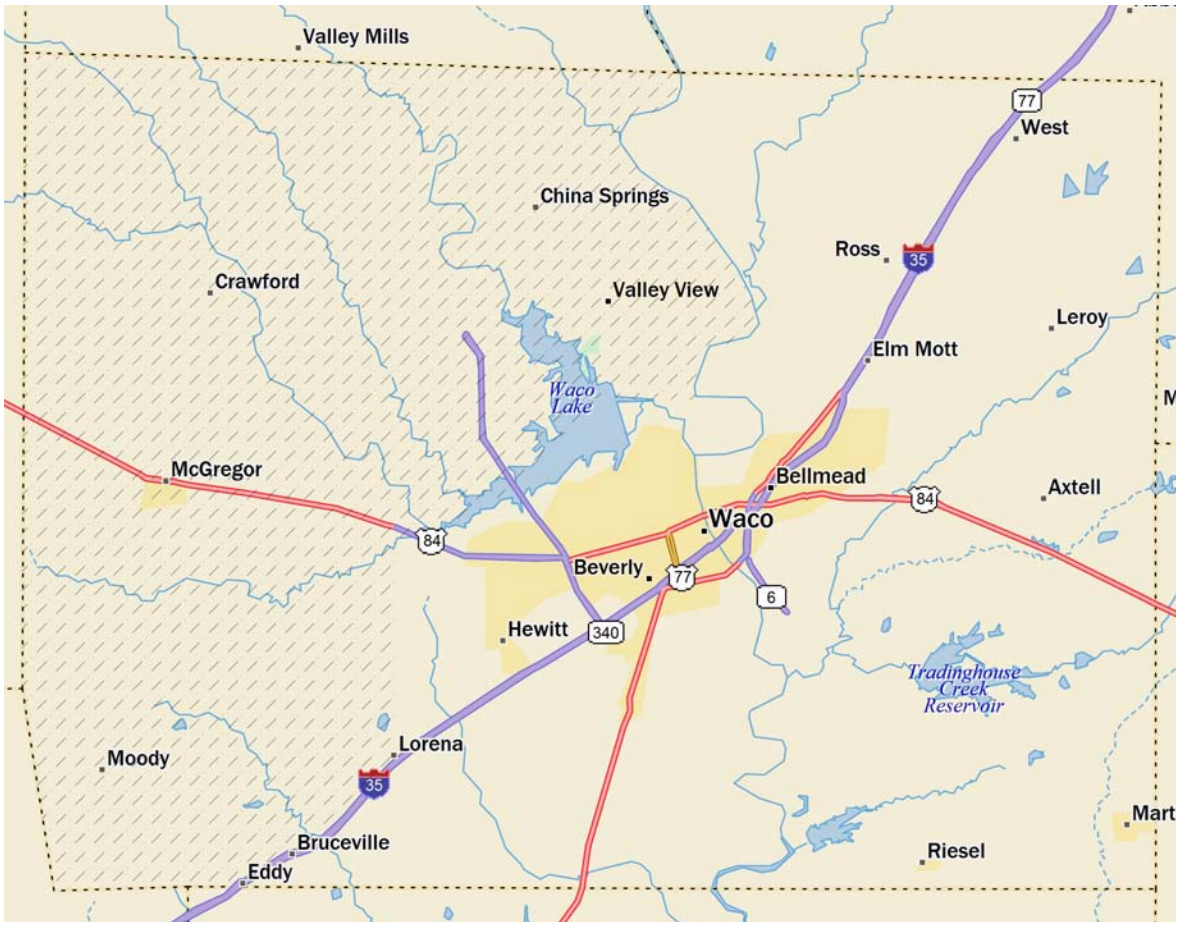

Figure 1.1 Geographic Extent of Hensell Management Zone (shown as hatched area)

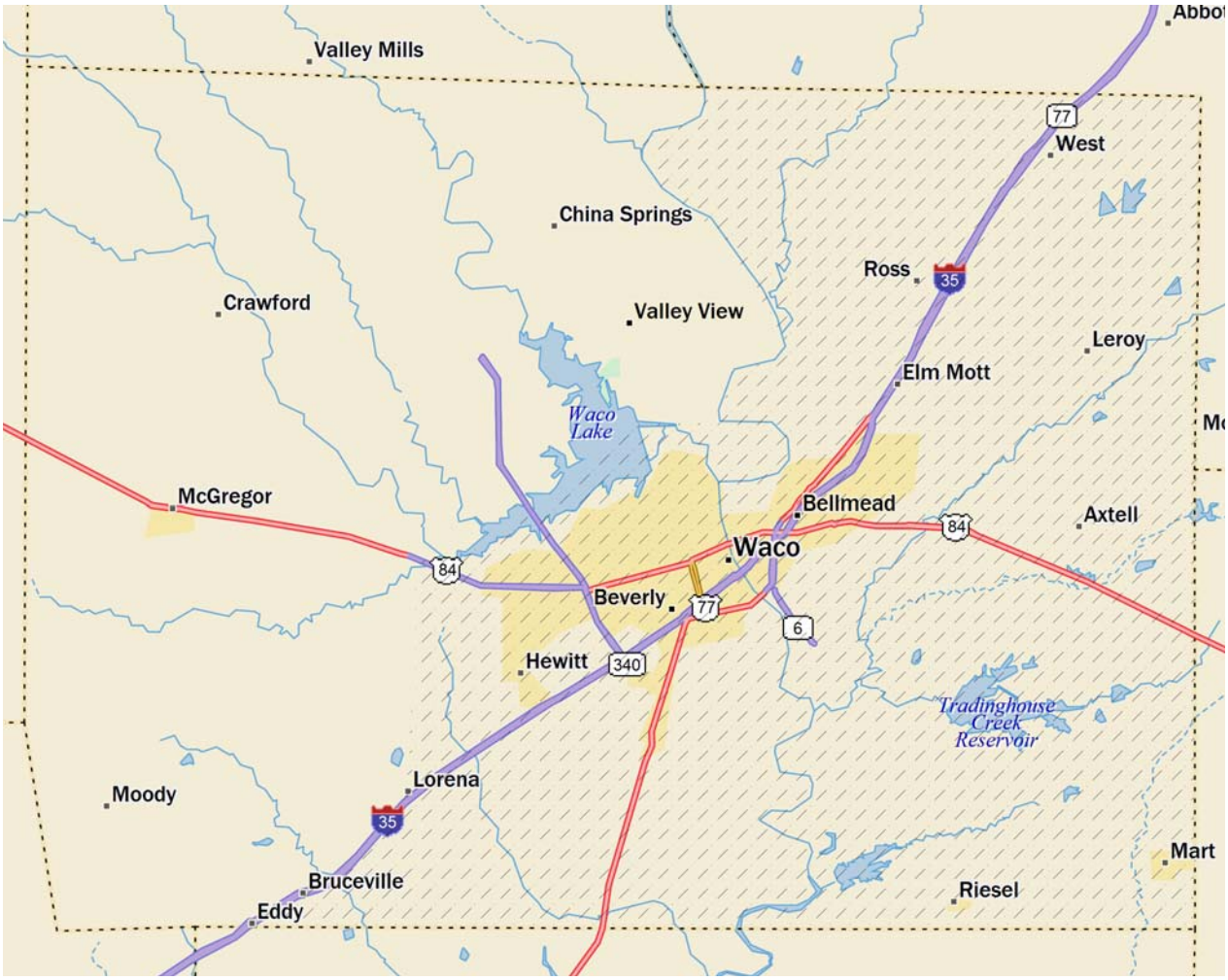

Figure 1.2 Geographic Extent of Hosston Management Zone (shown as hatched area)

1.2.2. Brazos River Alluvium Aquifer

The Brazos River Alluvium Aquifer consists of water bearing alluvial sediments that occur in floodplain and terrace deposits proximate to the Brazos River as it flows through McLennan County. The Brazos River Alluvium Aquifer is an unconfined aquifer that receives recharge primarily from direct precipitation on the floodplain surface but may also be recharged from overbank flows during flood events and from lateral flow from adjacent formations. The aquifer discharges through springs and seeps into the Brazos River and streams within the outcrop of the alluvium.

1.2.3. Woodbine Aquifer

The Woodbine Aquifer is a minor aquifer that extends only into a very limited portion of the northernmost part of McLennan County. The outcrop of the Woodbine occurs within the District boundaries but is covered by alluvium over much of its area. There is no or very little use of the

groundwater in the portion of the Woodbine Aquifer within McLennan County. The District's Board has designated the Woodbine Aquifer as non-relevant for regional planning purposes.

1.2.4. Other Groundwater Resources

Shallow or perched groundwater occurs in the fractured weathered veneer of the Fredericksburg and Washita series and in other formations in McLennan County. Little water is produced from this shallow or perched groundwater in McLennan County but it supports small springs and local stream base flow.

1.3. Texas Water Development Board - Groundwater Availability Model (GAM)

The Trinity and Woodbine aquifers are included in a TWDB GAM model (Bené *et al*, 2004). The Northern Trinity/Woodbine Aquifer GAM is a 7-layer model that has the ability to resolve inflow and vertical movement of water between layers. This model was used as a reference for estimating recharge from precipitation, the amount of flow into and out of the district, and the amount of inflow from overlying or underlying units. The model does not include the Brazos River Alluvium Aquifer. A newer GAM Model has been approved by the TWDB, but at the time this plan was prepared the Groundwater Management Area 8 (GMA 8) had not adopted any new MAG or DFC values.

1.4. Priority Groundwater Management Area

The Texas Commission on Environmental Quality designated portions of the Trinity Aquifer, including that portion within the District, as a priority groundwater management area (Appendix 10.3). This TCEQ finding indicates that the decline in groundwater levels in the Central Trinity Aquifer is a significant problem and that the decline in groundwater levels will cause groundwater availability and quality problems for the region.

2. Groundwater Management

The District has adopted rules to regulate groundwater withdrawals, primarily by means of well spacing and production limits (Appendix 10.17). The District will make periodic assessments of groundwater conditions within the District and will report those conditions to the Board. The District will undertake investigations and, to the extent appropriate, cooperate with third-party investigations, of the groundwater resources within the District, and the results of the investigations will be made available to the public.

The District has adopted rules designed to achieve the desired future conditions (DFCs) for the groundwater resources within the District, as those DFCs are agreed upon by Groundwater Management Area 8 (GMA 8). With respect to the Trinity, Woodbine, and Brazos River Alluvium aquifers, the District will adopt an historic use period and provide preferential permitting rights to those well owners that can demonstrate beneficial and non-wasteful groundwater usage during that period. A similar approach might be adopted for other groundwater sources within the District as well. The District may, at the Board's discretion after notice and hearing, amend or revoke any permit for non-compliance, or reduce the production authorized by permit for the purpose of protecting the aquifer and groundwater

availability. The District will enforce the terms and conditions of permits and the rules of the District as authorized by Chapter 36 of the Texas Water Code.

The District will employ reasonable technical resources within its budgetary constraints to evaluate the groundwater resources within the District and to determine the effectiveness of regulatory or conservation measures.

The District will establish and enforce rules that require, among other things, the following:

1. spacing requirements for certain non-exempt groundwater wells;
2. permits limiting the annual amount of groundwater that can be produced from non-exempt wells;
3. a limit on the maximum amount of groundwater permitted for withdrawal from the Hensell (upper) stratum of the Trinity Aquifer within the District;
4. a limit on the maximum amount of groundwater permitted for withdrawal from the Hosston (lower) stratum of the Trinity Aquifer within the District; and
5. a limit on the maximum amount of groundwater permitted for withdrawal from the Brazos River Alluvium Aquifer within the District.

3. Estimates of Annual Volumes of Water

The estimates of annual volumes of water discussed in this section were obtained from a report prepared by the Texas Water Development Board (TWDB GAM Run 14-015 Report). A copy of this report is included in Appendix 10.2. This report contains estimates of the annual amount of recharge from precipitation, annual volumes of water that discharge from aquifers to springs, annual volumes of groundwater inflow and outflow to and from aquifers and volume of flow between aquifers. All values reflect estimated groundwater flow with respect to the District's boundaries. Appendix 10.4 contains a copy of a Technical Memorandum regarding "The Brazos River Alluvium Aquifer Flow System in McLennan County, Texas" and contains estimates of the annual amount of recharge from precipitation, annual volumes of water that discharges from aquifers to springs, and annual volumes of interflow and outflow from aquifers within the Brazos River Alluvium Aquifer.

3.1. Estimate of the Annual Volume of Water That Discharges from the Aquifers to Springs and Any Surface Water Bodies, Including Lakes, Streams and Rivers

3.1.1. Trinity Aquifer (Paluxy, Glen Rose, Hensell, Pearsall/Cow Creek/Hammett, Sligo, and Hosston strata)

The estimate for discharges from the Trinity Aquifer to springs or surface water bodies is zero (Table 2 in Appendix 10.2).

3.1.2. Brazos River Alluvium Aquifer

The estimate of discharge from the Brazos River Alluvium Aquifer to the Brazos River to springs or surface water bodies is 2,500 acre-feet per year in McLennan County (Yelderman, 2008, Appendix 10.4, Page 10-29).

3.1.3. Woodbine Aquifer

The estimate of the total annual volume of water that discharges from the Woodbine Aquifer to springs or surface water bodies is 1,370 acre-feet. No discussion was provided in the report regarding the location of the discharge but it is likely much of the discharge is to seeps along the sides and beds of streams (Table 1 in Appendix 10.2).

3.1.4. All other Aquifers, Formations, or Series

The estimate of the total annual volume of water that discharges from all other aquifers, formations, or series is zero.

3.2. Modeled Available Groundwater in the District Based on the Desired Future Condition of the Aquifers

3.2.1. Trinity Aquifer (Hensell, Pearsall/Cow Creek/Hammett, Sligo, and Hosston Formations)

Modeled Available Groundwater (MAG) for the portion of the Trinity Aquifer within the District has been determined by the Texas Water Development Board to be 20,690 acre-feet per year (Appendix 10.5). The portions of the MAG for the following geological units are: Paluxy 231 acre per year, Glen Rose 265 acre-feet per year, Hensell (Upper Trinity) 4,190 acre-feet per year, and Hosston (Lower Trinity) 16,004 acre-feet per year.

3.2.2. Brazos River Alluvium Aquifer

Modeled Available Groundwater for the portion of the Brazos River Alluvium Aquifer within the District has been determined by the Texas Water Development Board to be 15,023 acre-feet per year (Appendix 10.6).

3.2.3. Woodbine Aquifer

Modeled Available Groundwater for the portion of the Woodbine Aquifer within the District is not relevant to the District for planning purposes.

3.3. Estimate of the Amount of Groundwater Being Used Within the District on an Annual Basis

Comprehensive groundwater production and consumption data for McLennan County have been accumulated and reported since February 2008 to the District. The District has worked each year since 2008 to improve the accuracy and completeness of the metering reports and amount of annual groundwater produced in the District. Appendix 10.8 contains records for production for the years 2010 through 2014. The production amounts for 2011 is estimated due to reporting problems during that year, and the years 2012 through 2014 rates are rated by the District as very accurate. Appendix 10.9 contains a report evaluating the amount of agricultural land that was irrigated in 2013 in the District (both surface water and groundwater) and was used to verify the amount of groundwater production reported to the District for agricultural use. Appendix 10.11 contains a table of the Estimated Historical Water Use prepared by the TWDB showing groundwater use in McLennan County for 2010 as 17,045 acre-feet and in 2011 as 23,225[1] acre-feet.

3.3.1. Trinity Aquifer (Paluxy, Glen Rose, Hensell, Pearsall/Cow Creek/Hammett, Sligo, and Hosston Formations)

The best available data regarding groundwater use from the Trinity Aquifer within the District comes from reports to the Southern Trinity Groundwater Conservation District in the year 2008 of the amount of groundwater pumped by non-exempt well owners. The District rules have required reporting the amount of groundwater produced from all non-exempt wells drilled into the Trinity Aquifer, in McLennan County. Exempt production from the Trinity Aquifer is estimated at 200 acre-feet per year. The total amount reported of groundwater pumpage from the well screened in the Trinity is 16,983, 16,154[2], 15,325, 13,836, and 12,410 acre-feet per year for 2010 through 2014, respectively (Appendix 10.8).

3.3.2. Brazos River Alluvium Aquifer

The amount of production reported for 2014 for permitted wells was 18 acre-feet. The total estimate of production including exempt wells is estimated to be 100 acre-feet per year for every year from 2010 through 2014.

3.3.3. Woodbine Aquifer

There are no known non-exempt wells located in the portion of the Woodbine Aquifer within the District. The exempt-use, if any, is likely less than 5 acre-feet per year.

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[1] The District estimates that the 2011 groundwater production was approximately 16,154 acre-feet per year. This estimate is consistent with the ongoing efforts of the District and water users to utilize more surface water.

[2] The District's water use records for 2011 were incomplete and the 2011 production value was estimated based on an average of 2010 and 2012 numbers.

3.3.4. All Other Aquifers and Geological Formations or Series

There is no estimate of the amount of groundwater being used within the District on an annual basis for any other aquifers or geological formations or series.

3.4. Estimate of the Annual Amount of Recharge, From Precipitation, To The Groundwater Resources Within The District

3.4.1. Trinity Aquifer (Paluxy, Glen Rose, Hensell, Pearsall/Cow Creek/Hammett, Sligo, and Hosston Formations)

There is no known recharge from precipitation to the Trinity Aquifer (Paluxy Aquifer, Glen Rose Formation, Hensell Aquifer, Pearsall/Cow Creek/Hammett/Sligo Formations and Hosston Aquifer) within the District.

3.4.2. Brazos River Alluvium Aquifer

Recharge from precipitation to the Brazos River Alluvium Aquifer is estimated to be 11,000 acre-feet per year within the District (Appendix 10.4).

3.4.3. Woodbine Aquifer

The estimate of annual recharge from precipitation to the Woodbine Aquifer within the District is 370 acre-feet (Appendix 10.2).

3.4.4. All Other Aquifers, Formations, or Series

There are no recharge estimates available from precipitation to all other aquifers, formations, or series within the District.

3.5. Estimate of the Annual Volume of Flow Into and Out of the District Within Each Aquifer, and Between Aquifers, In the District[3]

3.5.1. Trinity Aquifer

The estimated annual volume of flow into the District for the Trinity Aquifer is 12,514 acre-feet. The estimated annual volume of flow out of the District for the Trinity Aquifer is 1,251 acre-feet. The estimate of the annual volume of flow from overlying confining units to the Trinity Hensell Aquifer is 534 acre-feet (Appendix 10.2).

[3] All estimates of annual volumes of flow, except for the Brazos River Alluvium Aquifer, where obtained from Texas Water Development Board GAM Run 14-015 which is included in Appendix 10.2. Estimates of annual volumes of flow for the Brazos River Alluvium Aquifer where obtained from Technical Memorandum by Yelderman, 2008 of which a copy is included in Appendix 10.4 or through personal communication with Yelderman.

3.5.2. Brazos River Alluvium Aquifer

Estimated annual volume of flow into the District for the Brazos River Alluvium Aquifer is 340 acre-feet per year. Estimated annual volume of flow out of the District for the Brazos River Alluvium Aquifer is 360 acre-feet per year (Yelderman, 2008). The Brazos River Alluvium Aquifer is a water table aquifer and has no overlying aquifer. It is underlain in McLennan County by slowly permeable aquitards and therefore there is no measurable vertical inflow between the Brazos River Alluvium Aquifer and overlying or underlying units.

3.5.3. Woodbine Aquifer

The estimated annual volume of flow into the District for the Woodbine Aquifer is 223 acre-feet. The estimated annual volume of flow out of the District for the Woodbine Aquifer is 8 acre-feet. The estimate of the annual volume of flow between from the Washita and Fredericksburg series to the Woodbine Aquifer is 71 acre-feet (Appendix 10.2).

3.6. Estimate of the Projected Surface Water Supply Within the District According To the Most Recently Adopted 2012 State Water Plan

The projected surface water supply for McLennan County ranges from 80,690 acre-feet in 2010 to 81,451 acre-feet in 2060 (see Appendix 10.11).

3.7. Estimate of the Projected Total Demand for Water Within the District According to the 2012 State Water Plan

The 2012 State Water Plan lists the water demands within the District as 58,631 acre-feet in 2010 and increasing to 88,212 acre-feet in 2060 (Appendix 10.11).

4. Performance Standards and Management Objectives For Effecting the Plan

The District will prepare and present an annual report to the Board of Directors on the performance of the District in regards to achieving management goals and objectives. The Board will maintain the adopted report on file, for public inspection, at the District's offices. This methodology will apply to all management goals contained within this plan.

5. Actions, Procedures, Performance and Avoidance Necessary To Effectuate The Management Plan

The District's rules relating to permitting, well spacing, production limits, and transportation of groundwater outside of the District will be developed consistent with this plan and in consideration of the best technical data that are reasonable available regarding the groundwater resources within the District.

The District will seek cooperation with other agencies in the implementation of this plan and the management of groundwater supplies within the District. Activities of the District will be undertaken in cooperation and coordination with the appropriate state, regional or local water management entity.

5.1. Socioeconomic Impacts

The TWDB has prepared reports on the socioeconomic impacts of not meeting the water needs identified for each of the Regional Water Planning Groups for the 2011 Regional Water Plans as adopted in the 2012 State of Texas Water Plan. The District has evaluated the development of its DFCs in the context of the recommended water management strategies proposed in the 2011 Regional Water Plan.

5.2. Interests and Rights in Private Property

The District has considered the potential impact on private property, including the ownership and rights of landowners and their lessees and assigns in groundwater within the GMA as recognized under Texas Water Code Section 36.002.

5.3. Feasibility of Achieving the Desired Future Condition

The District monitors groundwater level conditions in aquifers within the District's boundaries, accurately obtains and measures the amount of groundwater production, and is currently meeting its "district averaged" desired future conditions

6. Evidence of Coordination and Adoption of Plan

6.1. Certified Copy of The District's Resolution Adopting The Plan

Appendix 10.13 contains a copy of the District resolution adopting this plan.

6.2. Evidence That The Plan Was Adopted After Notice and Hearing

Documentation demonstrating that the plan was adopted after appropriate public notice and hearing are located at Appendix 10.14 - Evidence of Notice and Hearing.

6.3. Coordination of Management Plan With Surface Water Management Entities

The District provided a draft of its proposed Management Plan to the surface water management entities within its boundaries and invited comments from those entities. Copies of the letters transmitting the draft are located in Appendix 10.15.

6.4. Copy of District's Current Rules

A hard copy of the District's current, existing rules are included at Appendix 10.12.

7. Consideration of State Water Plan Water Supply Needs and Water Management Strategies

7.1. Water Supply Needs

Appendix 10.11 contains a list the Water Supply Needs adopted in the 2012 State Water Plan for McLennan County showing a supply need (deficit) of 245 acre-feet per year in 2010 and 1,745 acre-feet per year in 2060.

7.2. Water Management Strategies

Appendix 10.11 contains a list the Project Water Management Strategies adopted in the 2012 State Water Plan for Region G lists 6 general water management strategies. All of these strategies were reviewed and considered in the development of this plan.

8. Management Goals

For each of the following management goals, except to the extent that a goal is not applicable or not cost-effective, the District has identified specific objectives and listed performance standards to assess the progress of those objectives. The Board will evaluate the District's progress for attaining its management goals by periodically reviewing the performance standards and possibly modifying the management plan.

8.1. Providing the Most Efficient Use of Groundwater

In order to meet this goal, the District has established the following Management Objectives:

1. The District will establish a District Aquifer Water Level Observation Well Program with one or more observation well located within the portions of the Trinity and Brazos River Alluvium aquifers within the District, and measure the depth to groundwater in each well or wells at least once annually.
2. The District will provide educational leadership to citizens within the District concerning efficient use of groundwater. The activity will be accomplished annually through at least one printed publication, such as a brochure, and one public presentation at service organizations and/or public schools.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standards:

1. Establish a District Aquifer Water Level Observation Well Program and its criteria, and begin measurements of the observation wells within one year following the adoption and approval of this plan.
2. Water levels at these observation well or wells will be measured a minimum of once annually.
3. The number of publications and speaking appearances by the District each year will be included in an annual report to the Board.

8.2. Controlling and Preventing Waste of Groundwater

In order to meet this goal, the District has established the following Management Objectives:

1. The District will provide educational leadership to citizens within the District identifying ways to minimize and avoid the waste of groundwater. This will be accomplished annually through at least one printed or on-line publication, such as a brochure, and one public presentation at service organizations and/or public schools.
2. The District will implement a Well Closure Program. The objective of the well closure program is to obtain the closure and plugging of derelict and abandoned wells in a manner that is consistent with state law, for the protection of the aquifers, the environment, and the public safety. The District will conduct a program to identify, inspect, categorize and cause abandoned and derelict wells to be closed and plugged.

In order to assess the progress of the objective listed above, the District has designated the following Performance Standard:

1. The number of publications and speaking appearances by the District each year will be included in the annual report to the Board.
2. When applicable, the annual funding for the District's Well Closure Program, and the number of wells closed and plugged as a result of the Well Closure Program will be included in the annual report to the Board.

8.3. Controlling and Preventing Subsidence

This management goal is not applicable to the District. Because subsidence is not likely to affect the District, the District has not established any Management Objectives or Performance Standards for this conservation goal. Subsidence is unlikely to occur in the District. The geologic formations in the District range in age from Cretaceous (sandstones, limestones and shales of the Hosston, Hensell, Paluxy and Woodbine formations) to Quaternary (floodplain deposits of the Brazos River Alluvium). The Cretaceous formations are generally consolidated to semi-consolidated, and have little potential for compaction and subsidence due to groundwater withdrawals. The Brazos River Alluvium is poorly consolidated, but generally too thin to experience measurable (if any) subsidence due to groundwater withdrawals.

8.4. Addressing Conjunctive Surface Water Management Issues

In order to meet this goal, the District has established the following Management Objective:

Each year the District will confer at least once with the Brazos River Authority (BRA) and the cities of Crawford, Mart, Robinson, and Waco on cooperative opportunities for conjunctive resource management.

In order to assess the progress of the objective listed above, the District has designated the following Performance Standard:

The number of conferences with the BRA and the cities of Crawford, Mart, Robinson and Waco on conjunctive resource management each year will be included in the annual report to the Board.

8.5. Addressing Natural Resource Issues that Impact the Use and Availability of Groundwater and Which are Impacted by the Use of Groundwater

In order to meet this goal, the District has established the following Management Objectives:

1. Each year the District will contact at least once with a representative of the Texas Railroad Commission (RRC) to confer on the impact of oil and gas production on groundwater availability and quality, as well as the impact of groundwater production on the production of oil and gas in the District.
2. Also, during each year the District will evaluate permit applications for new wells, if any are filed, and the information submitted by the applicants on those wells prior to drilling, in order to assess the impact of these wells on the groundwater resources in the District.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standards:

1. The number of conferences with a representative of the RRC each year will be included in an annual report to the Board.
2. Annual reports to the District's Board of Directors on the number of new well permit applications on file, the number of evaluations and the possible impacts of those new wells on the groundwater resources in the District.

8.6. Addressing Drought Conditions

In order to meet this goal, the District has established the following Management Objective:

The District will track rainfall records from nearby weather stations on an ongoing basis. This data will be compared to hydrographs in monitoring wells used by the District. Additionally, the District will monitor the updated Palmer Drought Severity Index (PDSI) and the information provided at the Texas Water Development Board's drought web page. The District staff will provide in its annual report in January the precipitation amounts, water levels and any apparent associated trends. Upon Board approval, the District's web site and/or local newspapers will disseminate information to the public.

In order to assess the progress of the objective listed above, the District has designated the following Performance Standards:

Report on precipitation amounts as compared to water levels within the District; and, manner and timing of distribution of precipitation and water level data to the public.

8.7. Addressing Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, and Brush Control, where Appropriate and Cost Effective

In order to meet this goal, the District has established the following Management Objective:

The District will provide educational leadership to citizens within the District concerning groundwater conservation, rainwater harvesting, and brush control. The educational efforts will be through at least one printed publication, such as a brochure, and at least one public speaking program at a service organization and/or public school. Each of the following topics will be addressed:

A. Conservation of groundwater

The District will provide educational leadership to citizens within the District concerning groundwater conservation,. The educational efforts will be through at least one printed publication, such as a brochure, annually and at least one public speaking program at a service organization and/or public school annually.

B. Rainwater Harvesting

The District will provide educational leadership to citizens within the District concerning, rainwater harvesting. The educational efforts will be through at least one printed publication, such as a brochure, annually and at least one public speaking program at a service organization and/or public school annually.

C. Brush Control

The District will provide educational leadership to citizens within the District concerning brush control. The educational efforts will be through at least one printed publication, such as a brochure, annually and at least one public speaking program at a service organization and/or public school annually.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standard:

The number of brochures issued and the number of public speaking programs regarding water conservation, rainwater harvesting, and brush control will be included in the annual report to the District's Board.

8.7.1. Recharge Enhancement

The District has opted to not include in this plan any management objectives related to recharge enhancement because the District does not consider these measures to be appropriate or cost effective for the District. Therefore, this goal is not applicable to the District at this time.

8.7.2. Precipitation Enhancement

The District has opted to not include in this plan any management objectives related to precipitation enhancement because the District does not consider these measures to be appropriate or cost effective for the District. Therefore, this goal is not applicable to the District at this time.

8.8. Addressing the Desired Future Condition of the Groundwater Resources in the District

Groundwater Management Area 8 has established Desired Future Conditions (DFCs) for all aquifers within the District. Pursuant to those DFCs, the Texas Water Development Board has established the Modeled Available Groundwater within the Southern Trinity Groundwater Conservation District for the Trinity and Brazos River Alluvium aquifers (Appendices 10.5 and 10.6).

8.8.1. Trinity Aquifer (Paluxy, Glen Rose, Hensell, Pearsall/Cow Creek/Hammett, Sligo, and Hosston Formations)

Currently there is no significant use of water from the Paluxy or Glen Rose formations in McLennan County. Groundwater wells in the Trinity Aquifer are completed in a variety of ways and may be open, perforated, or screened in both the Hensell and Hosston formations. Therefore, the District manages them as a single aquifer. The average DFC of these two formations is 508 feet of draw down per 50 years or 10.16 feet of draw down per year. The District will limit the total amount of groundwater produced or withdrawn from the portion of the Trinity Aquifer within the District as necessary to limit the draw down in such aquifer to less than 508 feet in the year 2050.

In order to meet this goal, the District has established the following Management Objective:

> The District will measure the water level in one or more wells open, perforated, or screened in the portion of the Paluxy, Glen Rose, Hensell and/or Hosston formations within the District and shall calculate the annual and cumulative draw down and provide such information to the District's Board of Directors.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standard:

> The District will provide an analysis report of the effects from pumping on groundwater levels, including the annual and cumulative draw down statistics, in the annual report to the District Board of Directors.

8.8.2. Woodbine Aquifer

The Woodbine Aquifer is a minor aquifer that extends only into a very small portion of the northernmost part of the McLennan County. The outcrop of the Woodbine occurs within the District boundaries but is covered by alluvium over much of its area. There is no or very little use of the groundwater in the portion of the Woodbine Aquifer within McLennan County and currently the District is not aware of any well that

is operational in the portion of the Woodbine Aquifer that is located within the District. The average DFC for the Woodbine formation is 61 feet of drawdown per 50 years or 0.8 feet of drawdown per year. The District will limit the total amount of the groundwater produced or withdrawn from the Woodbine Aquifer as necessary to meet the DFCs.

In order to meet this goal, the District has established the following Management Objective:

> The District will locate a well screened in the Woodbine Aquifer and will annually collect the water level in one or more wells open, perforated or screened in the Woodbine Aquifer, and shall calculate the annual and cumulative draw down and provide such information to the District's Board of Directors.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standard:

> The District will provide an analysis report of the effects from pumping on groundwater levels, including the annual and cumulative draw down statistics in the annual report to the District's Board of Directors.

8.8.3. Brazos River Alluvium Aquifer

The average DFC of the Brazos River Alluvium Aquifer is to maintain 82% of estimated saturated thickness after 50 years in McLennan County. The District will limit the total amount of groundwater produced or withdrawn from the portion of the Brazos River Alluvium Aquifer as necessary to meet the DFCs.

In order to meet this goal, the District has established the following Management Objective:

> The District will annually measure the water level in one or more wells open, perforated, or screened in the portion of the Brazos River Alluvium within the District and shall calculate the annual and cumulative draw down and provide such information to the District's Board of Directors.

In order to assess the progress of the objectives listed above, the District has designated the following Performance Standard:

> The District will provide an analysis report of the effects from pumping on groundwater levels, including the annual and cumulative draw down statistics, in the annual report to the District's Board of Directors.

9. References

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Yelderman, Joe, October, 2008, Personal Communications Regarding the Hydrology of the Portion of the Brazos River Alluvium Aquifer within McLennan County.

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 1

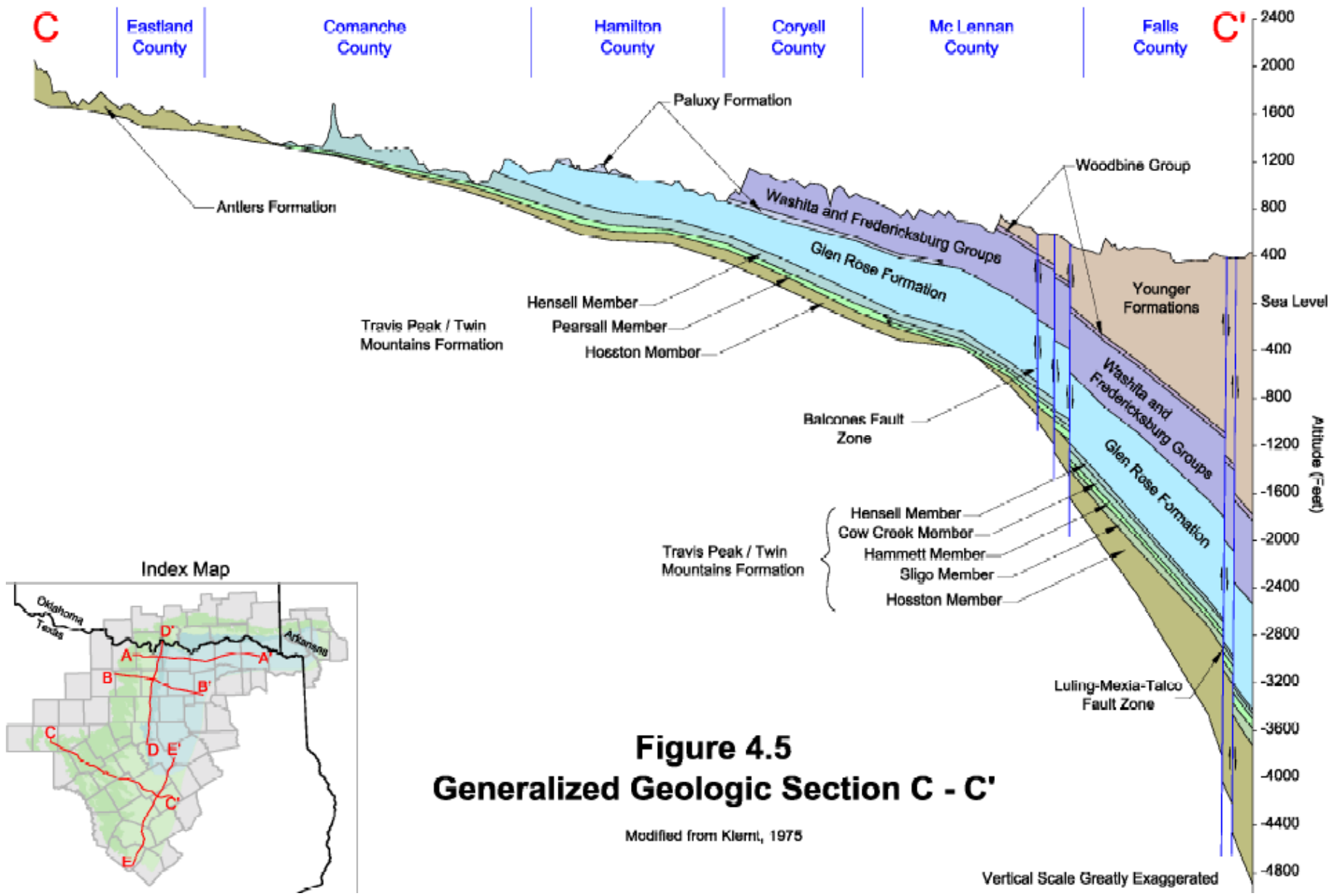

Figure 4.5
Generalized Geologic Section C - C'

Modified from Klemt, 1975

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 2

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

February 9, 2015

Mr. Scooter Radcliffe, General Manager
Southern Trinity Groundwater Conservation District
P.O. Box 2205
Waco, TX 76703

Re: Groundwater Availability Model Run 14-015 in support of the Southern Trinity Groundwater Conservation District Groundwater Management Plan

Dear Mr. Radcliffe:

Texas Water Code, Section 36.1071, Subsection (h), states that, in developing its groundwater management plan, a groundwater conservation district shall use groundwater availability modeling information provided by the Executive Administrator of the Texas Water Development Board (TWDB) in conjunction with any available site-specific information provided by the district for review and comment to the Executive Administrator before being used in the plan. Information for your groundwater management plan that was derived from groundwater availability model(s) in the attached report includes:

(1) the annual amount of recharge from precipitation, if any, to the groundwater resources within the district;
(2) for each aquifer within the district, the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams, and rivers; and
(3) the annual volume of flow into and out of the district within each aquifer and between aquifers in the district.

The attached groundwater availability model run (Part 2 of a two-part package of information from the TWDB to Southern Trinity Groundwater Conservation District) fulfills the requirements noted above. Part 1 of the two-part package is the Historical Water Use/State Water Plan data report. The District will receive this data report from the TWDB Groundwater Technical Assistance Section. Questions about the data report can be directed to Mr. Stephen Allen, Stephen.Allen@twdb.texas.gov, (512) 463-7317. This model run was conducted using the recently-released groundwater availability model (approved by the TWDB Executive Administrator on November 21, 2014) for the northern portion of the Trinity Aquifer and Woodbine Aquifer and replaces the results of GAM Run 14-003 submitted to the Southern Trinity Groundwater Conservation District in August 2014.

The groundwater management plan for Southern Trinity Groundwater Conservation District should be adopted by the district on or before April 8, 2015, and submitted to the Executive Administrator of the TWDB on or before May 8, 2015. The current management plan for the Southern Trinity Groundwater Conservation District expires on July 7, 2015.

If you have any further questions or concerns about the model run, please feel free to contact Mr. Radu Boghici at (512) 463-5808 or Radu.Boghici@twdb.texas.gov or Ms. Cindy Ridgeway at (512) 936-2386 or Cindy.Ridgeway@twdb.texas.gov.

Sincerely,

Kevin Patteson
Executive Administrator

KP/CR:gr
Attachment

c: Cindy Ridgeway, P.G., Manager, Groundwater Availability Modeling
Stephen Allen, P.G., Geoscientist, Groundwater Technical Assistance
Radu Boghici, P.G., Groundwater Modeler, Groundwater Availability Modeling

GAM Run 14-015: Southern Trinity Groundwater Conservation District Management Plan

by Radu Boghici, P.G. and Shirley C. Wade, Ph.D., P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5808
February 9, 2015

2/10/15

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GAM Run 14-015: Southern Trinity Groundwater Conservation District Management Plan

by Radu Boghici, P.G. and Shirley C. Wade, Ph.D., P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5808
February 9, 2015

EXECUTIVE SUMMARY:

Texas State Water Code, Section 36.1071, Subsection (h), states that, in developing its groundwater management plan, a groundwater conservation district shall use groundwater availability modeling information provided by the executive administrator of the Texas Water Development Board (TWDB) in conjunction with any available site-specific information provided by the district for review and comment to the executive administrator. Information derived from groundwater availability models that shall be included in the groundwater management plan includes:

- the annual amount of recharge from precipitation to the groundwater resources within the district, if any;
- for each aquifer within the district, the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams, and rivers; and
- the annual volume of flow into and out of the district within each aquifer and between aquifers in the district.

This report (Part 2 of a two-part package of information from the TWDB to Southern Trinity Groundwater Conservation District) fulfills the requirements noted above. Part 1 of the two-part package is the Estimated Historical Water Use/State Water Plan data report. The District will receive, or received, this data report from the TWDB Groundwater Technical Assistance Section. Questions about the data report can be directed to Mr. Stephen Allen, Stephen.Allen@twdb.texas.gov, (512) 463-7317.

The groundwater management plan for the Southern Trinity Groundwater Conservation District should be adopted by the District on or before April 8, 2015 and submitted to the executive administrator of the TWDB on or before May 8, 2015. The current management plan for the Southern Trinity Groundwater Conservation District expires on July 7, 2015.

This report discusses the methods, assumptions, and results from a model run using the recently adopted groundwater availability model (approved by the TWDB Executive Administrator on November 21, 2014) for the Trinity (northern portion) and Woodbine aquifers, version 2.01 (Kelley and others, 2014). This model run replaces the results of GAM Run 14-003 (Boghici, 2014) that used version 1.01 of the groundwater availability model for the Trinity (northern portion) and Woodbine aquifers (Bené and others, 2004). GAM Run 14-015 also meets current standards set after the release of GAM Run 08-69 (Oliver, 2008), which was provided to the District in 2008. Tables 1 and 2 summarize the groundwater availability model data required by statute to be included in the District's groundwater conservation management plan, and Figures 1 and 2 show the areas of the model from which the values in the tables were extracted. If after review of the figures, Southern Trinity Groundwater Conservation District determines that the District boundaries used in the assessment do not reflect current conditions, please notify the TWDB at your earliest convenience.

The Southern Trinity Groundwater Conservation District is also underlain by the Brazos River Alluvium Aquifer; however, a groundwater availability model for this minor aquifer is not available at this time. If the District would like information for the Brazos River Alluvium Aquifer, they may request it from the Groundwater Technical Assistance Section of the TWDB.

METHODS:

In accordance with the provisions of the Texas State Water Code, Section 36.1071, Subsection (h), the updated groundwater availability model for the northern portion of the Trinity Aquifer and Woodbine Aquifer (Kelley and others, 2014) was run for this analysis. Water budgets for the Southern Trinity Groundwater Conservation District were extracted for the historical model periods (1980-2012) using ZONEBUDGET Version 3.01 (Harbaugh, 2009). The average annual water budget values for recharge, surface water outflow, inflow to the District, outflow from the District, net inter-aquifer flow (upper), and net inter-aquifer flow (lower) for the portion of the aquifers located within the District are summarized in this report.

PARAMETERS AND ASSUMPTIONS:

Northern portion of the Trinity Aquifer and Woodbine Aquifer

- We used the updated groundwater availability model for the northern portion of the Trinity Aquifer and Woodbine Aquifer. See Kelley and others (2014) for assumptions and limitations of the updated groundwater availability model for the northern portion of the Trinity Aquifer and Woodbine Aquifer.

- The groundwater availability model includes eight layers, that generally correspond to:

    - the surficial outcrop area and the younger formations overlying the downdip portions of the Woodbine Aquifer and Washita and Fredericksburg groups (Layer 1),
    - the Woodbine Aquifer (Layer 2),
    - the Washita and Fredericksburg groups (Layer 3),
    - the Paluxy Aquifer (Layer 4),
    - the Glen Rose Formation (Layer 5),
    - the Hensell Sand (Layer 6),
    - the Pearsall Formation (Layer 7), and
    - The Hosston Formation (Layer 8).

- All model layers are present in the District. The Trinity Aquifer units (Layers 4 through 8) were combined collectively to calculate water budget values for the Trinity Aquifer.

- As described in Kelley and others (2014), the groundwater flow modeling program MODFLOW does not allow vertical flow through inactive cells. Therefore, where aquifers or formations represented by model Layers 2 through 7 do not exist under the surficial outcrop area of Layer 1, a 1-foot thickness was assigned to those layers to provide for vertical connection between layers.

- Groundwater in the Trinity Aquifer within Southern Trinity Groundwater Conservation District is generally fresh, with total dissolved solids concentrations ranging between 533 to 1,084 milligrams per liter (TWDB

Groundwater Database, 2014). There are no water quality data for Woodbine Aquifer within the District in the TWDB Groundwater Database (2014). In the neighboring Prairielands Groundwater Conservation District to the north, groundwater in the Woodbine Aquifer is fresh to brackish, with total dissolved solids concentrations ranging from 492 to 2,242 milligrams per liter (TWDB Groundwater Database, 2014).

- The model was run with MODFLOW-NWT (Niswonger and others, 2011).

RESULTS:

A groundwater budget summarizes the amount of water entering and leaving the aquifer according to the groundwater availability model. Selected groundwater budget components listed below were extracted from the model results for the aquifers located within the District and averaged over the duration of the calibration and verification portion of the model run in the District, as shown in Tables 1 and 2.

- Precipitation recharge—the areally-distributed recharge sourced from precipitation falling on the outcrop areas of the aquifers (where the aquifer is exposed at land surface) within the District.

- Surface water outflow—the total volume of water discharging from the aquifer (outflow) to surface water features such as streams, reservoirs, and drains (springs).

- Flow into and out of District—the lateral flow within the aquifer between the District and adjacent counties.

- Flow between aquifers—the net vertical flow between aquifers or confining units. This flow is controlled by the relative water levels in each aquifer or confining unit and aquifer properties of each aquifer or confining unit that define the amount of leakage that occurs. "Inflow" to an aquifer from an overlying or underlying aquifer will always equal the "Outflow" from the other aquifer.

The information needed for the Southern Trinity Groundwater Conservation District's management plan is summarized in Tables 1 and 2. It is important to note that sub-regional water budgets are approximate. This is due to the size of the model cells and the approach used to extract data from the model. To avoid double accounting, a model cell that straddles a political boundary, such as a district or county boundary, is assigned to one side of the boundary based on the location of the centroid of the model cell. For example, if a cell contains two counties, the cell is assigned to the

county where the centroid of the cell is located (Figures 1 and 2). Please note that the results of this model run are different from the results of the model run 14-003 that were obtained from the older groundwater availability model. The changes can be attributed to several characteristics of the new model, such as differences in model layering, geologic boundaries, hydraulic properties distribution, and the use of MODFLOW modeling packages.

TABLE 1: SUMMARIZED INFORMATION FOR THE WOODBINE AQUIFER THAT IS NEEDED FOR THE SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.

Management Plan requirement	*Aquifer or confining unit*	*Results*
Estimated annual amount of recharge from precipitation to the District	Woodbine Aquifer	370
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Woodbine Aquifer	1,370
Estimated annual volume of flow into the District within each aquifer in the District	Woodbine Aquifer	223
Estimated annual volume of flow out of the District within each aquifer in the District	Woodbine Aquifer	8
Estimated net annual volume of flow between each aquifer in the District	From overlying younger units into the Woodbine Aquifer	71
Estimated net annual volume of flow between each aquifer in the District	From Woodbine Aquifer into the underlying Fredericksburg and Washita groups	188

TABLE 2: SUMMARIZED INFORMATION FOR THE TRINITY AQUIFER THAT IS NEEDED FOR THE SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.

Management Plan requirement	*Aquifer or confining unit*	*Results*
Estimated annual amount of recharge from precipitation to the District	Trinity Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Trinity Aquifer	0
Estimated annual volume of flow into the District within each aquifer in the District	Trinity Aquifer	12,514
Estimated annual volume of flow out of the District within each aquifer in the District	Trinity Aquifer	1,251
Estimated net annual volume of flow between each aquifer in the District	From overlying Washita and Fredericksburg Confining Units into the Trinity Aquifer	534

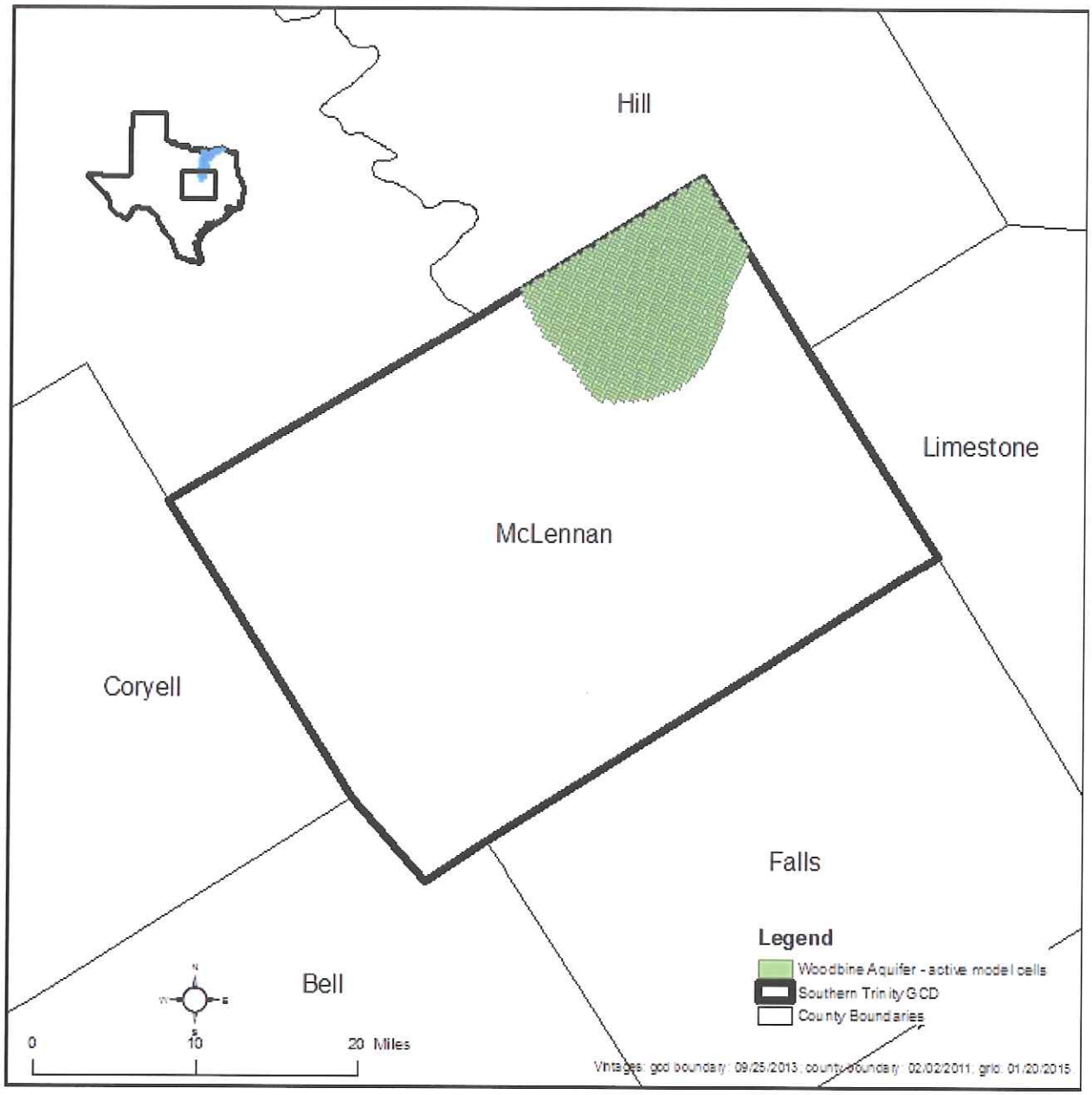

FIGURE 1: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE NORTHERN PORTION OF THE TRINITY AQUIFER AND WOODBINE AQUIFER FROM WHICH THE INFORMATION IN TABLE 1 WAS EXTRACTED (THE WOODBINE AQUIFER FOOTPRINT EXTENT WITHIN THE DISTRICT BOUNDARY).

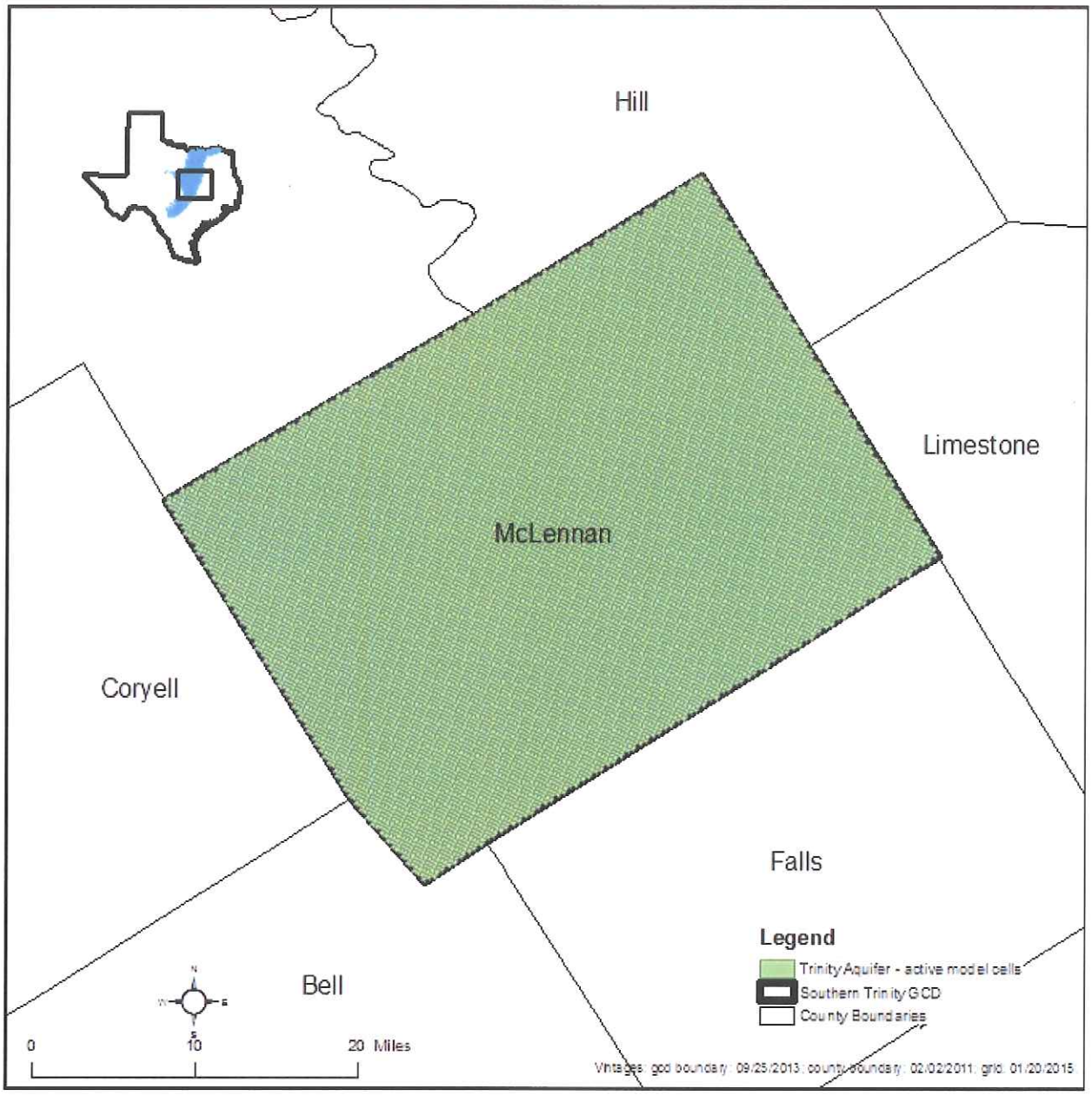

FIGURE 2: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE NORTHERN PORTION OF THE TRINITY AQUIFER AND WOODBINE AQUIFER FROM WHICH THE INFORMATION IN TABLE 2 WAS EXTRACTED (THE TRINITY AQUIFER FOOTPRINT EXTENT WITHIN THE DISTRICT BOUNDARY).

LIMITATIONS

The groundwater model used in completing this analysis is the best available scientific tool that can be used to meet the stated objectives. To the extent that this analysis will be used for planning purposes and/or regulatory purposes related to pumping in the past and into the future, it is important to recognize the assumptions and limitations associated with the use of the results. In reviewing the use of models in environmental regulatory decision making, the National Research Council (2007) noted:

> *"Models will always be constrained by computational limitations, assumptions, and knowledge gaps. They can best be viewed as tools to help inform decisions rather than as machines to generate truth or make decisions. Scientific advances will never make it possible to build a perfect model that accounts for every aspect of reality or to prove that a given model is correct in all respects for a particular regulatory application. These characteristics make evaluation of a regulatory model more complex than solely a comparison of measurement data with model results."*

A key aspect of using the groundwater model to evaluate historic groundwater flow conditions includes the assumptions about the location in the aquifer where historic pumping was placed. Understanding the amount and location of historic pumping is as important as evaluating the volume of groundwater flow into and out of the district, between aquifers within the district (as applicable), interactions with surface water (as applicable), recharge to the aquifer system (as applicable), and other metrics that describe the impacts of that pumping. In addition, assumptions regarding precipitation, recharge, and interaction with streams are specific to particular historic time periods.

Because the application of the groundwater models was designed to address regional scale questions, the results are most effective on a regional scale. The TWDB makes no warranties or representations related to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor groundwater pumping and overall conditions of the aquifer. Because of the limitations of the groundwater model and the assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine this analysis in the future given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future. Historic precipitation patterns also need to be placed in context as future climatic conditions, such as dry and wet year precipitation patterns, may differ and affect groundwater flow conditions.

REFERENCES:

Bené, J., Harden, B., O'Rourke, D., Donnelly, A., and Yelderman, J., 2004, Northern Trinity/Woodbine Groundwater Availability Model: contract report to the Texas Water Development Board by R.W. Harden and Associates, 391 p., http://www.twdb.texas.gov/groundwater/models/gam/trnt_n/TRNT_N_Model_Report.pdf.

Boghici, R., 2014, GAM Run 14-003: Texas Water Development Board, GAM Run 14-003 Management plan data for Southern Trinity GCD Report, 12 p., http://www.twdb.texas.gov/groundwater/docs/GAMruns/GR14-003.pdf.

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Kelley, V.A., Ewing. J., Jones, T.L., Young, S.C., Deeds, N., and Hamlin, S., 2014, Updated Groundwater Availability Model of the Northern Trinity and Woodbine Aquifers: contract report prepared for North Texas GCD, Northern Trinity GCD, Prairielands GCD, and Upper Trinity GCD by INTERA Incorporated, Bureau of Economic Geology, and LBG-Guyton Associates, 990 p., http://www.twdb.texas.gov/groundwater/models/gam/trnt_n/Final_NTGAM_Vol%20I%20Aug%202014_Report.pdf.

Niswonger, R.G., Panday, S., and Ibaraki, M., 2011, MODFLOW-NWT, a Newton formulation for MODFLOW-2005: USGS, Techniques and Methods 6-A37, 44 p.

National Research Council, 2007, Models in Environmental Regulatory Decision Making Committee on Models in the Regulatory Decision Process, National Academies Press, Washington D.C., 287 p., http://www.nap.edu/catalog.php?record_id=11972.

Oliver, Wade, 2008, GAM Run 08-69: Texas Water Development Board, GAM Run 08-69 Report, 6 p., http://www.twdb.texas.gov/groundwater/docs/GAMruns/GR08-69.pdf.

TWDB, 2014, Water Information, Integration, and Dissemination System, http://wiid.twdb.texas.gov/ queried on August 12, 2014.

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 3

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 17, 2008

Rodney Kroll, President
McLennan Groundwater Conservation District
4900 Sanger Avenue
Waco, Texas 76710

Re: Designation of the Central Texas Trinity Aquifer Priority Groundwater Management Area (PGMA); TCEQ Docket No. 2008-0099-MIS; SOAH Docket No. 582-08-1502

Dear Mr. Kroll:

The Texas Commission on Environmental Quality (TCEQ) designated the Central Texas Trinity Aquifer PGMA in Bosque, Coryell, Hill, McLennan, and Somervell counties and recommended a groundwater conservation district or districts be created. The TCEQ considered this matter at its public agenda in Austin on October 22, 2008, and the designation of the area became effective on October 31, 2008.

A copy of the TCEQ order designating the subject PGMA is being provided to you in accordance with Title 30 Texas Administrative Code, Section 294.43. Copies of the order have also been provided to the Texas AgriLife Extension Service requesting groundwater management educational programming in the PGMA, and to the commissioners courts of the affected counties notifying them of education responsibilities under Texas Water Code, Section 35.012(c).

If you have any questions about this matter please contact Mr. Kelly Mills of my staff at 512.239.4512 or kmills@tceq.state.tx.us.

Sincerely,

Todd Chenoweth, Director
Water Supply Division

TC/mlc

1 Enclosure/ TCEQ Docket 2008-0099-MIS; SOAH 582-08-15 designation order

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AN ORDER Designating the Central Texas - Trinity Aquifer - Priority Groundwater Management Area and Approving the Executive Director's Recommendations Regarding Groundwater Conservation Districts in the PGMA, TCEQ Docket No. 2008-0099-MIS; SOAH Docket No. 582-08-1502

On October 22, 2008, the Texas Commission on Environmental Quality (Commission or TCEQ) considered Executive Director's Petition for Designation of the Central Texas – Trinity Aquifer – Priority Groundwater Management Area (PGMA) and the Executive Director's recommendations for creation of Groundwater Conservation Districts (GCDs) in the PGMA. The Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH), presented a Proposal for Decision (PFD) which recommended that the Commission designate the Central Texas PGMA and approve the Executive Director's recommendations for creation of GCDs in the PGMA. After considering the ALJ's PFD, the Commission adopts the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

Procedural History

1. In 1990, the Executive Director (ED) wrote a report concerning critical area designation in McLennan, Coryell, Bosque, Hill, Somervell, Brown, Erath, Callahan, Falls, Hamilton, Eastland, Bell, Lampasas, Mills, Comanche, Limestone, and Milam Counties. The Texas Water Commission decided not to designate the area at that time, but determined that the area should be restudied in the future.

2. In 1998, the ED reinitiated the study and requested reports from the Texas Water Development Board (TWDB) and Texas Parks & Wildlife Department (TPWD). The TWDB and TPWD prepared reports and sent them to the ED in 1999.

3. On October 18, 2004, the Executive Director sent notice of the initiation of the study to approximately 532 stakeholders. These stakeholders included area legislators, planning entities, county officials, municipalities, river authorities, groundwater conservation districts, water districts, entities supplying public drinking water, agricultural interest groups, selected federal and state agencies, and environmental interest groups. Seven comments were received.

4. The Executive Director mailed notice of its draft report, "Updated Evaluation for the Central Texas – Trinity Aquifer – Priority Groundwater Management Study Area," (the report) to the same stakeholders. Three stakeholders provided written comment after this notice was given.

5. When the report was final, notice of the final report was sent to the same stakeholders and notice was placed in the *Texas Register*. A copy of the draft report was placed in the county clerk's offices in the proposed PGMA, libraries and public places in the 16-county study area, and all GCDs adjacent to or in the study area.

6. Notice of the hearing was mailed on February 8, 2008, to all the stakeholders, governing bodies of each county, adjacent GCDs, river authorities, municipalities, water authorities or other entities that supply public drinking water, including each holder of a CCN, and irrigation districts in the proposed PGMA.

7. Notice of the hearing was published in the following newspapers:

The Clifton Record, Bosque County, February 29, 2008
Bosque County News, Bosque County, February 22, 2008
Gatesville Messenger, Coryell County, February 27, 2008
The Copperas Cove Leader, Coryell County, February 22, 2008
The Mart Messenger, Coryell County, February 22, 2008
The Hillsboro Reporter, Hill County, February 25, 2008
Waco Tribune Herald, McLennan County, February 27, 2008

The Lonestar Iconoclast, McLennan County, February 22, 2008
The McGregor Mirror, McLennan County, February 26, 2008
The Glen Rose Reporter, Somervell County, February 26, 2008

8. The ALJ conducted a preliminary hearing and took jurisdiction of this matter on April 3, 2008 in Waco, Texas.

9. Hearing on the merits was held May 1, 2008, in Waco, Texas.

10. At the Evidentiary Hearing, parties were allowed to present evidence and cross examine the Executive Director's witnesses.

Designation of the Central Texas – Trinity Aquifer – PGMA

11. Water needs throughout the study area are primarily met with surface water. Despite that fact, almost constant quantities of groundwater are being used in the study area.

12. The Trinity Group aquifer is the only major aquifer in the study area.

13. The Trinity Aquifer supplies about 52.9 percent of the groundwater available in the study area.

14. The Trinity Aquifer provides all of the groundwater in Callahan, Comanche, Coryell, Eastland, Erath, Hamilton, Mills, and Somervell Counties.

15. The major portion of groundwater used in Bell, Brown, and Hill counties is from the Trinity Aquifer.

16. The Trinity Aquifer supplies water to Bosque and McLennan Counties.

17. The population of the study area will increase by approximately 32.5 percent from 2000 to 2030.

18. Bosque, Coryell, and Somervell Counties will experience an increase in population from 2000 to 2030 of more than 30% percent.

19. Major water level declines occur in areas of high groundwater usage in the study area.

20. Groundwater declines occur only in the confined portion of the Trinity aquifer and not in the outcrop or recharge zones. In the outcrop area the water levels fluctuate according to the amount of rainfall. Counties in the outcrop area are in the western part of the study area, and include Erath, Comanche, Lampasas, and Hamilton, Callahan, Brown, Eastland, and Mills counties

21. More groundwater is being withdrawn than is effectively recharged to aquifers in the Central Texas PGMA study area.

22. Historically, pumpage in the study area has exceeded effective recharge resulting in declining water levels, removal of water from aquifer storage, and possible deterioration of chemical quality.

23. The greatest groundwater level declines in the study area are from wells completed in the Trinity Aquifer Hosston Formation in the Waco metropolitan area in McLennan County with declines of over 400 feet. The Trinity Aquifer Hensell Formation has also recorded significant water-level declines with well over 200 feet of decline in Coryell County. Declines from 171 feet have been shown in Somervell County, and 337 feet in Bosque County.

24. The 2004 GAM Report for the Northern Trinity/Woodbine Aquifer indicates that the model runs predict future water-level drawdown and recovery in the study area. Up to 100 feet of drawdown is predicted to occur in Bosque, Falls, Limestone, and McLennan counties. Although the report indicates that artesian pressure could recover due to reduction in pumping, the predictive simulation very likely underestimated future pumping and future pumping would likely be at the same or greater levels.

25. The 2006 Region G Water Plan states that the present use of groundwater exceeds or is near the estimate of long-term reliable groundwater supply in many counties in the study area. The pumping in Bell, Bosque, Callahan, Coryell, Eastland, Erath, Falls, Hill, Lampasas, Limestone, McLennan and Somervell counties is at or above the estimated long term sustainable supply.

26. The 2007 State Water Plan (draft at the time of the report) illustrates that the most significant historical water-level declines in the state have occurred in the Trinity aquifer in the study area centered in McLennan County. Also, there are water level declines of between 50 and 250 feet from 1994 to 2004 in Bell, Bosque, Falls, Hill and McLennan counties

27. The "Assessment of Groundwater Use in the Northern Trinity Aquifer Due to Urban Growth and Barnett Shale Development" (the Barnett Shale report) was prepared because the TWDB was concerned about the effects of growth and gas exploration on groundwater resources in the area. These effects were not considered in the Region G Plan.

28. Bell County has a GCD, the Clearwater Underground Water Conservation District.

29. Falls and Limestone County do not anticipate new groundwater users or significant new demands on the Trinity Aquifer through the year 2030.

30. The Barnett Shale report finds that water use for the study area is likely to increase to 2.1 million acre feet of water by 2025; Barnett Shale use may rise from about 10,000 to about 25,000 acre feet per year; and groundwater modeling results suggest that water levels may decline from less than 10 to more than 150 feet.

31. Barnett Shale water use and demand projections could push Trinity aquifer use above the regional water plan estimates of sustainable supply for Bosque, Comanche, Erath, Hamilton, Hill, and Somervell counties.

32. There is no historical use of groundwater from Hamilton County for exploration or production in the Barnett Shale.

33. Erath and Comanche are already in confirmed GCDs.

34. Water quality has been impacted by long-term urbanization of the region and other activities such as confined animal feeding operations.

35. Groundwater use can decrease groundwater reserves, which impacts the springs, which in turn impacts species that rely on surface water. Long term decreases in groundwater can exacerbate water quality and impact these species.

36. Designation of the area as a PGMA could lead to more efficient use of existing water resources of the area.

37. Coryell, Hill, Bosque, McLennan, and Somervell Counties are experiencing or are expected to experience critical groundwater problems in the next 25 years.

38. The other eleven counties in the study area, except Eastland County, are not experiencing critical groundwater problems within the next 25 years.

39. Eastland County, which has experienced and may continue to experience water shortages for irrigation, does not appear to have any long term water level declines in the Trinity aquifer. This indicates that there has been no significant mining of the aquifer in Eastland County.

Groundwater Conservation District Recommendations

40. There are no federal or state agencies that have the authority to regulate groundwater in this area, and local governments cannot provide the type of groundwater regulation required to protect these resources.

41. GCDs are statutorily charged and authorized to manage groundwater resources within their jurisdiction. They have many powers, such as enacting rules requiring well permits, regulating spacing of wells, and regulating transfers of groundwater out of the districts.

42. GCDs must adopt management plans and join other districts in a Groundwater Management Area (GMA) in joint planning, including determining "desired future conditions" for the aquifers in the GMA.

43. Management through a GCD or GCDs would be the best management option for the five counties in the PGMA.

44. GCDs are the preferred method of groundwater management in the State.

45. The proposed PGMA could benefit from GCD monitoring, assessment, planning, and permitting programs as well as water well spacing and well closure programs for the Trinity Aquifer.

46. A GCD must generate revenue, usually though a property tax or from well production fees.

47. The feasibility of a GCD is dependent upon many factors, including the size and total tax base of the GCD, the quantity of water that is subject to production fees, and the scale and scope of the programs undertaken by the GCD.

48. Creation of a GCD or GCDs in the PGMA is feasible and practicable.

49. A minimum of about $250,000 in revenue must be generated annually to operate a single-county GCD and fund meaningful groundwater management programs.

50. Under Chapter 36 of the Texas Water Code, a GCD may not levy a tax at a rate exceeding 50 cents per $100 assessed valuation to pay for maintenance and operating expenses.

51. Within the proposed PGMA, only McLennan County could generate tax revenue to support a single-county GCD if the rate was less than $0.01 per $100 valuation.

52. Counties in the PGMA other than McLennan would require higher tax rates, but it is feasible to create a GCD with tax powers in those counties.

53. A multi-county GCD would be more economical, have the money to perform more regulatory functions, and would cover a larger area of the aquifer.

54. It is doubtful that any of the counties in the PGMA study area would be able to finance meaningful single-county GCD operation through well production fees alone.

55. Funding of a GCD by both property taxes and production fees is the best option for the PGMA counties.

56. One GCD in all five counties is the most feasible, economic, and practicable option for protection and management of the groundwater resources. This would also avoid duplication of administrative and groundwater management programs and would cover the largest area of the aquifer. Local committees could be established for localized input.

57. Two GCDs have already been created in the proposed PGMA by legislation. These two districts are the McLennan County GCD and the Tablerock GCD in Coryell County. The legislation for both GCDs requires that by September 1, 2011, both of the GCDs' boundaries must include one adjacent county, or the districts shall be dissolved by the TCEQ. Neither GCD has been confirmed as yet.

58. If both GCDs are confirmed and a county is added to both GCDs, two multi-county GCDs in the proposed PGMA would be the best option for the PGMA. One GCD would consist of Bosque, Somervell, and Coryell Counties, and the other would consist of McLennan and Hill Counties.

CONCLUSIONS OF LAW

Jurisdiction and Notice

1. Texas Water Code § 35.008(a) gives the Commission authority to designate a PGMA in the Central Texas Trinity Aquifer Area.

2. SOAH has jurisdiction over matters related to the hearing in this matter, including the authority to issue a proposal for decision with Findings of Fact and Conclusions of Law, under Tex. Gov't Code Chapter 2003; Tex. Water Code § 35.008.

3. SOAH obtained jurisdiction of this matter on April 3, 2008.

4. The Executive Director provided notice of the commencement of his PGMA study as required by Tex. Water Code § 35.007(c) and Tex. Admin. Code Chapter 294.

5. The Executive Director provided notice of this PGMA report as required by Tex. Water Code § 35.007(g) and Tex. Admin. Code Chapter 294.

6. The Executive Director provided notice of the evidentiary hearing as required by Tex. Water Code § 35.009 and Tex. Admin. Code Chapter 294.

Hearing

1. An evidentiary hearing concerning the creation of a PGMA was held in one of the counties in which the PGMA would be located as required by Tex. Water Code § 35.008(c).

2. The evidentiary hearing concerning creation of the PGMA complied with Tex. Water Code § 35.008.

PGMA Designation

1. The hearing on the petition to designate the Central Texas – Trinity Aquifer – PGMA was conducted in accordance with Water Code Chapter 35 and the Commission's and SOAH's applicable procedural rules.

2. Under Tex. Water Code § 35.007(a), PGMAs are those areas of the State that are experiencing or are expected to experience, within the immediately following 25-year period, critical groundwater problems, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies.

3. The five counties of Bosque, McLennan, Hill, Coryell, and Somervell are experiencing or are expected to experience, within the immediately following 25-year period, critical groundwater problems, including shortages of surface water or groundwater.

Creation of a District

1. Tex. Water Code § 35.008(b) and (g) require the TCEQ to consider and recommend whether one of more GCDs should be created over all or part of a PGMA, whether all or part of the land in the PGMA should be added to an existing district, or whether a combination of these actions should be taken.

2. Tex. Water Code § 35.008(b) requires the TCEQ to determine whether a GCD is feasible and practicable.

3. GCDs are the best management tool for the PGMA.

4. GCDs are feasible and practicable in the five-county PGMA.

5. If elections do not confirm McLennan County GCD and Tablerock GCD, the most practicable and feasible GCD option for the five-county PGMA is one GCD that covers all five counties.

6. Because two GCDs, McLennan County and Tablerock GCD, have been legislatively created in the PGMA, and both GCDs are required to add a county by September 1, 2011, and, if either or both GCDs add a county by September 1, 2011, and are confirmed by September 1, 2012, then the most feasible and practicable option for GCD creation is two GCDs. One GCD would consist of Bosque, Somervell, and Coryell Counties, and the other would consist of McLennan and Hill Counties.

7. The enabling legislation of the McLennan District and the Tablerock District allow those districts to have until September 1, 2012, to be confirmed at a confirmation election.

EXPLANATION OF CHANGES TO ALJ'S OCTOBER 24, 2005 ORDER

During its October 22, 2008, open meeting, the Commission adopted all but one of the revisions to the proposed Order recommended by the ALJ in his September 9, 2008 letter, as thereafter revised by the ALJ during his presentation during the October 22, 2008 meeting. The ALJ during his presentation read during the open meeting a revised Conclusion of Law No. 6, which he requested replace the version that he earlier recommended in his September 9, 2008 letter. By letter dated October 22, 2008, and distributed to all parties, the ALJ states how Conclusion of Law No. 6 was revised by the ALJ and read at the open meeting. However, while the ALJ recommended on page 5 of his September 9, 2008 letter the addition of proposed Conclusion of Law No. 9 as recommended by the Executive Director in his response to McLennan County Groundwater Conservation District's exceptions, the Commission did not adopt that recommendation and voted to deny the recommendation to add Conclusion of Law No. 9 to its order. Accordingly, this Order contains the revisions the ALJ recommended to Finding of Fact Nos. 27, 28, 41, 57, and 58, and to Conclusions of Law Nos. 3 and 6. It also contains new Conclusion of Law No. 7 as requested by McLennan GCD and recommended by the ALJ on page four of his September 9, 2008 letter.

The Commission also adopted the two minor revisions to Finding of Fact No. 1 and Finding of Fact No. 20 recommended by the Executive Director during the October 22, 2008 open meeting. Thus, revised Finding of Fact No. 1 in this Order includes a reference to Milam County along with the references to the other 16 counties that were included in the 1990 report, and the third sentence in Finding of Fact No. 20 is revised to refer to the western part of the study area and not to the eastern part of the study area as requested by the Executive Director. The Commission also determined to add a new Ordering Provision, which is Ordering Provision

No. 5 in this Order, which requires the Commission's Chief Clerk to forward a copy of this order to all persons on the mailing list for this matter.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY THAT:

1. The Central Texas – Trinity Aquifer – PGMA be created to cover Bosque, McLennan, Coryell, Hill, and Somervell Counties.

2. All other motions, requests for entry of specific findings of fact or conclusions of law and any other requests for general or specific relief not expressly granted herein are hereby DENIED for want of merit.

3. The effective date of this Order is the date the Order is final as provided by Tex. Gov't Code § 2001.144.

4. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.

5. The Chief Clerk of the Texas Commission on Environmental Quality shall forward a copy of this order to all persons on the mailing list for this matter.

Issue Date: OCT 31 2008

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Buddy Garcia

Buddy Garcia, Chairman

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 4

The Brazos River Alluvium Aquifer Flow System in McLennan County, Texas

Technical Memo
11-1-08

by
Joe C. Yelderman Jr.

Baylor University
Department of Geology
Waco, Texas

The Brazos River Alluvium Aquifer Flow System in McLennan County, Texas

Introduction

The Brazos River alluvium is composed of interbedded sediments ranging in size from clays to gravels. These sediments were deposited by the Brazos River and occur both in the modern floodplain and in terraces. The lower (younger) terraces in some locations are laterally contiguous with the modern floodplain and hydrologically connected but in other locations they are separated topographically by underlying bedrock formations that are less permeable. In some places the Brazos River sediments have been reworked by tributary streams and redeposited in the floodplain or terraces along with the local tributary deposits. These processes have formed a sediment package with interfingering laterally and multiple fining-upward sequences vertically. The result is a complex geological framework for an unconfined aquifer that has significant lateral and vertical heterogeneity. Because these alluvial sediments occur immediately adjacent to the present Brazos River channel, a hydrologic connection between groundwater and surface water appears obvious. Groundwater levels are known to fluctuate in response to river levels indicating a fairly direct connection (Cronin and Wilson,1967; Pinkus,1987). However, the flow directions are less obvious to the casual observer and because of the system heterogeneity, recharge and discharge volumes are difficult to quantify. This technical memo describes the flow system for the Brazos River Alluvium Aquifer in McLennan County and estimates the annual recharge and discharge volumes.

Flow System Description

A flow system is the groundwater flow in a portion of an aquifer that occurs from recharge area to point of discharge. The description of a flow system includes the area (or location) of groundwater recharge, the direction of groundwater flow and the area (or location) of groundwater discharge. In most cases it includes the sources of the recharge and the methods of discharge. These characteristics specific to the Brazos River Alluvium Aquifer in McLennan County are described below.

Flow Directions

The groundwater in the Brazos River Alluvium Aquifer in McLennan County flows toward the Brazos River with few exceptions (Cronin and Wilson, 1967; Harlan, 1990; Pinkus, 1987; Turco and others, 2007). In the floodplain the flow is predominately

toward the Brazos River and slightly down-valley. However, in the terraces, tributaries may influence the groundwater flow and locally deflect flow toward the tributary channel (Harlan, 1985). Pumping, especially high-volume pumping such as dewatering efforts by local surface mining may temporarily modify local flow directions. Mine reclamation and landfill activities may permanently modify local flow directions.

Recharge Areas

Recharge occurs over the entire alluvium surface although recharge is greater in areas with sandier soils than where clay soils occur. Open pits from surface mining or other activities may allow more direct recharge and act as point-source recharge areas. Lateral flow occurs from adjacent bedrock formations on the outer edges of the alluvium. The Brazos River Alluvium Aquifer in McLennan County receives some lateral flow from the contiguous alluvial deposits in Hill County.

Recharge Sources

Recharge occurs primarily from precipitation, which is almost exclusively rainfall in McLennan County. However, additional sources of recharge occur in the form of infiltration as a result of flood water inundation, lateral flow from adjacent formations, vertical flow from underlying formations, infiltration from losing streams, leaky pipes and tanks containing water from outside sources, leach field infiltration from on-site wastewater treatment if the water came from an outside source and infiltration from irrigation applications which originated from surface water or another aquifer other than the Brazos River Alluvium Aquifer.

Floodwater inundation is infrequent and is probably not significant over a long period. However, it could be important for the season or year in which it occurs.

The bedrock formations that abut the alluvium are not considered aquifers but could contribute some lateral flow. This lateral flow may be locally important if the adjacent geologic unit is a fairly large terrace with substantial amounts of sand or gravel.

The bedrock formations underneath the alluvium are not considered aquifers and the head in the alluvium is generally thought to be higher than the head in these underlying formations. Therefore, the vertical flow would be downward rather than upward and these underlying units probably would not contribute water to the alluvium aquifer in McLennan County.

There are a few losing streams within the Brazos River Alluvium Aquifer in McLennan County and they are localized in area. Therefore, they probably contribute only a small portion of the total recharge (Cronin and Wilson, 1967).

Leaky pipes and tanks are not considered a significant source of recharge but there are few data available to quantify their contribution.

The amount of leachfield infiltration is unknown but leachfields are designed to have a significant amount of evapotranspiration and probably do not contribute a significant amount to the total volume of recharge to the Brazos River Alluvium Aquifer in McLennan County at this time.

There is some lawn irrigation from municipal water supplies and some turf grass irrigation directly from the Brazos River but most agricultural irrigation water in the past originated from the Brazos River Alluvium Aquifer and did not contribute significantly to the overall recharge volume.

Recharge to the Brazos River Alluvium Aquifer in McLennan County also occurs as lateral flow downgradient within the alluvium from Hill County.

Discharge Areas

Discharge in McLennan County occurs as seeps and springs along the Brazos River and in some cases as seeps and springs along tributaries. Point source discharge occurs at pumping wells and open pits which intersect the water table. The down-valley flow component of the Brazos River Alluvium Aquifer results in groundwater flow out of McLennan County to alluvial deposits in Falls County

Discharge Sources

Discharge occurs primarily as seeps and springs into the Brazos River and tributaries. However, additional sources of discharge in McLennan County include pumping wells, open pits that are being dewatered, evapotranspiration from surface water bodies, wetland areas that intersect the water table and down-valley flow from McLennan County to Falls County. The majority of the discharge is thought to occur as seeps and springs to the Brazos River.

Annual Recharge Volumes

Methods

The estimate of recharge to the Brazos River Alluvium Aquifer in McLennan County calculated in this memo focused on the recharge from precipitation and considered the other potential sources of recharge to be either insignificant in volume or impractical to calculate accurately. Using GIS and published maps for the Brazos River Alluvium in McLennan County, Bruce Byars from the Center for Spatial Research at Baylor University calculated there were 62,442 acres of Brazos River Alluvium exposed on the surface and available for recharge in McLennan County. Cronin and Wilson (1967) estimated the annual recharge for Falls County was 2.1 inches (.175 feet). Since Falls County and McLennan County are adjacent to each other and their climates are similar, the annual recharge for Falls County was used for McLennan County and Multiplied by the alluvium outcrop area (.175 feet/year * 62,442 acres).

The down-valley flow was calculated using Darcy's Law ($Q=KIA$; where Q = the volumetric flow rate, K = hydraulic conductivity, I = water table gradient, and A = the cross sectional area perpendicular to the discharge flow direction)

Results

The recharge depth times the recharge area resulted in 10,927 acre-feet/year, but other recharge sources may contribute additional recharge. It is also probable that some of the area mapped as alluvium is covered with impermeable surfaces such as streets and roof tops that would deflect potential recharge precipitation to runoff. Therefore a reasonable estimate of the annual recharge to the Brazos River Alluvium Aquifer in McLennan County is approximately11,000 acre-feet.

Annual Discharge Volumes

Methods

The estimate of discharge from the Brazos River Alluvium Aquifer in McLennan County calculated in this memo focused on the discharge from seeps and springs into the Brazos River and considered the other potential sources of discharge to be either insignificant in volume or impractical to calculate accurately. Using GIS and published maps for the Brazos River in McLennan County, Bruce Byars from the Center for Spatial Research at Baylor University calculated there were 21.46 miles of river in McLennan County. I used two methods to calculate discharge and then estimated the amount to be something in between the two calculations. The first method was a version of Darcy's law and the second was based on seepage meters measured by Harlan (1990).

Darcy's law (Q=KIA; where Q = the volumetric flow rate, K = hydraulic conductivity, I = water table gradient, and A = the cross sectional area perpendicular to the discharge flow direction) was used to calculate the volumetric flow rate per day (Q = ft^3/day, K = ft/day, I = ft/ft and A = ft^2) and then the result was multiplied by 365 days per year to get the annual discharge in ft^3/year. The volume of annual discharge was then converted from ft^3/year to acre-feet/year for comparison with other volumes used in groundwater management.

Harlan (1990) placed seepage meters in several areas of the Brazos River and measured the seepage rate in ft^3/sec. Each seepage meter was 2.62 ft^2 in area. I estimated the seepage area for each side of the river to be approximately 10 feet since most seepage into lakes and rivers occurs along the edges.

Results

Darcy's law: Cronin and Wilson (1967) reported K values from 4.72×10^{-8} cm/sec to 8.49×10^{-2} cm/sec. I used a mid-range value of 3×10^{-4} ft/sec (9461 ft/yr). Harlan reported gradients in the floodplain from 10 to 14.5 feet/mile. I used the mid-range value of 12 feet/mile or .00227 ft/ft. The area was calculated using 113,332 feet of linear river in McLennan County multiplied by an average of 20 feet of saturated section for a cross-sectional area of 2,266,640 ft^2 and this was multiplied by the 2 sides of the river resulting in 4,533,280 ft^2. The area (ft^2) was then multiplied by the hydraulic conductivity, K (ft/year) and the gradient (12 feet/5280 feet) to get ft^3/year. The volumetric rate in ft^3/year was then multiplied by .0000229568 acre-feet/ft^3 and the result is 2237 acre-feet/year of discharge.

Seepage meters: Using the linear river footage of 113332 feet multiplied by the 10 feet of seepage area times 2 for each side of the river and then dividing by the 2.62 ft^2 for each seepage meter resulted in 865,130 seepage meters. The rate of seepage was determined by Harlan (1990) to be 152.5 ft^3/year for each seepage meter (or each 2.62ft^2). Therefore the discharge along the Brazos River in McLennan County would be 865,130 times 152.5 ft^3/year resulting in 131,932,325 ft^3/year. When converted to acre-feet/year the result is a discharge volume of 3028 acre-feet/year.

The results from the two methods described above are on the same order of magnitude and indicate that seeps and springs from the Brazos River Alluvium Aquifer probably contribute about 2500 acre-feet/year to the Brazos River.

Discussion

The data available for these calculations are limited in space and time. Much more research needs to be conducted specific to the area of McLennan County in order to develop better data. The difference between the recharge and discharge volumes indicates that either the calculations are incorrect due to inaccurate data or there are additional sources of discharge that were not considered in this approach. Increased urbanization continues to change the recharge and discharge of the Brazos River Alluvium Aquifer in McLennan County and should probably be monitored in order to accurately assess any changes.

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Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 5

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Appendix 6

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Appendix 7 - Reserved

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Appendix 8

Appendix 10 – 8

Southern Trinity Groundwater Conservation District

Groundwater Use 2010-2014

Annual Groundwater Production Estimates by Aquifer and Aquifer Formation					
	2010	2011	2012	2013	2014
	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft
Brazos River Alluvium	100	100	100	100	100
Trinity Hensell (22.6% of Trinity Total)	3,666	3,732	3,332	3,122	2,800
Trinity Hosston (77.4% of Trinity Total)	12,554	12,782	11,413	10,690	9,591
Trinity Total	16,219	16,514	14,745	13,812	12,391
Woodbine	0	0	0	0	0
Other	55	56	50	50	50
Total All Aquifers	16,374	16,670	15,859	13,936	12,514

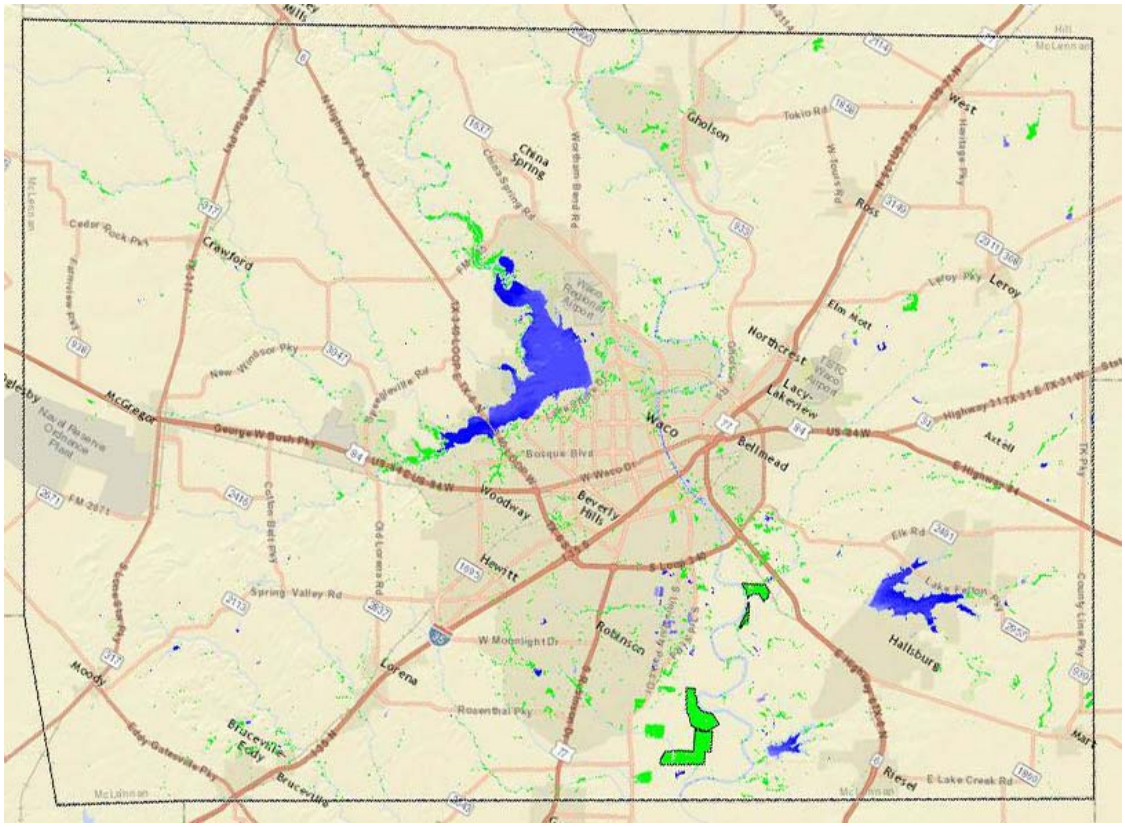
Annual Groundwater Production in STGCD (acre-feet per year)				
Name	2012	2013	2014	Permitted
City of West	184	95	140	487
City of Robinson	1,469	1331	1,077	1,418
City of Woodway	1,748	1272	1,186	2,038
City of Hewitt	2,379	1345	994	1,441
City of Waco	210	515	345	887
Bold Springs WSC	197	202	190	238
Elm Creek WSC	158	163	152	225
City of Bruceville-Eddy	501	378	323	347
City of Moody	9	6	2	62
City of Lorena	56	143	170	583
City of McGregor	228	286	229	430
Spring Valley WSC	90	39	27	124
Aqua Texas, Inc	373	422	250	256
Pure WSC	320	37	50	84
Ross WSC	314	309	274	337
Menlow WSC	23	29	30	57
Axtell WSC	181	183	158	210
Sanderson Farms, Inc.	1,162	1121	1,182	1,203
Windsor Water Company	85	91	76	131
East Crawford WSC	294	252	222	230
Cargill Meat Solutions	387	421	467	558
City of Bellmead	1,262	1228	1,036	1,477
Cross Country WSC	438	404	364	523
Chalk Bluff WSC	389	404	341	401
Gholson Water Supply Corporation	183	202	218	270
Levi Water Supply Corporation	226	207	221	330
Hilltop WSC	96	96	58	105
South Bosque WSC	10	12	9	18
McLennan County WCID No. 2	190	218	228	259
EOL Water Supply Corporation	218	183	161	215
City of Crawford	161	145	115	140
Patrick Water Supply Corporation	36	37	38	53
Bosque Basin WSC	21	9	29	43
Cottonwood WSC	42	47	37	66
U.S. Army Corps of Engineers	0	0	0	11
CS Community WSC	27	22	26	55
Cedar Ridge Deep Well Water System	16	16	15	16
H & H WSC	136	158	140	213
M.S. Water Supply Corporation	53	63	60	72
City of Riesel, Texas	133	105	156	242
West Brazos WSC	174	156	95	112
Aqua Texas, Inc	291	307	243	256
Aqua Texas, Inc	171	196	190	256
Prairie Hill WSC	192	208	193	210
Leroy-Tours-Gerald W S C	146	159	137	167
Moore Water System	12	3	18	20
North Bosque WSC	407	325	373	576
Texas AgriLife Research Center	19	13	18	44
City of Mart	97	41	125	183
Texas State Technical College	0	0	0	21
Hog Creek WSC	16	8	2	82
Camp Hope	1	1	1	1
Dannis E. Russell	4	12	17	20
Heritage Ministries	24	11	6	31
Estimated Exempt Use (Trinity - Hosston)	100	100	100	NA
Estimated Exempt Use (Trinity - Hensell)	100	100	100	NA
Estimated Exempt Use (Brazos River Alluvium)	100	100	100	NA
Totals Total All Aquifers	**15,859**	**13,936**	**12,514**	**17,834**

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 9

Estimate of Agricultural Irrigation Water Use in McLennan County, Texas during 2013 Using LANDSAT 8 NDVI Images



Prepared for the

Southern Trinity Groundwater

Conservation District

December 23, 2014

A.W. Blair, P.E. Ph.D.
AW Blair Engineering
Austin, Texas

STATE OF TEXAS
ALLIE W. BLAIR
63707
REGISTERED
PROFESSIONAL ENGINEER

1. Introduction and Summary

As requested by the Southern Trinity Groundwater Conservation District (the District) this report was prepared in accordance with generally recognized engineering principles, practice, and methods and documents the estimated amount of groundwater and surface water used for agricultural irrigation in 2013 in McLennan County. The District has permitted and metered all non-exempt wells in McLennan County. Only three permits have been issued for agricultural irrigation use and currently one of the three permits is not active.

The estimated 2013 agricultural water use was 3,511 acre-feet from surface water sources to irrigate 2,341 acres of land and 123 acre-feet from groundwater sources. The total amount of land that is irrigable in McLennan County was estimated by the County Agricultural Agent as 4,180 acres. The amount of commercial agricultural land irrigated estimated by the District to be irrigated using groundwater is 20 acres with the remaining 4,160 acres using surface water.

2. 2013 Rainfall and Temperature Data, and LANDSAT 8 Images

In August of 2013McLennan County had a very limited amount of rainfall (0.22 inches) and high temperatures (104F Maximum and 97F Average Maximum for Month). The largest rain event was 0.14 inches which occurred on August 22, 2013. Because of the low rainfall and high temperatures during this month, any irrigated crops can be determined separate from rain feed agricultural fields by analyzing multi-spectral images of McLennan County.

LANDSAT 8 multi-spectral images are available to the public via USGS Earth Explorer web site. These images are taken on a continuous basis with repeating coverable approximately every 10 to 16 days. The image must be free of clouds to be used for vegetation analysis.

3. NDVI Calculations

The Normalized Difference Vegetation Index (NDVI) was calculated from the LANDSAT 8 Red and Near Infra-Red Bands for the August 30, 2013 image. The NDVI values range from -1.0 to 1.0 with typical values for water surface being less than 0.0 and bare soil being equal to or slightly greater than 0.0, and healthy vegetation having values of greater than 0.30. The exact NDVI values are specific to the unique characteristics of the images used, the time of year and recent climatic events (rainfall, cold weather, drought). For the August 30, 2013 LANDSAT 8 images of fields in McLennan County with an NDVI value of greater than 0.40 were likely irrigated land and fields with a NDVI value greater than 0.50 were very likely

irrigated land. These NDVI values were also compared against known irrigated land (golf courses and athletic fields) which all had NDVI values greater than 0.40.

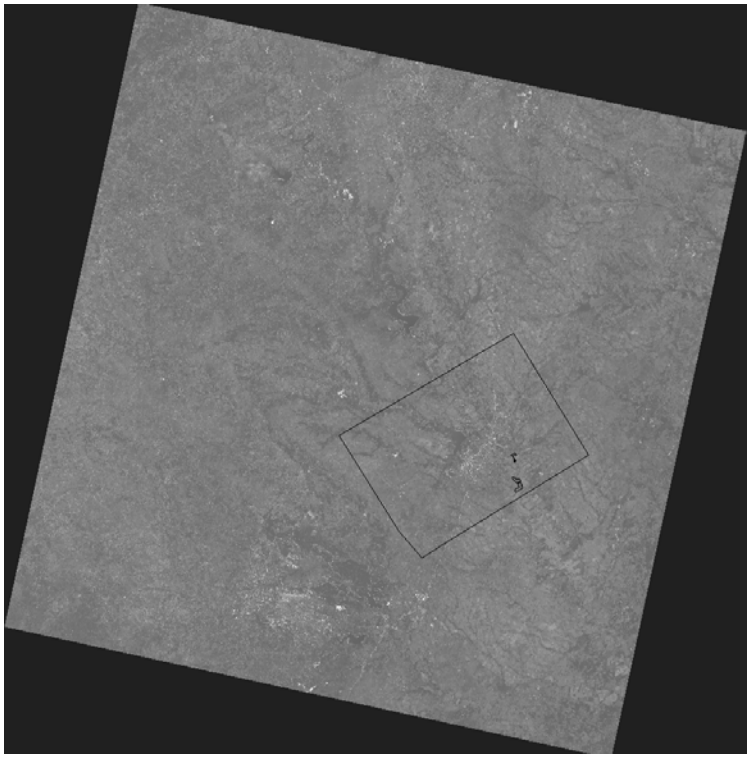


Figure 1 – August 30, 2013 LANDSAT 8 Panchromatic (Gray Scale) Image Covering McLennan County

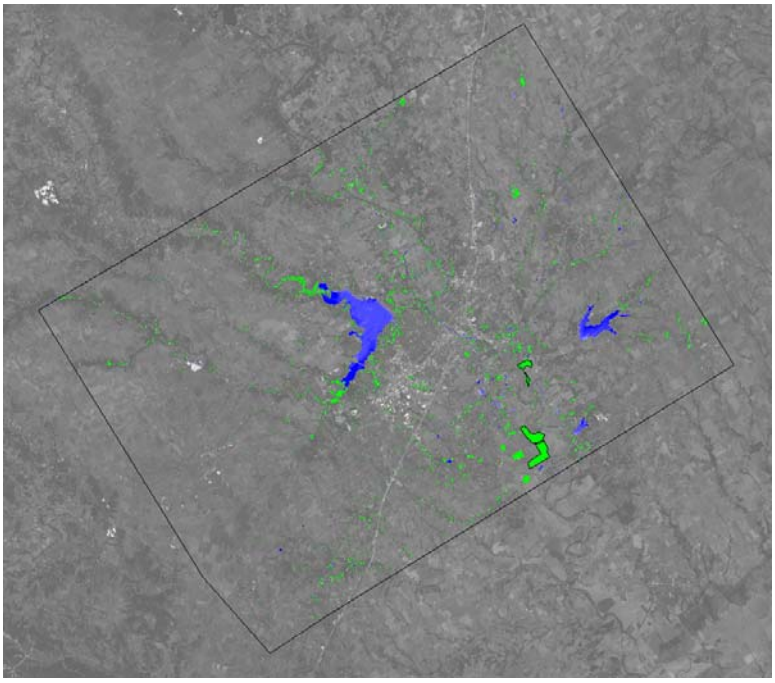


Figure 2 – August 30, 2013 LANDSAT 8 NDVI Overlay on Panchromatic Image

4. Estimate of Irrigated Land, Water Source, and Amount of Water Use

The estimate of agricultural land being commercially irrigated in August 2013 in McLennan County was 2,341 acres of which 1,618 acres had an NDVI value of greater than 0.50 and the remaining 723 acres had an NDVI of between 0.40 and 0.50. All 2,341 acres appear to have been irrigated using surface water pumped from the Brazos River or surface water reservoirs. Figure 3 shows that the majority of this land is located in the eastern central area of McLennan County. The primary crop grown on this irrigated land in 2013 was corn and the estimate amount of water pumped was 1.5 acres-feet per acre or 3,511 acre feet. The TCEQ Surface Water User reports for 2013 for McLennan County show 3,320 acre-feet of report pumping from surface water sources.

The reported groundwater use from permitted wells for agricultural irrigation in McLennan County for 2013 was 23 acre-feet. This are only two agricultural irrigation use permit in the District that were active during 2013. The District has a significant amount of exempt wells (wells not permitted) that pump both Trinity and Alluvium aquifer groundwater for irrigation of small domestic gardens, orchards, or pasture. The rough estimate of the amount of groundwater pumped for these uses is approximately 100 acre-feet.

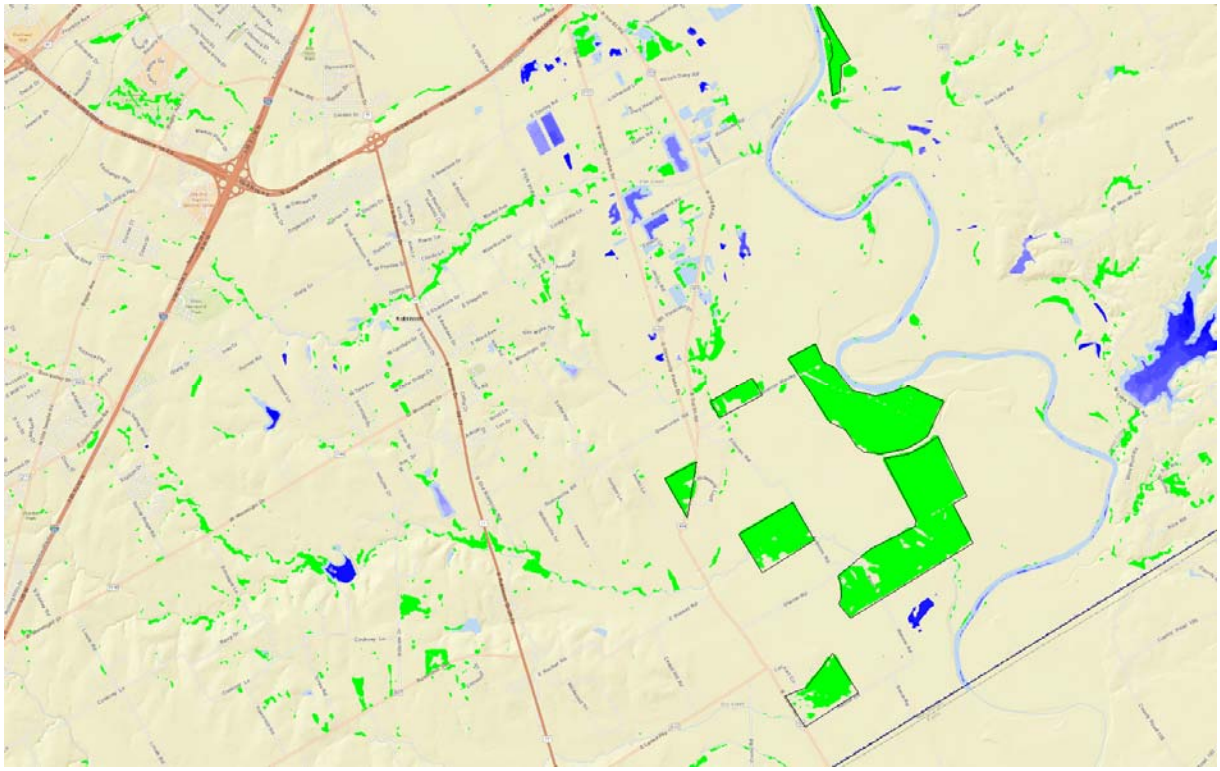


Figure 3 – August 30, 2013 LANDSAT 8 NDVI Overlay Showing Location of the Majority of Irrigated Fields in McLennan County

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 10

Historical Conservation Efforts

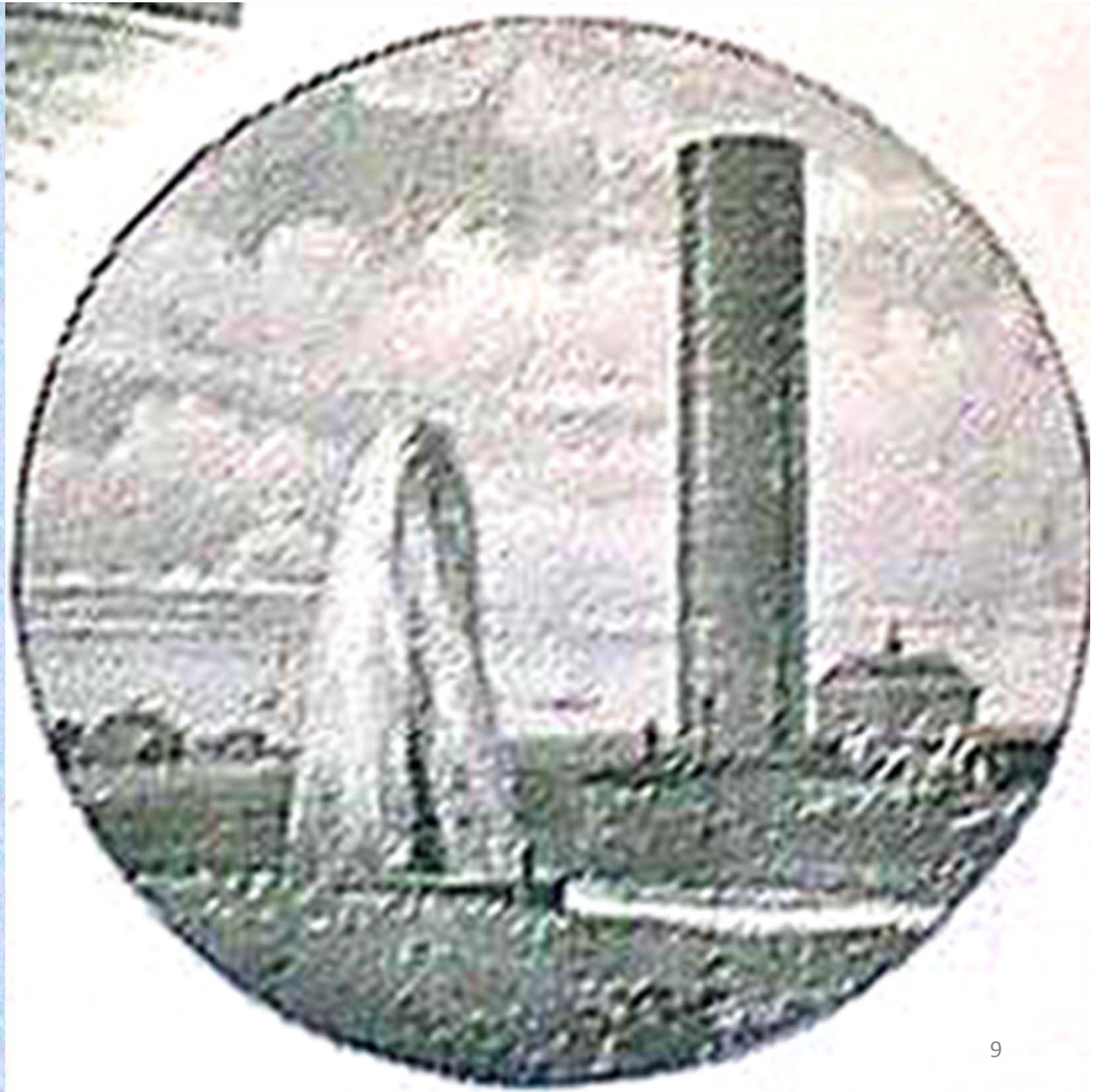
Hill, R.T. et al (1901)

TWENTY-FIRST ANNUAL REPORT OF THE UNITED STATES GEOLOGICAL SURVEY PART VII-TEXAS GEOGRAPHY AND GEOLOGY OF THE BLACK AND GRAND PRAIRIES, TEXAS

Sundstrom et al (1945)

Public Water Supplies in Eastern Texas Vol. II USGS and Texas State Board of Water Engineers

- 1889: First artesian well in McLennan County
- 1894: Some wells had stopped flowing at the surface

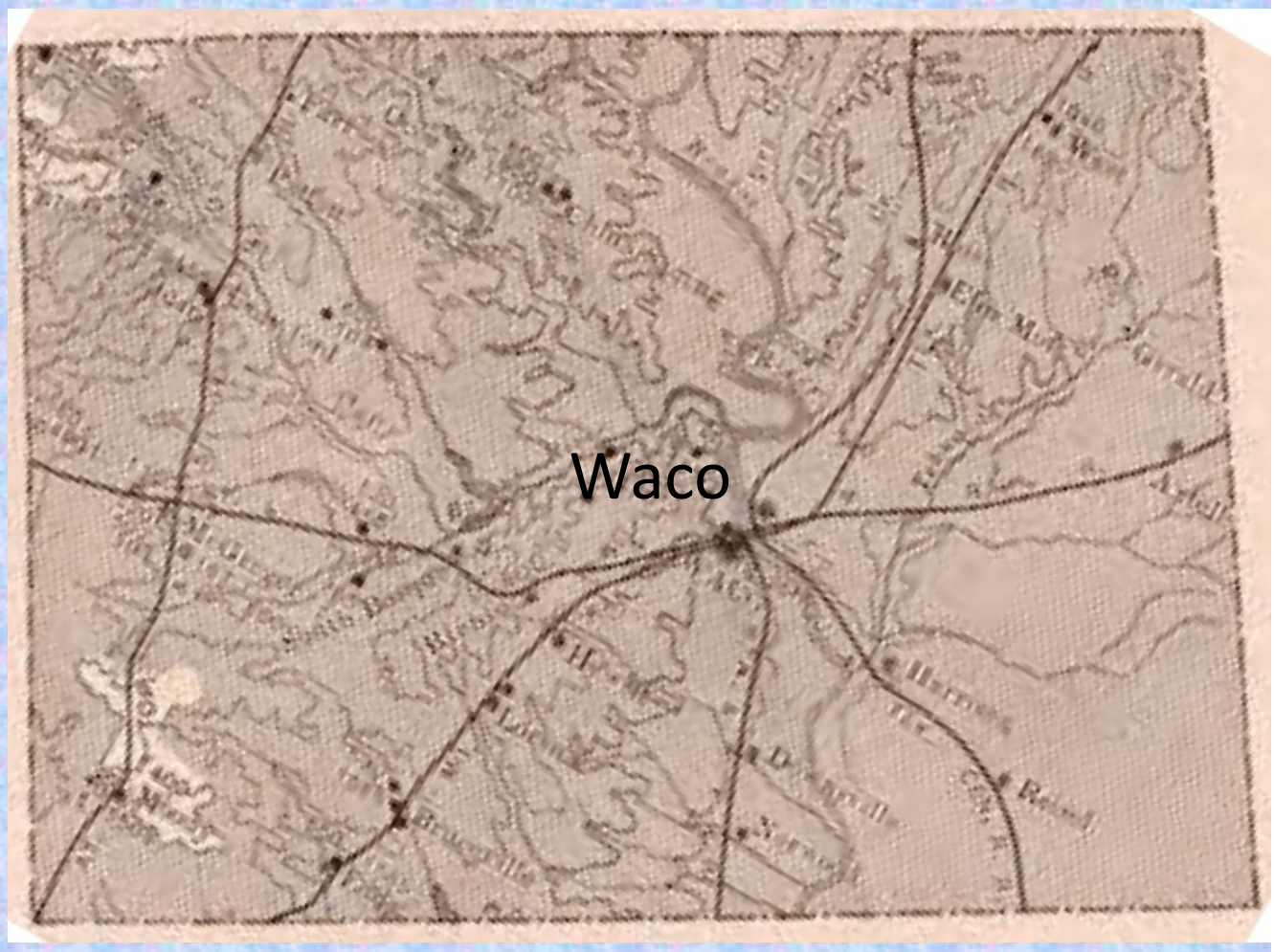


McLennan County Flowing Wells 1897

Approximately
27 Wells

Large Variation
in Flow Rate
5 to 1,000 gpm

Peak Annual
Discharge of
10,000 to
20,000 AF



1891 Waco Area Flowing Wells (Hill, 1901)

12 Wells - Total of 7,222 GPM or 11,650 AF/YR

Name of well.	Altitude.	Diameter.	Depth.	Flow per diem.	Temperature.	Initial pressure
	Feet.	*Inches.*	*Feet.*	*Gallons.*	° *F.*	*Pounds.*
The Moore well	493	6	1,840	600,000	103	*a* 60
The Bell well *b*	500	6	1,820	500,000	102½	*a* 60
Jumbo well No. 1 *b*	500	8	1,848	1,200,000	103	*c* 60
Jumbo well No. 2 *b*	500	8	1,860	1,000,000	103	60
The Glenwood	495	8	1,860	1,000,000	103	*a* 65
The Dickey well	532	8	1,840	1,000,000	103	*a* 60
The Bagby well	475	8	1,845	1,000,000	103	*a* 60
The Waco Light and Water Power Co. well	532	6	1,812	300,000	100	40
The Prather well	655	6	1,607	500,000	97	*c* 40
The Kellum well	420	6	1,776	1,000,000	103	*c* 76
The Padgett well (Fishing Club)	485	6	1,866	1,000,000	90	*c* 72
The W. V. Fort well	425	.....	1,825	1,300,000	.....	.....

a Estimated. *b* These three, the Bell, Jumbo No. 1 and No. 2, are 50 feet equidistant. *c* Tested.

Black and Grande Prairie Flowing Wells

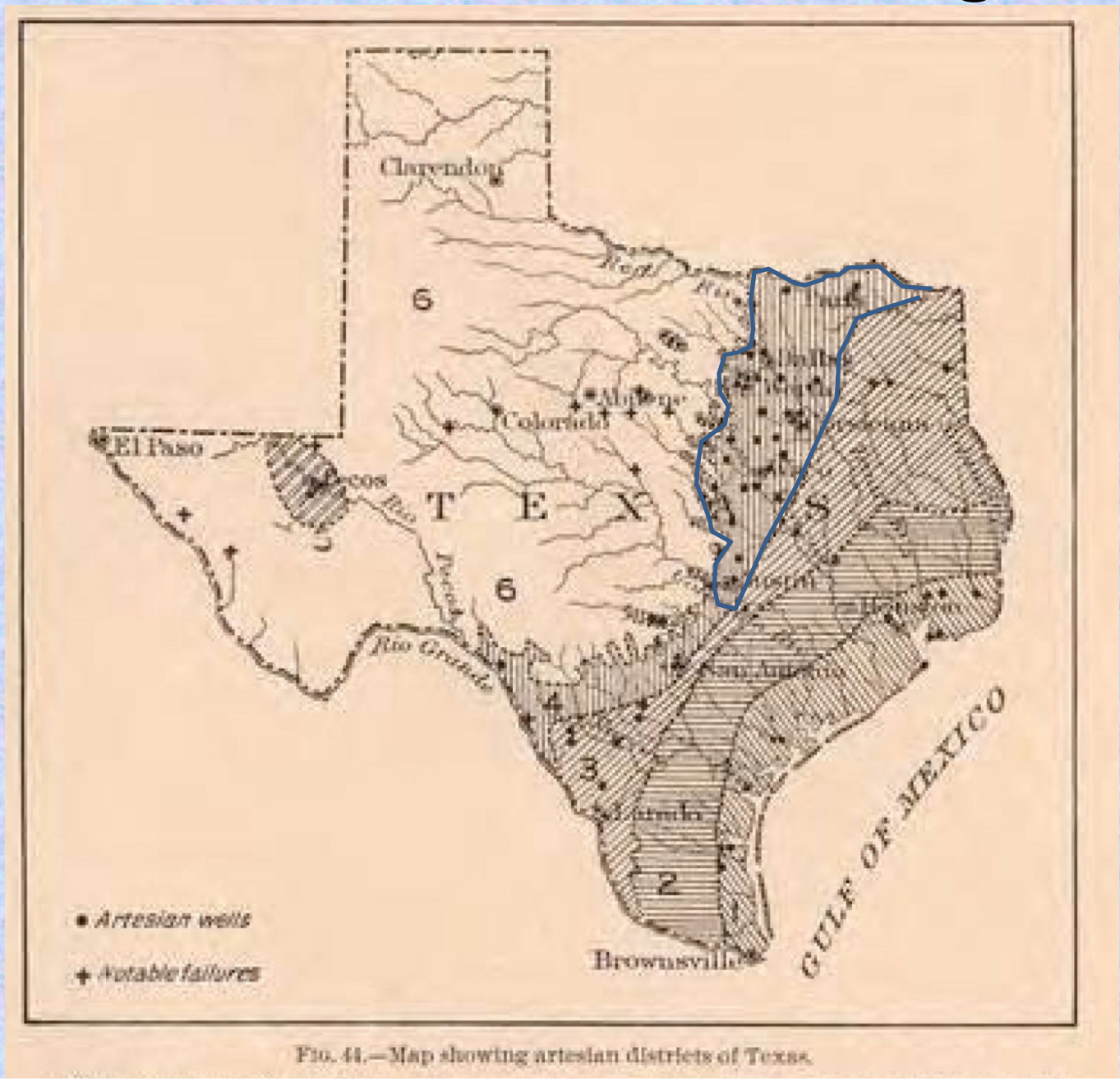
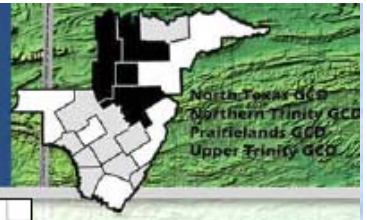
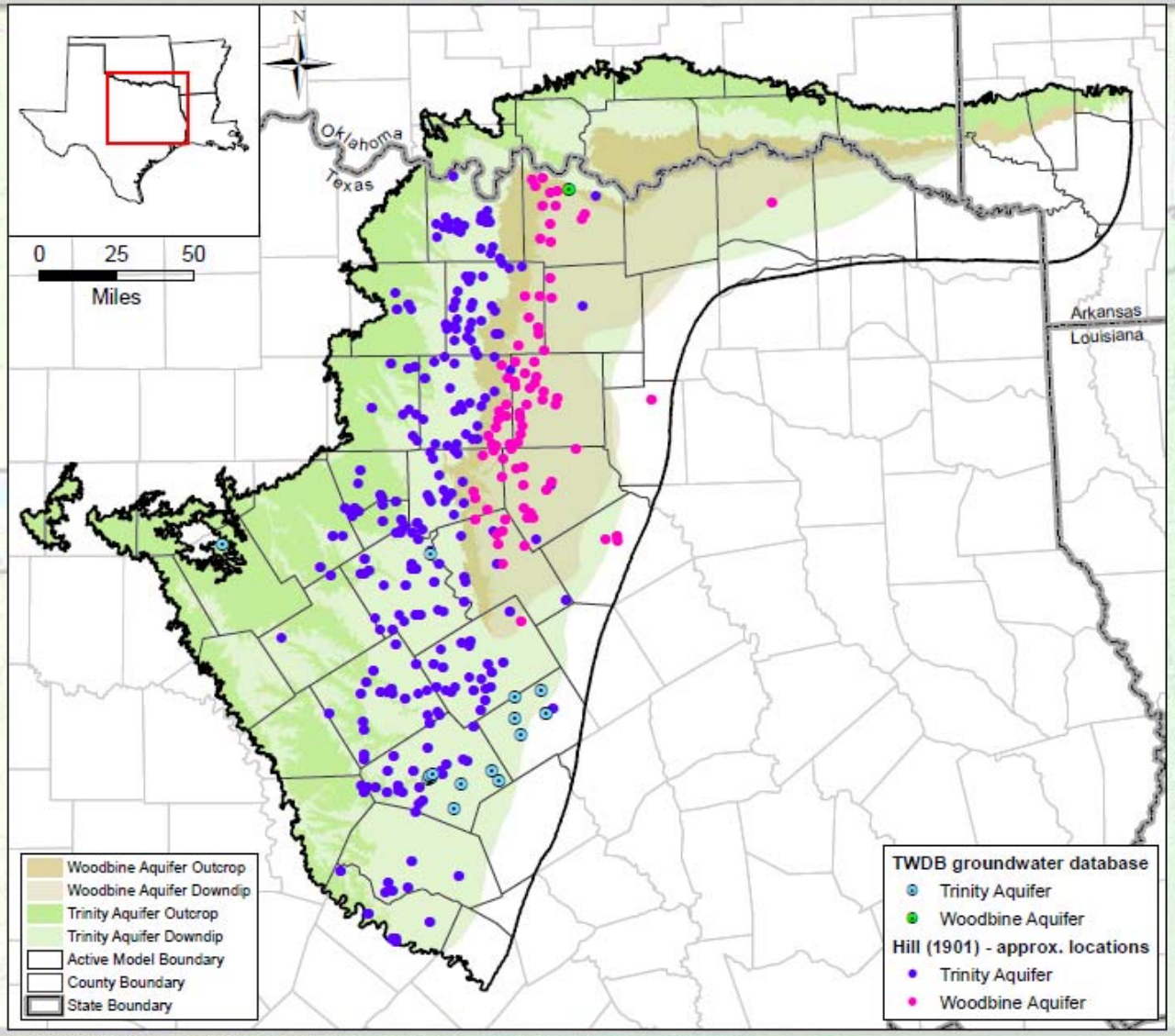


FIG. 44.—Map showing artesian districts of Texas.

Flowing Wells

Trinity and Woodbine Aquifers





Mullican & Associates

458 Flowing Wells in 1897 (Hill, 1901) Black and Grand Prairies

List of flowing and nonflowing artesian wells reported from the various counties of the Black and Grand prairie regions of Texas in 1897.

County.	Flowing.	Nonflowing.	County.	Flowing.	Nonflowing.
Bell	41	5	Jack	4	12
Bosque	44	32	Johnson	10	29
Brown	----	12	Kaufman	0	8
Burnet	3	12	Lamar	0	2
Collin	1	9	Lampasas	0	7
Comanche	1	16	McLennan	27	8
Cooke	10	32	Milam	2	2
Coryell	24	27	Mills	0	10
Dallas	60	17	Navarro	3	----
Denton	43	*a* 30	Parker	12	16
Ellis	22	14	Red River	0	2
Erath	2	25	Somervell	80	0
Falls	1	----	Tarrant	*b* 25	*a* 75
Fannin	----	*b* 6	Travis	9	11
Grayson	10	16	Williamson	7	13
Hamilton	2	20	Wise	1	12
Hill	5	14	Total	458	506
Hood	8	12			
Hunt	1	----			

a Or more. *b* About.

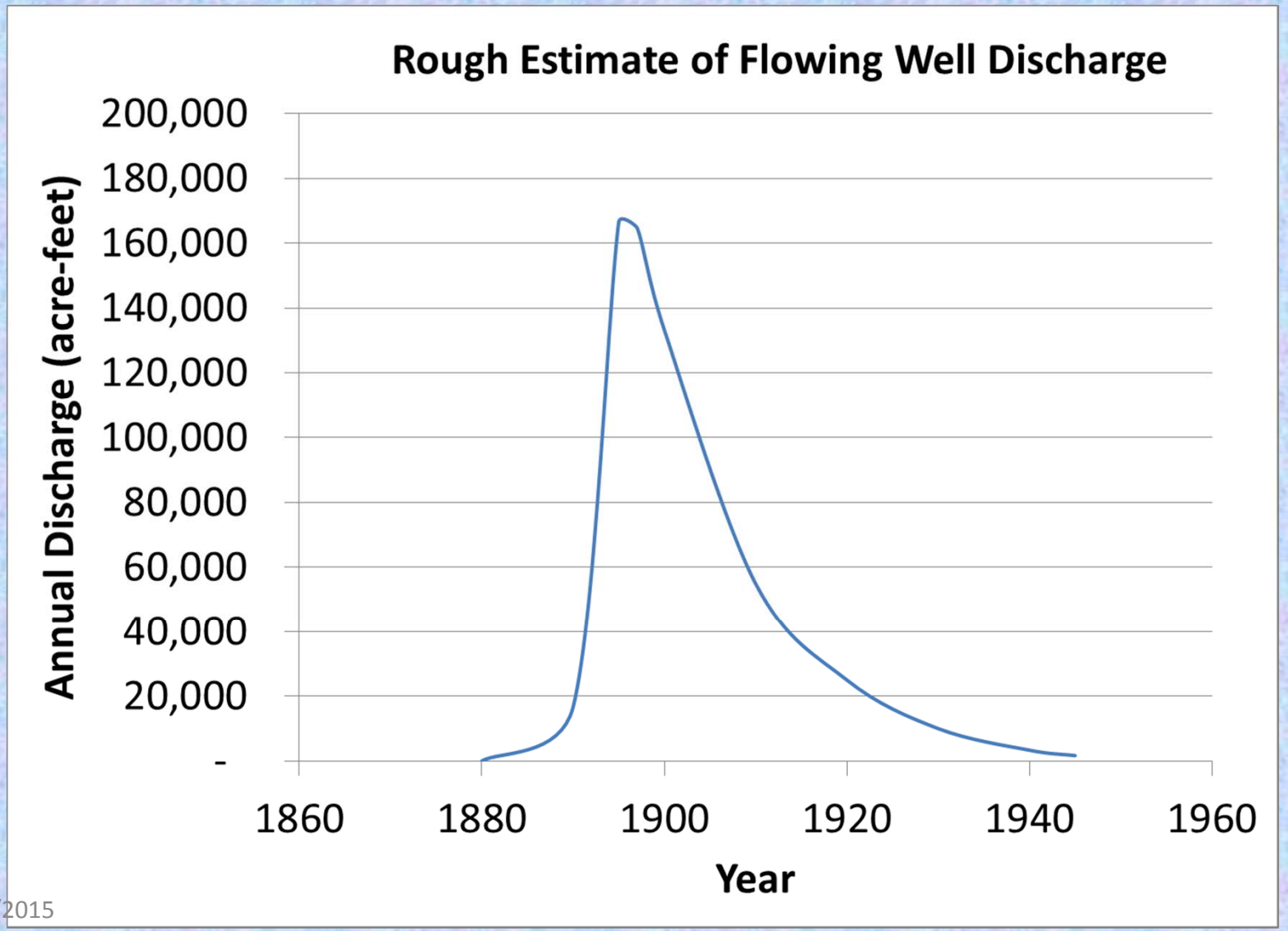
Rough Estimate of Annual Volume Discharged in 1897 Black and Grande Prairie Area

- 458 Flowing Wells in 1897
- Waco 12 Wells - Total of 11,650 AF/YR
- Hill (1901) county-by-county descriptions show there were approximately 25 large production wells (600 to 1,000 gpm)
- Assume a statistical distribution (log-normal) with skewed towards small production wells (also evaluated normal and uniform distributions)

Rough Estimate Annual Volume Discharged in 1897 Black and Grande Prairie Area

Avg GPM	# Wells	GPM
5	90.0	450
50	123.0	6,150
100	90.0	9,000
200	80.0	16,000
400	50.0	20,000
800	25.0	51,600
Totals	458	103,200
Annual Acre-Feet =		**166,462**

Rough Estimate of Flowing Well Discharge (2.9 Million Acre-Feet)



Public Water Supplies Vol. II by Sundstrom (USGS 1945)

Waco

Population in 1940: 55,982.

Ownership: Municipal.

Source of information:
George J. Roban, Water Superintendent
January 8, 1943

Source of supply: Lake Waco on Bosque River, capacity 39,000 acre-feet when built about 1930; (the city still uses a few water wells for display fountains and special industrial requirements. It was reported that the estimated natural flow of water from 12 wells in Waco was more than 10 million gallons a day in 1891 with pressure as high as 76 pounds, enough to raise the water 175 feet above the land surface. Because of these wells, Waco has been called the "Geyser City." Some of the wells in the lower part of town still have a flow. The yield diminished considerably, but the yield and pressure have recovered somewhat since the city started to use surface water.)

15 Municipal Surface Water Users in STGCD

Table 3.1-1 (Continued)

Wholesale Water Supplier Contracts	Year					
	2010	2020	2030	2040	2050	2060
Bluebonnet WSC						
City of Bruceville-Eddy	827	964	1,081	1,200	1,275	1,389
Elm Creek WSC	420	502	571	632	671	723
City of McGregor	933	923	913	902	894	899
City of Moody	202	203	203	204	206	212
Spring Valley WSC (McLennan C-O)	250	298	331	336	331	331
City of Woodway	110	110	110	110	110	110
Waco						
City of Waco	24,876	26,453	27,781	29,159	30,033	31,304
City of Bellmead	2,622	2,751	2,873	2,984	3,065	3,202
City of Hewitt	2,029	2,237	2,395	2,571	2,684	2,877
City of Lacy-Lakeview	1,120	1,120	1,120	1,120	1,120	1,120
City of Woodway	2,944	2,925	2,903	2,882	2,867	2,874
City of Beverly Hills	414	416	416	414	416	424
City of West	1,120	1,120	1,120	1,120	1,120	1,120
Bold Springs Water Supply (McLennan C-O)	560	560	560	560	560	560
Hilltop Water Supply (McLennan C-O)	97	97	97	97	97	97
McLennan County Manufacturing	2,503	2,888	3,249	3,618	3,948	4,403

Surface Water Use in STGCD

1974-2004 TWDB Data (19 years of data)

Averages 78% of Surface Water Use

47,135 AF/YR of Surface Water

2000

Averages 79% of Surface Water Use

59,090 AF/YR of Surface Water

2012

Averages 76% of Surface Water Use

47,342 AF/YR of Surface Water

Current and Historical Groundwater Users

- 48 Municipal and Rural Water Supply Entities
- Governmental Contractors
  - US Naval Weapons Industrial Reserve Plant – SPACE-X – Rocket Engine Test Facility
  - US Connally Air Force Base – TSTC and L3
- Industrial
  - Cargill – Processing Facility
  - Sanderson Farms – Processing Facility
  - Sandy Creek Power Plant (treated effluent)

Per Capita Use of Groundwater in Southern Trinity GCD

- 2000
  Trinity Groundwater Use of 15,677 AF
  Population 213,557
  Per Capita Use of 65.5 gallons per day
- 2012
  Trinity Groundwater Use of 15,399 AF
  Population of 238,702
  Per Capita Use of 57.3 gallons per day
  0.02 acre-feet per acre per year

- **13% per capita reduction between 2000 & 2012**

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 11

Estimated Historical Water Use And 2012 State Water Plan Datasets:

Southern Trinity Groundwater Conservation District

by Stephen Allen
Texas Water Development Board
Groundwater Resources Division
Groundwater Technical Assistance Section
stephen.allen@twdb.texas.gov
(512) 463-7317
July 29, 2015

GROUNDWATER MANAGEMENT PLAN DATA:

This package of water data reports (part 1 of a 2-part package of information) is being provided to groundwater conservation districts to help them meet the requirements for approval of their five-year groundwater management plan. Each report in the package addresses a specific numbered requirement in the Texas Water Development Board's groundwater management plan checklist. The checklist can be viewed and downloaded from this web address:

http://www.twdb.texas.gov/groundwater/docs/GCD/GMPChecklist0113.pdf

The five reports included in part 1 are:

1. Estimated Historical Water Use (checklist Item 2)

   from the TWDB Historical Water Use Survey (WUS)

2. Projected Surface Water Supplies (checklist Item 6)
3. Projected Water Demands (checklist Item 7)
4. Projected Water Supply Needs (checklist Item 8)
5. Projected Water Management Strategies (checklist Item 9)

   reports 2-5 are from the 2012 Texas State Water Plan (SWP)

Part 2 of the 2-part package is the groundwater availability model (GAM) report. The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov, (512) 936-0883.

DISCLAIMER:

The data presented in this report represents the most up-to-date WUS and 2012 SWP data available as of 7/29/2015. Although it does not happen frequently, neither of these datasets are static so they are subject to change pending the availability of more accurate WUS data or an amendment to the 2012 SWP. District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The WUS dataset can be verified at this web address:

http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/

The 2012 SWP dataset can be verified by contacting Sabrina Anderson (sabrina.anderson@twdb.texas.gov or 512-936-0886).

For additional questions regarding this data, please contact Stephen Allen (stephen.allen@twdb.texas.gov or 512-463-7317) or Rima Petrossian (rima.petrossian@twdb.texas.gov or 512-936-2420).

Estimated Historical Water Use
TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water historical use estimates are currently unavailable for calendar year 2014. TWDB staff anticipates the calculation and posting of these estimates at a later date.

MCLENNAN COUNTY

All values are in acre-fee/year

Year	Source	Municipal	Manufacturing	Mining	Steam Electric	Irrigation	Livestock	Total
2013	GW	12,611	1,716	0	1	148	239	14,715
	SW	35,119	3,075	0	0	3,511	1,356	43,061
2012	GW	14,444	551	0	0	4,500	225	19,720
	SW	35,067	3,147	2	0	684	1,276	40,176
2011	GW	16,874	629	634	0	4,820	268	23,225
	SW	36,721	3,348	1,181	0	1,933	1,516	44,699
2010	GW	14,608	508	735	98	834	262	17,045
	SW	31,494	1,699	1,373	230	3,287	1,487	39,570
2009	GW	11,801	536	675	125	4,094	284	17,515
	SW	35,247	1,617	1,260	255	2,445	1,611	42,435
2008	GW	12,837	674	615	139	926	271	15,462
	SW	32,772	3,405	1,148	671	3,869	1,535	43,400
2007	GW	11,807	590	0	139	540	303	13,379
	SW	28,957	3,093	393	0	2,519	1,714	36,676
2006	GW	12,977	746	0	178	601	313	14,815
	SW	33,059	3,390	393	610	4,065	1,773	43,290
2005	GW	13,946	458	2	142	1,310	292	16,150
	SW	33,832	3,567	390	0	3,749	1,655	43,193
2004	GW	10,185	526	0	121	2,232	185	13,249
	SW	32,147	3,034	392	223	3,343	1,659	40,798
2003	GW	9,780	940	1	153	645	183	11,702
	SW	44,005	3,528	392	795	2,715	1,644	53,079
2002	GW	11,004	660	1	123	690	201	12,679
	SW	31,031	2,746	392	541	4,240	1,800	40,750
2001	GW	11,526	715	1	123	706	193	13,264
	SW	29,068	2,975	392	541	4,340	1,737	39,053
2000	GW	13,599	728	3	173	396	62	14,961
	SW	27,931	1,979	996	904	2,423	557	34,790

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

MCLENNAN COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
G	BELLMEAD	BRAZOS	WACO LAKE/RESERVOIR	2,622	2,751	2,873	2,984	3,065	3,202
G	BEVERLY HILLS	BRAZOS	WACO LAKE/RESERVOIR	414	416	416	414	416	424
G	BRUCEVILLE-EDDY	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	818	953	1,069	1,187	1,261	1,374
G	COUNTY-OTHER	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	250	298	331	336	331	331
G	COUNTY-OTHER	BRAZOS	WACO LAKE/RESERVOIR	657	657	657	657	657	657
G	ELM CREEK WSC	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	177	212	242	268	285	307
G	HEWITT	BRAZOS	WACO LAKE/RESERVOIR	2,029	2,237	2,395	2,571	2,684	2,877
G	IRRIGATION	BRAZOS	BRAZOS RIVER COMBINED RUN-OF-RIVER IRRIGATION	8,871	8,875	8,878	8,882	8,885	8,889
G	LACY-LAKEVIEW	BRAZOS	WACO LAKE/RESERVOIR	1,120	1,120	1,120	1,120	1,120	1,120
G	LIVESTOCK	BRAZOS	LIVESTOCK LOCAL SUPPLY	1,151	1,151	1,151	1,151	1,151	1,151
G	LORENA	BRAZOS	BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM	1,000	1,000	1,000	1,000	1,000	1,000
G	MANUFACTURING	BRAZOS	BRAZOS RIVER COMBINED RUN-OF-RIVER MANUFACTURING	16	16	16	16	16	16
G	MANUFACTURING	BRAZOS	WACO LAKE/RESERVOIR	2,503	2,888	3,249	3,618	3,948	4,403
G	MCGREGOR	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	1,620	1,610	1,600	1,589	1,581	1,586

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
G	MOODY	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	202	203	203	204	206	212
G	ROBINSON	BRAZOS	BRAZOS RIVER RUN-OF-RIVER	1,125	1,125	1,125	1,125	1,125	1,125
G	STEAM ELECTRIC POWER	BRAZOS	LAKE CREEK LAKE/RESERVOIR	9,992	9,983	9,975	9,967	9,958	9,950
G	STEAM ELECTRIC POWER	BRAZOS	TRADINGHOUSE CREEK LAKE/RESERVOIR	4,958	4,967	4,975	4,983	4,992	5,000
G	WACO	BRAZOS	BRAZOS RIVER RUN-OF-RIVER	5,600	5,600	5,600	5,600	5,600	5,600
G	WACO	BRAZOS	WACO LAKE/RESERVOIR	31,391	30,686	30,067	29,434	28,923	28,123
G	WEST	BRAZOS	WACO LAKE/RESERVOIR	1,120	1,120	1,120	1,120	1,120	1,120
G	WOODWAY	BRAZOS	BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM	110	110	110	110	110	110
G	WOODWAY	BRAZOS	WACO LAKE/RESERVOIR	2,944	2,925	2,903	2,882	2,867	2,874
	Sum of Projected Surface Water Supplies (acre-feet/year)			**80,690**	**80,903**	**81,075**	**81,218**	**81,301**	**81,451**

Projected Water Demands
TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

MCLENNAN COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
G	CHALK BLUFF WSC	BRAZOS	441	527	599	676	722	798
G	HALLSBURG	BRAZOS	139	150	158	166	172	182
G	CROSS COUNTRY WSC	BRAZOS	445	497	541	585	614	661
G	ELM CREEK WSC	BRAZOS	184	227	261	298	320	357
G	WEST BRAZOS WSC	BRAZOS	161	181	195	214	224	244
G	WESTERN HILLS WS	BRAZOS	384	458	520	588	627	694
G	NORTH BOSQUE WSC	BRAZOS	367	454	530	608	655	730
G	WOODWAY	BRAZOS	2,944	2,925	2,903	2,882	2,867	2,874
G	STEAM ELECTRIC POWER	BRAZOS	3,808	11,217	14,305	15,538	17,901	19,142
G	WEST	BRAZOS	459	467	475	482	490	506
G	MANUFACTURING	BRAZOS	3,526	4,068	4,577	5,096	5,561	6,022
G	LIVESTOCK	BRAZOS	1,151	1,151	1,151	1,151	1,151	1,151
G	IRRIGATION	BRAZOS	2,816	2,814	2,812	2,809	2,806	2,803
G	MINING	BRAZOS	416	399	389	380	371	366
G	COUNTY-OTHER	BRAZOS	6,345	6,332	6,361	6,359	6,384	6,466
G	VALLEY MILLS	BRAZOS	1	1	1	1	1	1
G	WACO	BRAZOS	24,876	26,453	27,781	29,159	30,033	31,304
G	HEWITT	BRAZOS	2,029	2,237	2,395	2,571	2,684	2,877
G	LACY-LAKEVIEW	BRAZOS	835	989	1,116	1,256	1,338	1,477
G	MOODY	BRAZOS	202	203	203	204	206	212
G	MART	BRAZOS	335	354	367	383	394	415
G	MCGREGOR	BRAZOS	933	923	913	902	894	899
G	ROBINSON	BRAZOS	1,268	1,462	1,611	1,756	1,857	2,030
G	RIESEL	BRAZOS	109	116	120	126	129	137
G	CRAWFORD	BRAZOS	65	67	68	69	70	73
G	GHOLSON	BRAZOS	150	169	184	202	213	231
G	BELLMEAD	BRAZOS	2,622	2,751	2,873	2,984	3,065	3,202
G	BEVERLY HILLS	BRAZOS	414	416	416	414	416	424
G	BRUCEVILLE-EDDY	BRAZOS	825	961	1,077	1,195	1,270	1,383
G	LORENA	BRAZOS	369	408	440	475	497	533
G	TRI-COUNTY SUD	BRAZOS	12	13	14	15	16	18
	Sum of Projected Water Demands (acre-feet/year)		**58,631**	**69,390**	**75,356**	**79,544**	**83,948**	**88,212**

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

MCLENNAN COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
G	BELLMEAD	BRAZOS	1,277	1,277	1,277	1,277	1,277	1,277
G	BEVERLY HILLS	BRAZOS	0	0	0	0	0	0
G	BRUCEVILLE-EDDY	BRAZOS	357	356	356	356	355	355
G	CHALK BLUFF WSC	BRAZOS	167	81	9	-68	-114	-190
G	COUNTY-OTHER	BRAZOS	1,057	1,118	1,122	1,129	1,099	1,017
G	CRAWFORD	BRAZOS	26	24	23	22	21	18
G	CROSS COUNTRY WSC	BRAZOS	75	23	0	-169	-198	-245
G	ELM CREEK WSC	BRAZOS	61	53	49	38	33	18
G	GHOLSON	BRAZOS	638	619	604	586	575	557
G	HALLSBURG	BRAZOS	-2	-13	-21	-29	-35	-45
G	HEWITT	BRAZOS	1,467	1,467	1,467	1,467	1,467	1,467
G	IRRIGATION	BRAZOS	6,938	6,944	6,949	6,956	6,962	6,969
G	LACY-LAKEVIEW	BRAZOS	285	131	4	-136	-218	-357
G	LIVESTOCK	BRAZOS	0	0	0	0	0	0
G	LORENA	BRAZOS	905	866	834	799	777	741
G	MANUFACTURING	BRAZOS	596	439	291	141	6	0
G	MART	BRAZOS	-192	-211	-224	-240	-251	-272
G	MCGREGOR	BRAZOS	980	980	980	980	980	980
G	MINING	BRAZOS	65	82	92	101	110	115
G	MOODY	BRAZOS	179	179	179	179	179	179
G	NORTH BOSQUE WSC	BRAZOS	164	77	1	-77	-124	-199
G	RIESEL	BRAZOS	-3	-10	-14	-20	-23	-31
G	ROBINSON	BRAZOS	650	456	307	162	61	-112
G	STEAM ELECTRIC POWER	BRAZOS	28,491	21,082	17,994	16,761	14,398	13,157
G	TRI-COUNTY SUD	BRAZOS	22	21	20	19	18	16
G	VALLEY MILLS	BRAZOS	2	2	2	2	2	2
G	WACO	BRAZOS	12,115	9,833	7,886	5,875	4,490	2,419
G	WEST	BRAZOS	892	884	876	869	861	845
G	WEST BRAZOS WSC	BRAZOS	-48	-68	-82	-101	-111	-131
G	WESTERN HILLS WS	BRAZOS	147	73	11	-57	-96	-163
G	WOODWAY	BRAZOS	1,725	1,725	1,725	1,725	1,725	1,725
	Sum of Projected Water Supply Needs (acre-feet/year)		**-245**	**-302**	**-341**	**-897**	**-1,170**	**-1,745**

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

MCLENNAN COUNTY

WUG, Basin (RWPG) All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
BELLMEAD, BRAZOS (G)							
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	1,121	1,121	1,121	1,121	1,121	1,121
CHALK BLUFF WSC, BRAZOS (G)							
ADDITIONAL TRINITY AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	TRINITY AQUIFER [MCLENNAN]	0	0	0	230	230	230
CROSS COUNTRY WSC, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	0	0	0	281	281	281
HALLSBURG, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	49	49	49	49	49	49
MUNICIPAL WATER CONSERVATION	CONSERVATION [MCLENNAN]	4	10	8	6	6	6
HEWITT, BRAZOS (G)							
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	1,223	1,223	1,223	1,223	1,223	1,223
LACY-LAKEVIEW, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	0	0	0	200	300	450
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	1,121	1,121	1,121	1,121	1,121	1,121
LORENA, BRAZOS (G)							
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	448	448	448	448	448	448
MANUFACTURING, BRAZOS (G)							
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	5,319	6,918	7,847	7,847	7,847	7,847
MART, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	300	300	300	300	300	300

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
NORTH BOSQUE WSC, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	0	0	0	194	194	194
MUNICIPAL WATER CONSERVATION	CONSERVATION [MCLENNAN]	10	33	36	38	37	42
RIESEL, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	38	38	38	38	38	38
ROBINSON, BRAZOS (G)							
INCREASE TREATMENT CAPACITY	BRAZOS RIVER RUN-OF-RIVER [MCLENNAN]	0	0	0	0	1,120	1,120
VALLEY MILLS, BRAZOS (G)							
BOSQUE COUNTY REGIONAL PROJECT	BRAZOS RIVER RUN-OF-RIVER [BOSQUE]	0	0	10	10	10	10
WACO, BRAZOS (G)							
WASTEWATER REUSE	DIRECT REUSE [MCLENNAN]	10	10	430	1,827	2,715	4,005
WEST BRAZOS WSC, BRAZOS (G)							
INTERCONNECTION OF CITY OF WACO SYSTEM WITH NEIGHBORING COMMUNITIES	WACO LAKE/RESERVOIR [RESERVOIR]	200	200	200	200	200	200
WESTERN HILLS WS, BRAZOS (G)							
ADDITIONAL TRINITY AQUIFER DEVELOPMENT (INCLUDES OVERDRAFTING)	TRINITY AQUIFER [MCLENNAN]	0	0	0	198	198	198
Sum of Projected Water Management Strategies (acre-feet/year)		**9,843**	**11,471**	**12,831**	**15,331**	**17,438**	**18,883**

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 12

SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT RULES

Initially Adopted and Effective December 6, 2007
Revised February 28, 2008
Revised January 7, 2010
Revised December 15, 2011
Revised August 16, 2012
Amended and Effective April 23, 2015

SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT RULES

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CHAPTER 1. DEFINITIONS AND GENERAL PROVISIONS

§ 1.1 Definitions of Terms

In the administration of its duties, the Southern Trinity Groundwater Conservation District follows the definitions of words, terms and phrases set forth in Chapter 8821 of the Special District Local Laws Code, Chapters 35 and 36 of the Texas Water Code, Chapters 1901 and 1902 of the Texas Occupations Code. In addition, the following words, terms and phrases, when used in these rules, and when used in any other rule or regulation of the District and not defined therein, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Words used in the present tense include the future tense. Words used in the plural number include the singular, and words in the singular include the plural. The word "shall" is always mandatory. The word "herein" means in these rules. The word "regulations" means the provisions of any applicable resolution, order, rule, regulation or policy.

(1) "Abandoned well" means a well that has not been in use for six consecutive months. A well is considered to be in use when the well is not a deteriorated well and contains the casing, pump, and pump column in good condition, or when the well is not a deteriorated well and has been properly capped.

(2) "Acre-foot" means the amount of water necessary to cover one acre of land one foot deep; 325,851 U.S. gallons of water.

(3) "Affected person" means a person who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest that is within the District's regulatory authority and is or may be affected by the application in question. An interest common to members of the general public does not qualify as a personal justiciable interest.

(4) "Agricultural use" means a use or activity involving any of the following:

(A) cultivating the soil to produce crops for human food, animal feed, or planting seed, or for the production of fibers;

(B) the practice of floriculture, viticulture, silvicuture, and horticulture, including the cultivation of plants in containers, or nonsoil media, by a nursery grower;

(C) raising, feeding, or keeping animals for breeding purposes or for the production of food or fiber, leather, pelts, or other tangible products having a commercial value;

(D) planting cover crops, including cover crops cultivated for transplantation, or leaving land idle for the purpose of participating in any governmental program or normal crop or livestock rotation procedure;

(E) wildlife management; and

(F) raising or keeping equine animals.

(5) "Aquifer" means a geologic formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(6) "Aquifer management zone" means the geographic surface area located within the District's boundaries in which the amount of groundwater production from non-exempt wells is predominantly from a single and identical water bearing geologic strata of either the Hensell or the Hosston strata (geologic member) of the Trinity group of geologic formations.

(7) "Beneficial Use" means the use of the amount of water that is necessary for a purpose authorized by law when reasonable intelligence and reasonable diligence are used in applying the water to that purpose.

(8) "Best Management Practice (BMP)" means any of the water conservation practices that are identified in Texas Water Development Board Report 362.

(9) "Board" means the board of directors of the District.

(10) "Brazos River Alluvium Aquifer" means the water-bearing alluvial sediments occurring in floodplain and terrace deposits of the Brazos River. The Brazos River Alluvium Aquifer is defined by the Texas Water Development Board as a minor aquifer.

(11) "Business day" means a weekday, Monday through Friday, excluding District holidays.

(12) "Casing" means a watertight pipe which is installed in an excavated or drilled hole, temporarily or permanently, to maintain the hole sidewalls against caving, advance the borehole, and in conjunction with cementing and/or bentonite grouting, to confine the ground waters to their respective zones of origin, and to prevent surface contaminant infiltration.

(13) "Casing diameter" means the inside diameter of the casing of a well.

(14) "Conjunctive Use" means the combined use of groundwater and surface water sources that optimizes the beneficial characteristics of each source.

(15) "Contested case hearing" means a proceeding before the District, or where appropriate, the State Office of Administrative Hearings, in which the legal rights, duties or privileges of a party are to be determined by the board after an opportunity for an adjudicative hearing.

(16) "Contract user" means a person who withdrew or purchased groundwater during the Existing and Historic Use Period pursuant to a contract or other legal right from an existing well on land owned by another.

(17) "Desired Future Condition (DFC)" means the desired, quantified condition of groundwater resources for a specific aquifer within the District as defined in the District's Groundwater Management Plan and implemented by the District.

(18) "Deteriorated well" means a well or borehole that because of its condition, will cause, or may cause, pollution of any water in the state, including any groundwater, or cause a public nuisance.

(19) "Dewatering well" means a well used to remove water from a construction site or excavation, or to relieve hydrostatic pressure or uplift on permanent structures.

(20) "District" means the Southern Trinity Groundwater Conservation District.

(21) "District Act" means the Chapter 8821 of the Special District Local Laws Code, as may be amended.

(22) "District Office" means the location of the office of the District, as designated by the Board by written resolution. The location of the District Office may be changed from time to time by written resolution of the Board.

(23) "Domestic Use" means the private use of water to provide the daily water needs of a household, and includes water used on-site for: drinking, washing or culinary purposes; residential landscape watering, or watering of a family garden/orchard; watering of domestic animals; and for residential water recreation uses (e.g., swimming pool, hot tub). Domestic use does not include water used by, or to support, activities for which consideration is given or received or for which the product of the activity is sold. Domestic use does not include use by or for a public water system.

(24) "Drilling permit" means a permit issued by the District allowing for the construction, drilling, installation, equipping, completion, reworking, alteration, or modification of a well, or other work designed for the production of groundwater.

(25) "Evidence of Historic or Existing Use" means evidence that is material and relevant to a determination of the amount of groundwater beneficially used without waste by a permit applicant during the relevant time period set by District rule that regulates groundwater based on Historic Use. Evidence in the form of oral or written testimony shall be subject to cross-examination. The Texas Rules of Evidence govern the admissibility and introduction of Evidence of Historic or Existing Use, except that evidence not admissible under the Texas Rules of Evidence may be admitted if it is of the type commonly relied upon by reasonably prudent persons in the conduct of their affairs.

(26) "Exempt well" means any groundwater withdrawal well exempt from the requirement to obtain a permit under these rules.

(27) "Existing and Historic Use Period" means the time period from January 1, 2000, through December 31, 2009.

(28) "Existing well" means a well which:

(A) was in existence on or for which drilling had commenced on December 31, 2009;

(B) is capable of having water withdrawn from it; and

(C) was properly constructed in accordance with the District's Rules and applicable state law.

(29) "Federal conservation program" means the Conservation Reserve Program of the United States Department of Agriculture or any successor program.

(30) "Groundwater" means water percolating beneath the earth's surface within the boundaries of the District.

(31) "Groundwater Production" means to withdraw, pump, or otherwise obtain groundwater from an underground source.

(32) "Groundwater exportation permit" means a permit authorizing a person to export groundwater produced from a well within the District's boundaries pursuant to an authorization issued by the District to a place of use outside of the District's boundaries.

(33) "Hearing body" means the board, any committee of the board, or a hearing examiner that conducts a contested case hearing.

(34) "Hearing examiner" means the person appointed by the board or the State Office of Administrative Hearings to conduct a contested case hearing or other proceeding.

(35) "Hensell Management Zone" means the geographic surface area shown on Exhibit A and general located in the northwestern portion of McLennan County.

(36) "Historic Use" means the lawful production and placing to beneficial use, without waste, of groundwater during the Existing and Historic Use Period.

(37) "Historic Use Production Permit" means a permit authorizing a landowner or operator to produce groundwater based on a landowner or his or her contract user or predecessor in interest's production and beneficial use of groundwater without waste during the Existing and Historic Use Period.

(38) "Hosston Management Zone" means the geographic surface area shown on Exhibit B and general located in the central and southeastern portion of McLennan County.

(39) "Industrial use" means the use of water for or in connection with industrial activities, including but not limited to, manufacturing, bottling, brewing, food processing, scientific research and technology, recycling, production of concrete, asphalt, and cement, quarrying, and similar activities.

(40) "Landowner" means the person who owns the land surface or the right to withdraw groundwater from wells located on such land surface.

(41) "Leachate well" means a well used to remove contamination from soil or groundwater.

(42) "Livestock use" means the watering of animals, including beasts or poultry, but does not include the watering of any animal that is stabled, confined, or fed at a facility that is defined by Texas Commission on Environmental Quality Rules as an "animal feeding operation" or a "concentrated animal feeding operation."

(43) "Modeled Available Groundwater" or "MAG" means the amount of groundwater that is determined by the executive administrator of the Texas Water Development Board to be produced on an annual basis in a given aquifer to achieve a Desired Future Condition under Section 36.108, Texas Water Code for that aquifer.

(44) "Maximum Historic Use (MHU)" or "MHU" means the maximum amount of groundwater that an applicant for an Historic Use Production Permit proves was produced and beneficially used without waste from the applicant's non-exempt well during any one calendar year of the Existing and Historic Use Period.

(45) "Meter" means a water flow measuring device that can, within +/- 5% of accuracy, measure the instantaneous rate of flow and record the amount of groundwater produced from a well during a measure of time.

(46) "Monitoring Well" means a well installed solely for the purpose of measuring some property of the groundwater or the aquifer it penetrates, and that does not produce more than 5,000 gallons of groundwater per year.

(47) "Municipal use" means water supplied to retail or wholesale end users by persons, municipalities, utilities, political subdivisions, or other water purveyors for domestic, industrial, or commercial uses, and fire fighting, sewer and drain flushing, swimming pools, and maintenance of public property.

(48) "New well" means a well for which drilling commenced after December 31, 2009.

(49) "Non-agricultural use" means the beneficial use of groundwater withdrawn from within the boundaries of the District for any use other than agricultural use.

(50) "Non-exempt well" means a well not exempt from the requirement to obtain a permit under these rules.

(51) "Non-Historic Use Production Permit" means a permit authorizing a landowner or operator to produce groundwater that is not based on Historic Use.

(52) "Open well" means a well, or exploratory hole, dug or drilled for the purpose of exploring for or producing water from the aquifer that is not capped or covered.

(53) "Open Meetings Law" means Chapter 551, Texas Government Code, as may be amended.

(54) "Party" means each person admitted as a party in a contested case hearing.

(55) "Permit" means a document issued by the District approving an application for a permit.

(56) "Permitted well" means a groundwater withdrawal well authorized to operate by a permit issued by the District.

(57) "Person" means a corporation, individual, organization, government, or governmental subdivision or agency, business trust, estate, trust, partnership, association or any other legal entity.

(58) "Pleadings" means any document filed by a party in a contested case hearing.

(59) "Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state, including groundwater, that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose, including the alteration of groundwater by saltwater or other deleterious matter admitted from another stratum or from the surface of the ground.

(60) "Presiding officer" means the President, Vice President, Secretary, or other board member presiding at any hearing or other proceeding or a hearing examiner conducting any hearing or other proceeding on behalf of the District.

(61) "Protestant" means any person opposing, in whole or in part, an application for which a request for a contested case hearing may be filed under the District's Rules.

(62) "Public Information Act" means Chapter 552, Texas Government Code, also referred to as the "Open Records Law," as may be amended from time to time.

(63) "Registration" means a certificate issued by the District for a well that qualifies as an exempt well.

(64) "Replacement well" means any well drilled in accordance with the requirements of these rules with the purpose of replacing a well and drilled within 150 feet of the well to be replaced.

(65) "Reworked well" means a well that has been altered, modified, repaired or recompleted.

(66) "Rules" means the rules of the District compiled in this document and as may be supplemented or amended from time to time.

(67) "Section," as related to land, means the numbered section of a survey or block as shown in a county's real property records.

(68) "Sewage wet well" means a sewage well which incorporates a reservoir in addition to a pump.

(69) "SOAH" means the State Office of Administrative Hearings.

(70) "Solid waste" means garbage, rubbish, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations and from community and institutional activities. The term:

(A) does not include:

(i) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued under Chapter 26, Water Code;

(ii) soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements; or

(iii) waste materials that result from activities associated with the exploration, development, or production of oil or gas or geothermal resources and other substance or material regulated by the Railroad Commission of Texas under Section 91.101, Texas Natural Resources Code, unless the waste, substance, or material results from activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants and is hazardous waste as defined by the administrator of the United States Environmental Protection Agency under the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended (42 U.S.C. Section 6901 et seq.); and

(B) does include hazardous substances.

(71) "Trinity Aquifer" means the water-bearing geological group comprised of the Paluxy, Glenn Rose, Hensell, Pearsall, Cow Creek, Hammett, Sligo, and Hosston geologic formations. The Trinity Aquifer is defined by the Texas Water Development Board as a major aquifer.

(72) "Total aquifer storage" means the total calculated volume of groundwater that an aquifer is capable of producing.

(73) "Uncovered well" means an open well.

(74) "Waste" means any one or more of the following:

(A) production of groundwater at a rate and in an amount that causes or threatens to cause intrusion into an aquifer of water unsuitable for agricultural, gardening, domestic, or stock watering purposes;

(B) the flowing or producing of wells from an aquifer if the water produced is not used for a beneficial purpose;

(C) escape of groundwater from an aquifer to any other reservoir or geologic strata that does not contain groundwater;

(D) pollution or harmful alteration of groundwater in an aquifer by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground;

(E) willfully or negligently causing, suffering, or allowing groundwater produced from an aquifer to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the Texas Commission on Environmental Quality under Chapter 26, Texas Water Code, as may be amended;

(F) groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge; or

(G) for water produced from an artesian well, "waste" has the meaning assigned by Section 11.205, Texas Water Code, as may be amended.

(75) "Well" means any artificial opening or excavation in the ground to a depth greater than the top of any stratum containing groundwater.

(76) "Well operator" means the person who operates a well located on land owned by the well operator or owned by a third-party.

(77) "Well owner" means the person who owns the land upon which a well is, or is proposed to be, located.

(78) "Well system" means a well or group of wells tied together by pipeline and/or storage facilities.

(79) "Windmill" means a wind-driven or hand-driven device that uses a piston pump to withdraw groundwater.

(80) "Withdraw or Withdrawal" means producing or obtaining groundwater using man-made facilities by pumping or another method.

Exhibit A.

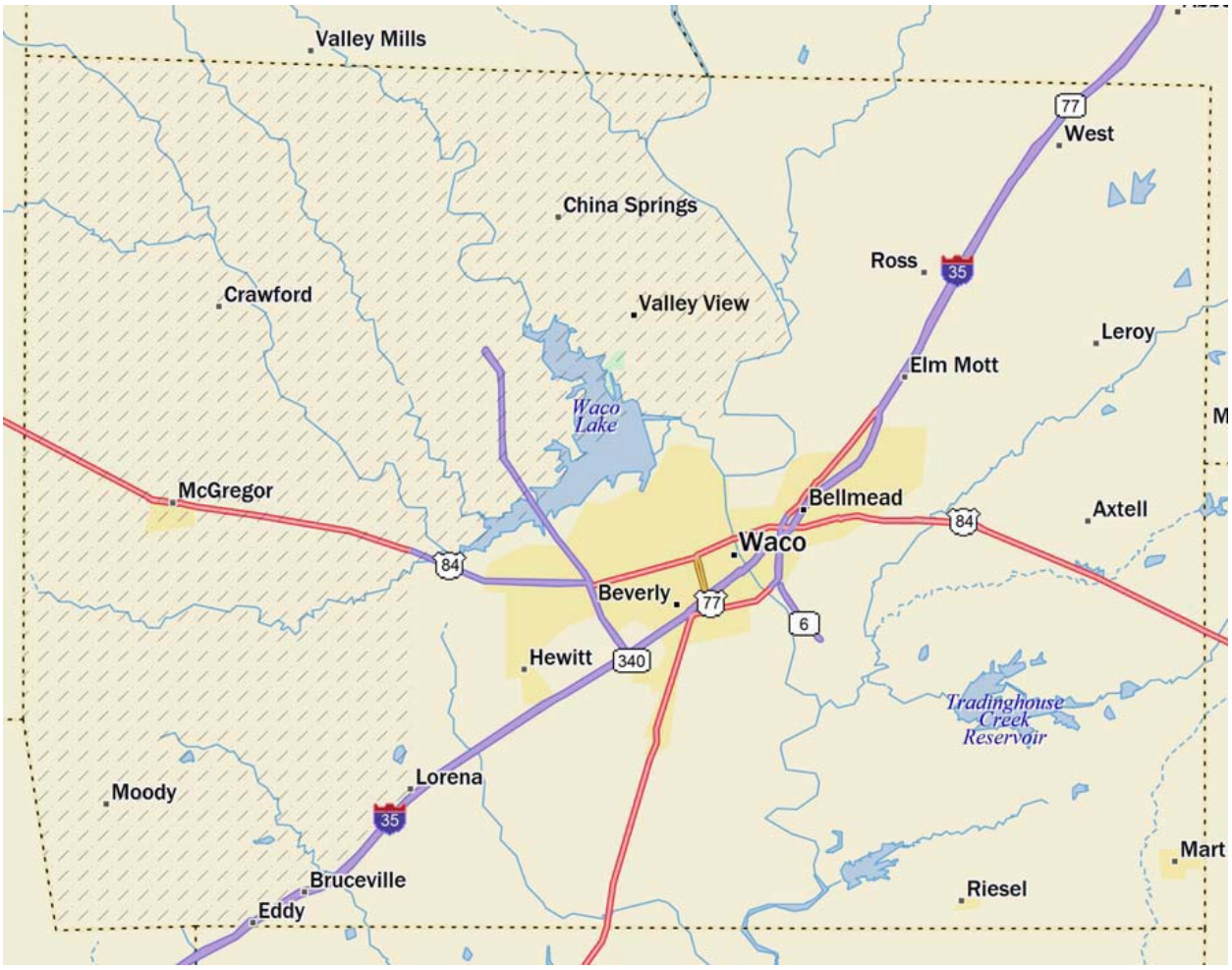

Exhibit A.: Hensell Management Zone (shown as hatched area)

Exhibit B.

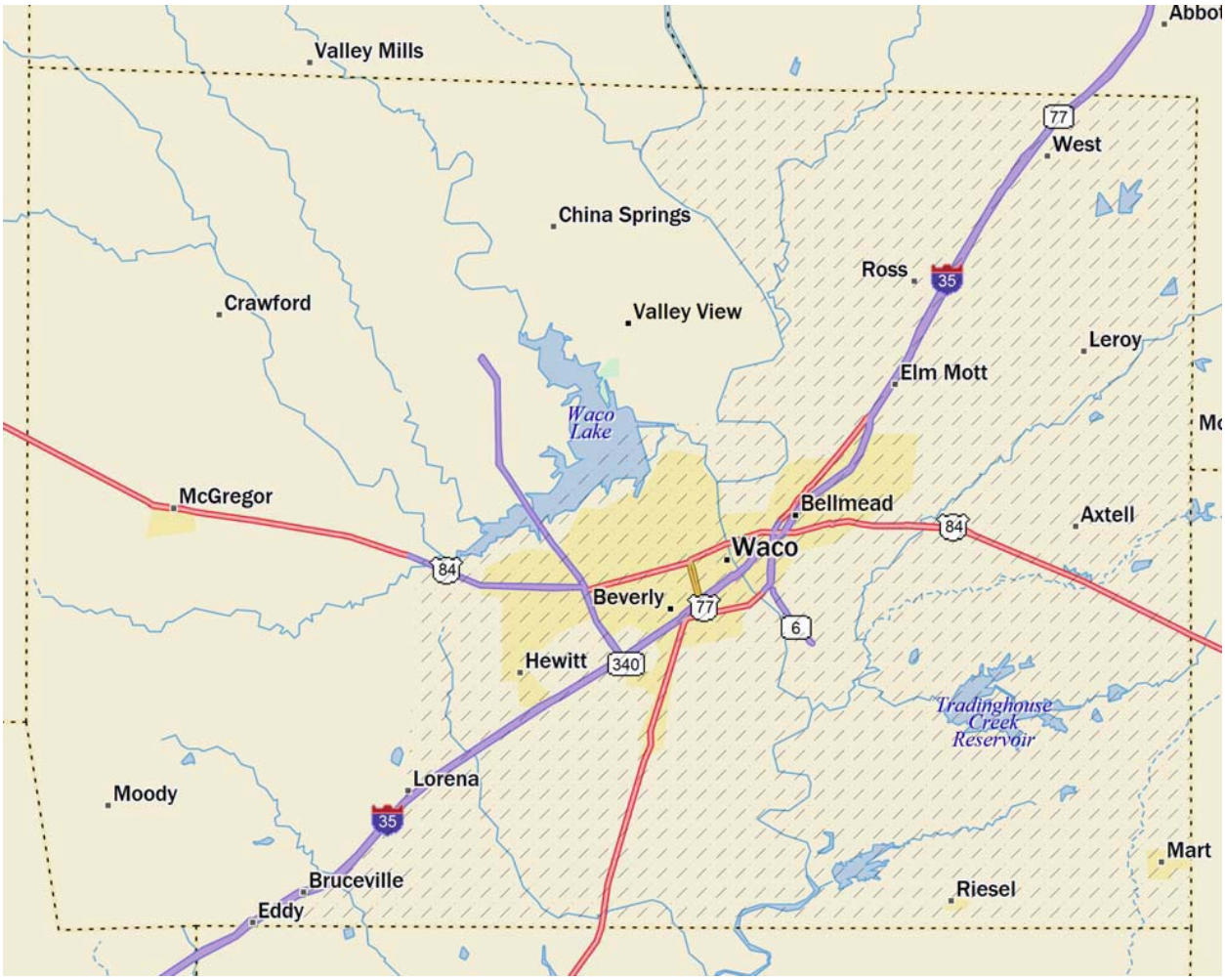

Exhibit B.: Hosston Management Zone (shown as hatched area)

§ 1.3 Purpose of Rules

These rules are adopted to achieve the objectives of Article XVI, Section 59, Texas Constitution, the District Act, Chapter 36, Texas Water Code, the District's approved groundwater management plan, and other general laws applicable to the District, as may be amended.

§ 1.5 Construction

Construction of words and phrases is governed by the Code Construction Act, Subchapter B, Chapter 311, Texas Government Code. References to a code or statutory provision or section in these rules shall include such code or statutory provision as amended, reordered or re-codified. These rules shall be read, interpreted and applied in a manner that is consistent with the District Act and, if any definition or provision of these rules conflicts with or is inconsistent with any definition or provision of the District Act such definition or rule shall be read, construed and applied consistent with the District Act which shall govern and control.

§ 1.7 Headings and Captions

The section and other headings and captions contained in these rules are for reference purposes only. They do not affect the meaning or interpretation of these rules in any way.

§ 1.9 Methods of Service under the Rules

Except as otherwise expressly provided in these rules, any notice or documents required by these rules to be served or delivered may be delivered to the recipient, or the recipient's authorized representative, in person, by agent, by courier receipted delivery, by certified mail sent to the recipient's last known address, by electronic mail to the recipient's electronic mail address on file with the District, or by telephonic document transfer to the recipient's current telecopier number and shall be accomplished by 5:00 p.m. (local time) of the date on which it is due. Service by mail is complete upon delivery in a post office or other official depository of the United States Postal Service. Service by telephonic document transfer is complete upon transfer, except that any transfer occurring after 5:00 p.m. will be deemed complete on the following business day. If service or delivery is by mail, and the recipient has the right, or is required, to do some act within a prescribed time after service, three days will be added to the prescribed period.

Where service by one or more of the above methods has been attempted and has failed, service may be completed by any other of the above-authorized methods of service. If personal service is not made or deemed to be made as above provided, if the location of a person to be served is unknown to the board, if unknown persons may have a property interest in the matter at issue, or in addition to any other service made, notice may be given by publication and the service by publication is complete upon the notice being published in a newspaper of general circulation in the District. Further, upon approval by the board, notice may be given in any manner authorized by the Texas Rules of Civil Procedure.

The person or the person's attorney of record shall certify compliance with this rule in writing over signature on the filed document. A certificate by a person or the person's attorney of

record, or the return of an officer, or the affidavit of any person showing service of a document, shall be prima facie evidence of the fact of service. Nothing herein shall preclude any person from offering proof that the notice or instrument was not received and upon so finding, the District may extend the time for taking the action required of such party or grant such other relief as it deems just. In contested case hearings, copies of all documents filed with the presiding officer shall be served on all parties, including the District, no later than the day of filing.

§ 1.11 Severability

If any one or more of the provisions contained in these rules is for any reason held to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability does not affect any other rules or provisions of these rules, and these rules must be construed as if such invalid, illegal, or unenforceable rule or provision had never been contained in these rules.

§ 1.12 Amendment of Rules

The Board may, following applicable notice, hearing, process and procedural requirements set forth in these rules and in Chapter 36, Texas Water Code, amend these rules and adopt new rules from time to time. These rules, as amended, shall apply to all groundwater usage within the territorial boundaries of the District.

CHAPTER 2. BOARD

§ 2.1 Purpose of the Board

The board was created to determine policy and regulate the withdrawal and use of groundwater within the boundaries of the District for conserving, preserving, protecting and recharging the groundwater within the District, and to exercise the District's rights, powers, and duties in a way that will effectively and expeditiously accomplish the purposes of the District Act and Chapter 36, Water Code. The board's responsibilities include, but are not limited to, the adoption and enforcement of reasonable rules and other orders.

§ 2.3 Ex Parte Communications

Board members may not communicate, directly or indirectly, about any issue of fact or law in any contested case that is before the board, with any agency, person, party or their representatives, except on notice and opportunity for all parties to participate. A board member may not communicate ex parte with other members of the board. This rule does not apply to a board member who abstains from voting on any matter in which ex parte communications have occurred.

CHAPTER 3. DISTRICT STAFF

§ 3.1 General Manager

The board may employ or contract with a person to serve as general manager of the District and to perform such services as the board may from time to time specify. The board may delegate to the general manager full authority to manage and operate the affairs of the District subject to these rules and orders of the board. The general manager, with approval of the board, may employ all persons necessary for the proper handling of business and operation of the District, and their salaries will be set by the board.

If the position of general manager is vacant, the board may appoint an interim manager, or act to manage the District and perform any function of the general manager identified by these rules.

CHAPTER 4. DISTRICT RECORDS

§ 4.1 Minutes and Records of the District

All documents, reports, records, and minutes of the District are available for public inspection and copying consistent with the requirements of the Public Information Act. Copying charges may be assessed by the District. A list of charges for copies will be furnished by the District.

§ 4.3 Certified Copies

Requests for certified copies must be in writing. Certified copies will be made under the direction of the board. Certification charges may be assessed by the District.

§ 4.5 Notice of Change of Address or Phone Number

Applicants, registrants, permittees, and other persons with a permit with or a matter or proceeding before the District shall give written notice to the District of any change of ownership, well operator, contact person for District matters, electronic mail address, mailing address or telephone number within 30 days of such change.

CHAPTER 5. GROUNDWATER PRODUCTION

Subchapter A. General Provisions

§ 5.1 Beneficial Use; Prohibition on Waste

Groundwater produced within the District may only be used for a beneficial purpose. No person may produce or use groundwater in a manner that constitutes waste. Any person producing or using groundwater from within the District shall employ all reasonable methods to identify, prevent and stop the waste of water.

§ 5.3 Operation of Well at Higher Than Authorized Rate or Amount Prohibited

No person may operate a well within the District's boundaries at a rate of production higher than the rate authorized or for a greater annual amount than authorized by a permit, these rules, or other applicable law.

§ 5.5 Conveyed Water; Pipelines

All persons shall use reasonable diligence to convey water from the wellhead where produced to the place of use in order to prevent evaporation, channel loss by percolation, or waste. Water conveyed greater than a distance of one-half mile from the wellhead where produced must be conveyed through a pipeline.

§ 5.7 Permits Subject to Revocation

All permits granted by the District are based upon and contingent upon the accuracy of the information supplied by the applicant. A finding that false information has been supplied is grounds for immediate revocation of the permit.

§ 5.9 General Provisions Applicable To Withdrawals

(a) A valid Historic Use Production Permit or Non-Historic Use Production Permit is required to withdraw or produce groundwater from a non-exempt well.

(b) A permit confers only the right to use the permit under the provisions of these rules. The permit's terms may be modified or amended pursuant to the provisions of these rules.

(c) Withdrawal or production of groundwater from a non-exempt well must be measured by the owner or operator and reported to the District according to the requirements of Chapter 8 of these rules.

(d) All well sites must be accessible to District representatives for inspection, and any permittee agrees to cooperate fully in any reasonable inspection of the well and well site by the District representatives.

(e) The application for a permit or permit amendment shall be in writing and sworn to by the applicant.

(f) Within 30 days after the date of a change in ownership of a permit, the permittee must notify the District in writing of the name of the new owner. Any person who becomes the owner of a permit must, within 30 calendar days from the date of the change in ownership, file a notice of transfer of ownership or an application to amend the permit, as applicable.

(g) Violation of a permit's terms, conditions, requirements, or special provisions, including pumping, withdrawing, or producing groundwater in excess of the quantity authorized by a permit issued by the District, is a violation of these rules and is subject to enforcement action as provided by these rules and any applicable law.

(h) For any applications submitted to the District for which the applicant has requested that such applications be processed concurrently, the District may process and the Board may consider such applications concurrently according to the standards and rules applicable to each.

(i) Any increase in the volume of groundwater produced or in the rate of withdrawal from a well or wells, or change in the purpose of use or place of use of groundwater during the term of a permit issued by the District may not be made unless the Board has first approved a permit amendment authorizing the change.

Subchapter B. Groundwater Production Limitations

§ 5.101 Purpose

The purpose of this subchapter is to:

(a) establish the aggregate, annual volume of groundwater that may be produced from:

(1) exempt wells; and

(2) non-exempt wells that withdraw groundwater from the Trinity Aquifer or the Brazos River Alluvium Aquifer operating pursuant to Historic Use Production Permits and Non-Historic Use Production Permits;

(b) establish the procedures for implementing, if necessary, proportional adjustments to the volume of groundwater allowed to be produced in any given year pursuant to Historic Use Production Permits; and

(c) establish the procedures for implementing, if necessary, proportional adjustments to the volume of groundwater allowed to be produced in any given year pursuant to Non-Historic Use Production Permits.

§ 5.103 Groundwater Available for Production from the Trinity Aquifer

(a) The aggregate, annual volume of groundwater that may be produced from the Trinity Aquifer is based on combined withdrawals from:

(1) exempt wells, as estimated in the District's approved Groundwater Management Plan; and

(2) non-exempt wells operating pursuant to Historic Use Production Permits and Non-Historic Use Production Permits shall be no greater than the volume of Modeled Available Groundwater for the Trinity Aquifer (MAG Trinity), except as provided in Subsection (d), below.

(b) The estimated volume of groundwater from the Trinity Aquifer allotted for production from exempt wells shall equal that amount as stated in the District's approved Groundwater Management Plan, as may be amended ($Exempt_{Trinity}$) and shall include the amounts from exempt wells in both the Hensell and Hosston Management Zones.

(c) The volume of groundwater that may be produced from the Trinity Aquifer by non-exempt wells ($Non\text{-}Exempt_{Trinity}$) shall not exceed the volume of Modeled Available Groundwater for the Trinity Aquifer ($MAG_{Trinity}$) less the estimated volume of groundwater from the Trinity Aquifer allotted for production from exempt wells ($Non\text{-}Exempt_{Trinity} \leq MAG_{Trinity} - Exempt_{Trinity)}$. This amount shall equal the combined volume of Modeled Available Groundwater for the Hensell Management Zone of the Trinity Aquifer ($MAG_{Trinity\ (Hensell)}$) and the volume of Modeled Available Groundwater for the Hosston Management Zone of the Trinity Aquifer

($MAG_{Trinity\ (Hosston)}$).

(d) The volume of groundwater that may be produced from the Hensell Management Zone by non-exempt wells ($Non\text{-}Exempt_{Trinity\ (Hensell)}$) shall not exceed the volume of Modeled Available Groundwater for the Hensell Management Zone ($MAG_{Trinity\ (Hensell)}$) less the estimated volume of groundwater from the Hensell Management Zone allotted for production from exempt wells ($Non\text{-}Exempt_{Trinity\ (Hensell)} \leq MAG_{Trinity\ (Hensell)} - Exempt_{Trinity\ (Hensell)}$.

(e) The volume of groundwater that may be produced from the Hosston Management Zone by non-exempt wells ($Non\text{-}Exempt_{Trinity\ (Hosston)}$) shall not exceed the volume of Modeled Available Groundwater for the Hosston Management Zone ($MAG_{Trinity\ (Hosston)}$) less the estimated volume of groundwater from the Hosston Management Zone allotted for production from exempt wells ($Non\text{-}Exempt_{Trinity\ (Hosston)} \leq MAG_{Trinity\ (Hosston)} - Exempt_{Trinity\ (Hosston)}$.

(f) Unless a lower production amount is deemed appropriate for a given applicant due to the factors identified in Section 5.211(a) below, each Historic Use Production Permit for the Trinity Aquifer shall initially authorize the permittee to produce his or her Maximum Historic Use (MHU). If, after all Historic Use Production Permit applications have been finally decided by the District, the aggregate of the annual volume of groundwater permitted for production pursuant to the Historic Use Production Permits exceeds the volume calculated in Subsection (c) above ($Non\text{-}Exempt_{Trinity}$), then the District shall, by written order no later than January 1, 2014, proportionally reduce the authorized production amount of each and every Historic Use Production Permit in order to equal the $Non\text{-}Exempt_{Trinity}$ amount, and such order shall effectively modify each Historic Use Production Permit.

(g) If after all Historic Use Production Permit applications have been finally decided by the District, the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits from the Trinity Aquifer ($HUPP_{Trinity}$) is less than the volume calculated in Subsection (c) above for $Non\text{-}Exempt_{Trinity}$, then the District may grant Non-Historic Use Production Permits for the Trinity Aquifer ($NHUPP_{Trinity}$) in an aggregate annual volume equal to or less than the difference between the volume calculated in Subsection (c) above and the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits for the Trinity Aquifer ($NHUPP_{Trinity} \leq Non\text{-}Exempt_{Trinity} - HUPP_{Trinity}$). No Non-Historic Use Production Permit applications shall be considered by the District until all Historic Use Production Permit applications have been finally decided by the District.

(h) If after the reissuance of all Historic Use Production Permits and Non-Historic Use Production Permits authorizing withdrawals from the Trinity Aquifer in accordance with Section 5.222, the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits from the Hensell Management Zone ($HUPP_{Trinity\ (Hensell)}$) is less than the volume calculated in Subsection (c) above for the $Non\text{-}Exempt_{Trinity\ (Hensell)}$, then the District may grant Non-Historic Use Production Permits for the Hensell Management Zone ($NHUPP_{Trinity\ (Hensell)}$) in an aggregate annual volume equal to or less than the difference between the volume calculated in Subsection (c) above and the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits from the Hensell Management Zone ($NHUPP_{Trinity\ (Hensell)} \leq Non\text{-}Exempt_{Trinity\ (Hensell)}$ -

$HUPP_{Trinity\ (Hensell)}$).

(i) If after the reissuance of all Historic Use Production Permits and Non-Historic Use Production Permits authorizing withdrawals from the Trinity Aquifer in accordance with Subsection (g), the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits from the Hosston Management Zone ($HUPP_{Trinity\ (Hosston)}$) is less than the volume calculated in Subsection (c) above for the $Non\text{-}Exempt_{Trinity\ (Hosston)}$, then the District may grant Non-Historic Use Production Permits for the Hosston Management Zone ($NHUPP_{Trinity\ (Hensel)}$) in an aggregate annual volume equal to or less than the difference between the volume calculated in Subsection (c) above and the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits from the Hosston Management Zone ($NHUPP_{Trinity\ (Hosston)} \leq Non\text{-}Exempt_{Trinity\ (Hosston)} - HUPP_{Trinity\ (Hosston)}$).(j) The aggregate of the annual volume of groundwater production permitted pursuant to Historic Use Production Permits and Non-Historic Use Production Permits, if any, is subject to additional proportional reduction by written order of the District as may be necessary in order to achieve the Modeled Available Groundwater, as it may be amended, or any Desired Future Condition of the Trinity Aquifer. If any additional proportional reduction is necessary, such reduction shall be first applied to Non-Historic Use Production Permits, even to the extent, if necessary, that Non-Historic Use Production Permits will be entirely voided, before any proportional reduction is made to Historic Use Production Permits.

(j) The aggregate of the annual volume of groundwater production permitted pursuant to Historic Use Production Permits and Non-Historic Use Production Permits, if any, is subject to additional proportional reduction by written order of the District as may be necessary in order to achieve the Modeled Available Groundwater, as it may be amended, or any Desired Future Condition of the Trinity Aquifer. If any additional proportional reduction is necessary, such reduction shall be first applied to Non-Historic Use Production Permits, even to the extent, if necessary, that Non-Historic Use Production Permits will be entirely voided, before any proportional reduction is made to Historic Use Production Permits.

§ 5.107 Groundwater Available for Production from the Brazos River Alluvium Aquifer

(a) The aggregate annual volume of groundwater that may be produced from the Brazos River Alluvium Aquifer from:

(1) exempt wells, as estimated in the District's approved Groundwater Management Plan; and

(2) non-exempt wells operating pursuant to Historic Use Production Permits and Non-Historic Use Production Permits shall be no greater than the volume of Modeled Available Groundwater for the Brazos River Alluvium Aquifer ($MAG_{Alluvium}$), except as provided in Subsection (d), below.

(b) The estimated volume of groundwater from the Brazos River Alluvium Aquifer allotted for production from exempt wells shall equal that amount as stated in the District's approved Groundwater Management Plan, as may be amended ($Exempt_{Alluvium}$).

(c) The volume of groundwater that may be produced from the Brazos River Alluvium Aquifer by non-exempt wells ($Non\text{-}Exempt_{Alluvium}$) shall not exceed the volume of Modeled Available Groundwater for the Brazos River Alluvium Aquifer ($MAG_{Alluvium}$) less the estimated volume of groundwater from the Brazos River Alluvium Aquifer allotted for production from exempt wells ($Non\text{-}Exempt_{Alluvium} \leq MAG_{Alluvium} - Exempt_{Alluvium}$).

(d) Unless a lower production amount is deemed appropriate for a given applicant due to the factors identified in Section 5.211(a), below, each Historic Use Production Permit for the Brazos River Alluvium Aquifer shall initially authorize the permittee to produce his or her Maximum Historic Use (MHU). If, after all Historic Use Production Permit applications have been finally decided by the District, the aggregate of the annual volume of groundwater permitted for production pursuant to the Historic Use Production Permits exceeds the volume calculated in Subsection (c) above ($Non\text{-}Exempt_{Alluvium}$), then the District shall, by written order, proportionally reduce the authorized production amount of each and every Historic Use Production Permit in order to equal the $Non\text{-}Exempt_{Alluvium}$ amount, and such order shall effectively modify each Historic Use Production Permit.

(e) If, after all Historic Use Production Permit applications have been finally decided by the District, the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits ($HUPP_{Alluvium}$) is less than the volume calculated in Subsection (c) above ($Non\text{-}Exempt_{Alluvium}$), then the District may grant Non-Historic Use Production Permits ($NHUPP_{Alluvium}$) in an aggregate annual volume equal or to less than the difference between the volume calculated in Subsection (c) above and the aggregate of the annual volume of groundwater authorized for production pursuant to Historic Use Production Permits ($NHUPP_{Alluvium} \leq Non\text{-}Exempt_{Alluvium} - HUPP_{Alluvium}$). No Non-Historic Use Production Permit applications shall be considered by the District until all Historic Use Production Permit applications have been finally decided by the District.

(f) The aggregate of the annual volume of groundwater production permitted pursuant to Historic Use Production Permits and Non-Historic Use Production Permits, if any, is subject to additional proportional reduction by written order of the District as may necessary in order to achieve the Modeled Available Groundwater, as it may be amended, or any Desired Future Condition of the Brazos River Alluvium Aquifer. If any additional proportional reduction is necessary, such reduction shall be first applied to Non-Historic Use Production Permits, even to the extent, if necessary, that Non-Historic Use Production Permits will be entirely voided, before any proportional reductions are made to Historic Use Production Permits.

Subchapter C. Groundwater Production Permits

§ 5.201 Types of Groundwater Production Permits

The District may issue the following types of groundwater production permits:

(1) Historic Use Production Permits (HUPPs); and

(2) Non-Historic Use Production Permits (NHUPPs).

Groundwater may not be produced from a non-exempt well within the District without holding a valid HUPP or NHUPP.

§ 5.203 Authorized Uses

As specifically designated in a groundwater production permit, a person may beneficially use groundwater withdrawn from the Aquifer for the following purposes of use:

(a) irrigation use; and

(b) municipal/industrial/other use.

§ 5.205 Filing Deadline for Applications for Historic Use Production Permits

In order to obtain an Historic Use Production Permit, the owner of a non-exempt well that was completed and operational prior to January 1, 2010, and that produced and used groundwater in any year during the Existing and Historic Use Period, was required to submit an application to the District for an Historic Use Production Permit by no later than 5:00 p.m., May 1, 2010. HUPP applications arriving at the District Office after that deadline will be returned to the applicant. Failure to file an application for a HUPP by 5:00 p.m. on May 1, 2010 shall preclude the well owner from making any future claim or application to the District for Historic Use of groundwater under these rules. Failure to file an application for a HUPP by 5:00 p.m. on May 1, 2010 for a well or wells shall preclude the owner or any operator from producing groundwater from the well or wells unless such owner or operator obtains a Non-Historic Use Production Permit, if available, converts the well to an exempt well or monitoring well, or obtains a transfer of production rights from the holder of a HUPP.

§ 5.207 Applications for Historic Use Production Permits (HUPPs)

All HUPP applicants must use the application form prescribed by the District and include all relevant information required by these rules. A single HUPP application may, at the applicant's discretion, be submitted for multiple wells owned or operated by the applicant. In addition to the information specified in § 9.107, an application for an Historic Use Production Permit shall contain the following:

(a) Name and Address of Owner. The full name, physical and mailing addresses, telephone number, fax number, and electronic mail address of the landowner and operator, as applicable.

(b) Source of Supply. A statement identifying which aquifer(s) is/are the source of groundwater from the well.

(c) Rate of Withdrawal. The maximum rate of withdrawal, in gallons per minute, that the well is capable of producing.

(d) Method of Withdrawal. A description of the method used to withdraw groundwater.

(e) Declaration of Historic Use. A declaration of the amount of groundwater claimed to have been used in each year of the Existing and Historic Use Period, identifying the total amount of groundwater that the applicant or his or her contract user or predecessor in interest, withdrew and beneficially used without waste, and, if applicable, the number of acres irrigated without waste, during each calendar year of the Existing and Historic Use Period, calculated in accordance with the following guidelines, as may be applicable:

(1) For an applicant whose use during the Existing and Historic Use Period has been affected by a requirement of, or participation in, the federal conservation program, a credit for Beneficial Use shall be given for the amount that would have been withdrawn and beneficially used during the Existing and Historic Use Period by such applicant but for the operation of the federal conservation program. The credit may be based on irrigation use on comparable acres on a similarly-situated farm that is not in the federal conservation program.

(2) If, during the Existing and Historic Use Period, more than one user applied groundwater for a Beneficial Use on the same land, then all such Beneficial Use shall inure solely to the benefit of and may only be claimed by the landowner who last withdrew and used the water or whose contract user last withdrew and used the water during the Existing and Historic Use Period.

(f) Purpose of Historic Use. The purpose(s) for which the groundwater was used during the Existing and Historic Use Period.

(g) Purpose of Future Use: The purpose(s) for which the groundwater will be used.

(h) Crop Type. For irrigation applications, the crop type and acreage of all crops irrigated during the Existing and Historic Use Period.

(i) Irrigated Acreage. For irrigation applications, the deed and legal description of irrigable land irrigated to produce an agricultural crop during the Existing and Historic Use Period, including the year irrigated.

(j) Ownership of Well Land: The deed and legal description for the tract of land on which the well is located.

(k) Federal Conservation Plan Documentation: For irrigation applications, where applicable, documentation regarding enrollment of each tract of land in the federal conservation program.

(l) Well locations: The number and location of each well owned by the applicant and for which the applicant claims groundwater was withdrawn and placed to Beneficial Use during the Existing and Historic Use Period.

(m) Place of Use: The place of use of groundwater withdrawn from each well, including, as applicable, a copy of the deed and legal description for the place of use or a copy of the map identifying the boundaries of the applicant's Certificate of Convenience and Necessity (CCN).

(n) Other Users: If the groundwater was withdrawn from the well or placed to a Beneficial Use by a contract user or predecessor in interest, then the name, address and telephone number of each contract user or predecessor in interest, and copies of the legal documents establishing the legal right of the contract user or predecessor in interest to withdraw and/or place groundwater from the well to Beneficial Use.

(o) Year Drilled: The year in which the well was drilled.

(p) Photograph: A photograph of the well taken approximately 100 feet from the wellhead.

(q) Well or Driller's Log: A copy of the State Well Report and, if available, any geophysical logs for the well.

(r) Plans: Any potable water supply entity shall provide a copy of its water conservation plan and drought contingency plan prepared for the TCEQ.

(s) Compliance with Management Plan: A declaration that the applicant will comply with the District's Groundwater Management Plan.

(t) Compliance with Rules: A declaration that the applicant is in compliance with all applicable District rules in effect since December 7, 2007, and will comply with the District's rules.

(u) Surface Water Bodies: The name of any surface water, including lakes, streams, or rivers, within 1,000 feet of the well.

(v) Waste and Conservation: A statement that the applicant agrees to avoid waste and achieve water conservation.

(w) Groundwater Quality: A statement that the applicant agrees to use reasonable diligence to protect groundwater quality.

(x) Other Information: Any other information determined to be necessary by the District.

§ 5.211 Basis for Action on Historic Use Production Permit Applications

(a) The Board shall grant an application for an Historic Use Production Permit if the

Board finds that:

(1) the application is complete;

(2) the application was timely filed in accordance with Section 5.205;

(3) the application complies with the rules of the District;

(4) all applicable fees and deposits have been paid;

(5) the applicant owns the proposed or existing well and the place of use;

(6) the applicant has a legal right to produce groundwater from the proposed or existing well;

(7) the wellhead is, or will be physically located, within the boundaries of the District;

(8) the withdrawals are proposed to be placed to a Beneficial Use;

(9) except as provided in Section 5.401(b), the place of use is located within the District's boundaries, unless the applicant also has obtained or applied for a groundwater exportation permit from the District;

(10) the applicant is in compliance with any permits the applicant holds from the District and with District rules;

(11) the activities of the applicant constituting the purpose of use for which the groundwater will be beneficially used will be managed to preserve, protect, prevent the pollution, degradation, or harmful alteration of, control and prevent the waste of, prevent the escape of groundwater from, and achieve the conservation of groundwater in and produced from, the aquifer;

(12) the proposed production of water will not unreasonably affect existing groundwater or surface water resources or existing holders of permits issued by the District;

(13) operation of the well will not cause unreasonable interference between wells;

(14) the application is consistent with the District's certified groundwater management plan, as may be amended; and

(15) the applicant proves the Beneficial Use of groundwater without waste during the Existing and Historic Use Period.

(b) Aggregation of Withdrawals. The authorized withdrawal amount for a given Historic Use Production Permit may be aggregated with the authorized withdrawal amounts for other Historic Use Production Permits held by the same permittee. Where aggregated, the total authorized withdrawal amount will be assigned to the wells in aggregate, rather than allocating to

each well its pro-rata share of production.

(c) An Historic Use Production Permit issued by the District will initially authorize the permittee to produce his or her Maximum Historic Use (MHU), unless the District finds that a lower production amount is appropriate for a given applicant based upon the factors listed in Subsection (a), above. The initial production amount specified in an Historic Use Production Permit may subsequently be proportionally reduced by the District as provided in Subchapter B of this chapter.

(d) The Board shall not issue Historic Use Production Permits for lands for which the Board determines the applicant, his predecessor in interest, or a contract user did not beneficially use groundwater without waste during the Existing and Historic Use Period.

(e) The Board shall determine the volume of Maximum Historic Use (MHU) of groundwater by an applicant as follows:

(1) for irrigation purposes, it shall be the number of acres of Existing and Historic Irrigated Land proven to have been to have been irrigated during any one year of the Existing and Historic Use Period multiplied by 2.5 acre-feet per acre;

(2) for all other non-exempt uses, it shall be the maximum amount of groundwater proven to have been produced and beneficially used in a non-wasteful manner in any one calendar year during the Existing and Historic Use Period or for a municipal historical user within a certificate of convenience and necessity (CCN) who has less than one full year of use by some end users within the CCN, it shall be the maximum amount of groundwater proven to have been produced and beneficially used in a non-wasteful manner during part of the calendar year during the Existing and Historic Use Period calculated on an annualized basis; or

(3) for any land that was enrolled in the federal conservation program during the Existing and Historic Use Period, it shall be the number of acres of Existing and Historic Irrigated Land proven to have been land that was both irrigated for production prior to enrollment in the federal conservation program, and enrolled or participating in the program during any year in the Existing and Historic Use Period, multiplied by 2.5 acre-feet per acre.

(f) Existing and Historic Irrigated Land shall be classified by the District as the acres of land that are irrigable and which were irrigated to produce an agricultural crop during one or more years of the Existing and Historic Use Period.

(g) The following measures shall be used by the District to determine if land within the District's boundaries is irrigable:

(1) the land is classified by the United States Department of Agriculture Farm Services Agency as "cropland" that is land that is capable of being farmed with normal farming equipment and any other requirements of the Farm Services Agency;

(2) the land is classified by the United States Department of Agriculture Natural Resources Conservation Services as "Additional Farmland of Statewide Importance" according to the procedures of Part 657.5 Identification of Important Farmlands (7 CFR 657); or

(3) any other method or methods determined by the Board to reasonably determine if land is irrigable.

(h) One or more of the following measures may be used by the District to determine if land classified by the District as irrigable was irrigated to produce an agricultural crop during the Existing and Historic Use Period:

(1) crop production reports from a governmental agency that are determined by the District to contain sufficient information to identify:

(A) the location of the land on which the agricultural crop was produced;

(B) that an agricultural crop was produced on such land;

(C) that such land was irrigated to produce the agricultural crop; and

(D) the year or years that the agricultural crop was produced;

(2) aerial photographs or imagery that were produced by or obtained from an agency of the United States or the State of Texas and are determined by the District to be:

(A) of sufficient quality to accurately determine the location of the irrigated field;

(B) properly documented as to source and date when the photograph was taken; and

(C) of sufficient quality that the irrigated land shown in the photograph can be correlated by the District to a legal description of the land and the appraisal district property identification number associated with such land;

(3) crop production reports from any reasonable source that are determined by the District to contain sufficient information to identify:

(A) the location of the land on which the agricultural crop was produced;

(B) that an agricultural crop was produced on such land;

(C) that such land was irrigated to produce the agricultural crop; and

(D) the year or years that the agricultural crop was produced;

(4) aerial photographs or imagery that were produced by or obtained from any source and are determined by the District to be:

(A) of sufficient quality to accurately determine the location of the irrigated field;

(B) properly documented as to source and date when the photograph was taken; and

(C) of sufficient quality that the irrigated land shown in the photograph can be correlated by the District to a legal description of the land and the appraisal district property identification number associated with such land; and

(5) any other method or methods determined by the Board to reasonably determine if irrigable land has been irrigated.

§ 5.213 Contents of Historic Use Production Permits

(a) An Historic Use Production Permit issued by the District shall include the following terms and conditions:

(1) the name of the person or entity to whom the permit is issued;

(2) the date the permit is issued;

(3) the location of the well;

(4) the purpose of use for which the water produced from the well will be used;

(5) the specific location of the place of use of the water produced from the well;

(6) the aquifer and aquifer management zone, if applicable, from which withdrawals are authorized to be made;

(7) except as provided in Section 5.401(b), if the place of use is not within the District's boundaries, the permittee must obtain a groundwater exportation permit from the District prior to the withdrawal of groundwater under the permit;

(8) the requirements for the conveyance of water produced from the well to the place of use;

(9) the maximum rate of production in gpm, and any conditions relative thereto;

(10) the maximum amount of production in acre-feet per annum, specifying the authorized withdrawal amount by aquifer management zone, if applicable, and any conditions relative thereto;

(11) a water well closure plan or a declaration that the applicant will comply with well plugging requirements and report closure to the District and the Commission;

(12) metering and reporting requirements;

(13) a statement that the permit is subject to the Standard Permit Conditions set forth in Section 5.215 of these rules; and

(14) a statement that the permit is subject to limitation or modification as may be provided in the District's Rules or other applicable law; and

(15) other terms and conditions as may be required by the Board.

(b) Within 30 days of issuance, an Historic Use Production Permit shall be recorded with the Clerk of every county in which the well or wells or place of use are located and a copy shall be provided to the District.

(c) Within 30 days of reissuance pursuant to Section 5.222, the District, on behalf of the permit holder, will file a reissued Historic Use Production Permit for recordation in the deed records of every county in which the well or wells or place of use are located and a copy shall be provided to the permit holder.

§ 5.215 Standard Permit Conditions for Historic Use Production Permits

All Historic Use Production Permits issued by the District shall be subject to the following conditions:

(a) the duty to beneficially use and avoid waste of groundwater;

(b) the duty to conserve water in accordance with applicable law, and comply with the District's water conservation plan, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(c) the duty to properly close (cap or plug) all wells in accordance with applicable law, and comply with the District's well closure plan, if any, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(d) the duty to file all applicable reports with the District, and other appropriate federal, state, or local governments;

(e) the duty to reduce water production or consumption during times of drought in accordance with applicable law, and to comply with the District's drought management plan, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(f) the duty to comply with the District's certified groundwater management plan, as may be amended from time to time;

(g) the duty to use diligence to protect groundwater quality within the District;

(h) the duty to comply with the District's rules, as may be amended;

(i) any permit review, renewal, or extension conditions;

(j) the duty to locate all wells, and confirm the actual location with the proposed location in the application or as provided for in the permit, consistent with the District's well spacing rules, prior to the production from any wells identified in the permit or application;

(k) the continuing right of the District to supervise and manage groundwater production and protect the aquifer;

(l) the duty to install, equip, operate, maintain, and close all wells in accordance with the District's rules, and other applicable federal, state, and local law;

(m) the duty to comply with the District's rules relating to transfers and amendments of permits;

(n) the duty to pay and be current in the payment of all applicable fees;

(o) the duty not to export groundwater from a well within the District's boundaries to a place of use outside the District's boundaries without a Groundwater Exportation Permit issued by the District;

(p) the duty to give notice to the District of any changes in name, address, or telephone number of the permittee, or the authorized representative, as applicable, in accordance with these rules;

(q) the duty to comply with all of the terms and conditions of the permit;

(r) the duty to ensure that the well site is accessible to District representatives for inspection, and to cooperate fully in any reasonable inspection of the well and well site by District representatives;

(s) the right of the District to enter land under § 36.123, Texas Water Code, as may be amended;

(t) the duty to comply with the metering and reporting requirements set forth in Chapter 8 of these rules;

(u) the duty to comply with any proportional adjustments mandated by Subchapter B of Chapter 5 of these rules; and

(v) any other conditions as the Board may deem appropriate.

§ 5.217 Groundwater Production in Violation of Historic Use Production Permit Prohibited

No holder of a Historic Use Production Permit may withdraw or use groundwater in a manner inconsistent with the terms of the permit, and any such production is illegal, wasteful per se, and a nuisance.

§ 5.219 Transfer of Ownership or Lease of Historic Use Production Permit; Notice

(a) The ownership of a Historic Use Production Permit may be transferred separately from the ownership of the place of use.

(b) Within 30 days after transfer of the ownership of a Historic Use Production Permit, or lease of the right to withdraw groundwater thereunder, the transferee shall file with the District a notice on a form prescribed by the District. For transfers of ownership, if the notice is complete, and the transfer is otherwise in compliance with this subchapter, the general manager shall reflect the new ownership and issue an amended permit to the transferor, transferee, or both, as may be appropriate. For leases, the general manager will update the District's permit records to reflect the lease.

§ 5.221 Historic Use Production Permit Transfers and Amendments; Applications

(a) The District may amend a Historic Use Production Permit as to the following:

(1) point of withdrawal;

(2) place of use;

(3) the total volume of groundwater authorized to be withdrawn in acre-feet per annum by aquifer management zone, if applicable;

(4) rate of production in gpm; or

(5) ownership in accordance with Section 5.219.

(b) Any person seeking to amend their permit as provided in Subsection (a)(1)-(4) must first file with the District an application to amend on a form prescribed by the District.

(c) No permit transfer or amendment is effective until the transfer or amendment has been approved by the Board.

(d) A permit amendment may not authorize the withdrawal of groundwater from a different aquifer management zone than that authorized in the transferor's Historic Use Production Permit.

(e) An amendment to a Historic Use Production Permit to increase the authorized withdrawal amount may only be made based on the transfer of Historic Use Production Permit withdrawal amounts from another Historic Use Production Permit.

§ 5.222 Historic Use Production Permit Reissuance

Following the readoption of the District's management plan in 2015, and in compliance with the applicable procedures in Chapter 9, Subchapter C, the District shall reissue all Historic Use Production Permits authorizing withdrawals from the Trinity Aquifer to specify, to the extent reasonably possible, whether withdrawals are from the Hensell and/or the Hosston

Management Zone and in what amount or amounts from each aquifer management zone withdrawals are authorized to be made.

§ 5.223 Basis for Granting Applications to Amend Historic Use Production Permits

The Board shall grant an application to amend a Historic Use Production Permit if it finds that:

(1) the elements provided for in §§ 5.207, 5.211 and 5.221 are established; and

(2) during the term of the permit, the applicant, transferor, or transferee, as may be appropriate, demonstrates a positive compliance history with the permit's terms and conditions, and the District's rules.

§ 5.225 Availability of and Application for Non-Historic Use Production Permits

(a) If, pursuant to Subchapter B of this chapter, the District determines that there is sufficient groundwater available for the District to issue Non-Historic Use Production Permits in a given aquifer, and given aquifer management zone, if applicable, then the Board will issue a written order authorizing the filing and processing of applications for Non-Historic Use Production Permits for the applicable aquifer and aquifer management zone, if applicable (an "NHUPP Authorization Order"). The District will not accept for filing any NHUPP application for a given aquifer unless and until such an NHUPP Authorization Order has been issued by the Board for that aquifer.

(b) If the District issues an NHUPP Authorization Order for a given aquifer and given aquifer management zone, if applicable, then no groundwater may be produced from that aquifer and aquifer management zone, if applicable, from a non-exempt well for which there is not an associated Historic Use Production Permit without first applying for and obtaining a Non-Historic Use Production Permit. On the other hand, if, pursuant to Subchapter B of Chapter 5 of these rules, the District determines that there is not sufficient groundwater available for the District to issue Non-Historic Use Production Permits in a given aquifer and given aquifer management zone, if applicable, then no groundwater may be produced from a non-exempt well for which there is not an associated Historic Use Production Permit.

§ 5.227 Applications for Non-Historic Use Production Permits (NHUPP)

(a) If NHUPPs may be applied for, an NHUPP applicant must use the application form prescribed by the District and include all relevant information required by these rules. A single NHUPP application may, at the applicant's discretion, be submitted for multiple wells owned or operated by the applicant. In addition to the information specified in § 9.107, an application for an NHUPP application shall contain the following:

(1) Name and Address of Owner: The full name, physical and mailing addresses, telephone number, fax number, and electronic mail address of the landowner and operator, as applicable.

(2) Source of Supply: A statement identifying which aquifer(s) and aquifer

management zone, if applicable, is/are the source of groundwater from the well.

(3) Rate of Withdrawal: The maximum rate of withdrawal in gallons per minute or cubic feet per second that the well is capable of producing.

(4) Method of Withdrawal: A description of the method used to withdraw groundwater.

(5) Declaration of Amount of Proposed Use. A declaration by the applicant of the volume of groundwater that is proposed to be used without waste for a beneficial purpose and detailed documentation showing the need for the proposed amount of use.

(6) Purpose of Use: The purpose(s) for which the groundwater will be used and the dates by which water will be needed for any specific projects, if applicable.

(7) Ownership of Land: The deed and legal description for the tract of land on which the well is or will be located.

(8) Information regarding availability, access to, and cost to obtain water from a source other than the aquifer identified by the applicant. Information regarding such other sources shall at a minimum include the availability of, access to, and cost to obtain surface water.

(9) Well location: The location of the well or proposed well.

(10) Place of Use: The place of use of groundwater to be withdrawn from the well.

(11) Year Drilled: The year in which the well was or will be drilled.

(12) Well or Driller's Log: A copy of any State well report and, if applicable, any geophysical log for the well.

(13) Plans: Any potable water supply entity shall provide a copy of its water conservation plan and drought contingency plan prepared for the Commission.

(14) Compliance with Management Plan: A declaration that the applicant will comply with the District's management plan.

(15) Compliance with Rules: A declaration that the applicant is in compliance with all applicable District rules in effect on or after December 7, 2007, and will comply with the District's rules.

(16) Surface Water Bodies: The name of any surface water, including lakes, streams, or rivers, within 1,000 feet of the well.

(17) Waste and Conservation: A statement that the applicant agrees to avoid waste and achieve water conservation.

(18) Groundwater Quality: A statement that the applicant agrees to use reasonable diligence to protect groundwater quality.

(19) Other Information: Any other information determined to be necessary by the District.

(b) All applicants for an NHUPP for municipal use shall also include a report prepared by an engineer licensed in the State of Texas that provides the details and methods used to determine:

(1) the applicant's monthly and annual water use on a per meter and per capita basis for the previous 10 years;

(2) the estimated future water needs of the applicant;

(3) the applicant's billing amounts, rate structure, and billing efficiency;

(4) the estimate of water lost through leaks, unmetered connections, and any other loss;

(5) the water conservation methods implemented during the previous 10 years and the methods planned for implementation in the next 10 years;

(6) the economic analysis of using surface water or conservation methods to avoid the need for increased groundwater use; and

(7) the economic analysis of using groundwater from the Brazos River Alluvium Aquifer or other groundwater sources to avoid the need for increased groundwater use from the Trinity Aquifer.

(c) All applicants for an NHUPP for industrial use shall also include a detailed report prepared by an engineer licensed in the State of Texas that includes:

(1) the applicant's monthly and annual water use for the previous 10 years;

(2) the estimated future water needs of the applicant;

(3) the amount of water used per unit of production and referenced to the typical amount of water used in the industry per unit of production (gallons per pound, gallons per item, gallons per unit processed, etc.);

(4) an estimate of water lost through leaks, unmetered uses, and any other loss;

(5) the water conservation methods implemented during the previous 10 years and those methods planned for implementation in the next 10 years;

(6) an economic analysis of using surface water or conservation methods to avoid the need for increased groundwater; and

(7) an economic analysis of using groundwater from the Brazos River Alluvium Aquifer or other groundwater sources to avoid the need for increased groundwater use from the Trinity Aquifer.

(d) All applicants for an NHUPP for agricultural, irrigation, recreational, or wildlife use shall also include a report prepared by an engineer licensed in the State of Texas or the United States Department of Agriculture Natural Resources Conservation Service that includes:

(1) the estimated future water needs of the applicant;

(2) the amount of water used per unit of production (acre-feet per acre of crop, gallons per animal, acre-feet per acre of pond water surface, etc.);

(3) the amount of water lost through evaporation, seepage, or runoff;

(4) the amount of on-site surface water or rainfall usable for meeting proposed demands;

(5) the amount of groundwater need during a year with average rainfall and during a year with extreme drought (drought of record);

(6) an estimate of water lost through leaks, unmetered uses, and any other loss;

(7) the water conservation methods implemented during the previous 10 years and the methods planned for implementation in the next 10 years;

(8) an economic analysis of using surface water or conservation methods to avoid the need for increased groundwater; and

(9) an economic analysis of using groundwater from the Brazos River Alluvium Aquifer or other groundwater sources to avoid the need for increased groundwater use from the Trinity Aquifer.

(e) All applicants for an NHUPP for any other use not defined in Subsections (b), (c) and (d), shall submit additional information determined by the Board based on the proposed use of groundwater.

§ 5.229 Basis for Action on Non-Historic Use Production Permit Applications

(a) The Board shall grant an application for an Non-Historic Use Production Permit if the Board finds that:

(1) the application is complete;

(2) the application complies with the rules of the District;

(3) all applicable fees and deposits have been paid;

(4) the applicant owns the proposed or existing well;

(5) the applicant has a legal right to produce groundwater from the proposed or existing well;

(6) the wellhead is, or will be physically located, within the boundaries of the District;

(7) the withdrawals are proposed to be placed to an actual beneficial use;

(8) except as provided in Section 5.401(b), the place of use is located within the District's boundaries, unless the applicant also has obtained or applied for a groundwater exportation permit from the District;

(9) there are no economically feasible alternative sources of water available;

(10) there is a sufficient volume of water available pursuant to Chapter 5, Subchapter B of these rules to satisfy the applicant's intended purpose of use for the term of the permit;

(11) no other pending applications compliant with the rules, and essential to support domestic use, will be denied, in whole or in part, as the result of granting the application;

(12) the withdrawal amount requested will be physically withdrawn and put to beneficial use within three years of the date the application was filed;

(13) the activities of the applicant will be managed to preserve, protect, prevent the pollution, degradation, or harmful alteration of, control and prevent the waste of, prevent the escape of groundwater from, and achieve the conservation of groundwater in and produced from, the aquifer;

(14) the proposed production of water will not unreasonably affect existing groundwater or surface water resources or existing holders of permits issued by the District or exceed the MAG;

(15) operation of the well will not cause unreasonable interference between wells;

(16) the applicant is in compliance with any permits the applicant holds from the District and with District rules; and

(17) the application is consistent with the District's certified groundwater management plan, as may be amended.

(b) Aggregation of Withdrawals. The authorized withdrawal amount for a given Non-Historic Use Production Permit may be aggregated with the authorized withdrawal amounts for other Non-Historic Use Production Permits held by the same permittee. Where aggregated, the total authorized withdrawal amount will be assigned to the wells in aggregate, rather than

allocating to each well its pro-rata share of production.

(c) The initial production amount specified in a Non-Historic Use Production Permit may subsequently be proportionally reduced, even to the extent that it is entirely voided, by the District as provided in Subchapter B of this Chapter.

§ 5.231 Contents of Non-Historic Use Production Permits

(a) A Non-Historic Use Production Permit issued by the District shall include the following terms and conditions:

(1) the name of the person or entity to whom the permit is issued;

(2) the date the permit is issued;

(3) the location of the well;

(4) the purpose of use for which the water produced from the well will be used;

(5) the specific location of the place of use of the water produced from the well;

(6) except as provided in Section 5.401(b), if the place of use is not within the District's boundaries, the permittee must obtain a groundwater exportation permit from the District prior to the withdrawal of groundwater under the permit;

(7) the requirements for the conveyance of water produced from the well to the place of use;

(8) the maximum rate of production in gpm, and any conditions relative thereto;

(9) the maximum amount of production in acre-feet per annum, and any conditions relative thereto;

(10) a water well closure plan or a declaration that the applicant will comply with well plugging requirements and report closure to the District and the Commission;

(11) metering and reporting requirements;

(12) requirement that withdrawals from the same point or points of withdrawal and purpose of use permitted in a Historic Use Production Permit be allocated first to the authorized annual withdrawal amount of a Historic Use Production Permit before being allocated to a Non-Historic Use Production Permit;

(13) a statement that the permit is subject to the Standard Permit Conditions set forth in Section 5.233 of these rules;

(14) a statement that the permit is subject to limitation or modification as may be provided in the District's rules or other applicable law; and

(15) any other terms and conditions as may be required by the Board.

(b) Within 30 days of issuance, the District, on behalf of the permit holder, will file a Non-Historic Use Production Permit for recordation in the deed records of every county in which the well or wells or place of use are located and a copy shall be provided to the permit holder. The permit holder is responsible for payment of these recording costs.

(c) Within 30 days of reissuance pursuant to Section 5.222, the District, on behalf of the permit holder, will file a reissued Non-Historic Use Production Permit for recordation in the deed records of every county in which the well or wells or place of use are located and a copy shall be provided to the permit holder.

§ 5.233 Standard Permit Conditions for Non-Historic Use Production Permits

Any Non-Historic Use Production Permit issued by the District shall be subject to the following conditions:

(a) the duty to beneficially use and avoid waste of groundwater;

(b) the duty to conserve water in accordance with applicable law, and comply with the District's water conservation plan, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(c) the duty to properly close (cap or plug) all wells in accordance with applicable law, and comply with the District's well closure plan, if any, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(d) the duty to file all applicable reports with the District, and other appropriate federal, state, or local governments;

(e) the duty to reduce water or production or consumption during times of drought in accordance with applicable law, and comply with the District's drought management plan, as may be amended from time to time, and the permittee's plan approved by the District, as applicable;

(f) the duty to comply with the District's certified groundwater management plan, as may be amended from time to time;

(g) the duty to use diligence to protect the groundwater quality within the District;

(h) the duty to comply with the District's rules, as may be amended;

(i) any permit review, renewal, or extension conditions;

(j) the duty to locate all wells, and confirm the actual location with the proposed

location in the application or as provided for in the permit, consistent with the District's well spacing rules, prior to the production from any wells identified in the permit or application;

(k) the continuing right of the District to supervise and manage groundwater production and protect the aquifer;

(l) the duty to install, equip, operate, maintain, and close all wells in accordance with the District's rules, and other applicable federal, state, and local law;

(m) the duty to comply with the District's rules relating to transfers and amendments of permits;

(n) the duty to pay and be current in the payment of all applicable fees;

(o) except as provided in Section 5.401(b), the duty not to export groundwater from a well within the District's boundaries to a place of use outside the District's boundaries without a groundwater exportation permit issued by the District;

(p) the duty to give notice to the District of any changes in name, address, or telephone number of the permittee, or the authorized representative, as applicable, in accordance with these rules;

(q) the duty to comply with all of the terms and conditions of the permit;

(r) the duty to ensure that the well site is accessible to District representatives for inspection, and to cooperate fully in any reasonable inspection of the well and well site by District representatives;

(s) the right of the District to enter land under § 36.123, Texas Water Code, as may be amended;

(t) the duty to comply with the metering and reporting requirements set forth in Chapter 8 of these rules;

(u) the duty to comply with any proportional adjustments mandated by Subchapter B of Chapter 5; and

(v) any other conditions as the Board may deem appropriate.

§ 5.235 Reduction in Amount or Cancellation of Non-Historic Use Production Permit for Non-Use

(a) If all or part of the water authorized to be produced under a Non-Historic Use Production Permit has not been put to Beneficial Use at any time during between the time the permit is issued and three years thereafter, then the permit is subject to cancellation by the District in whole or a reduction in the annual volume of production authorized by the permit.

(b) Prior to any cancellation or reduction, the District shall provide the opportunity

for a hearing and give notice to the permittee at least 30 days before the date of the hearing.

(c) The District shall also have the notice of the hearing published once a week for two consecutive weeks, at least 30 days before the date of the hearing, in a newspaper published in each county in which diversion of water from the source of supply was authorized or proposed to be made and in each county in which the water was authorized or proposed to be used, as shown by the records of the District. If in any such county no newspaper is published, then the notice may be published in a newspaper having general circulation in the county.

(d) The District shall hold a hearing and shall give the permittee and other interested persons an opportunity to be heard and to present evidence on any matter pertinent to the questions at issue.

(e) At the conclusion of the hearing, the District may cancel the permit in whole or in part to the extent that it finds that:

(1) the water or any portion of the water authorized to be produced under the permit has not been put to a Beneficial Use during the 3-year period; and

(2) the permittee has not used reasonable diligence in applying the water or the unused portion of the water to an authorized Beneficial Use or is otherwise unjustified in the nonuse.

§ 5.237 Groundwater Production in Violation of Non-Historic Use Production Permit Prohibited

No holder of a Non-Historic Use Production Permit may withdraw or use groundwater in a manner inconsistent with the terms of the permit, and any such production is illegal, wasteful per se, and a nuisance.

§ 5.239 Transfer of Ownership or Permittee of Non-Historic Use Production Permit; Notice

(a) The ownership or authorized permittee of a Non-Historic Use Production Permit may not be transferred separately from the ownership of the place of use or points of withdrawal for a permit for municipal use with a certificate of convenience and necessity (CCN).

(b) Within 30 days after transfer of the ownership of a Non-Historic Use Production Permit, the transferee shall file with the District a notice on a form prescribed by the District. If the notice is complete, and the transfer is otherwise in compliance with this subchapter, the general manager shall reflect the new ownership and issue an amended permit to the transferee, as appropriate.

§ 5.241 Non-Historic Use Production Permit Transfers and Amendments; Applications

(a) The District may amend a Non-Historic Use Production Permit as to the following:

(1) point of withdrawal;

(2) place of use;

(3) the total volume of groundwater authorized to be withdrawn in acre-feet per annum by aquifer management zone, if applicable;

(4) rate of production in gpm; or

(5) ownership in accordance with Section 5.239.

(b) Any person seeking to amend their permit as provided in Subsection (a)(1)-(4) must first file with the District an application to amend on a form prescribed by the District.

(c) No permit transfer or amendment is effective until the transfer or amendment has been approved by the Board.

(d) A permit amendment may not authorize the withdrawal of groundwater from a different aquifer management zone than that authorized in the transferor's Non-Historic Use Production Permit.

(e) An amendment to a Non-Historic Use Production Permit to increase the authorized withdrawal amount must comply with Sections 5.225 and 5.227 applicable to new applications for a Non-Historic Use Production Permit and shall be granted only in accordance with Section 5.229.

§ 5.242 Non-Historic Use Production Permit Reissuance

Following the readoption of the District's management plan in 2015, and in compliance with the applicable procedures in Chapter 9, Subchapter C, the District shall reissue all Non-Historic Use Production Permits authorizing withdrawals from the Trinity Aquifer to specify, to the extent reasonably possible, whether withdrawals are from the Hensell and/or the Hosston Management Zone and in what amount or amounts from each aquifer management zone withdrawals are authorized to be made.

§ 5.243 Basis for Granting Applications to Amend Non-Historic Use Production Permits

The Board shall grant an application to amend a Non-Historic Use Production Permit if it finds that:

(a) the elements provided for in § 5.229 are established; and

(b) during the term of the permit, the applicant, transferor, or transferee, as may be appropriate, demonstrates a positive compliance history with the permit's terms and conditions, and the District's rules.

Subchapter D. Groundwater Exportation Permits

§ 5.401 Applicability

(a) Except as provided in Subsection (b), this subchapter applies to any person who seeks to export groundwater that is produced from a well within the District's boundaries to a place of use outside the District's boundaries.

(b) This subchapter does not apply to:

(1) a groundwater export arrangement in effect prior to January 7, 2010, and continuing thereafter, so long as there is no increase in the annual amount exported after January 7, 2010;

(2) groundwater that is incorporated into a finished, manufactured product within the District and then exported for sale outside of the District;

(3) groundwater that is produced from a well located within the District, where the well is situated on a contiguous tract of land that straddles the District's boundaries and the groundwater is placed to use solely on that tract, but including portions outside the District's boundaries; or

(4) groundwater that is produced from a non-exempt well located within the District and delivered by the permittee to end users pursuant to a certificate of convenience and necessity (CCN), where: the CCN boundaries straddle the District boundaries.

§ 5.403 Groundwater Exportation Permit Required

(a) Exporting groundwater from the District without a required groundwater exportation permit is illegal, wasteful per se, and a nuisance.

(b) Any person seeking to export groundwater to a place of use outside of the District's boundaries is required to first file with the District an application to export groundwater on a form prescribed by the District and obtain a groundwater exportation permit from the District.

(c) An application filed to comply with this section shall be considered and processed under the same procedures as other applications for other permits and may be combined with applications filed to obtain a permit for in-District water use from the same applicant, if any.

(d) The District may not deny a permit under this subchapter based on the fact that the applicant seeks to export groundwater outside of the boundaries of the District, but may restrict a groundwater exportation permit to the annual production of groundwater and the purpose of use allowed under the associated groundwater production permit.

§ 5.405 Applications for Groundwater Exportation Permits

In addition to the information specified in § 9.107, an application for a groundwater

exportation permit shall contain information reasonably related to the information to be contained in a groundwater exportation permit under §§ 5.413 and 5.417 and the elements to be considered by the Board in determining whether to grant or deny the application under § 5.407. The application shall be submitted on the form developed and prescribed by the District.

§ 5.407 Basis for Action on Groundwater Exportation Permit Applications

The Board shall grant an application for a groundwater exportation permit if the Board finds that:

(a) the application is complete;

(b) the application complies with the rules of the District;

(c) all applicable fees and deposits have been paid;

(d) the water to be exported is proposed to be placed to a Beneficial Use;

(e) the place of use is identified specifically and located outside the District's boundaries;

(f) the well to be used for the proposed exportation project is identified specifically and located within the District's boundaries;

(g) the applicant is in compliance with any permits the applicant holds from the District and with the District's rules;

(h) the applicant owns a groundwater production permit issued by the District to produce the groundwater necessary for the proposed exportation project, or has a contract to purchase the groundwater from a third party who holds such permit or other authorization;

(i) there is insufficient water available in the proposed receiving area to substantially meet the actual or projected demand during the proposed term of the groundwater exportation permit;

(j) there is sufficient water available within the District to substantially meet the actual or projected demand during the proposed term of the groundwater exportation permit;

(k) the proposed exportation will not have an unreasonably adverse effect on aquifer conditions, depletion, or water quality within the District;

(l) the proposed exportation will not have an unreasonably adverse effect on existing permittees, or other groundwater users within the District;

(m) the proposed exportation is consistent with the applicable Regional Water Plans approved by the Texas Water Development Board; and

(n) the proposed exportation is consistent with the District's certified Groundwater Management Plan, as may be amended.

§ 5.411 Groundwater Exportation Permit Term; Renewal

(a) The permit term for an exportation permit shall be set by the Board, consistent with the following criteria:

(1) the permit term shall be three years, if construction of a conveyance system in the District's boundaries has not been initiated prior to the issuance of the permit; or

(2) the permit term shall be 30 years, if construction of a conveyance system has been initiated in the District's boundaries prior to the issuance of the permit.

(b) The three-year term specified in Subsection (a)(1) shall automatically be extended to thirty years if construction of a conveyance system is begun before the expiration of the three-year period. For the purposes of this section, construction of a conveyance system shall be considered to have been initiated when the permittee has completed construction of at least 10% of the portion of the conveyance facilities located within the District that will be used to convey the maximum annual quantity of groundwater permitted for transfer outside of the boundaries of the District. Such portion of the conveyance facilities does not include any existing or previously constructed facilities that were not constructed specifically for use in exporting the groundwater considered under the permittee's groundwater exportation permit application.

(c) An exportation permit may be renewed. Any person seeking the renewal of a groundwater exportation permit must file with the District an application to renew on a form prescribed by the District. The application must be filed with the District no later than one year prior to the expiration of the permit term.

§ 5.413 Contents of Groundwater Exportation Permits

A groundwater exportation permit shall include the following terms and conditions:

(a) the name, address, and telephone number of the permittee;

(b) the groundwater production permit number to be tied to the groundwater exportation permit;

(c) if the permittee does not own the well(s) from which the production for exportation is made, then the name, address and telephone number of the well owner;

(d) if not the permittee, the name, address and telephone number of the owner of the land on which the well(s) is located;

(e) the permit term, including dates of issuance, effectiveness, and termination;

(f) the purpose of use for which the water produced from the well(s) is to be used;

(g) a requirement that the water produced under the permit be put to Beneficial Use without waste;

(h) the location of the place of use outside the District's boundaries;

(i) the maximum amount of production in acre-feet per annum that may be exported from the District, which will be limited to the amount that could be produced by the well(s) for in-District use pursuant to the production limitations set forth in these rules, and any conditions or restrictions relative thereto;

(j) the metering and reporting requirements; and

(k) other terms and conditions as may be required by the Board.

§ 5.417 Standard Permit Conditions for Groundwater Exportation Permits

All groundwater exportation permits shall be issued with and subject to the following conditions:

(a) the duty to beneficially use water and avoid waste;

(b) the duty to conserve water in accordance with applicable law and comply with either the District's water conservation plan, as may be amended;

(c) the duty to file all applicable reports with the District and other appropriate federal, state, or local governments;

(d) the duty to reduce water consumption during times of drought in accordance with applicable law, and comply with either the District's drought management plan, as may be amended from time to time, or the permittee's plan approved by the District, as appropriate;

(e) the District's certified groundwater management plan, as may be amended from time to time;

(f) the duty to use all reasonable diligence to protect the groundwater quality of the aquifer;

(g) the duty to comply with the District's rules as may be amended from time to time;

(h) permit review, renewal, or extension conditions;

(i) the continuing right of the District to supervise the depletion of the aquifer;

(j) installation, equipping, operation, and maintenance of all meters in accordance with the District's rules;

(k) the duty to comply with the District's rules relating to transfers and amendments of permits as may be amended from time to time;

(l) the duty to pay and be current in the payment of all applicable fees;

(m) the duty to record the permit;

(n) the duty to give notice to the District of any changes in name, address, or telephone number of the permittee, or the authorized representative, or the landowner, as may be appropriate;

(o) the duty to comply with all of the terms and conditions of the permit;

(p) the duty to ensure that the well site is accessible to District representatives for inspection, and to cooperate fully in any reasonable inspection of the well and well site by District representatives;

(q) the right of the District to enter land under § 36.123, Texas Water Code, as may be amended; and

(r) any other conditions as the Board may deem appropriate.

§ 5.419 Groundwater Production in Violation of Permit Prohibited

No holder of a groundwater exportation permit may export groundwater in a manner inconsistent with the terms of the permit, and any such production is illegal, wasteful per se, and a nuisance.

§ 5.421 Transfer of Ownership or Lease; Notice

(a) The ownership of a groundwater exportation permit may be transferred separately from the ownership of the place of use. The owner of a groundwater exportation permit may authorize a person other than the permittee to export groundwater under the permit.

(b) Within 30 days after transfer of the ownership of a groundwater exportation permit, or lease of the right to export thereunder, the transferee shall file with the District a notice on a form prescribed by the District. For transfers of ownership, if the notice is complete, and the transfer is otherwise in compliance with this subchapter, the general manager shall reflect the new ownership and issue an amended permit to the transferor, transferee, or both, as may be appropriate. For leases, the general manager will update the District's permit records to reflect the lease.

§ 5.423 Permit Transfers and Amendments; Applications

(a) The District may amend a groundwater exportation permit as to the following:

(1) point of withdrawal;

(2) place of use;

(3) the total volume of groundwater exported in acre-feet per annum;

(4) rate of production in gpm; or

(5) ownership in accordance with Section 5.421.

(b) Any person seeking to amend their permit as provided in Subsection (a)(1)-(4) must first file with the District an application to amend on a form prescribed by the District.

(c) No permit transfer or amendment is effective until the transfer or amendment has been approved by the Board.

(d) An amendment to a groundwater exportation permit to increase the authorized exportation amount must comply with Section 5.405 applicable to new applications for a groundwater exportation permit and shall be granted only in accordance with Section 5.407.

§ 5.425 Basis for Granting Applications to Amend Groundwater Exportation Permits

The Board shall grant an application to amend a groundwater exportation permit if it finds that:

(a) the elements provided for in § 5.407 are established; and

(b) during the term of the permit, the applicant, transferor, or transferee, as may be appropriate, demonstrates a positive compliance history with the permit's terms and conditions, and the District's rules.

Subchapter E. Wells Exempt from Permits

§ 5.501 Exempt Wells

(a) The owner and/or operator of any of the following types of wells is exempt from the duty to obtain a drilling permit or groundwater withdrawal permit for the well:

(1) a well that was in use prior to the effective date of these rules, that is used solely for domestic use, and that was drilled, completed, or equipped so that it is incapable of producing more than 25,000 gallons of groundwater per day;

(2) a well on a tract of land larger than 10 acres if the well is drilled, completed, or equipped so that it is incapable of producing more than 25,000 gallons of groundwater a day and if the water produced or to be produced from the well is used or to be used solely for domestic use or to provide water for livestock or poultry;

(3) a well to supply water solely for a drilling rig that is actively engaged in drilling or exploration operations permitted by the Railroad Commission of Texas if:

(A) the person holding the Commission permit is responsible for the water well; and

(B) the water well is located:

(i) on the lease on which the drilling rig is located;

(ii) within the boundaries of the field in which the drilling rig is located; or

(iii) in close proximity to the drilling rig; or

(4) a well authorized under a permit issued by the Railroad Commission of Texas under Chapter 134, Natural Resources Code; or

(5) a well completed and capable of withdrawing water solely from the Brazos River Alluvium Aquifer if the water produced or to be produced from the well is used or to be used solely for domestic use or to provide water for livestock or poultry, and the well is:

(A) on a tract of land that is 2 acres or more in size but less than 5 acres and the well is drilled, completed, or equipped to be incapable of producing more than 5,000 gallons of groundwater a day;

(B) on a tract of land that is 5 acres or more in size but less than 7 acres and the well is drilled, completed, or equipped to be incapable of producing more than 12,000 gallons of groundwater a day; or

(C) on a tract of land that is 7 to 10 acres in size and the well is drilled, completed, or equipped to be incapable of producing more than 17,000 gallons of groundwater a

day.

(b) Notwithstanding Subsection (a), the District may require a well to be permitted pursuant to these rules if any of the applicable criteria in Section 36.117(d), Texas Water Code, are satisfied.

(c) A person holding a permit issued by the Railroad Commission of Texas under Chapter 134 of the Texas Natural Resource Code that authorizes the drilling of a water well shall report monthly to the District the total amount of water withdrawn from the well, the quantity of water necessary for mining purposes, and the quantity of water withdrawn for other purposes.

(d) All wells qualifying as exempt wells pursuant to Subsection (a) of this Section, shall be registered with the District in accordance with these rules.

(e) All exempt wells shall be equipped and maintained so as to conform to the District's Rules requiring installation of casing, pipe, and fittings to prevent the escape of groundwater from a groundwater reservoir to any reservoir not containing groundwater and to prevent the pollution or harmful alteration of the character of the water in any groundwater reservoir.

(f) All exempt wells shall comply with the spacing requirements set forth in these rules, except for wells exempt under Subsection (a)(4).

(g) The driller of an exempt well shall file the drilling log, and if available, a geophysical log, for the well with the District within 60 days of completion of the exempt well.

(h) An exemption under this section does not affect the District's authority to impose fees under Texas Water Code, Section 36.122 or Texas Water Code, Chapter 36, Subchapter G. Groundwater withdrawn from an exempt well and subsequently transported outside the boundaries of the District shall be subject to any applicable production and exportation fees.

(i) An exempt well will lose its exempt status if the well is subsequently altered, equipped, or used for a purpose or in a manner that is not exempt.

(j) The owner and/or operator of an exempt well must ensure that the well site is accessible to District representatives for inspection, and must cooperate fully in any reasonable inspection of the well and well site by District representatives.

§ 5.503 Loss of Exemption; Notice of Changed Circumstances

The owner and/or operator of a well that is exempt under this subchapter loses the exemption if the nature of the well changes such that the well no longer qualifies for the exemption. Within 30 days of the occurrence of any facts that may cause a well to lose its exemption, the owner and/or operator of the well shall give written notice to the District of the changed circumstances. If the board determines that the changed circumstances have caused the well to lose its exemption, then the board will issue an order declaring the loss of exemption and advising the well owner and/or operator that the well is subject to District regulation, including the duty to obtain a permit, or other regulation, as may be applicable.

§ 5.505 Well Conversions

(a) If the owner and/or operator of a well for which a groundwater withdrawal permit has been issued desires to convert the well to one exempt from the duty to obtain a groundwater withdrawal permit, the owner and/or operator must claim the exemption by abandoning the groundwater withdrawal permit and registering the well as provided for in Section 5.601.

(b) If the owner and/or operator of a well exempt from the duty to obtain a groundwater withdrawal permit desires to convert the well to one for which a groundwater withdrawal permit is required, then the owner and/or operator must apply for and obtain a groundwater withdrawal permit.

Subchapter F. Registration of Wells

§ 5.601 Registration of Exempt Wells

(a) No person may drill or operate an exempt well within the boundaries of the District without first registering the well with the District using a registration form approved by the District, and obtaining written District approval of the registration and agreement that the well qualifies as exempt. All registrations for existing exempt wells shall be filed with the District on or before January 1, 2009.

(b) In addition to the information specified in Section 9.107 of these rules (Contents of and Requirements for All Applications; Registrations and Notices of Transfer of Ownership), a well registration shall contain the following, as applicable:

(1) the name, address and phone number of the registrant and the owner of the land on which the well is or will be located;

(2) if the registrant is other than the owner of the property, documentation establishing the applicable authority to construct and operate a well for the proposed use;

(3) a statement of the nature and purpose of the existing or proposed use and the annual amount of water used or to be used for each purpose;

(4) the location of the well;

(5) the physical address of the property upon which the well is located;

(6) the location where the water from the well will be used;

(7) information relating to the size, source of power, and estimated production rate (in gallons per minute, "gpm") of the pump used or to be used in the well;

(8) the depth or proposed depth of the well and the depth of the casing;

(9) the internal diameter of the well casing.

(10) the approximate date that the well was or will be constructed;

(11) the name, address, and telephone number of the well driller who constructed or will construct the well, and related information;

(12) a copy of any well drilling and completion report, driller's logs, geophysical logs, or well equipping report which pertain to the well;

(13) the size of the tract of land on which the well site is located, including the total number of acres owned by the registrant upon which the well is or will be located;

(14) a legal description of the location of the well, including: the county, section, block and survey, and the number of feet to the two nearest public streets or highways;

or other adequate legal description approved by the District;

(15) if requested by the District:

(A) a city or county map with the location of the property on which the well is located highlighted and the location of the well pinpointed; and

(B) a map or plat of the property on which the well is located, drawn to scale, not greater than 1000 feet to an inch (1" = 1000') that shows the pinpoint location of the well;

(16) the maximum amount of groundwater that the well is or will be capable of withdrawing per day stated in gallons;

(17) where applicable, a copy of any permit issued by the Railroad Commission of Texas relevant to the well; and

(18) any other information deemed necessary by the board in order to determine whether the well qualifies for exempt well status.

(c) The general manager may approve a well registration if the general manager finds that:

(1) the well is eligible to be registered;

(2) the registration is complete;

(3) the registration complies with the rules of the District;

(4) all applicable fees have been paid;

(5) the registration identifies a proposed or an existing well;

(6) the wellhead is or will be physically located within the boundaries of the District;

(7) the production from the well is proposed to be placed to a beneficial use;

(8) the registrant has a legal right to make withdrawals from the well;

(9) for new wells, the proposed well location complies with the spacing rules;

(10) the registrant is in compliance with any permits the registrant holds from the District and with District rules;

(11) the well will be installed, equipped, operated, maintained, or closed, as appropriate, to preserve, protect, prevent the pollution, degradation, or harmful alteration of, control and prevent the waste of, prevent the escape of, and achieve the conservation of groundwater in the aquifer;

(12) the registrant intends to install, equip, operate, maintain, and close the well, as appropriate, in accordance with the manufacturer's standards, instructions, or recommendations, as may be applicable; and

(13) the well meets the criteria for exempt well status pursuant to Section 5.501 of these Rules.

(d) If the general manager makes a preliminary determination that the well is ineligible to be registered, then the matter shall be referred to the board for its consideration. If the board determines that the well is ineligible to be registered, then the owner and/or operator of the well shall file an application for, as applicable, a groundwater withdrawal permit, and/or a well drilling permit, under these rules.

CHAPTER 6. WELL MANAGEMENT

Subchapter A. General Provisions

§ 6.1 Responsibility for Well Management

Well owners and/or operators shall be responsible for the installation, equipping, operation, maintenance, and closure of their wells, and all costs associated therewith.

§ 6.3 Well Construction and Pump Installation Standards

(a) All new wells located within the District's boundaries shall be installed, equipped, operated, maintained, and closed in accordance with Chapters 1901 and 1902, Texas Occupations Code, and Chapter 76, 16 Texas Administrative Code, as may be amended, the Texas Department of Licensing and Regulation's rules on water well drillers and water well pump installers, irrespective of whether the well is required to obtain a drilling permit from the District. In addition, all new wells located within the District's boundaries that are completed so as to be capable of producing groundwater from the Trinity Aquifer shall be located, drilled, equipped, and operated in accordance with 30 Texas Administrative Code § 290.41(c)(1)(A)-(D), (c)(2), (c)(3)(B) – (F)(i), (c)(3)(H) – (Q). To the extent that any of the applicable requirements cited in this section conflict, the well owner and/or operator, driller and/or pump installer shall comply with the requirement that is more protective of groundwater and the environment.

(b) Any existing well or pump that is altered, reworked, redrilled, reequipped or replaced must be done in accordance with the standards in Subsection (a), irrespective of whether the well owner and/or operator is required to obtain a drilling permit from the District.

§ 6.7 Re-completions

(a) The landowner, well owner and/or operator shall have the continuing responsibility of insuring that a well does not allow commingling of undesirable water and fresh water or the loss of water through the wellbore to other porous strata.

(b) If a well is allowing the commingling of undesirable water and fresh water or the loss of water, and the casing in the well cannot be removed and the well re-completed within the applicable rules, the casing in the well shall be perforated and cemented in a manner that will prevent the commingling or loss of water. If such a well has no casing, then the well shall be cased and cemented, or plugged in a manner that will prevent such commingling or loss of water.

(c) The board may direct the landowner, well owner and/or operator to take steps to prevent the commingling of undesirable water and fresh water, or the loss of water.

Subchapter B. Well Spacing and Location Requirements

§ 6.101 Location of Wells

(a) All new wells must comply with the location requirements set forth in the Texas Department of Licensing and Regulation's rules in Chapter 76, 16 Texas Administrative Code, as may be amended.

(b) All new wells must be located a minimum horizontal distance of 50 feet from any property line.

(c) No new well may be located within five hundred (500) feet of a sewage treatment plant, solid waste disposal site, or land irrigated by sewage plant effluent, or within three hundred (300) feet of a sewage wet well, sewage pumping station, or a drainage ditch that contains industrial waste discharges or wastes from sewage treatment systems.

§ 6.103 Required Well Spacing

(a) Except for replacement wells, all new wells drilled into the Hensel Formation or the Hosston Formation of the Trinity Aquifer with a maximum production capacity of 50 gallons per minute or less shall be located a minimum distance of one thousand (1,000) feet from any other well, other than an abandoned well, completed in the same management zone of the Trinity Aquifer.

(b) Except for replacement wells, all new wells drilled into the Hensel Formation or the Hosston Formation of the Trinity Aquifer with a maximum production capacity of more than 50 gallons per minute shall be located a minimum distance of one thousand (1,000) feet plus 20 additional feet for each additional gallon per minute of capacity over 50 gallons per minute from any other well completed in the same management zone of the Trinity Aquifer.

(c) The spacing requirements set forth in Subsections (a) and (b) of this section are not applicable to any well that was completed on or before February 28, 2008. However, any well exempt from the spacing requirements because it was completed on or before February 28, 2008 will lose its exemption and become subject to the spacing requirements if, after February 28, 2008, the well is modified in a manner that substantially increases the capacity of the well.

§ 6.105 Applications for Variance from Well Spacing Limitations

In addition to the information specified in Section 9.107 (Contents of and Requirements for All Applications and Registrations), an application for variance from well spacing limitations shall contain the following:

(a) Name and Address of Owner. The full name, address, telephone number, and electronic mail address of the owner of the proposed well.

(b) Name and Address of Operator. The full name, address, telephone number, and electronic mail address of the operator of the proposed well if not operated by the well owner.

(c) Drilling Application Number. The drilling permit application number for the proposed well.

(d) The names and addresses of owners of wells located within the applicable minimum well spacing distance mandated in § 6.103 from the proposed well.

(e) Information about why the applicable well spacing requirements mandated in § 6.103 cannot be complied with, if applicable.

(f) Information demonstrating that the operation of the proposed well will not substantially interfere with the use and enjoyment of wells located within the minimum well spacing distance mandated in § 6.103, if applicable.

(g) Signed waivers from all owners of wells located within the applicable minimum well spacing distance mandated in § 6.103 from the proposed well stating that they have no objection to the District granting the requested variance, if applicable.

(h) Any other information as may be required by the District.

§ 6.107 Variances from Well Spacing Limitations; Protesting Variance Applications

(a) The board may grant a variance from the well spacing limitations set forth in § 6.103 if the board finds that:

(1) an administratively complete application for variance from well spacing limitations has been filed;

(2) the application complies with the rules of the District;

(3) all applicable fees have been paid;

(4) the applicant has shown good cause why the applicable well spacing limitations mandated in § 6.103 cannot be complied with; and

(5) the applicant has demonstrated that the operation of the proposed well will not substantially interfere with the use and enjoyment of wells located within the minimum well spacing distance mandated in § 6.103.

(b) The board may also grant a variance from the well spacing limitations set forth in § 6.103 if the board finds that:

(1) an administratively complete application for a variance from the well spacing limitations has been filed;

(2) the application complies with the rules of the District;

(3) all applicable fees have been paid; and

(4) the applicant presents signed waivers from all owners of wells located

within the applicable minimum well spacing distance mandated in § 6.103 from the proposed well stating that they have no objection to the District granting the requested variance.

(c) A well owner with a well located within the applicable minimum well spacing distance mandated in § 6.103 from the proposed well may protest the application for variance from spacing limitations pursuant to the procedures set forth in Subchapter D of Chapter 9. If timely protested, the issue of spacing limitations will be decided utilizing the contested case process set out in Subchapter D of Chapter 9. If the board chooses to grant a variance to drill a well that does not meet the spacing limitations mandated in § 6.103, the board may limit the production of the well to ensure that the well will not substantially interfere with the use and enjoyment of wells located within the minimum well spacing distance mandated in § 6.103.

(d) The board, on its own motion, may enter special orders or add special permit conditions increasing or decreasing spacing requirements if site-specific conditions warrant.

Subchapter C. Well Drilling Permits

§ 6.201 Well Drilling Permits Required; Applications; Exception for Exempt Wells

(a) Drilling, equipping or completing any non-exempt well or increasing the size or capacity of a non-exempt well or well pump without a well drilling permit required by this subchapter is illegal, waste, and a nuisance per se.

(b) The owner and/or operator of a well or proposed well must apply for and obtain from the District a well drilling permit before drilling, equipping or completing any non-exempt well or increasing the size or capacity of a well or well pump.

(c) Any person seeking to perform any of the activities identified in Subsection (b) must file with the District an application for a well drilling permit on a form prescribed by the District.

(d) A drilling permit is not required for well maintenance or repair that does not increase the production capabilities of the well to more than its authorized production rate.

§ 6.203 Applications for Well Drilling Permits

In addition to the information specified in Section 9.107 (Contents of and Requirements for All Applications and Registrations), an application for a well drilling permit shall contain the following:

(a) Name and Address of Owner. The full name, address, telephone number, and electronic mail address of the owner of the well or proposed well.

(b) Name and Address of Operator. The full name, address, telephone number, and electronic mail address of the operator of the well or proposed well if not operated by the well owner.

(c) Description of Proposed Activity. A description of the activity for which a well drilling permit is being sought (e.g., drilling a new well, altering an existing well, installing a larger pump).

(d) Well Address. The physical address of the property upon which the well or proposed well will or is to be located.

(e) Well Location. A description of the actual or proposed location of the well, including: the county; section, block and survey and the number of feet to the two nearest non-parallel property lines (legal survey lines), and the latitude and longitude for the well based on readings from a global positioning satellite (GPS) accurate to within 50 feet.

(f) Map. A city or county map with the location of the property on which the well is or will be located highlighted and the location of the well pinpointed.

(g) Purpose of Use. The proposed purpose of use for the water stated in definite

terms.

(h) Amount of Annual Withdrawal. The total amount of groundwater proposed to be withdrawn from the aquifer and beneficially used on an annual basis, stated in number of acre-feet or gallons.

(i) Rate of Withdrawal. The maximum rate of withdrawal that the well will be capable of, in gallons per minute.

(j) Depth. The proposed depth of the well and proposed depth of cement casing.

(k) Casing. The proposed depth of the cemented casing and cementing methodology.

(l) Depth of Strata. The predicted depth to the top of targeted water-bearing strata.

(m) Pump. The size of the proposed pump and pumping method.

(n) Proposed Construction Date. The approximate date that well construction operations are proposed to begin.

(o) Identity of Well Driller. The name, address, telephone number and driller's license number of the well driller.

(p) Water source. The applicant shall identify the intended source or sources of water for the well.

(q) Legal Basis of Right to Withdraw Groundwater. The applicant shall identify the legal basis under which groundwater will be withdrawn from the well (groundwater withdrawal permit or interim production status) and which the applicant either owns or is seeking to obtain.

(r) Any other information as may be required by the District.

§ 6.205 Basis for Action on Well Drilling Permit Applications

The board shall grant an application for a well drilling permit if the board finds that:

(a) the application is complete;

(b) the application complies with the rules of the District;

(c) all applicable fees have been paid;

(d) the applicant owns the well;

(e) the application identifies a proposed or an existing well;

(f) the wellhead is or will be physically located within the boundaries of the District;

(g) the well is designed to produce groundwater from a groundwater source within

the District;

(h) the withdrawals are proposed to be placed to a beneficial use;

(i) the applicant has a legal right to make withdrawals from the well;

(j) the well location complies with the spacing rules;

(k) the applicant is in compliance with any permits the applicant holds from the District and with District rules;

(l) the well will be installed, equipped, operated, maintained, or closed, as appropriate, to preserve, protect, prevent the pollution, degradation, or harmful alteration of, control and prevent the waste of, prevent the escape of, and achieve the conservation of groundwater;

(m) the applicant intends to install, equip, operate, maintain, and close the well, as appropriate, in accordance with the manufacturer's standards, instructions, or recommendations, as may be applicable; and

(n) the well will be installed, equipped, operated, maintained, or closed, as appropriate, consistent with applicable local, state, and federal law.

§ 6.207 Well Drilling Permit Does Not Authorize Withdrawals

No water may be withdrawn or produced from a well for which the District has solely issued a well drilling permit, except for the purposes of drilling or testing the well during the time the well drilling permit is valid, and the well shall not be placed into operation without the owner or operator of such well first obtaining a groundwater withdrawal permit.

§ 6.209 Well Drilling Permit Terms; Extensions; Applications

A well drilling permit shall expire and be void and of no force or effect 120 days from the date of issuance of the permit, or upon the expiration of any permit extension. The board, for good cause, may extend the term of a drilling permit for up to two additional 120-day periods. In order to extend the period, the permittee must file with the District an application to extend the term. The application must be filed with the District during the original 120-day term, or the first extension period, as appropriate.

§ 6.211 Multiple Test Wells Authorized

A well drilling permit authorizes the completion of a single well. However, a holder of a well drilling permit may, within a radius of 200 yards from the authorized well location specified in a well drilling permit, drill multiple test wells in order to identify the best location for the completed well. The coordinates of the location ultimately chosen must be provided to the District and the well drilling permit will be modified as necessary to reflect the chosen location. The chosen location must comply with all applicable spacing and location requirements. All test wells must, within 60 days, be completely plugged in compliance with applicable well plugging

standards.

§ 6.213 Basis for Action on Applications to Extend Well Drilling Permit Term

The board shall grant an application to extend a drilling permit term if the board finds that:

(a) the application is complete;

(b) the application complies with the rules of the District;

(c) all applicable fees have been paid;

(d) the applicant filed the original drilling permit application;

(e) the applicant is in compliance with any permits the applicant holds from the District and with District rules; and

(f) a reasonable basis for the need for the extension is established and demonstrates that the failure to complete the well is not due to the permittee's own lack of due diligence.

§ 6.215 Contents of Well Drilling Permits

Well drilling permits shall contain the following:

(a) name, address and telephone number of the permittee;

(b) name, address and telephone number of an authorized representative, if any, of the permittee;

(c) permit term;

(d) purpose of use of the well;

(e) maximum rate of withdrawal in gallons per minute;

(f) legal description of the location of the well, including, county, section, block and survey, and the latitude and longitude for the well based on readings from a global positioning satellite (GPS) accurate to within 50 feet;

(g) identification of the legal authority to produce groundwater from the well (groundwater withdrawal permit) which the applicant either owns or is seeking to obtain;

(h) the groundwater source;

(i) size of the pump, pumping rate, and pumping method;

(j) meter specifications, if any;

(k) borehole diameter; external and internal diameter of casing; total depth of casing; depth of grout; total well depth; screen, perforation, and filter pack intervals; and other well installation specifications, as appropriate;

(l) any conservation-oriented methods of drilling prescribed by the District;

(m) all applicable reporting requirements;

(n) installation and completion schedule;

(o) a requirement that the permittee must file all applicable reports with the District prior to the production of water from the well, except for such production necessary to the drilling and testing of the well;

(p) a requirement that the permittee use reasonable diligence to protect groundwater quality and that all well plugging laws will be followed at the time of well closure;

(q) a copy of the approved water well closure plan, if any, or a requirement that the permittee will comply with well plugging law and report closure to the TDLR and the District; and

(r) any other appropriate conditions as determined by the board.

§ 6.217 Standard Permit Conditions

All well drilling permits shall be issued with and subject to the following conditions:

(a) the duty to properly close (cap or plug) all wells in accordance with applicable law, and comply with either the District's well closure plan, if any, as may be amended from time to time, or the permittee's plan approved by the District, as appropriate;

(b) the duty to file all applicable reports with the District, and other appropriate federal, state, or local governments;

(c) the duty to use diligence to protect the groundwater quality of the aquifer;

(d) the duty to comply with the District's Rules as may be amended;

(e) permit review, or extension conditions;

(f) the duty to locate all wells, and confirm the actual location with the proposed location in the application or as provided for in the permit, consistent with the District's well spacing rules, prior to the production from any wells identified in the permit or application;

(g) the continuing right of the District to supervise and manage groundwater production and the depletion of the aquifer;

(h) installation, equipping, operation, maintenance, and closure of all wells in accordance with the District's Rules, and other applicable federal, state, and local law;

(i) installation, equipping, operation, and maintenance of all meters in accordance with the District's Rules;

(j) the duty to pay and be current in the payment of all applicable fees;

(k) the duty to give notice to District of any changes in name, address, or telephone number of the permittee, or the authorized representative, the landowner, well owner, or well operator, as may be appropriate;

(l) the duty to comply with all of the terms and conditions of the permit;

(m) the duty to ensure that the well site is accessible to District representatives for inspection, and to cooperate fully in any reasonable inspection of the well and well site by District representatives;

(n) the right of the District to enter land under Section 36.123, Texas Water Code, as may be amended; and

(o) any other conditions as the board may deem appropriate.

§ 6.219 Notice of Condition Affecting Groundwater Quality; Corrective Action

If at any time a well owner or operator has reason to believe that a well condition may exist that may cause the pollution, degradation, or harmful alteration of the character of the groundwater in the aquifer, then the owner and/or operator shall, within forty-eight (48) hours of learning of the fact(s), notify the District in writing of the well condition. The District may conduct an investigation and, if facts warrant, direct the owner and/or operator of the well, at the owner's or operator cost, to evaluate and test the well conditions and take appropriate corrective action, including replacement, to bring the well into proper working condition in conformance with this chapter.

§ 6.221 Notice of Commencement of Well Construction Activities

No later than 3 days prior to commencement of the activities authorized in a well drilling permit, the permittee shall give notice to the District of the intent to commence, so that a representative of the District may attend and observe the activities, at the District's discretion.

§ 6.223 Replacement of Wells

(a) A well owner or operator may rework, re-equip, re-drill or replace an existing permitted or registered well by filing an application to amend such permit or registration, and applying for a well drilling permit, providing such information as may be required by the General Manager, under the following conditions:

(1) The replacement well must be drilled within 150 feet of the original permitted location and shall not be drilled nearer to the property line than the original well;

(2) The replacement well shall not be located any closer to any other

permitted well or authorized well site than the well being replaced, unless the new location complies with the minimum spacing requirements set out in Subchapter B of Chapter 6 of these rules;

(3) The replacement well or pump shall not be changed to a larger size or capacity so as to increase the rate of production authorized in such permit; and

(4) If a replacement well is drilled, the well owner or operator shall cease production from the existing permitted or registered well and ensure that the replaced well is, within 90 days:

(A) plugged;

(B) capped; or

(C) re-equipped to meet the eligibility requirements applicable to an exempt well and registered under Subchapters E and F of Chapter 5 of these rules or applicable to a monitoring well under these rules.

§ 6.225 Transfer of Well Drilling Permit Prohibited

No person may transfer the ownership of a well drilling permit issued by the District.

§ 6.227 Additional Logging Requirements for Trinity Wells

Within 60 days after drilling any well completed so as to be capable of producing water from the Trinity Aquifer, the well owner and/or operator shall have prepared and delivered to the District an electric or geophysical log showing for the well, at a minimum, electrical conductance, spontaneous potential, and natural gamma.

Subchapter D. Well Construction

§ 6.301 Unlicensed or Unregistered Well Drillers or Pump Installers Prohibited

(a) Except as otherwise provided in Subsection (b) of this section, within the District's boundaries no person may drill or construct a water well unless the person first holds a well driller's license issued by the Texas Department of Licensing and Regulation ("TDLR") under Chapter 1901, Texas Occupations Code; and Chapter 76, 16 Texas Administrative Code, as may be amended.

(b) The requirement to hold a well driller's license pursuant to Subsection (a) of this Section does not apply to any person who personally drills, constructs or alters a water well on his own property for his own use.

(c) Except as otherwise provided in Subsection (d) of this section, within the District's boundaries, no person may install or repair a water well pump unless the person first holds a pump installer's license issued by the TDLR under Chapter 1902, Texas Occupations Code; and Chapter 76, 16 Texas Administrative Code, as may be amended.

(d) The requirement to hold a pump installer's license issued by the TDLR pursuant to Subsection (c) of this Section does not apply to:

(1) any person who personally installs or repairs a water well pump on his own property, or on property that he has leased or rented, for his own use; or

(2) any person who is a ranch or farm employee whose general duties include personally installing or repairing a water well pump or equipment on his employer's property for his employer's use, but who is not employed or otherwise in the business of installation or repair of water pumps or equipment.

(e) Regardless of whether a license is required, all persons engaging in well drilling or pump installation or repair must comply with the applicable standards set forth in 16 Texas Administrative Code §§ 76.701, 76.702, 76.1000, 76.1001, 76.1003, and 76.1004, as may be amended (the "TDLR's Rules"), and the District's Rules. In the event that a specific provision in the District's Rules conflicts with a specific provision in the TDLR's Rules, the more stringent provision will govern.

§ 6.303 Notice of Commencement of Well Installation

Not less than 3 days prior to the commencement of the activities authorized in a well drilling permit, the well driller shall give notice to the District of the intent to commence, so that a representative of the District may attend and observe the activities, at the District's discretion.

§ 6.305 Confirmation and Posting of Drilling Permits and Registrations

Any well driller engaged to drill or otherwise construct a well within the District shall, before undertaking any drilling or construction operations, confirm with the District that any required well drilling permit or other permit or registration has been issued for the well and is in

effect. In addition, at all times during well drilling or construction operations, the driller shall post a copy of any permit or registration for the well at a location at the well site that can be easily seen by visitors to the well site.

§ 6.307 Well Records, Reports, and Logs

The driller of any well within the District, regardless of whether the well qualifies or does not qualify as an exempt well, shall keep and maintain for at least three years an accurate driller's log for each such well. The driller shall file a copy of each driller's log, a report detailing the drilling, equipping, and completing of the well and, if performed, any electric or geophysical log, pump test results, water quality sampling results, and well video surveys with the District within 60 days after the date the well is completed. The report shall include copies of all information about the well submitted to any agency of the State of Texas.

Subchapter E. Capping of Wells

§ 6.401 Capping Requirements

(a) Every owner or operator of any land within the District upon which is located any open or uncovered well shall be required to cap or close the well with a covering capable of preventing the entrance of surface pollutants into the well and of sustaining a weight of at least four-hundred (400) pounds, except when said well is in actual use by the owner or operator thereof.

(b) In addition, every owner or operator of any land within the District upon which is located a flowing artesian water well shall be required to cap or close the well with a covering capable of preventing any flow and therefore preventing waste, except when the well is in actual use by the owner or operator thereof.

(c) If the owner or operator fails or refuses to close or cap the well in compliance with this section, the District, or its employees or agents, may go on the land and close or cap the well safely and securely. Reasonable expenses incurred by the District in closing or capping a well constitute a lien on the land on which the well is located. The lien arises and attaches upon recordation of an affidavit in the deed records of the county where the well is located, executed by any person conversant with the facts, stating the following:

(1) the existence of the well;

(2) the legal description of the property on which the well is located;

(3) the approximate location of the well on the property;

(4) the failure or refusal of the owner or operator, after notification, to close the well within 10 days after the notification;

(5) the closing of the well by the District, or by an authorized agent, representative, or employee of the District; and

(6) the expense incurred by the District in closing the well.

Subchapter F. Plugging of Abandoned or Deteriorated Wells

§ 6.501 Responsibility

It is the responsibility of the well owner and/or operator to plug or have plugged any well that is deteriorated or abandoned, in accordance with Chapter 1901, Texas Occupations Code and Title 16, Chapter 76, Texas Administrative Code, as may be amended.

§ 6.503 Report on Plugging of Wells

The person that plugs a well shall, within thirty (30) days after plugging is complete, submit a copy of the plugging report (on forms furnished by the Texas Department of Licensing and Regulation) to the District.

CHAPTER 7. FEES

§ 7.1 Registration Fees

(a) By resolution and order, the District shall adopt a well registration fee for exempt wells completed so as, in the opinion of the District, to be capable of producing water from the Trinity Aquiferor Brazos River Alluvium Aquifer, and for all other exempt wells. The registration fee shall be determined based on the District's estimated processing costs for such registrations.

(b) The applicable registration fee must accompany the registration form and be paid at the time of filing. If the registrant fails to pay the fee at the time of filing, the District may refuse to accept the registration for filing and/or commence any other action to enforce payment as authorized by law.

§ 7.3 Application Fees

(a) By resolution and order, the District shall adopt an application fee for the following applications:

(1) a new or amended groundwater withdrawal permit application, except as provided in Subsections (b) and (c);

(2) a new or amended groundwater exportation permit application; and

(3) a well drilling permit application.

(b) By resolution and order, the District shall adopt an application fee for the following applications:

(1) a new or amended groundwater withdrawal permit application relating to a well drilled at a depth of less than 100 feet;

(2) a well drilling permit application for a well drilled at a depth of less than 100 feet.

(c) By resolution and order, the District shall adopt an application fee for the following applications:

(1) an application to amend a groundwater withdrawal permit for a year or less;

(2) an application to amend a groundwater exportation permit for a year or less; and

(3) an application to amend a groundwater withdrawal permit based solely on installing a replacement well.

(d) All required fees must accompany the application form and be paid at the time of

filing. If the applicant fails to pay the fee at the time of filing, the District may refuse to accept the application for filing, or otherwise cease processing the application.

(e) The District shall adopt application fees for the purpose of compensating the District for the administrative functions associated with the applications. If an application fee is determined by the District to be insufficient to cover the anticipated costs of processing the application, the District shall require the applicant to post additional funds in an amount determined to be sufficient to cover anticipated costs. The costs for which the District may seek additional fees include, but are not limited to, the cost for public notices, legal fees, expert fees, hearing facility rental fees, and other expenses. If the applicant fails to pay the additional amounts, then the District may suspend processing the application, and may return the application. As application processing costs are incurred by the District, at the District's discretion, the District may incur costs itself and seek reimbursement from the additional deposited funds, or may expend deposited funds directly to pay for additional application processing costs. The applicant shall be provided periodic accountings of billings against the deposit. If the additional deposit is determined by the District to be insufficient to cover the application processing costs, then the applicant may be required to pay additional fee deposits. Any unexpended and unobligated fee deposits will be promptly returned to the applicant after the board issues a final order disposing of the application.

§ 7.4 Annual Well Fees

(a) By resolution and order, the District shall adopt a non-refundable well fee per well on all non-exempt wells in the District.

(b) The District shall adopt annual well fees for the purpose of compensating the District for the administrative functions associated with well inspections and monitoring.

(c) All Historic Use Production Permit and Non-Historic Use Production Permit owners are required to pay the annual well fee assessed under this section by February 15th for that calendar year.

§ 7.5 Groundwater Production Fees

(a) The District shall assess groundwater production fees as set forth in this chapter.

(b) Except for withdrawals of groundwater made from an exempt well as defined under Section 5.501, groundwater production fees shall be assessed by the District against all withdrawals of groundwater from within the boundaries of the District.

(c) Annually, the groundwater production fees for agricultural use and non-agricultural uses for the fiscal year shall be calculated and assessed by resolution and order based on the District's adoption of a budget reflecting annual operating revenue requirements for the fiscal year. The groundwater production fee for agricultural use shall not exceed 20% of the fee for non-agricultural uses nor $1 per acre-foot annually. The District shall calculate the groundwater production fee for non-agricultural uses on a per acre-foot basis as follows: the District's estimated net annual operating revenue requirements minus an estimate of the amount of other fees to be collected divided by the amount of groundwater estimated to be withdrawn in

acre-feet by non-agricultural users. The groundwater production fee shall be assessed against the amount of groundwater actually produced.

(d) All persons making withdrawals of groundwater from a non-exempt well within the boundaries of the District are required to pay to the District the groundwater production fee as assessed pursuant to this section. Each non-exempt well owner and/or operator shall complete a groundwater use report as required by Section 8.7, and return the completed report, along with payment of the applicable groundwater production fees, to the District by no later than the 15th day of the month. The amount due becomes delinquent if payment in full is not received by the District by the 30th day of the month following the month for which the fees were assessed.

(e) For any groundwater production fee that is delinquent, the District may assess, for every month thereafter that the invoice remains delinquent, a penalty equivalent to the maximum amount allowed by law.

§ 7.7 Limitation on Amount of Assessments

The District may not assess a total amount of groundwater production fees that is more than is reasonably necessary for the annual operating revenue requirements for the administration of the District as reflected in its adopted annual fiscal year budget.

§ 7.9 Enforcement for Nonpayment

If the District determines that a fee is delinquent, enforcement for nonpayment may be as follows:

(1) by suspending the processing of any application that the person owing the fee, or his successor in interest, may have pending before the District; or

(2) by commencing any action to enforce payment and collection of the delinquent fee as may be authorized by law.

§ 7.11 Prohibitions

No person may withdraw groundwater from within the boundaries of the District if the person, or his predecessor in interest, is delinquent in the payment of a groundwater production fee or annual well fee that is due and payable to the District.

§ 7.13 Unauthorized Withdrawals

(a) Any person who withdraws groundwater from within the boundaries of the District without legal authority shall pay to the District the groundwater production fees and annual well fees in force and effect for the period of time during which the unauthorized withdrawals were made. The District shall assess groundwater production fees based on the amount of groundwater the District reasonably estimates was actually withdrawn.

(b) If a person makes withdrawals of groundwater that are not being metered and reported in accordance with Chapter 8 of these rules, the board may assess groundwater

production fees based on the amount of water the permittee is authorized to withdraw under a groundwater withdrawal permit or based on the amount of groundwater the District reasonably estimates was actually withdrawn.

§ 7.15 Groundwater Export Fees

(a) The District shall assess, and all persons exporting groundwater produced from a well within the District's boundaries to a place of use outside of the District's boundaries shall pay, a groundwater export fee on the metered volume of groundwater produced for export. The groundwater export fee will be in addition to any production fees assessed by the District. The groundwater export fee applies to and will be assessed on all groundwater produced as follows:

(1) water actually exported from the District's boundaries to a place of use outside the District's boundaries;

(2) operational water that is lost in the operation and maintenance of the export project and not actually exported from the District's boundaries; and

(3) reject water processed in order to produce water of a suitable quality for export and not actually exported from the District's boundaries.

(b) The groundwater export fee shall be calculated and assessed as follows: 50% of the groundwater production fee assessed under Section 7.5 for that use

(c) The District will bill and collect the groundwater export fee. The monthly groundwater exportation report shall constitute the groundwater export fee invoice. At the end of each month, the holder of a groundwater export permit shall complete a groundwater exportation report, using the District's form, reporting the total amount of groundwater exported during the immediately preceding month, and return the completed form, along with payment of the applicable groundwater export fees, to the District by no later than the 15th day after the end of the month for which the fees are assessed. The amount due becomes delinquent if payment in full is not received by the District by the 30th day after the end of the month for which the fees were assessed.

(d) For any export fee that is delinquent, if payment in full is not received on or before 10 days after the date the amount becomes delinquent, then the District shall assess, for every month thereafter that the invoice remains delinquent, an administrative penalty of 10%. Additionally, each day that an export fee is delinquent constitutes a separate violation of the District's rules.

(e) No person may export groundwater outside the District's boundaries if the owner and/or operator of the well from which the exported groundwater is produced is delinquent in the payment of any fee that is due and payable to the District.

(f) Any person who, without any legal authority, exports groundwater outside the District's boundaries shall pay to the District the export fee then in force and effect for the period of time during which the unauthorized exports were made.

(g) Any person who exports groundwater outside the District's boundaries without metering in accordance with Chapter 8 of these rules, shall pay to the District the export fee then in force and effect based on the maximum amount of water the person is authorized to export under a groundwater exportation permit.

(h) A groundwater export fee shall not be assessed against:

(1) groundwater produced from within the District that is incorporated into a finished, manufactured product within the District and then exported for sale outside of the District;

(2) groundwater produced from within the District, where the well is situated on a contiguous tract of land that straddles the District boundary and the groundwater is placed to use solely on that tract, but including portions outside the District's boundaries; and

(3) groundwater produced from within the District and supplied by a public water system to customers within the public water system's retail service area where that retail service area straddles the District boundaries. This exception does not apply to any water produced within the District's boundaries by a public water system that is conveyed outside the District's boundaries for any use other than retail service to the public water system's own customers.

§ 7.17 Inspection and Plan Review Fees

The board may, by rule, establish fees for the inspection of wells, meters, or other inspection activities; plan reviews; special inspection services requested by other entities; or other similar services that require involvement of District personnel or its agents. Fees may be based on the amount of the District's time and involvement, out-of-pocket costs, number of wells, well production, well bore, casing size, size of transporting facilities, or amounts of water transported.

CHAPTER 8. METERS AND REPORTING

§ 8.1 Meters Required

(a) Duty to Install: The owner and/or operator of a non-exempt well located within the District shall equip the well with a meter meeting the specifications of these Rules and shall operate and maintain the meter to measure the instantaneous flow rate and cumulative amount of groundwater withdrawn from the well. For an existing, non-exempt well, a meter shall be installed by the owner and/or operator no later than February 1, 2008. For a new, non-exempt well, a meter shall be installed before any groundwater is withdrawn from the well.

(b) Approved Meters: Meters must be mechanically driven, digital, totalizing water meters. The digital totalizer must not be resettable by the permittee and must be capable of a maximum reading greater than the maximum expected pumpage during a permit term. Battery operated registers must have a minimum five-year life expectancy and must be permanently hermetically sealed. Battery operated registers must visibly display the expiration date of the battery. All meters must meet the requirements for registration accuracy set forth in the American Water Works Association standards for cold-water meters.

(c) Installation and maintenance: Meters must be installed, operated, maintained, and repaired according to the manufacturer's published specifications, and shall ensure an accuracy of not greater than plus or minus five percent. If no specifications are published, there must be a minimum length of five pipe diameters of straight pipe upstream of the meter and one pipe diameter of straight pipe downstream of the meter. These lengths of straight pipe must contain no check valves, tees, gate valves, back-flow preventers, blow-off valves, or any other fixture other than those flanges or welds necessary to connect straight pipe to the meter. The pipe must be completely full of water throughout the area of the meter. All installed meters must measure only groundwater.

(d) Bypasses: All bypasses must be metered. A bypass is any pipe of any size connected to the discharge pipe between the well and the meter.

(e) Meter accuracy to be tested: The District may require the permittee, at the permittee's expense, to test the accuracy of the meter and submit a certificate of the test results. The certificate must be on a form provided by the District. The District may further require that the test be performed by a third party qualified to perform meter tests. Certification tests will be required no more than once every three years for the same meter and installation. If the test results indicate an accuracy outside the 95% - 105% of the actual flow, then appropriate steps must be undertaken by the permittee to repair or replace the meter within 90 calendar days from the date of the test. The District, at its own expense, may undertake further random tests and other investigations for the purpose of verifying meter readings. If the District's tests or investigations reveal that a meter is not registering within an accuracy of 95% - 105% of actual flow, or is not properly recording the total flow of groundwater withdrawn from the well, or well system, the permittee must reimburse the District for the costs of those tests and investigations, and the permittee must take appropriate steps to remedy the problem within 90 calendar days from the date of the tests or investigations. If a water meter or related piping or equipment is tampered with or damaged so that the measurement accuracy is impaired, the District may

require the permittee, at the permittee's expense, to take appropriate steps to remedy any problem, and to retest the meter within 90 calendar days from the date the problem is discovered and reported to the permittee.

§ 8.3 Pre-existing Meters and Alternative Measuring Methods

(a) By no later than February 1, 2008, the owner and/or operator of an existing, non-exempt well shall register with the District any meter or alternative measurement(s) method installed and in use on the well as of the effective date of these rules.

(b) All meters existing on the effective date of these Rules and registered in accordance with Subsection (a) of this section shall be inspected by the District for compliance with the meter specifications set forth in these Rules. If the meter complies with these specifications, the District shall approve the meter in writing and advise the owner or operator of the approval. If the meter does not comply with these specifications, the District will issue a notice of deficiency and direct the owner and/or operator of the meter to install a new meter or modify the existing meter in compliance with these Rules within 45 days.

(c) If at any time the well owner or operator has reason to believe that a condition, of any kind whatsoever, may exist that affects the accuracy of a meter, then the well owner and/or operator shall, within seven days of learning of the fact(s), notify the District that the accuracy of the meter may be in question. Such notification shall be in writing.

(d) The District may conduct an investigation and, if facts warrant, direct the well owner and/or operator, at the well owner and/or operator's cost, to evaluate and test the accuracy of the meter and take appropriate corrective action, including replacement, to restore the accuracy and proper working condition of the meter in conformance with the requirements of these Rules.

§ 8.5 Removal and Disabling of Meters

(a) A meter may not be removed or otherwise disabled, including for routine maintenance, unless the well owner or operator gives the District prior notice, in writing, of the intent to remove or disable the meter. Except in cases of routine maintenance, such notice must be approved in writing by the District before the meter is removed or disabled.

(b) A meter may be removed or otherwise disabled, only by the well owner or operator or his or her authorized representative.

(c) During a period that a meter is removed or otherwise disabled, groundwater may not be withdrawn from the well, unless the District has approved an alternative measuring method.

§ 8.7 Meter Reading and Groundwater Use Reporting

The well owner and/or operator must read the meter associated with the well and record the meter readings and the actual amount of withdrawals on a form provided by the District by no later than the 15th of each month for the prior month's withdrawals. The District shall send to

each permittee an annual groundwater use report reflecting reported withdrawals for the previous calendar year. By not later than March 31st of each year, each non-exempt well owner and/or operator must return to the District the annual groundwater use report with any changes. Groundwater withdrawal reports shall provide the following: (1) name of the well owner and/or operator; (2) the well number; (3) the total amount of groundwater produced during the immediately preceding period, either month or calendar year (January 1 through December 31), including the total amount of groundwater produced during each separate month of the immediately preceding calendar year, by management zone, if appropriate; (4) the purpose for which the groundwater was used; and (5) any other information requested by the District as indicated on the report form.

CHAPTER 9. PROCEDURES BEFORE THE DISTRICT

Subchapter A. General

§ 9.1 Purpose

The purpose of this chapter is to provide for the procedures to be followed in the processing of applications and registrations, and other types of approvals or actions that may be taken by the District. These rules should be interpreted to simplify procedure, avoid delay, save expense, and facilitate the administration and enforcement of the District's Rules, policies, and objectives.

§ 9.3 Applicability

This chapter applies to the processing of all applications or registrations filed with the District, and to the adoption of rules and management plans by the District.

§ 9.5 Service of Documents

(a) Except as otherwise provided in these rules, all documents filed, served, or delivered under this chapter or these rules, must be served as follows:

(1) by delivering a copy to the person to be served, or the person's duly authorized agent or attorney of record, either in person or by agent or by carrier-receipted delivery or by United States mail, to the person's last known address;

(2) by facsimile to the recipient's current facsimile number; or

(3) by electronic mail to the recipient's electronic mail address.

(b) Service by mail shall be complete upon deposit of the document, enclosed in a postage-paid, properly addressed wrapper, in a post office or official depository under the care and custody of the United States Postal Service. Service by facsimile or electronic mail is complete upon transfer and shall be accomplished by 5:00 p.m. (as shown by the clock of the local time of the recipient) of the date on which it is due. Any transfer after 5:00 p.m. shall be deemed served on the following day. Service by facsimile or electronic mail must be followed by serving the original document in person, by mail or by carrier-receipted delivery within three days. Where service by the methods listed in Subsection (a) has proved unsuccessful, the service shall be complete upon publication of notice in a newspaper.

(c) Whenever a person has the right or is required to do some act within a prescribed period after the service of a document upon the person, and the document is served by mail or by facsimile, three days shall be added to the prescribed period. This subsection does not apply when documents are filed for consideration at a board meeting.

(d) A document served under this rule must contain a certificate of service indicating the date and manner of service and the name and address of each person served. The person or the person's attorney of record shall certify compliance with this rule in writing by signature on

the filed document. A certificate by a person or the person's attorney of record, or the return of an officer, or the affidavit of any person showing service of a document, shall be prima facie evidence of service.

(e) Nothing herein shall preclude any person from offering proof that the notice or instrument was not received or, if service was by mail, that it was not received within three days from the date of deposit in a post office or official depository under the care and custody of the United States Postal Service, and upon so finding, the District may extend the time for taking the action required of such party or grant such other relief as it deems just. The provisions herein relating to the method of service of notice are in addition to all other methods of service prescribed by these rules.

(f) In contested case hearings, copies of all documents filed with the presiding officer shall be served on all parties, including the District, no later than the day of filing.

Subchapter B. Requirements for Applications and Registrations

§ 9.101 Purpose

The purpose of this subchapter is to provide for the procedures to be followed for applications and registrations that may be filed with the District.

§ 9.103 Applicability

This subchapter applies to any application or registration filed with the District.

§ 9.105 Proper Applicant or Registrant

If a well or a proposed well has one owner or operator, that owner or operator shall file the application or registration required to be filed by the District. If there is more than one owner or operator, a joint application or registration shall be filed by those owners or operators. In such an instance, the owners or operators shall select one among them to act for and represent the others in filing the application or registration. Written documentation of such a selection satisfactory to the District shall be filed with the application or registration.

§ 9.107 Contents of and Requirements for All Applications and Registrations

All applications and registrations filed with the District shall be typewritten or printed legibly in ink and shall include:

(a) The full name, physical and mailing addresses, telephone number, and electronic mail address of the applicant or registrant. If the applicant or registrant is a partnership, the name of the partnership shall be followed by the words "a partnership." If the applicant or registrant is acting as trustee for another, the trustee's name shall be followed by the word "trustee." If one other than the named applicant or registrant executes the application or registration, the person executing the application or registration shall provide their name, position, physical address, mailing address, electronic mail address and telephone number.

(b) Signature of Applicant or Registrant. The application or registration shall be signed as follows:

(1) If the applicant or registrant is an individual, the application or registration shall be signed by the applicant, registrant or a duly appointed agent. An agent shall provide written evidence of his or her authority to represent the applicant or registrant. If the applicant or registrant is an individual doing business under an assumed name, the applicant or registrant shall attach to the application or registration an assumed name certificate filed with the county clerk of the county in which the principal place of business is located or the Secretary of State.

(2) Joint applications and registrations. A joint application or registration shall be signed by each applicant or registrant or each applicant's or registrant's duly authorized agent with written evidence of such agency submitted with the application or registration. If a well or proposed well is owned by both husband and wife, each person shall sign the application or registration. Joint applicants or registrants shall select one among them to act for and represent

the others in pursuing the application or registration with the District with written evidence of such representation to be submitted with the application or registration.

(3) If the application or registration is by a partnership, the application or registration shall be signed by one of the general partners. If the applicant or registrant is a partnership doing business under an assumed name, the applicant or registrant shall attach to the application or registration an assumed name certificate filed with the county clerk of the county in which the principal place of business is located or with the Secretary of State.

(4) If the applicant or registrant is an estate or guardianship, the application or registration shall be signed by the duly appointed guardian or representative of the estate and a current copy of the letters testamentary issued or order appointing guardian by the court shall be attached to the application or registration.

(5) If the applicant or registrant is a corporation, public district, county, municipality or other corporate entity, the application or registration shall be signed by a duly authorized official. Written evidence specifying the authority of the official to take such action shall be submitted along with the application or registration, including in the form of bylaws, charters, or resolutions. A corporation may file a corporate affidavit as evidence of the official's authority to sign.

(6) If the applicant or registrant is acting as trustee for another, the applicant or registrant shall sign as trustee and in the application or registration shall disclose the nature of the trust agreement and give the name and current address of each trust beneficiary.

(c) Attestation. Each applicant or registrant shall subscribe and swear or affirm under oath that the facts set out in the application or registration are accurate before any person entitled to administer oaths who shall also sign his or her name and affix his or her seal of office to the application, registration or notice.

Subchapter C. Application, Registration and Reissuance Processing by the District

§ 9.201 Purpose

The purpose of this subchapter is to provide the procedures to be followed in the processing of applications and registrations filed with the District and reissuances of Historic Use Production Permits and Non-Historic Use Production Permits under Sections 5.222 and 5.242.

§ 9.203 Applicability

This subchapter applies to the processing of all applications or registrations filed with the District and to the reissuances of Historic Use Production Permits and Non-Historic Use Production Permits under Sections 5.222 and 5.242.

§ 9.205 Initial Action on Applications and Registrations

All applications and registrations received by the District shall be stamped or marked "received" with the date of receipt clearly indicated.

§ 9.207 Review for Administrative Completeness

(a) The District will promptly conduct an initial review of each application or registration for administrative completeness.

(b) In reviewing an application or registration for administrative completeness, the District will assess whether the application or registration contains the necessary information in legible form to allow:

(1) the District staff to conduct a technical review, if appropriate; and

(2) the District to take or recommend action on the application or registration, as appropriate.

(c) Upon determining that an application or registration is administratively complete, the District will notify the applicant or registrant by mail.

§ 9.209 Return of Applications and Registrations Deemed Not Administratively Complete

(a) If the District determines that an application or registration is not administratively complete, the District will notify the applicant or registrant of any such deficiencies by mail or electronic mail. Illegible applications or registrations will be returned to the filer.

(b) The applicant or registrant may submit any additional necessary information in response to a letter sent by the District pursuant to Subsection (a) of this section, within 30 days of the date the letter noting the deficiencies was mailed or electronically mailed.

(c) If the additional necessary information is not forthcoming within 30 days of the date of receipt of the letter noting the deficiencies, the District will return the incomplete application or registration to the applicant or registrant.

§ 9.211 Technical Review

(a) After an application or registration is determined by the District to be administratively complete, District staff will commence a technical review of the application or registration as necessary and appropriate.

(b) The applicant or registrant shall be notified in writing of any additional material necessary for a complete technical review. If the applicant or registrant provides the information within 30 days of the date it is requested, District staff will complete the technical review of the application or registration. If the necessary additional information is not received by the District within 30 days of the date the information is requested and the information is considered essential by the District, the District may return the application to the applicant or registration to the registrant. Decisions to return an application to the applicant or registration to the registrant during the technical review will be made on a case-by-case basis.

(c) The general manager or his or her designee is entitled to enter public or private property at any reasonable time and upon reasonable notice for the purpose of inspecting, investigating or verifying conditions or information submitted in connection with an application or a registration.

(d) Following the readoption of the District's management plan in 2015, the District shall conduct a technical review of all Historic Use Production Permits and Non-Historic Use Production Permits authorizing withdrawals from the Trinity Aquifer to determine, to the extent reasonably possible, whether withdrawals are from the Hensell and/or the Hosston Management Zone and in what amount or amounts from each aquifer management zone withdrawals should be authorized to be made.

§ 9.213 General Manager's Proposed Action on Applications and Reissuances and Technical Summary

(a) Following completion of technical review, the general manager will determine whether to recommend granting or denying the application or whether to reissue a permit in accordance with Sections 5.222 or 5.242 and will prepare a written statement summarizing the recommendation and the reasons for that recommendation. If the general manager recommends full or partial granting of a permit or permit amendment application, or permit reissuance, the general manager shall also prepare a draft permit. The general manager's recommendation and any draft permits are subject to change by the general manager or board during the course of the proceedings on the application or reissuance. The statement and proposed permit or denial shall be available for public review and inspection.

(b) In conjunction with the proposed permit, denial, or reissuance, the general manager will prepare a technical summary that will include the following, as appropriate:

(1) the applicant or permittee's name and address;

(2) a summary of the application or reissuance;

(3) the location of each point of withdrawal for an application;

(4) the reasons and technical basis for the recommended action;

(5) if applicable, a summary of the proposed permit;

(6) the proposed purpose(s) of use, if applicable;

(7) notice that the general manager may modify his or her recommendation, or seek additional information from the applicant or permittee, in the course of the District's proceeding on the application or reissuance;

(8) as may be authorized by this chapter, a statement that the applicant, or other affected persons may file a request for a contested case hearing on the application on or before the deadline set forth in Section 9.307; and

(9) any other information that the general manager determines to be appropriate.

(c) The general manager will provide the applicant or permittee with a copy of the general manager's statement, any proposed permit or denial and the technical summary.

§ 9.215 Action by Board on Applications or Registrations Where There is No Right to a Contested Case Hearing

(a) Applicability. This section applies to all registrations and applications other than applications for groundwater withdrawal permits, groundwater exportation permits, and applications for a variance from well spacing limitations and to the reissuance of Historic Use Production Permits pursuant to Section 5.222 and Non-Historic Use Production Permits pursuant to Section 5.242.

(b) Scheduling the Board Meeting. Following technical review and the referral of the proposed action to the board, the general manager will schedule the presentation of the application, registration or reissuance and the proposed permit, approval, authorization or denial to the board. The board may reschedule the presentation of the application, registration or reissuance and the proposed permit, approval, authorization or denial.

(c) Notice of Board Meeting. At least 10 days prior to the board meeting, the District will notify the applicant, registrant or permittee of the date of the board meeting referred to above. If rescheduled by the board, the District will send notice of the rescheduled meeting date to the applicant, registrant or permittee no later than ten days before the rescheduled meeting. In addition, the District will provide public notice that the application, registration or reissuance and the permit, approval, authorization or denial will be considered by the board by including an item on the board's agenda pursuant to the Open Meetings Act. Except to the extent that such items contain information excepted from public disclosure under the Public Information Act, copies of the application, registration or reissuance and the proposed permit, approval, authorization or

denial will be made available to the public for inspection and copying at the offices of the District during regular business hours.

(d) Consolidation or Severance of Matters. Consistent with notices required by law, the board may consolidate related matters if the consolidation will not injure any party and may save time and expense or otherwise benefit the public interest and welfare. The board may sever issues in a proceeding or hold special hearings on separate issues if doing so will not injure any party and may save time and expense or benefit the public interest and welfare.

(e) Oral Presentation Before the Board. The applicant, registrant or permittee and the general manager or his or her designee may make an oral presentation at the board meeting at which the application, registration or reissuance and the proposed permit, approval, authorization or denial are presented to the board. Oral presentations before the board will be limited to 15 minutes each, excluding time for answering questions, unless the president establishes other limitations. Before the board meeting, the president may allot time for oral presentations. Oral presentations and responses to questions will be directed to the board.

(f) Public Comment. In addition, public comment on the application, registration or reissuance and the proposed permit, approval, authorization or denial will be accepted.

(g) Upon consideration of the application, registration or reissuance and the proposed permit, approval, authorization or denial at its meeting, the board may issue an order granting or denying an application, registration or reissuance in whole or in part, dismissing proceedings, amending or modifying a proposed permit, or taking any other appropriate action.

§ 9.217 Action by Board on Applications Where There is a Right to a Contested Case Hearing But None Was Requested or Requests Were Withdrawn

(a) Applicability. This section applies only to all applications for groundwater withdrawal permits, groundwater exportation permits, and applications for a variance from well spacing limitations where, after the time for the filing of a hearing request provided in Section 9.307:

(1) no timely hearing request has been received;

(2) all timely hearing requests have been withdrawn; or

(3) the judge has remanded the application because of settlement.

(b) Scheduling the Board Meeting. Following the expiration of the time to file a hearing request pursuant to Section 9.307 of this chapter, and if all of the conditions stated in Subsection (a)(1)-(3) of this section have been met, the District will schedule the presentation of the application and the proposed permit, approval, authorization or denial to the board. The board may reschedule the presentation of the application and the proposed permit, approval, authorization or denial.

(c) Notice of Board Meeting. At least 10 days prior to the board meeting, the District will notify the applicant of the date of the board meeting referred to above via first class mail or

hand delivery. If rescheduled by the board, the District will send notice of the rescheduled meeting date to the parties no later than ten days before the rescheduled meeting. In addition, the District will provide public notice that the application and the proposed permit, approval, authorization or denial will be considered by the board by including an item on the board's agenda pursuant to the Open Meetings Act. Copies of the application and the proposed permit, approval, authorization or denial will be made available to the public for inspection and copying at the offices of the District during regular business hours.

(d) Consolidation or Severance of Matters. Consistent with notices required by law, the board may consolidate related matters if the consolidation will not injure any party and may save time and expense or otherwise benefit the public interest and welfare. The board may sever issues in a proceeding or hold special hearings on separate issues if doing so will not injure any party and may save time and expense or benefit the public interest and welfare.

(e) Oral Presentation Before the Board. The applicant and the general manager or his or her designee may make an oral presentation at the board meeting in which the application and the proposed permit, approval, authorization or denial are presented to the board. Oral presentations before the board will be limited to 15 minutes each, excluding time for answering questions, unless the president establishes other limitations. Before the board meeting, the president may allot time for oral presentations. Oral presentations and responses to questions will be directed to the board.

(f) Public Comment. In addition, public comment on the application and the proposed permit, approval, authorization or denial will be accepted.

(g) Upon consideration of the application and the proposed permit, approval, authorization or denial at its meeting, the board may issue an order granting or denying an application in whole or in part, dismissing proceedings, amending or modifying a proposed permit, or taking any other appropriate action.

§ 9.219 Notice of Permit Hearing Where There is a Right to a Contested Case Hearing

(a) Applicability. This section applies only to applications for groundwater withdrawal permits, groundwater exportation permits, and applications for a variance from well spacing limitations and relates to final permit hearings before the board.

(b) A notice of hearing on an application for a permit shall be prepared by the District. At a minimum, the notice shall state the following information:

(1) the name and address of the applicant;

(2) the name or names of the owner or owners of the land or well, if different from the applicant;

(3) the name or names of the operator or operators of the land or well, if different from the applicant;

(4) the date the application was filed and the number assigned to it;

(5) the time, date and location of the hearing;

(6) the address or approximate location of the well or proposed well;

(7) a brief explanation of the permit or permit amendment sought, including any requested amount of groundwater, the purpose of the proposed use, and any change in use;

(8) a summary of the action on the application recommended by the general manager pursuant to Section 9.213 of these rules;

(9) a statement of the legal authority and jurisdiction under which the hearing is to be held;

(10) a brief description of the technical summary;

(11) a statement that a copy of the proposed action, technical summary, and application are available for inspection by the public at the offices of the District;

(12) a statement that the application will be presented to the board for action at the hearing unless a request for a contested case hearing is submitted at least five days prior to the date of the hearing pursuant to Section 9.307; and

(13) a statement that the applicant or another affected person may request a contested case hearing on the application by filing a request with the District, at least five days before the date of the hearing, in accordance with 9.307.

(14) any other information the board or general manager considers relevant and appropriate.

(c) The District shall, not less than 20 days before the date of the hearing:

(1) Post the notice in a place readily accessible to the public at the District's office;

(2) Provide the notice for posting at the county courthouse to the county clerk of each county in which the District is located;

(3) Provide the notice:

(A) By regular mail to the applicant; and

(B) By regular mail, facsimile, or electronic mail to any person who has requested notice under Subsection (d) below; and

(4) Publish the notice at least once in a newspaper of general circulation in the District.

(d) Any person may request to receive written notice of permit hearings by submitting a request to the District in writing. The request must identify with as much specificity as possible the types of permit hearings for which written notice is requested. The request remains valid for the remainder of the calendar year in which the request is received by the District, after which time a new request must be submitted. An affidavit of an officer or employee of the District establishing attempted service of notice by first class mail, facsimile, or electronic mail to a person required pursuant to Subsection (c)(3)(B), above, in accordance with the information provided by that person is proof that notice was provided by the District. Failure to provide notice under Subsection (c)(3)(B) does not invalidate an action taken by the District at the hearing.

(e) The applicant, at the applicant's expense, shall give the notification by first class mail to well owners and well operators within 1,000 feet of the well for which the application is sought, not less than twenty (20) days before the hearing. Prior to the hearing, the applicant will provide the District with proof of service including a list of names and addresses of the landowners, well owners and well operators.

§ 9.221 Scheduling of Permit Hearings Where There is a Right to a Contested Case Hearing

(a) Applicability. This section applies only to applications for groundwater withdrawal permits, groundwater exportation permits, and applications for variance from well spacing limitations and relates to final permit hearings before the board.

(b) Hearings on applications for permits may be scheduled during the District's regular business hours, Monday through Friday of each week, except District holidays and may be held in conjunction with a regularly scheduled board meeting. All permit hearings will be held at the District Office, unless the board directs otherwise. The District may from time to time schedule additional dates, times, and places for permit hearings by resolution adopted at a regular board meeting. The District may schedule as many applications for consideration at one hearing as deemed desirable and feasible.

Subchapter D. Contested Case Hearing Procedures

§ 9.301 Purpose

The purpose of this subchapter is to provide for the procedures to be applied to contested case hearings before the District.

§ 9.303 Applicability

This subchapter applies to matters subject to a contested case hearing under Section 9.219 for which a timely request for contested case hearing is pending before the District and the request has not been withdrawn because of settlement or for some other reason.

§ 9.305 Persons Entitled to Request a Contested Case Hearing

The following persons may request a contested case hearing on an application subject to this subchapter:

(a) the applicant; and

(b) any other affected person.

§ 9.307 Timing, Form and Contents of Requests for Contested Case Hearing

(a) A request for a contested case hearing may only be made for applications for groundwater withdrawal permits, groundwater exportation permits, and applications for a variance from well spacing limitations.

(b) A request for a contested case hearing must be in writing and be filed by United States mail, facsimile, or hand delivery to the District by no later than fourteen days before the date of the hearing specified in the notice made pursuant to Section 9.219.

(c) A hearing request must substantially include the following:

(1) the name, address, daytime telephone number, fax number, and electronic mail address of the person filing the request. If the request is made by a corporation, partnership, or other business entity, the request must identify the entity and one person by name, physical and mailing address, daytime telephone number, fax number, and electronic mail address, who shall be responsible for receiving all documents on behalf of the entity;

(2) the basis for the contention that the person will be injured and has a personal justiciable interest in the matter such that a contested case hearing is appropriate;

(3) a request for a contested case hearing;

(4) whether or not the requestor is seeking a hearing to be conducted by SOAH;

(5) provide any other information requested in the notice of hearing; and

(6) the person filing the request shall subscribe and swear or affirm under oath that the facts set out in the request are true and correct before any person entitled to administer oaths who shall also sign his or her name and affix his or her seal of office to the request.

(d) Where a request for a contested case hearing is filed by a person other than the applicant, a copy of that request must be served on the applicant at or before the time that the request is filed with the District. The request shall indicate the date and manner of service and the name and address of all persons served.

(e) If a person is requesting a contested case hearing on more than one application, a separate request must be filed in connection with each application.

§ 9.309 Processing of Hearing Requests

(a) Except as provided in Subsection (d), the general manager shall schedule any timely filed contested case hearing request for board consideration. At least seven days prior to the board hearing, the general manager shall provide notice to the applicant and other persons making a timely hearing request of the hearing. The board may receive relevant oral testimony or documentary evidence at a board hearing during which the contested case hearing request is evaluated.

(b) The hearing request will be the initial matter considered at the hearing on the permit application.

(c) Persons may submit a written response to the hearing request. Responses shall be filed with the District, the applicant and any persons filing a hearing request in connection with that matter. The response should address the question of whether the person requesting the contested case hearing has a personal justiciable interest related to the application at issue.

(d) The board shall evaluate the hearing request and any written responses thereto at the scheduled board hearing and shall determine that the person requesting the hearing:

(1) does not have a personal justiciable interest related to the application and deny the hearing request and not admit the person as a party to the hearing; or

(2) has a personal justiciable interest relating to the application, refer the application to a contested case hearing, and admit the person as a party to the hearing.

(e) The board may delegate to a presiding officer the processing of requests for contested case hearing.

(f) The determination of whether a hearing request should be granted is not itself a contested case hearing.

§ 9.311 General Hearing Procedures in Contested Cases

(a) Except for a hearing referred to SOAH, the procedures provided in this subchapter apply to contested case hearings. If the board refers a contested case hearing to

SOAH, then the hearing shall be conducted as provided by Subchapters C, D, and F, Chapter 2001, Government Code, and the applicable rules of practice and procedure of SOAH (Title 1, Chapter 155, Tex. Admin. Code, as may be amended) govern any contested case hearing of the District conducted by SOAH, as supplemented by this subchapter.

(b) A contested case hearing of the District must be conducted by either:

(1) a quorum of the board;

(2) an individual to whom the board has delegated in writing the responsibility to preside as a hearings examiner over the hearing or matters related to the hearing; or

(3) a SOAH administrative law judge.

(c) If requested by any party to a contested case, the District must contract with SOAH to conduct a contested case hearing.

(d) Except as provided by Subsection (d), the board president or the hearings examiner shall serve as the presiding officer at the hearing.

(e) If the hearing is conducted by a quorum of the board and the board president is not present, the directors conducting the hearing may select another director to serve as the presiding officer.

(f) Authority of presiding officer: The presiding officer may conduct the hearing in the manner the presiding officer deems most appropriate for the particular proceeding. The presiding officer has the authority to:

(1) convene the hearing at the time and place specified in the notice for public hearing;

(2) set hearing dates;

(3) designate the parties;

(4) establish the order for presentation of evidence;

(5) administer oaths to all persons presenting testimony;

(6) examine persons presenting testimony or comments;

(7) ensure that information and testimony are introduced as conveniently and expeditiously as possible, without prejudicing the rights of any party to the proceeding;

(8) prescribe reasonable time limits for testimony and the presentation of evidence;

(9) exercise the procedural rules of the District;

(10) issue subpoenas when required to compel the attendance of witnesses or the production of papers and documents;

(11) require the taking of depositions and compel other forms of discovery under these rules;

(12) reopen the record of a hearing for additional evidence when necessary to make the record more complete;

(13) establish the jurisdiction of the District concerning the subject matter under consideration;

(14) rule on motions and on the admissibility of evidence and amendments to pleadings;

(15) conduct public hearings in an orderly manner in accordance with these rules;

(16) recess any hearing from time to time and place to place; and

(17) exercise any other appropriate powers necessary or convenient to effectively carry out the responsibilities of the presiding officer.

(g) Alignment of Parties in a Contested Case Hearing; Number of Representatives Heard: Parties in a contested case hearing may be aligned according to the nature of the hearing and their relationship to it. The presiding officer may require the participants of an aligned class to select one or more persons to represent them in the hearing or on any particular matter or ruling and may limit the number of representatives heard, but must allow at least one representative of an aligned class to be heard in the proceeding or on any particular matter or ruling.

(h) Appearance by Applicant or Movant: The applicant, movant or party requesting the hearing or other proceeding or a representative should be present at the hearing or other proceeding. Failure to so appear may be grounds for withholding consideration of a matter and dismissal without prejudice or may require the rescheduling or continuance of the hearing or other proceeding if the presiding officer deems it necessary in order to fully develop the record.

(i) Reporting: Contested case hearings will be recorded by audio or video recording or, at the discretion of the presiding officer, may be recorded by a certified court reporter transcription. The District does not prepare transcripts of hearings or other proceedings recorded on audio cassette tape on District equipment for the public, but the District will arrange access to the recording. On the request of a party to a contested case hearing, the presiding officer shall have the hearing transcribed by a court reporter. The presiding officer may assess any court reporter transcription costs against the party that requested the transcription or among the parties to the hearing. Except as provided by this subsection, the presiding officer may exclude a party from further participation in a hearing for failure to pay in a timely manner costs assessed against that party under this subsection. The presiding officer may not exclude a party from further participation in a hearing as provided by this subsection if the parties have agreed that the costs

assessed against that party will be paid by another party. If a proceeding other than a contested case hearing is recorded by a reporter, and a copy of the transcript of testimony is ordered by any person, the testimony will be transcribed and the original of any transcript will be filed with the District and placed in the papers of the proceeding at the expense of the person requesting the transcript of testimony. Copies of the transcript of testimony of any hearing or other proceeding thus reported may be purchased from the reporter.

(j) Continuance: The presiding officer may continue hearings in a contested case hearing from time to time and from place to place without the necessity of publishing, serving, mailing or otherwise issuing a new notice under Section 9.219. If the presiding officer continues a contested case hearing without announcing at the hearing the time, date and location of the continued hearing, the presiding officer must provide notice of the continued hearing by regular mail to all parties.

§ 9.313 Conduct and Decorum

Every person participating in or observing a contested case hearing, or other associated proceeding, must conform to ethical standards of conduct and exhibit courtesy and respect for all other participants or observers. No person may engage in any activity during a proceeding that interferes with the orderly conduct of District business. If, in the judgment of the presiding officer, a person is acting in violation of this provision, the presiding officer shall first warn the person to refrain from engaging in such conduct. Upon further violation by the same person, the presiding officer may exclude that person from the proceeding for such time and under such conditions as the presiding officer deems necessary.

§ 9.315 Hearing Registration Forms

Each individual attending who provides comments or testimony in a contested case hearing shall submit a hearing registration form providing the following information: name, address, who the person represents, if the person is not there in person's individual capacity, whether the person plans to testify or provide comments, and any other information relevant to the hearing.

§ 9.317 Opportunity for Hearing and Participation; Notice of Hearing

(a) In a contested case, each party is entitled to an opportunity:

(1) for hearing; and

(2) to respond and to present evidence and argument on each issue involved in the case.

(b) Notice shall be provided not later than 14 days before the date of a contested case hearing to all parties to a contested case hearing and all persons who have requested a contested case hearing pursuant to Section 9.307 on which no action has been taken.

§ 9.319 Pre-Hearing Conferences

(a) The presiding officer may hold one or more pre-hearing conferences at which the presiding officer may consider any matter which may expedite the hearing or otherwise facilitate the hearing process.

(b) Matters Considered. Matters which may be considered at a pre-hearing conference include, but are not limited to:

(1) the withdrawal of protest;

(2) the designation of parties;

(3) the formulation and simplification of issues;

(4) the necessity or desirability of amending applications or other pleadings;

(5) the possibility of making admissions or stipulations;

(6) the scheduling of discovery;

(7) the identification of and specification of the number of witnesses;

(8) the filing and exchange of prepared testimony and exhibits; and

(9) the procedure at the hearing.

(c) Conference Action. Action taken at a pre-hearing conference may be reduced to writing and made a part of the record or may be stated on the record at the close of the conference.

§ 9.321 Designation of Parties

The following persons shall be designated as parties in a contested case hearing:

(a) The general manager of the District is a party in all contested case hearings;

(b) The applicant is a party in a contested case hearing on its application; and

(c) Any person who timely requested a contested case hearing pursuant to Section 9.307, and who has been determined by the presiding officer to be a person entitled to a contested case hearing under the standard set forth in Section 9.309.

§ 9.323 Right to Counsel

(a) Each party to a contested case hearing may have the assistance of legal counsel before the District.

(b) A party to a contested case hearing may choose not to have the assistance of legal

counsel.

§ 9.325 Interpreters for Deaf or Hearing Impaired Parties and Witnesses

(a) In a contested case hearing, the District shall provide an interpreter whose qualifications are approved by the Texas Office for Deaf and Hard of Hearing Services to interpret the proceedings for a party or subpoenaed witness who is deaf or hearing impaired.

(b) In this section, "deaf or hearing impaired" means having a hearing impairment, whether or not accompanied by a speech impairment, that inhibits comprehension of the proceedings or communication with others.

§ 9.327 Informal Disposition of Contested Case Hearing

An informal disposition may be made of a contested case hearing by:

(a) stipulation;

(b) agreed settlement;

(c) consent order; or

(d) default.

§ 9.329 Hearing Conducted by Hearings Examiner

(a) This section applies only to contested case hearings presided over by a hearings examiner.

(b) A hearings examiner who conducts a contested case hearing shall consider applicable District rules or policies in conducting the hearing.

(c) The District shall provide the hearings examiner with the District rules or policies applicable to the matter under consideration in the hearing.

(d) The District may not attempt to influence the findings of fact or the hearings examiner's application of law in a contested case hearing except by proper evidence and legal argument.

(e) The District may change a finding of fact or conclusion of law made by the hearings examiner, or may vacate or modify an order issued by the hearings examiner, only if the District determines:

(1) that the hearings examiner did not properly apply or interpret applicable law, District rules or policies provided under Subsection (c), or prior administrative decisions;

(2) that a prior administrative decision on which the hearings examiner relied is incorrect or should be changed; or

(3) that a technical error in a finding of fact should be changed.

The District shall state in writing the specific reason and legal basis for a change made under this subsection.

§ 9.331 Certified Questions

(a) At any time during a contested case hearing presided over by a hearings examiner, on a motion by a party or on the hearings examiner's own motion, the hearings examiner may certify a question to the District.

(b) Issues regarding District policy, jurisdiction or the imposition of any sanction by the hearings examiner that would substantially impair a party's ability to present its case are among the types of issues appropriate for certification. Policy questions for certification purposes include, but are not limited to:

(1) the District's interpretation of its rules and applicable statutes;

(2) which rules or statutes are applicable to a proceeding; or

(3) whether District policy should be established or clarified as to a substantive or procedural issue of significance to the proceeding.

(c) If a question is certified, the hearings examiner shall submit the certified issue to the general manager. The general manager will place the certified issue on the agenda of the earliest possible meeting of the board, in compliance with the Open Meetings Act and other applicable law. The general manager will give the hearings examiner and parties notice of the meeting at which the certified question will be considered. The parties to the proceeding may file with the District briefs on the certified question. Briefs shall be filed with the parties with a copy served on the hearings examiner. The general manager will provide copies of the certified question and any briefs to the board. The hearings examiner may abate the hearing until the District answers the certified question, or continue with the hearing if the hearings examiner determines that no party will be substantially harmed.

(d) The District will issue a written decision on the certified issue within 30 days following the meeting at which the certified issue is considered. A decision on a certified issue is not subject to a motion for rehearing, appeal or judicial review prior to the issuance of the District's final decision in the proceeding.

§ 9.333 Service of Documents filed in a Contested Case Hearing

(a) Service of all Documents Required. For any document filed with the District or the judge in a contested case hearing, the person filing that document must serve a copy on all parties to the contested case including the general manager at or before the time that the request is filed.

(b) Certificate of Service. A document presented for filing must contain a certificate of service indicating the date and manner of service and the name and address of each person

served. The docket clerk may permit a document to be filed without a certificate of service but will require the certificate to be filed promptly thereafter.

§ 9.335 Privilege

In a contested case hearing, the District shall give effect to the rules of privilege recognized by law.

§ 9.337 Objections to Evidence

An objection to an evidentiary offer in a contested hearing may be made and shall be noted in the record.

§ 9.339 Burden of Proof

The burden of proof is on the applicant to establish, by a preponderance of the evidence, that the applicant is entitled to have the application granted.

§ 9.341 Assessing Costs

(a) The party or parties requesting a contested case hearing before SOAH shall pay all costs associated with the contract for the hearing and shall deposit with the District an amount sufficient to pay the contract amount before the hearing begins. At the conclusion of the hearing, the District shall refund any excess money to the paying party or parties.

(b) Upon the timely request of any party, or at the discretion of the presiding officer, the presiding officer may make a recommendation to the board regarding the assessment of costs incurred by the District for the hearing not addressed in Subsection (a), including the District's expenditures for attorney's fees and technical experts, and any reporting and transcription costs to one or more of the parties. If the hearing is conducted by the board, a hearing report with recommendations need not be filed, and the board may directly assess the District's hearing costs and reporting and transcription costs to one or more of the parties. The presiding officer must consider the following factors in assessing the District's hearing costs not addressed in Subsection (a) and the reporting and transcription costs:

(1) the party who requested the hearing and/or transcript;

(2) the financial ability of the party to pay the costs;

(3) the extent to which the party participated in the hearing;

(4) the relative benefits to the various parties of having a transcript;

(5) the budgetary constraints of a governmental entity participating in the proceeding; and

(6) any other factor that is relevant to a just and reasonable assessment of costs.

(c) In any proceeding where the assessment of the District's hearing costs and reporting or transcription costs is an issue, the presiding officer must provide the parties an opportunity to present evidence and argument on the issue. If applicable, a recommendation regarding the assessment of costs must be included in the hearing presiding officer's report to the board.

§ 9.343 Rights of Designated Parties

Subject to the direction and orders of the presiding officer, parties have the right to conduct discovery; present a direct case; cross-examine witnesses; make oral and written arguments; obtain copies of all documents filed in the proceeding; receive copies of all notices issued by the District concerning the proceeding; and otherwise fully participate in the proceeding.

§ 9.345 Persons Not Designated Parties

At the discretion of the presiding officer, a person not designated as a party to a proceeding may submit a comment or statement, orally or in writing. Comments or statements submitted by non-parties may be included in the record, but may not be considered by the presiding officer.

§ 9.347 Ex Parte Communications

Except as otherwise provided below, the presiding officer or a member of the board assigned to render a decision or to make findings of fact or conclusions of law on a contested permit application may not communicate, directly or indirectly, about any issue of fact or law during the pendency of the contested case with any representative of the District or other designated party to the contested case, except on notice and opportunity for all parties to participate. This rule does not apply to a board member who abstains from voting on any matter in which he or she engaged in ex parte communications. A member of the board may communicate ex parte with other members of the board consistent with the requirements of other law, such as the Open Meetings Act. A member of the board or the presiding officer may communicate ex parte with a District employee who has not participated in any hearing in the contested case for the purpose of using the special skills or knowledge of the District employee in evaluating the evidence.

§ 9.349 Evidence

The presiding officer shall admit evidence that is relevant to an issue at the hearing. The presiding officer may exclude evidence that is irrelevant, immaterial, or unduly repetitious. The Texas Rules of Evidence may be referred to in order to determine the admissibility and introduction of evidence in contested case hearings. However, evidence not admissible under the Texas Rules of Evidence may be admitted if the evidence is:

(a) necessary to ascertain facts not reasonably susceptible of proof under those rules;

(b) not precluded by statute; and

(c) of a type on which a reasonably prudent person commonly relies in the conduct of the person's affairs.

In addition, evidence may be stipulated to by agreement of all parties.

§ 9.351 Written Testimony

(a) When a proceeding will be expedited and the interests of the parties will not be prejudiced substantially thereby, the presiding officer may allow testimony in a contested case hearing to be received in written form.

(b) The written testimony of a witness, either in narrative or question and answer form, must be sworn to by the witness and may be admitted into evidence upon the witness being sworn and identifying the testimony as a true and accurate record of what the testimony would be if given orally. The witness must be available, in person, by phone, or by other reasonable means, for clarifying questions and cross-examination, and the prepared testimony will be subject to objection. On the motion of a party, the presiding officer may exclude written testimony if the person who submits the testimony is unavailable for cross-examination by phone, a deposition before the hearing, or other reasonable means.

§ 9.353 Requirements for Exhibits

(a) Exhibits of a documentary character must be sized to not unduly encumber the files and records of the District. All exhibits must be numbered and, except for maps and drawings, may not exceed 8-1/2 by 11 inches in size.

(b) Abstracts of Documents. When documents are numerous, the presiding officer may receive in evidence only those which are representative and may require the abstracting of relevant data from the documents and the presentation of the abstracts in the form of an exhibit. Parties have the right to examine the documents from which the abstracts are made.

(c) Introduction and Copies of Exhibits. Each exhibit offered must be tendered for identification and placed in the record. Copies must be furnished to the presiding officer and to each of the parties, unless the presiding officer rules otherwise.

(d) Excluding Exhibits. In the event an exhibit has been identified, objected to, and excluded, it may be withdrawn by the offering party. If withdrawn, the exhibit will be returned and the offering party waives all objections to the exclusion of the exhibit. If not withdrawn, the exhibit will be included in the record for the purpose of preserving the objection to excluding the exhibit.

§ 9.355 Official Notice; District Evaluation of Evidence

(a) In connection with a contested case hearing, the presiding officer may take official notice of:

(1) all facts that are judicially cognizable; and

(2) generally recognized facts within the area of the District's specialized knowledge.

(b) Each party shall be notified, either before or during the hearing, or by reference in a preliminary report or otherwise, of the material officially noticed, including staff memoranda or information.

(c) Each party is entitled to be given an opportunity to object to material that is officially noticed.

§ 9.357 Agreement of Parties; Remand to Board

(a) No agreement between parties or their representatives affecting any pending matter shall be considered by the presiding officer unless it is in writing, signed, and filed as part of the record, or unless it is announced at the prehearing conference or the hearing and entered of record.

(b) An agreed disposition of a contested case may be made by stipulation, settlement, consent order, or the withdrawal of all requests for a contested case hearing so that no facts or issues remain controverted. Upon settlement of a matter, the presiding officer shall remand the matter to the board. If the person requesting the contested case hearing defaults, then the presiding officer may also deem the request for a contested case hearing to have been withdrawn by the person and remand the case to the board. Applications remanded under this section shall be considered to be uncontested and shall be considered under Section 9.215. The presiding officer shall summarize the evidence, including findings of fact and conclusions of law based on the existing record and any other evidence submitted by the parties at the hearing. Any stipulations, settlements, consent orders, withdrawals of requests for contested case hearing, orders, findings of default, presiding officer summary of the proceedings, and other relevant documents shall be presented to the board for its consideration.

§ 9.359 Discovery

Discovery may be conducted upon such terms and conditions, and at such times and places, as directed by the presiding officer. Unless specifically modified by this subchapter or by order of the presiding officer, discovery shall be governed by, and subject to the limitations set forth in, the Texas Rules of Civil Procedure. In addition to the forms of discovery authorized under the Texas Rules of Civil Procedure, the parties may exchange informal requests for information, either by agreement or by order of the presiding officer.

§ 9.361 Documents in District Files

Extrinsic evidence of authenticity is not required as a condition precedent to admissibility of documents maintained in the files and records of the District.

§ 9.363 Oral Argument

At the discretion of the presiding officer, oral arguments may be heard at the conclusion of the presentation of evidence. Reasonable time limits may be prescribed. The presiding officer

may require or accept written briefs in lieu of, or in addition to, oral arguments. When the matter is presented to the board for final decision, further oral arguments may be heard by the board if the board did not preside over the hearing.

§ 9.365 Closing the Record

At the conclusion of the presentation of evidence and any oral argument, the presiding officer may close the record or, if the board has not taken final action on the application, keep it open and allow the submission of additional testimony by a person who testified at the hearing, or exhibits, briefs, or proposed findings and conclusions from one or more of the parties. Any supplementation of the record must be filed not later than the 10th day after the date of the final hearing. A person who files additional written material with the presiding officer under this section must also provide the material, not later than the 10th day after the date of the hearing, to any person who provided comments on an uncontested application or any party to a contested case hearing. A person who receives additional written material under this section may file a response to the material with the presiding officer not later than the 10th day after the date the material was received. No additional evidence, exhibits, briefs, or proposed findings and conclusions may be filed unless permitted or requested by the presiding officer.

§ 9.367 Proposal for Decision

Except for contested cases presided over by a quorum of the board, no later than 30 days following the completion of the contested case hearing, the presiding officer shall submit a proposal for decision to the District and serve a copy on the applicant and each designated party to the contested case. A proposal for decision shall include a summary of the subject matter of the hearing, a summary of the evidence or public comments received, and the presiding officer's recommendations for board action on the subject matter of the hearing. The presiding officer, when submitting the proposal for decision, shall notify the parties of the deadlines for the filing of exceptions and replies.

§ 9.368 Exceptions to the Proposal for Decision

Prior to board action, any party in a contested case may file written exceptions to the proposal for decision. Upon review of the exceptions, the hearing examiner may reopen the record for the purpose of developing additional evidence, or may deny the exceptions and submit the proposal for decision and exceptions to the board. The board may, at any time and in any case, remand the matter to the hearing examiner for further proceedings.

§ 9.369 Scheduling a Meeting of the Board

(a) After receiving the proposal for decision or proposed order, the general manager shall schedule the presentation of the proposal for decision or proposed order to the board. The general manager shall provide at least 10 days' prior notice to the parties of the date of the board meeting at which the proposal for decision or proposed order will be presented and considered. The board may reschedule the presentation of the proposal for decision or proposed order. The general manager shall send notice of the rescheduled meeting date to the parties no later than 10 days before the rescheduled meeting.

(b) Consistent with notices required by law, the board may consolidate related matters if the consolidation will not injure any party and may save time and expense or otherwise benefit the public interest and welfare.

(c) The board may sever issues in a proceeding or hold special hearings on separate issues if doing so will not injure any party and may save time and expense or benefit the public interest and welfare.

§ 9.371 Oral Presentation Before the Board

(a) Any party to the contested case hearing may make an oral presentation at the board meeting in which the proposal for decision in that case is presented to the board.

(b) Any party to the contested case hearing may make an oral presentation at the board meeting in which the proposed order in that case is considered by the board.

(c) Oral presentations before the board shall be limited to 5 minutes each, excluding time for answering questions, unless the president establishes other limitations. Before the board meeting, the president may allot time for oral presentations. Oral presentations and responses to questions shall be directed to the board.

§ 9.373 Reopening the Record

The board, on the motion of any party to a contested case or on its own motion, may order the presiding officer to reopen the record for further proceedings on specific issues in dispute. The order shall include instructions as to the subject matter of further proceedings and the presiding officer's duties in preparing supplemental materials or revised proposals based upon those proceedings for the board's adoption.

§ 9.375 Decision

(a) No later than 60 days after the date of the final hearing on the application is concluded, the board shall render its decision. The decision, if adverse to any party, must be in writing or stated in the record. If a written request is filed with the District not later than the 20th day after the date of the board's decision, then the board's decision must be in writing and shall include findings of fact and conclusions of law separately stated regarding the decision of the board. The board shall provide certified copies of the findings and conclusions to the person who requested them, and to each person who provided comments or each designated party, not later than the 35th day after the date the board received the request.

(b) The board's decision shall be rendered no later than 60 days after the date the final hearing on the application is concluded, unless the board determines that there is good cause for continuing the proceeding.

(c) The board may change a finding of fact or conclusion of law made by the presiding officer, or may vacate or modify an order issued by the presiding officer, only if the board determines:

(1) that the presiding officer did not properly apply or interpret applicable law, District rules, written policies provided to the presiding officer by the District, or prior administrative decisions:

(2) that a prior administrative decision on which the presiding officer relied is incorrect or should be changed; or

(3) that a technical error in a finding of fact should be changed.

§ 9.377 Notification of Decisions and Orders

(a) The District shall notify all parties in a contested case either personally or by certified mail, return-receipt requested, of any decision or order.

(b) The District shall send a copy of the decision or order in a contested case by first-class mail to attorneys of record and shall keep an appropriate record of the mailing. If a party is not represented by an attorney, the District shall send a copy of the decision or order by first-class mail to the party and shall keep an appropriate record of the mailing.

(c) A party or attorney of record notified by mail under Subsection (b) is presumed to have been notified on the third day after the date on which the notice is mailed.

§ 9.379 Motion for Rehearing

(a) Filing motion. Only a party to the contested case may file a motion for rehearing. The motion shall be filed with the general manager within 20 days after the date the party or his or her attorney of record is notified of the decision or order. On or before the date of filing of a motion for rehearing, a copy of the motion shall be mailed or delivered to all parties with certification of service furnished to the District. The motion shall contain:

(1) the name and representative capacity of the person filing the motion;

(2) the style and official docket number assigned by the District;

(3) the date of the decision or order; and

(4) a concise statement of each allegation of error.

(b) Reply to motion for rehearing. Only a party to the contested case proceeding may reply to a motion for rehearing. A reply to a motion for rehearing must be filed with the general manager within 20 days after the date the motion for rehearing is filed.

(c) Ruling on motion for rehearing.

(1) Upon the request of a board member, the motion for rehearing shall be scheduled for consideration during a board meeting. Unless the board rules on the motion for rehearing, the failure of the board to grant or deny a request for rehearing before the 91st day after the date the request is submitted constitutes a denial of the request by operation of law.

(2) A motion for rehearing may be granted in whole or in part. When a motion for rehearing is granted, the decision or order is nullified. The board may reopen the hearing to the extent it deems necessary. If the board grants a request for rehearing, the board shall schedule the rehearing not later than the 45th day after the date the request is granted. Thereafter, the board shall render a decision or order as required by this subchapter.

§ 9.381 Decision Final and Appealable

In the absence of a timely filed motion for rehearing, a decision or order of the board is final and appealable on the expiration of the period for filing a motion for rehearing. If a party files a timely motion for rehearing, a decision or order of the board is final and appealable on the date: (1) the board denies the motion for rehearing; (2) the motion is denied by operation of law; or (3) the board renders a written decision after rehearing.

§ 9.383 Appeal of Final Decision

(a) A filing of a timely motion for rehearing is a prerequisite to appeal.

(b) Not later than the 60th day after the date on which the decision of the board becomes final, an applicant or a party to a contested case hearing may appeal the District's decision by filing suit under Section 36.251, Texas Water Code. An applicant or a party to a contested case hearing may not file suit against the District under Section 36.251 if a request for rehearing was not filed on time.

(c) The record. The record in a contested case shall include the following:

(1) all pleadings, motions and intermediate rulings;

(2) evidence received or considered;

(3) a statement of matters officially noticed;

(4) questions and offers of proof, objections and rulings on them;

(5) summaries of the results of any conferences held before or during the hearing;

(6) proposed findings, exceptions and briefs;

(7) any decision, opinion or report issued by the presiding officer;

(8) pre-filed testimony;

(9) all memoranda or data submitted to or considered by the presiding officer; and

(10) the final order and all interlocutory orders.

§ 9.385 Costs of Record on Appeal

A party who appeals a final decision in a contested case shall pay all costs of preparation of the record of the proceeding that is required to be transmitted to the reviewing court. A charge imposed as provided by this section is considered to be a court cost and may be assessed by the court in accordance with the Texas Rules of Civil Procedure.

Subchapter E. Procedures for Adoption of Rules and Management Plan

§ 9.401 Rulemaking and Management Plan Hearing Procedures

(a) The District shall adopt rules and its management plan following the notice and hearing procedures set forth in this subchapter.

(b) Not later than the 20th day before the date of a hearing to adopt rules or a management plan, the general manager shall provide notice of the public hearing as follows:

(1) post a notice in a place readily accessible to the public at the District office;

(2) provide a copy of the notice to the county clerk of each county in which the District is located, to be posted at the County courthouse;

(3) publish the notice in one or more newspapers of general circulation in the District;

(4) provide the notice by mail, facsimile, or electronic mail to any person who has requested the notice pursuant to Subsection (g); and

(5) make available a copy of the proposed rule or management plan at a place accessible to the public during normal business hours and, if the District has a website, post an electronic copy on its website.

(c) The notice shall include the following information:

(1) the time, date, and location of the rulemaking or management plan hearing;

(2) a brief explanation of the subject of the rulemaking or management plan hearing; and

(3) the procedures for submitting oral or written comments, and a location or internet site at which a copy of the proposed rules or management plan may be reviewed or copied, if any.

(d) The general manager may designate a person to be the presiding officer to conduct the public hearing. The presiding officer shall conduct a rulemaking or management plan hearing in the manner the presiding officer determines to be most appropriate to obtain information and comments relating to the proposed rule or management plan as conveniently and expeditiously as possible. Comments may be submitted orally at the hearing or in writing. The presiding officer may hold the record open for a specified period after the conclusion of the hearing to receive additional written comments. The District shall allow at least 20 days for submission of written public comments on a proposed rule or management plan before adopting the proposed rule or plan.

(e) Any person participating in a rulemaking hearing must submit to the District a registration form indicating the person's name, address, and who the person represents, if not in attendance or his or her behalf.

(f) The presiding officer shall prepare and keep a record of each rulemaking or management plan hearing in the form of an audio or video recording or a court reporter transcription.

(g) A person may submit to the District a written request for notice of a rulemaking or management plan hearing. A request is effective for the remainder of the calendar year in which the request is received by the District. To receive notice of a rulemaking or management plan hearing in a later year, a person must submit a new request. An affidavit of an officer or employee of the District establishing attempted service by first class mail, facsimile, or electronic mail to the person in accordance with the information provided by the person is proof that notice was provided by the District.

(h) The District may use an informal conference or consultation to obtain the opinions and advice of interested persons about a contemplated rule or management plan provision and may appoint an advisory committee of experts, interested persons, or public representatives to advise the District about a contemplated rule or management plan provision.

(i) Failure to provide notice under Subsection (b)(4) does not invalidate an action taken by the District at a rulemaking or management plan hearing.

(j) Oral Presentations. Any person desiring to testify on the subject of the hearing must so indicate on the registration form provided at the hearing. The presiding officer may establish the order of testimony and may limit the number of times a person may speak, the time period for oral presentations, and the time period for raising questions. In addition, the presiding officer may limit or exclude cumulative, irrelevant, or unduly repetitious presentations.

(k) Adoption of Proposed Rules or Management Plan. After the conclusion of the hearing and the time period for submission of written comments, the board shall consider all timely written comments and shall, in the order adopting the rule or plan, state the District's responses to the written comments.

(l) A proposed rule becomes final and effective on the day it is adopted by the board, unless otherwise specified by the board.

§ 9.402 Adoption of Desired Future Conditions Hearing Procedures

(a) Not later than the 20th day before the date of a hearing or meeting at which the District will adopt a desired future condition for any aquifer, the District shall provide notice of the public hearing or meeting as follows:

(1) post a notice in a place readily accessible to the public at the District office;

(2) provide a copy of the notice to the county clerk of each county in which

the District is located, to be posted at the County courthouse;

(3) publish the notice in one or more newspapers of general circulation in the District;

(4) provide the notice by mail, facsimile, or electronic mail to any person who has requested a notice pursuant to Section 9.401(g) or who has made such a request related specifically to the adoption of a desired future condition; and

(5) make available a copy of the proposed desired future condition at a place accessible to the public during normal business hours and, if the District has a website, post an electronic copy on its website.

(b) At least 10 days before a hearing or meeting at which the District will adopt a desired future condition for any aquifer, the District must post notice that includes:

(1) the proposed desired future conditions and a list of any other agenda items;

(2) the date, time, and location of the meeting or hearing;

(3) the name, telephone number, and address of the person to whom questions or requests for additional information may be submitted;

(4) the names of the other districts in the District's management area; and

(5) information on how the public may submit comments.

§ 9.403 Emergency Rulemaking

(a) The District may adopt an emergency rule without prior notice or hearing, or with an abbreviated notice and hearing, if the board:

(1) finds that a substantial likelihood of imminent peril to the public health, safety, or welfare, or a requirement of state or federal law, requires adoption of a rule on less than 20 days' notice; and

(2) prepares a written statement of the reasons for its findings under Subsection (a).

(b) Except as provided by Subsection (c), a rule adopted under this section may not be effective for longer than 90 days.

(c) If notice of a hearing on the final rule is given not later than the 90th day after the date the rule is adopted, the rule is effective for an additional 90 days.

(d) A rule adopted under this section must be adopted at a meeting held as provided by the Open Meetings Law.

CHAPTER 10. WATER QUALITY

§ 10.1 Prohibition on Pollution of Groundwater

A person may not pollute or contribute to the pollution of groundwater in the District.

CHAPTER 11. INVESTIGATIONS AND ENFORCEMENT

§ 11.1 Right to Enter Land

Any District board member or District employee, agent or representative is entitled to enter any public or private property within the boundaries of the District at any reasonable time for the purpose of inspecting or investigating conditions relating to the quality or quantity of groundwater or in regard to the compliance with the District Act, Chapter 36 of the Texas Water Code, or any rule, permit, or order of the District. Such persons acting under this authority who enter private property shall, prior to entry, give notice in writing or in person or by telephone to the owner, lessee, or operator, agent, or employee of the property, as determined by information contained in the application or other information on file with the District, if any.

§ 11.3 Conduct of Investigation

Investigations or inspections that require entrance upon property must be conducted at reasonable times, and must be consistent with the establishment's rules and regulations concerning safety, internal security, and fire protection. The persons conducting such investigations must identify themselves and present credentials upon request of the owner, lessee, operator, or person in charge of the property.

§ 11.5 Judicial Civil Enforcement

(a) The District may enforce the District Act or its rules by injunction, mandatory injunction, or other appropriate remedy in a court of competent jurisdiction.

(b) If the District prevails in any suit to enforce its rules, the District may seek and the court shall grant, in the same action, civil penalties, recovery for attorney's fees, costs for expert witnesses, and other costs incurred by the District before the court.

(c) Civil penalties for breach of any rule of the District shall be not less than $100 per day per violation and not more than $10,000 per day per violation.

(d) A penalty under this section is in addition to any other penalty provided by the law of this state and may be enforced by complaint filed in an appropriate court of jurisdiction in the District.

§ 11.7 Enforcement Action by the General Manager

If the general manager determines that a person, or his predecessor in interest, is in violation of the District Act, these Rules, or the terms or conditions of a permit or interim production status, he may suspend the processing of any application or authorization that the person has pending before the District.

§ 11.9 Enforcement Action by the Board

If the board determines that a person, or his predecessor in interest, violated, is violating, or is threatening to violate the District Act, these Rules, or the terms or conditions of a permit or

interim production status, it may, after providing a 10-day written notice to the person and an opportunity for the person to appear and be heard at a meeting of the board:

(a) suspend the processing of any application or authorization that the person has pending before the District, until the violation is remedied;

(b) suspend any interim production status, permit or authorization issued by the District, which is held by that person, until the violation is remedied;

(c) commence any action authorized by law to address the violation, including filing a civil suit in state district court seeking an injunction, a mandatory injunction, civil penalties, and attorney's fees and other costs associated with bringing a suit; or

(d) enter into, or authorize the general manager to enter into, a settlement agreement with the person.

§ 11.11 Enforcement Related to Groundwater Withdrawal Limitations

(a) If the board determines that the holder of a HUPP has exceeded the annual authorized withdrawal amount in the permit, the board may suspend taking enforcement action for a period of time in order to determine whether the holder of the permit has average annual withdrawals over a three-year period in excess of the permit's annual authorized withdrawal amount.

(b) If the board determines that the holder of a HUPP has annual withdrawals over a three-year period in excess of the permit's annual authorized withdrawal amount, the general manager and the board may commence any enforcement action authorized by these rules and other law to enforce the terms of the permit.

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 13

RESOLUTION AND ORDER NO. 2015-003

OF THE BOARD OF DIRECTORS OF THE SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT ADOPTING SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT RULES, CH. 1 (DEFINITIONS AND GENERAL PROVISIONS), CH. 3 (DISTRICT STAFF), CH. 5 (GROUNDWATER PRODUCTION), CH. 6 (WELL MANAGEMENT), CH. 7 (FEES), CH. 8 (METERS AND REPORTING), CH. 9 (PROCEDURES BEFORE THE DISTRICT)

WHEREAS, the Southern Trinity Groundwater Conservation District ("District") was created in 2007 by an organic act of the Texas Legislature, Act of May 26, 2007, 80th Leg., R.S., ch. 1345, 2007 Tex. Gen. Laws 4594, which was amended in 2009 and 2011, and is codified in Texas Special District Local Laws Code, Chapter 8821 (West 2014) ("Act");

WHEREAS, in 2008, the Texas Commission on Environmental Quality created the Central Texas–Trinity Aquifer Priority Groundwater Management Area in Somervell, Bosque, Hill, Coryell and McLennan Counties – an area designated by the State as one expected to experience critical groundwater problems within the next 25 years;

WHEREAS, the District was created "to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater . . ." in McLennan County. TEX. WATER CODE ANN. § 36.0015 (West 2008); Act §§ 8821.002, 8821.101;

WHEREAS, the District has "all of the rights, powers, privileges, authority, functions, and duties," provided by Chapter 36, Texas Water Code. Act § 8821.101;

WHEREAS, the District is required to propose for adoption a "desired future condition" for aquifers within its jurisdiction, in order to provide for "the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater" in the District. TEX. WATER CODE ANN. § 36.108(d), (d-2) (West Supp. 2014);

WHEREAS, the District readopted its management plan on April 23, 2015, which newly designates Hensell and Hosston Management Zones and requires the District to reissue permits to specify, to the extent reasonably possible, whether withdrawals are from the Hensell and/or the Hosston Management Zone;

WHEREAS, the District is required to adopt rules necessary to implement its management plan. TEX. WATER CODE ANN. §§ 36.101(b), 36.1071(f);

WHEREAS, the Texas Water Code provides that "[a] district may make and enforce rules, including rules limiting groundwater production based on tract size or the spacing of wells, to provide for conserving, preserving, protecting, and recharging of the groundwater or of a groundwater reservoir or its subdivisions in order to control subsidence, prevent degradation of water quality, or prevent waste of groundwater and to carry out the powers and duties provided by [Chapter 36]." *Id.* § 36.101(a);

WHEREAS, the District is mandated by the Texas Water Code to "require a permit for the drilling, equipping, or completing of wells or for substantially altering the size of wells or well pumps," except for wells exempted from any such requirements in Section 36.117, and Section 36.113 provides certain guidance to the District with respect to permit issuance. *Id.* § 36.113(a);

WHEREAS, the Texas Water Code requires that the District "issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition under Section 36.108." *Id.* § 36.1132(a);

WHEREAS, in adopting a rule under Chapter 36 of the Texas Water Code, a district is required to: "(1) consider all groundwater uses and needs; (2) develop rules that are fair and impartial; (3) consider the groundwater ownership and rights described by Section 36.002; (4) consider the public interest in conservation, preservation, protection, recharging, and prevention of waste of groundwater, and of groundwater reservoirs or their subdivisions, and in controlling subsidence caused by withdrawal of groundwater from those groundwater reservoirs or their subdivisions, consistent with the objectives of Section 59, Article XVI, Texas Constitution; (5) consider the goals developed as part of the district's management plan under Section 36.1071; and (6) not discriminate between land that is irrigated for production and land that was irrigated for production and enrolled or participating in a federal conservation program." *Id.* § 36.101(a);

WHEREAS, Section 36.002 of the Texas Water Code states, "(a) The legislature recognizes that a landowner owns the groundwater below the surface of the landowner's land as real property. (b) The groundwater ownership and rights described by this section: (1) entitle the landowner, including a landowner's lessees, heirs, or assigns, to drill for and produce the groundwater below the surface of real property, subject to Subsection (d), without causing waste or malicious drainage of other property or negligently causing subsidence, but does not entitle a landowner, including a landowner's lessees, heirs, or assigns, to the right to capture a specific amount of groundwater below the surface of that landowner's land; and (2) do not affect the existence of common law defenses or other defenses to liability under the rule of capture." *Id.* § 36.002(a), (b);

WHEREAS, when it adopts rules, the District must comply with the applicable procedural rulemaking requirements of Chapter 36 and the District's rules. *Id.* § 36.101; District Rules § 9.401;

WHEREAS, pursuant to TEX. WATER CODE ANN. § 36.101 and Section 9.401 of the District's Rules, the District provided notice of the rulemaking hearing held with respect to the Proposed Rules ("PRs") by, 20 days before the hearing: posting the notice in a place readily accessible to the public at the District's office; providing the notice to the McLennan County Clerk; publishing the notice in the *Waco-Tribune Herald*, a newspaper of general circulation in the District; providing the notice by mail, facsimile, or electronic mail to those persons who have requested notice; and making available a copy of the proposed rules at the District's office during the District's business hours and on the District's website;

WHEREAS, pursuant to § 36.101, TEX. WATER CODE ANN., and Section 9.401, the District held a public rulemaking hearing at which the public was allowed to make comments on the PRs and the hearing was conducted in accordance with the Texas Open Meetings Act, TEX. GOV'T CODE ANN. §§ 551.001-551.146 (West 2012 and Supp. 2014);

WHEREAS, pursuant to Section 9.401, the District allowed at least 20 days for the submission of written comments on the PRs;

WHEREAS, no written comments were submitted on the PRs on or before April 20, 2015;

WHEREAS, the Texas Private Real Property Rights Preservation Act Assessment, as set out in Exhibit A, is attached hereto and incorporated for all purposes;

WHEREAS, the District has prepared Final Rules ("FRs") as set out in Exhibit B (redlined) and Exhibit C (clean), which are attached hereto and incorporated for all purposes; and

WHEREAS, the board has reviewed the FRs and finds that they are consistent with the District's statutory authority and should be adopted.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE BOARD OF DIRECTORS OF THE SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT THAT:

Section 1. The Texas Private Real Property Rights Preservation Act Assessment, which is attached hereto as Exhibit A, and all of the statements, findings, and conclusions contained therein are hereby approved and adopted by the board and are incorporated into this Resolution and Order for all purposes.

Section 3. The rules, which are attached to this Resolution and Order as Exhibit B (redlined) and Exhibit C (clean), are hereby adopted as Final Rules by the board.

Section 4. The FRs become effective immediately.

PASSED AND APPROVED BY THE BOARD OF DIRECTORS OF THE SOUTHERN TRINITY GROUNDWATER CONSERVATION DISTRICT THIS 23RD DAY OF APRIL, 2015.

Rodney Kroll
President, Board of Directors

ATTEST:

Glen Thurman
Secretary, Board of Directors

APPROVED AS TO FORM:

Deborah Clarke Trejo
Kemp Smith LLP, General Counsel

Southern Trinity Groundwater Conservation District

2015 Management Plan

Appendix 14

Waco Tribune-Herald

Waco, McLennan County,
Texas
Affidavit of Publication

Account Number
1025944

SOUTHERN TRINITY GROUNDWATER
Attn GENERAL MANAGER
P O BOX 2205
WACO, TX 76703

Date	Category	Description	Ad Size	Total Cost
04/05/2015	Legal Notices	NOTICE OF PUBLIC HEARING ON PROPOSED RULES AND GROUNDWATER MANAGEMENT PLAN	1 x 237.00 CL	917.24

Publisher of the
Waco Tribune-Herald

Before me, a notary public, on this day personally appeared Ana Lozano-Harper and after being duly sworn, states that she is a Multi Media Sales Manager of the Waco Tribune Herald, a newspaper published in Waco, McLennan County, Texas, and that the Notice, a copy of which is hereto attached, was published in said newspaper on the following named dates, to-wit:

03/30/2015

The First insertion being given ... 03/30/2015

Newspaper reference: 0000095979

Sworn to and subscribed before me this day: March 31, 2015

Grace Allen
Notary Public

ana lozano harper
Multi Media Sales Manager

State of Texas
Waco,McLennan County
My Commission expires March 14, 2019

GRACE ALLEN
MY COMMISSION EXPIRES
MARCH 14, 2019

THIS IS NOT A BILL. PLEASE PAY FROM INVOICE. THANK YOU

Classif

PUBLIC NOTICES

Cemetery Lots

4 spaces in Garden of Apostles, Waco Memorial Park. $5,000 for all. 254-399-8724

Found

FOUND keys in front of Waco Orthopedic on Fishpond. Call 254-652-8029

Lost

LOST stud diamond earring at the Mix Cafe in Hewitt on March 10th. Call 806-787-1887

LEGAL NOTICES

Legal Notices

Attention Legal Advertisers! For your convenience, you may e-mail your advertisement to us at the following address:

legals@wacotrib.com
If you have any questions, please call 757-5757. This excludes liquor permits and some other types of legals ads. Call for details

Legal Notices

recharge enhancement, rainwater harvesting, precipitation enhancement, or brush control, where appropriate and cost-effective; and

(8)addressing the desired future conditions adopted by the district.

Because the proposed readopted Management Plan is lengthy, an exhaustive analysis of the plan is not attempted here. All interested persons are encouraged to review the proposed plan for themselves by obtaining a copy from the District, as provided below.

4.0 Procedures for Obtaining the Proposed Rules and Management Plan

Copies of the proposed rules and management plan may be obtained from the District as follows:

1. by calling (254) 759-5610, and requesting a copy of the proposed management plan from the District's General Manager; or

2. by visiting the offices of the District at 460 N. 6th Street, Waco, Texas between 8 a.m. and 12 p.m.; or

3. by requesting the proposed management plan by electronic mail sent to stgcd@att.net; or

4. from the District's website: http://southerntrinitygcd.org.

5.0 Procedures for Submitting Comments on the Proposed Rules and Management Plan

5.1 Oral Comments

Any person may appear at the public hearing on the proposed rules and management plan. Any person making an appearance must indicate their desire to make oral comments on the registration form provided by the District at the public hearing. A person must disclose any affiliation on the registration form and, if applicable, the authority to speak for a person represented. Any other person attending the public hearing will be considered by the District to be an observer not desiring to make comment on the proposed rules or management plan. The District will not consider any comments of an observer in any future action taken on the proposed rules or management plan.

The presiding officer will establish the order of oral comments of persons at the hearing. As appropriate, the presiding officer may limit:

1. the number of times a person may speak;

2. the time period for oral comments;

3. cumulative, irrelevant, or unduly repetitious comments;

4. general comments that are so vague, undeveloped, or immaterial

Legal Notices

to the following addresses in Texas: 606 E. Royal Lane, Irving; 1401 S. Macarthur Blvd., Irving; 8915 S. Hampton Rd., Dallas; 2020 North Lamar St., Dallas; 2650 Canada Dr., Dallas; 4605 Live Oak; 4536 and 4600 Bryan St., Dallas; 1750 Viceroy Dr., Dallas; 3939 N. Hampton Rd., Dallas; 1305 N. Center St., Arlington; 1100 Roosevelt Rd., Arlington; 122 N.E. 2nd St., Grand Prairie; and 1800 N. Hampton Rd., De Soto. In addition, part of the Project is located on a 0.047 acre-tract and a 0.106-acre tract located on the east side of Goldman St. between Calypso St. and Canada Dr. in Dallas; an approximately 6.82-acre tract located at the northwest corner of Interstate 30 and Ferguson Road in Dallas and on an approximately 18-acre tract located near the northwest corner of Camp Wisdom Rd. and Interstate 35 in Dallas. Members of the general public may attend or submit written comments prior to the hearing regarding the Project or the Bonds to the Issuer c/o Joseph E. Eckert, McCall, Parkhurst & Horton L.L.P., 717 North Harwood, Suite 900, Dallas, Texas 75201. This notice is published and the hearing is to be held to satisfy the requirements of Section 147(f) of the Internal Revenue Code of 1986, as amended.

PUBLIC NOTICE
RFP # 14-0988 Part A – Promotional Items Monday, April 20, 2015 @ 4:00 P.M. CST
RFP # 14-0989 Part A – Cheer, Dance & Drill Team Uniforms and Supplies, Tuesday, April 21, 2015 @ 3:00 P.M. CST
RFQ # 15-1027 – External Audit Services, Monday, April 20, 2015 @ 2:00 P.M. CST

The Waco Independent School District is soliciting bids/proposals for the item listed above. Bids/Proposals may be downloaded by registering online as a supplier at: https://wisdebid.ionwave.net. Once you have registered, bid documents may be downloaded, completed and received in the Purchasing Department, 501 Franklin Avenue; Suite 401, Waco, Texas 76701 until the time and dates listed above, local prevailing time. The District reserves the right to reject any and/or all bids or any part thereof and to waive any formalities or technicalities.

BID PROPOSALS

In compliance with Senate Bill

GROUNDWATER MANAGEMENT PLAN

The Southern Trinity Groundwater Conservation District (District) will conduct a public hearing concerning the District's proposed adoption of various amendments to its rules and readoption of its management plan. The purpose of the hearing is to provide interested members of the public the opportunity to appear and provide oral or written comments to the District related to the proposed rules and plan. The board will consider the adoption of rules and readoption of its management plan at its board meeting, immediately following the public hearing.

1.0 Date, Time, and Place of Public Hearing.

Date: Thursday, April 23, 2015
Time: 9:00 a.m.
Location: City of Woodway, City Council Chambers
922 Estates Drive
Woodway, Texas

2.0 Brief Explanation of the Subject of the Proposed Rulemaking

These proposed rules revise the District's existing rules: (1) to manage withdrawals from the proposed Hensell and Hosston Formation Management Zones, consistent with proposed amendments to the District's management plan; (2) to amend well spacing rules in accordance with proposed amendments to the District's management plan; (3) to require annual well fees be paid as a condition of continuing withdrawals or in the event of any unauthorized withdrawals; (4) relating to annual groundwater use reporting requirements; (5) to provide procedures for the reissuance of Historic Use Production Permits and Non-Historic Use Production Permits to specify whether withdrawals are authorized to be made from the proposed Hensell and/or Hosston Formation Management Zones; and (6) to improve clarity and consistency.

An exhaustive analysis of all the proposed rules is not attempted here. All interested persons are encouraged to review the proposed rules for themselves by obtaining a copy from the District, as provided below.

3.0 Brief Explanation of the Proposed Management Plan

The District is proposing to readopt the Management Plan for the District, which is intended to implement the District's organic act and various mandates of Chapter 36 of the Texas Water Code. Among other things, the proposed Management Plan will establish Hensell and Hosston Formation Management Zones for the Trinity Aquifer and will address the following management goals for the Trinity Aquifer and the Brazos Alluvium Aquifer within McLennan County:

(1)providing the most efficient use of groundwater;

(2)controlling and preventing waste of groundwater;

(3)controlling and preventing subsidence;

(4)addressing conjunctive surface water management issues;

(5)addressing natural resource issues;

(6)addressing drought conditions;

(7)addressing conservation, general oral comments and that are otherwise unhelpful to the District in analyzing the proposed management plan;

5. the time period for asking or responding to questions; and

6. other matters that come to the attention of the presiding officer as requiring limitation.

5.2 Written Comments

The District encourages all interested parties to submit written comments regarding the proposed rules and management plan. Written comments on the proposed rules and management plan must be filed with the District by no later than April 17, 2015. Written comments may be filed as follows:

1. by hand delivery to the District's general manager at the District's offices, 460 N. 6th Street, Waco, Texas during regular business hours Monday through Friday from 8 am to 12 pm; or

2. by mail to the District at P. O. Box 2205, Waco, Texas 76703; or

3. by electronic mail to stgcd@att.net.

Written comments should be filed on 8 1/2 x 11 inch paper and typed or legibly written.

5.0 Opportunity to Appear and Comment at Board Meeting at Which the Proposed Rules and Management Plan May be Adopted as Final

The meeting of the District's Board of Directors at which the proposed rules and management plan will be considered for adoption as final will be immediately following the public hearing and will be an open meeting and, at that meeting, the public will be allowed to make comments on the proposed rules and management plan, subject to whatever reasonable limits as to the number, frequency and length of comments the District is empowered to impose pursuant to the Texas Open Meetings Act, Tex. Gov't Code Ann. ch. 551.

ISSUED THIS 26th DAY OF MARCH, 2015.

Scooter Radcliffe
General Manager
Southern Trinity Groundwater Conservation District

NOTICE OF PUBLIC HEARING

The Clifton Higher Education Finance Corporation (the "Issuer") will hold a public hearing at 10:30 a.m. on April 16, 2015 at 505 W. Fifth Street, Suite 280, Clifton, Texas 76634. Among items to be discussed will be a proposal for issuance by the Issuer of its Education Revenue Bonds (the "Bonds"), which Bonds will be issued in one or more series in an aggregate principal amount not to exceed $87,000,000. The Bonds will be issued for the purpose of financing and/or refinancing the cost of acquiring, improving, constructing and equipping certain properties and facilities to be used for educational, administrative, athletic, science and classroom purposes (the "Projects"), which Projects will be owned and operated by Uplift Education ("Uplift"), a Texas non-profit corporation and an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986. In addition, Bond proceeds may be used to finance capitalized interest, to fund a debt service reserve fund and to pay the costs of issuance of the Bonds. The Projects are located at or adjacent

proposal, for the purchase of school foodservice products.

#2516 Specialty, #2521 Chemical & Paper for: Group A-Austin area, Group B-San Antonio area, Group D-Amarillo/Lubbock area and Group E-Corpus Christi ISD.

RFP #2516 Specialty Proposals are due 3:00 p.m., April 23, 2015.

RFP #2521 Chemical & Paper Proposals are due 3:00 p.m., April 30, 2015.

All Proposals must be submitted to Sharon Jonas, Program Director, Education Service Center, Region 20, 1314 Hines Avenue, AIS Building 3, 3rd Floor San Antonio, TX 78208, at which time proposals will be publicly opened.

Interested bidders contact Jennifer Tinney jennifer.tinney@esc20.net 210-370-5491.

EMPLOYMENT

Automotive

MECHANIC - Southwest International Trucks now hiring Diesel Mechanics for Waco location. 817-938-3470

Design, Creative

PRODUCTION ARTIST
Basic photoshop & illustrator skills needed Will train on software used. Apply in person 1110 LaSalle Ave.

Education, Training, Library

TEACHERS - First Baptist Preschool is currently accepting applications for part time & substitute teachers. Apply in person, 500 Webster Ave. 756-6933

General

GENERAL LABOR
able to lift 75lbs, standard shift truck, & forklift. Apply at 1110 LaSalle.

HVAC MECHANIC, Electrician, BEC Specialist, and Grounds
Aramark 1919 S. 1st
Waco, TX 76706
Dining.baylor.edu
254-710-1415