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Priority Groundwater Management Areas and Groundwater Conservation Districts

Report to the 86th Texas Legislature

Prepared by

Texas Commission on Environmental Quality
Texas Water Development Board

printed on
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I. Executive Summary

This report provides information to the executive and legislative leadership on activities undertaken during the preceding two years relating to the creation and operation of groundwater conservation districts (GCDs, or districts) and the study and designation of priority groundwater management areas (PGMAs). The Texas Commission on Environmental Quality and the Texas Water Development Board prepared the report to fulfill the requirements of Texas Water Code (TWC), Section (§) 35.018.

This biennial report describes state agency efforts to implement the groundwater management provisions of Chapters 35 and 36 of the TWC. The report provides information on:

- Acts of the 85th Legislature, Regular Session, 2017, that affect the state's GCDs;
- the results of confirmation elections for recently created GCDs and the addition of territory into existing districts;
- implementation of the state's PGMA program, including state and local actions conducted in the designated PGMAs;
- GCD adoption of management plans and TWDB administrative approval of those plans;
- groundwater management areas (GMAs) and joint planning by the GCDs in the GMAs; and
- TCEQ performance review actions related to GCD management plan adoption or implementation.

Acts of 85th Legislature and Groundwater Conservation Districts:

Section II of this report, "Acts of the 85th Legislature Affecting Groundwater Conservation Districts" details the bills that were enacted.

Three Acts of the 85th Legislature amended Chapter 36 of the Water Code related to general law: (1) House Bill (HB) 2215 (Chapter 471) included new due dates for the proposal and adoption of desired future conditions (DFCs); (2) Senate Bill (SB) 865 (Chapter 585) provided GCDs the ability to use electronic fund transfers in their business transactions and expanded a board's options with regard to the transfer of disbursements; and (3) SB 1009 (Chapter 1119) limited the contents that a GCD may require to be included in a well permit or permit amendment application to statutorily prescribed contents.

One Act created a new GCD: HB 4345 amended the Special District Local Laws Code by adding Chapter 8871 to create the Southwestern Travis County GCD in Travis County. The Act allows the district to collect fees on well construction, permit renewals, service connection, production, and administrative management. The Act provided that the appointed temporary directors hold an election on the uniform election date in May 2018 and if the district's creation is not confirmed at the election, a subsequent election must be held no earlier than the uniform election date in May 2020. The District, citing fiscal impracticality, did not hold an election in 2018, and remains unconfirmed as of November 2018.

Ten Acts amended the authority of specific GCDs:

1. HB 651 amended Chapter 764, Acts of the 78th Legislature, Regular Session, 2003, to revise the election date for the board of the directors of the Rusk County GCD to the uniform election date in November;
2. HB 886 amended Chapter 157, Acts of the 74th Legislature, Regular Session, 1995, to reflect that the powers of the Hemphill County Underground Water Conservation District (UWCD) are authorized under Chapter 36 of the TWC and removes references to Chapters 50 and 52. The election date for the board of directors was also changed;
3. HB 1982 amended Chapter 1321, Acts of the 77th Legislature, Regular Session, 2001 to provide that the board of directors for the Lone Star GCD would be elected, rather than appointed;
4. HB 3185 amended Section 8867.103, Special District Local Laws Code to authorize Rolling Plains GCD to assess fees for the export of groundwater from the district;
5. HB 4291 amended Section 8824.151(a), Special District Local Laws Code to provide the Colorado County GCD with the authority to accept grants and to assess fees for the export of groundwater from the district;
6. SB 726 amended Chapter 19, Acts of the 55th Legislature, Regular Session, 1957, to change the election date for the Panhandle GCD's board of directors;
7. SB 964 repealed Chapter 641, Acts of the 73rd Legislature, Regular Session, 1993, the enabling legislation for Jeff Davis County UWCD and amended Special District Local Laws Code, by adding new Chapter 8891 to recodify the creation of the district;
8. SB 1479 amended Section 8819.053, Special District Local Laws Code to change the election date for the Panola County GCD board of directors;
9. SB 2068 amended Chapter 654, Acts of the 71st Legislature, Regular Session, 1989, to provide the Bandera County River Authority and Groundwater District with specific authority to cap or plug, and permanently close uncovered deteriorated or abandoned water wells; and
10. SB 2186 amended Chapter 715, Acts of the 71st Legislature, Regular Session, 1989 to provide clarification for the Live Oak UWCD that the powers, duties, and functions of the district are provided under Chapter 36 of the TWC.

Several Acts were passed during this session which included non-substantive revisions of statutes. These included codifying a district's local laws concerning water and wastewater special districts, and conforming amendments into the Special District and Local Laws Code. Also, some Acts provided clarification on Regional Water Planning (RWP) groups to comply with the Open Meetings Act (SB 347) and required the Comptroller of Public Accounts to create and maintain a database of districts' financial and tax information (SB 625).

Priority Groundwater Management Areas:

During 2017–2018, TCEQ actions are not required for GCD creation efforts in the Hill Country PGMA at present. The Southwestern Travis County GCD was created, subject

to a confirmation election, during the 85th Regular Session, 2017 (also see Section III of this report related to PGMAs).

In Briscoe, Hale, Swisher County and Reagan, Upton, Midland County PGMAs, no local, legislative or TCEQ administrative action was taken during the biennium for the creation of GCDs in the PGMA territories in Briscoe, Upton and Midland counties.

District Management Plans and Joint Planning:

One confirmed district, Reeves County GCD, was required to submit an initial groundwater management plan during the 2017-2018 biennium. The TWDB Executive Administrator approved the Reeves County GCD management plan and also approved 39 readopted and submitted management plans from 39 established GCDs. During the 2019-2020 biennium, 48 GCD management plans are due to be readopted and submitted to TWDB for approval.

A total of 324 DFCs were adopted during the second round of joint GCD planning that was completed in March 2018. TWDB provided support at over 60 GMA meetings during the 2017-2018 biennium, as the second round of joint planning was completed, and the third round commenced. All GMAs submitted administratively complete DFCs and explanatory reports to the TWDB.

The TWDB has finalized and delivered to GCDs and regional water planning groups estimates of modeled available groundwater (MAG) for all submitted DFCs from the second round of joint planning that were proposed before May 1, 2016. TWDB issued 15 modeled available groundwater reports for the relevant aquifers.

District Management Plan Performance Review:

As of January 4, 2019, two GCDs were out of compliance. Rita UWCD and Coke County UWCD are expected to be operating under a compliance agreement soon. Six GCDs missed deadlines for management plan readoption and submittal during the biennium, but none required a compliance agreement. Red Sands GCD missed its management plan readoption and submittal deadline but came into compliance prior to signing a compliance agreement.

State Auditor's Office Report & Findings:

The State Auditor's Office (SAO) conducted five audits of GCDs in FY 2017 and produced a report in May 2018 describing their findings. The SAO found that one district (Starr County GCD) was not actively engaged in the achievement of its management plan goals and ensuring compliance with statutory requirements. Another district (Terrell County GCD) did not achieve the majority of its management plan goals but fully complied with all but one of the applicable requirements of the Water Code. Three districts (Duval County GCD, Brush County GCD, and Post Oak Savannah GCD) fully or partially achieved the majority their management plan goals and fully complied with all applicable Texas Water Code requirements.

Petitions for Inquiry:

One landowner filed a petition for inquiry in February 2018 seeking a review of the Post Oak Savannah GCD in Milam and Burleson counties pursuant to TWC§ 36.3011 and 30 Texas Administrative Code (TAC) § 293.23. In a May 2018 regular Commission meeting, the TCEQ dismissed the petition. For additional discussion see "Petitions for Inquiry" in Section V of this report.

Recommendation:

The TCEQ recommends that additional statutory changes to TWC, Chapters 35 and 36 to facilitate the designation of PGMAs and the creation and operation of GCDs are not needed at this time.

TCEQ actions are not required for GCD creation efforts in the Hill Country PGMA at present. The Southwestern Travis County GCD was created in this PGMA, subject to a confirmation election, during the 85th Regular Session, 2017.

In Briscoe, Hale, Swisher County and Reagan, Upton, Midland County PGMAs, no local, legislative or TCEQ administrative action was taken in 2017 – 2018 biennium for the creation of GCDs in the PGMA territories in Briscoe, Upton and Midland counties. The Executive Director will track legislative and local actions to establish a GCD for these PGMAs during the 86th Legislature. The TCEQ has exhausted its administrative GCD creation options for Briscoe County PGMA. If legislative or local actions do not establish a GCD for the Upton and Midland PGMA, TCEQ will continue administrative actions to establish a GCD in accordance with TWC, Section 35.008 and 30 TAC Section 293.19(b).

II. Acts of the 85th Legislature Affecting Groundwater Conservation Districts

The Acts of the 85th Legislature, 2017, affecting groundwater conservation districts are described in this chapter. These Acts include both special legislation creating new, or amending existing GCDs, and legislation that affects the general law authority, and therefore all GCDs. Elections to confirm GCD creation and any other pertinent GCD activities are discussed in this chapter.

Changes to Texas Water Code, Chapter 36

Three Acts passed by the 85th Legislature made changes to the Texas Water Code (TWC, or Water Code), Chapter 36, as discussed below. The Acts are identified by HB number or SB number and by the Chapter number for the 85th Legislature, Regular Session Laws, unless noted otherwise.

- **HB 2215 (Chapter 471)** amended TWC, Chapter 36 by providing a new deadline of not later than January 5, 2022 for district representatives to adopt new final Desired Future Conditions. The Act also established a deadline for adoption of subsequent DFCs as before the end of each successive five-year period following January 5, 2022. (Effective June 9, 2017)
- **SB 865 (Chapter 585)** amended TWC §36.151(b) to exclude disbursements made by federal reserve wire transfers or electronic fund transfers to the requirement that two directors sign disbursements, and to allow the board to authorize payroll disbursements by electronic direct deposit. The Act amended Water Code §36.151(c), to specify that in addition to allowing disbursements to be transferred by federal reserve wire system, the board may make them by electronic means, and allows disbursements to be made to accounts not in the name of the district. (Effective June 9, 2017)
- **SB 1009 (Chapter 1119)** amended TWC, Chapter 36, to update and limit the contents that a GCD may require in an application for a permit or amendment. The Act amended §36.113(c), related to administrative requirements, to limit the required information to existing statutorily prescribed contents listed in §36.113(c)(1-8), as applicable under the rules of the district. The Act also added new §36.113(c)(8), which adds “other information” to the list of requirements; new §36.113(c)(8)(A), which clarifies that the “other information” is to be included in rules of the district that specify what information must be included in an application and are in effect at the time the application is made; and new §36.113(c)(8)(B), which further clarifies that the “other information” must be reasonably related to an issue that the district is authorized to consider under TWC Chapter 36. The Act also amended §36.114(h) to further clarify that a district may not require additional information beyond the requirements set forth in §36.113 and §36.1131 in determining whether an application is administratively complete. (Effective September 1, 2017)

Groundwater Conservation Districts

One new GCD was created and several others were amended by the 85th Texas Legislature, 2017. The locations of the state's GCDs are shown on Figure 1.

New GCD

HB 4345 (Chapter 644) amended Subtitle H, Title 6 of the Special District Local Laws Code to add Chapter 8871, creating the Southwestern Travis County GCD in Travis County. The district boundaries include the portion of Travis County located in the Hill Country Priority Groundwater Management Area (PGMA).

The Act provides the district with the powers and duties provided by Chapter 36 of the Water Code applicable to GCDs created under Section 59, Article XVI of the Texas Constitution. The district was created to (1) protect the interests of private property ownership while balancing the interests of all property owners in the district, (2) manage groundwater resources, and (3) protect the groundwater in the district.

The Act requires well owners in the district to obtain a permit and pay required fees, including a well construction fee, before using any groundwater from that well. District employees or representatives may enter property within the district subject to specific requirements. The Act also allows the district to implement aquifer storage and recovery projects in accordance with the Water Code and TCEQ rules. Prior to the confirmation of the district the Act allows the temporary directors to regulate, but not prohibit, the transfer of groundwater out of the district per Water Code §36.122.

Certain wells are exempt from regulation by the district. The district may not regulate, permit, or meter a domestic use well at a single private residential household that is not capable of producing more than 10,000 gallons per day (gpd). For a well utilized either for domestic purposes or for providing water to livestock or poultry use located on a tract of land larger than ten acres and unable to produce more than 25,000 gpd, the district may not regulate, permit, or meter the well nor charge or collect a well construction fee. Finally, a well utilized for dewatering and monitoring in the production of coal or lignite is exempt from permit requirements, regulations, and fees imposed by the district.

The district does not have authority of eminent domain, nor may it impose an ad valorem tax. The Act does authorize the district to charge production fees up to $0.20 per thousand gallons on a non-exempt well, assess fees and surcharges, and issue bonds. Fees may be assessed for well construction, permit renewals, service connection, production, and administrative management.

The Act required that seven initial temporary directors be appointed within 90 days of the effective date of the Act. One appointment was to be made by the Travis County judge, and two appointments were made by each of the following persons: the county commissioner for the county precinct where the GCD is principally located, the state representative who represents the Texas House district within which the GCD is principally located, and the state senator who represents the Texas Senate district within which the GCD is principally located. The Act provided a mechanism to fill vacancies that may occur on the temporary board.

The Act required temporary directors to meet within 45 days of being appointed and provided that the temporary directors order an election not later than the uniform election date in May 2018. The election is required to confirm creation of the district and to elect the initial directors of the seven-member board.

The directors are required to live in each of the following areas and be elected by residents of the respective areas: one from the City of Bee Cave, one from either the City of Lakeway or Village of the Hills and elected by residents of both incorporated areas, one from the City of West Lake Hills. In addition, four directors must be elected from the area within the district that is outside of the corporate limits of the City of Bee Cave, the City of Lakeway, the Village of the Hills, and the City of West Lake Hills, and all four must utilize groundwater as a source of water supply for one or more beneficial uses at their respective residences. [Special District Local Laws Code, Chapter 8871; effective September 1, 2017]

The newly appointed board has met regularly and had ordered a confirmation election to be held on May 2018. However, due to unexpectedly high costs associated with a May election and no funds available to the district, the board cancelled the election. The Act provides that if the district's creation is not confirmed at the aforementioned election, the newly-elected directors will be established with the limited powers of temporary directors and those temporary directors would be required to order a subsequent district confirmation election not earlier than the uniform election date in May 2020. The temporary directors indicated during a board meeting that they intend to seek a mechanism to hold an election during the uniform election date in November prior to May 2020.

During the biennium, Representative Lyle Larson, Texas House of Representatives, Chairman of the House Committee on Natural Resources, requested an opinion from the Attorney General (AG) regarding the District's authorities in a letter dated April 4, 2018 (RQ-0218-KP). In his Opinion No. KP-0217 of September 26, 2018, Attorney General Ken Paxton provided the following response:

- *What legal authorities allow the initial temporary directors to cancel the May 2018 election of permanent directors and voter confirmation of the district?* The AG stated that a court would likely conclude that the temporary directors of the Southwestern Travis County GCD had no authority to cancel said election.
- *Does the cancellation of the election by the District's temporary directors terminate the authorities of those directors?* The AG stated that a court would likely conclude that the temporary directors hold office and can exercise those powers expressly given them in Section 8871.023 of the Texas Special District Local Laws Code until the initial directors are elected under Section 8871.024.
- *May an official withdraw an appointment for an initial temporary director who is currently serving in that capacity?* Absent express authority in Chapter 8871, the AG stated that a court would likely conclude that the appointing officials may not withdraw their respective appointments.
- Finally, the AG noted that the Legislature has authority to amend Chapter 8871 and pointed out two potential options to address the issues resulting from the absence of the confirmation and director election: either the removal of the temporary directors for misconduct or a *quo warranto* proceeding challenging the authority of the temporary directors to hold office.

Legislative Amendments for Specific GCDs

Ten other Acts of the 85th Legislature made changes to authorities and responsibilities of existing GCDs. These Acts amended the Special District Local Laws Code or the district's enabling legislation for those GCDs that were changed in some manner.

House Bills:

- **HB 651(Chapter 240)** amended the law to change the election date for the Rusk County GCD's board of directors from the first Saturday in May to the uniform election date in November of each even-numbered year. The Act provides that a director whose term expired in May 2018 must serve until the election of the director's successor is held on the uniform election date in November 2018, and a director's term that expires in May 2020 must serve until the election of the director's successor is held on the uniform election date in November 2020. [Amends Section 11(b), Chapter 764, Acts of the 78th Legislature, Regular Session, 2003; Effective September 1, 2017]
- **HB 886 (Chapter 208)** amended the enabling legislation for the Hemphill County UWCD to conform with changes to Chapter 36 of the Water Code that were made since the original law was enacted. The Act added references to Chapter 36 and removed Chapters 50 and 52 regarding district authority, and updated references to TNRCC as TCEQ. The Act also changed the election date for the board of directors from the first Saturday in May to the uniform election date in May of each even numbered year and repealed the section related to temporary directors, initial permanent directors, and confirmation and initial directors' election. [Amends Chapter 157, Acts of the 74th Legislature, Regular Session, 1995; Effective September 1, 2017]
- **HB 1982 (Chapter 20)** amended the law relating to the board of directors of the Lone Star GCD. The Act changed the number of directors of the district from nine appointed directors to seven elected directors, set a limit of three terms for a director, and specified when initial terms would expire. The Act specified the areas from which directors must be elected: one director shall be elected by voters living in the City of Conroe, one shall be elected by voters residing in the Woodlands Township, one director shall be elected for each of the four county precincts in the district, and one shall be elected by the voters of the district at large. [Amends Chapter 1321, Acts of the 77th Legislature; Effective September 1, 2017] The new Lone Star GCD directors were elected on November 6, 2018. The transition from the previous appointed board to the elected board was completed on November 16, 2018, when the prior board canvassed the votes from the election and the members of the newly elected board of directors qualified for office and officially assumed their duties as the new board of directors for the District.
- **HB 3185 (Chapter 609)** amended the law to authorize Rolling Plains GCD to assess annual fees for groundwater exported from the district in an amount not to exceed 150 percent of the maximum commercial water rate charged by the City of Wichita Falls. The Act provides that the district's use of funds obtained from such fees may be used for certain purposes, including aquifer monitoring, modeling, and data collection; as well as research to advance the scientific

understanding of the GCD's groundwater resources. [Amends the Special District Local Laws Code, Chapter 8867; Effective September 1, 2017]

- **HB 4291 (Chapter 628)** amended the law to authorize Colorado County GCD to assess a production fee, solicit and accept grants from any public or private source, and to assess annual fees for groundwater exported from the district in an amount not to exceed 150 percent of the maximum commercial water rate charged by the City of Houston. The Act also clarified that the district may assess other fees authorized by TWC Chapter 36 in order to accomplish its regulatory goals. [Amends the Special District Local Laws Code, Chapter 8824; Effective September 1, 2017]

Senate Bills:

- **SB 726 (Chapter 305)** amended the enabling legislation of the Panhandle GCD to change the election date of the board of directors from the third Saturday in January of each even-numbered year to the uniform election date in May of each odd-numbered year. The Act also removed reference to Chapter 51 of the Water Code to reference only the Election Code. [Amends Chapter 19, Acts of the 55th Legislature; Effective September 1, 2017]
- **SB 964 (Chapter 1158)** repealed the enabling legislation for Jeff Davis UWCD and added new Chapter 8891 of the Special District and Local Laws Code consistent with the original enabling legislation. The Act states that the district is a GCD created under Section 59, Article XVI of the Texas Constitution, and provides that TWC Chapter 36, except for §36.121, applies to the District. The Act provides for the appointment of five directors and includes provisions related to their terms. The Act prohibits the district from imposing taxes but allows it to assess fees no greater than $1.00 per acre-foot of water used for agricultural purposes or $0.17 per 1,000 gallons of water used for any other purpose. [Repeals Chapter 641 of Acts of the 73rd Legislature, Regular Session 1993; and adds Chapter 8891 of the Special District and Local Laws Code; Effective September 1, 2017]
- **SB 1479 (Chapter 431)** amended the law to change the election date for the Panola County GCD directors, which is held in each even numbered year, from the uniform election date in May to the uniform election date in November. The Act also states that directors currently in place and whose terms expire in May 2018 or May 2020 shall remain in office until their successors have qualified in the November 2018 or November 2020 elections, respectively. [Amends the Special District Local Laws Code, Chapter 8819; Effective September 1, 2017]
- **SB 2068 (Chapter 763)** amended the law to authorize the Bandera County River Authority and Groundwater District to contract with a licensed water well driller to cap an open, uncovered, or abandoned well or plug and permanently close a deteriorated well. The Act also authorized a district employee to perform the same functions if the employee is trained in the proper method of plugging wells in karst formations. The district may utilize any of its available funds to pay for the plugging of abandoned wells and may require a landowner or lessee to permanently close or cap an open or uncovered well on the land. The Act provided remedies such as injunction in order that the District may enforce its

rules regarding closing and capping wells. [Amends Chapter 654, Acts of the 71st Legislature, Regular Session, 1989; Effective September 1, 2017]

- **SB 2186 (Chapter 653)** amended the enabling legislation for Live Oak UWCD by clarifying that the powers, duties, and functions of the District are provided under TWC Chapter 36. The Act removed the references to Chapters 49, 51 and 52, related to tax and bond provisions and to specific powers of the district, and specified that these provisions are provided under Chapter 36 of the Water Code. [Amends Chapter 715, Acts of the 71st Legislature, Regular Session, 1989; Effective September 1, 2017]

Non-substantive Revisions of Statute

Section 323.007 of the Government Code, related to the Statutory Revision Program, requires the Texas Legislative Council to carry out a program that systematically revises Texas statutes in such a way that they will be more accessible, understandable, and usable. This involves reclassifying and rearranging the statutes in a more logical order, employing a numbering system and format that will accommodate later expansion of the law, and eliminating provisions that have been repealed or are invalid, duplicative, or otherwise ineffective. If practicable this may include improving the draftsmanship of the law.

HB 2803 (Chapter 869) added chapters to the Special District Local Laws Code, with each chapter representing the local law or laws governing a particular special district.

Section 1.04 of the Act amended Special District Local Laws Code by adding the following chapters related to specific GCDs:

- Chapter 8877. Clearwater UWCD
- Chapter 8879. Crockett County GCD
- Chapter 8880. Gonzales County UWCD
- Chapter 8881. Mesa UWCD
- Chapter 8882. Sandy Land UWCD
- Chapter 8883. Santa Rita UWCD
- Chapter 8884. Saratoga UWCD
- Chapter 8885. South Plains UWCD
- Chapter 8886. Sutton County UWCD
- Chapter 8887. North Plains GCD

Section 2.01 of the Act amended Section 1, Chapter 498, Acts of the 54th Legislature, Regular Session, 1955, related to North Plains GCD, by removing obsolete details concerning the creation of the district, appointment of initial directors, confirmation elections, and tax elections.

Section 3.01 of the Act repealed the related chapters of previous legislative session Acts for the specific GCDs listed above that were added based on Section 1.04 of the Act.

Addition of Territory to Existing GCDs

No new territory was added to existing GCDs during the 2017-2018 biennium.

TCEQ Rule Amendments

No TCEQ rules regarding PGMAs or GCDs were amended during the 2017-2018 biennium.

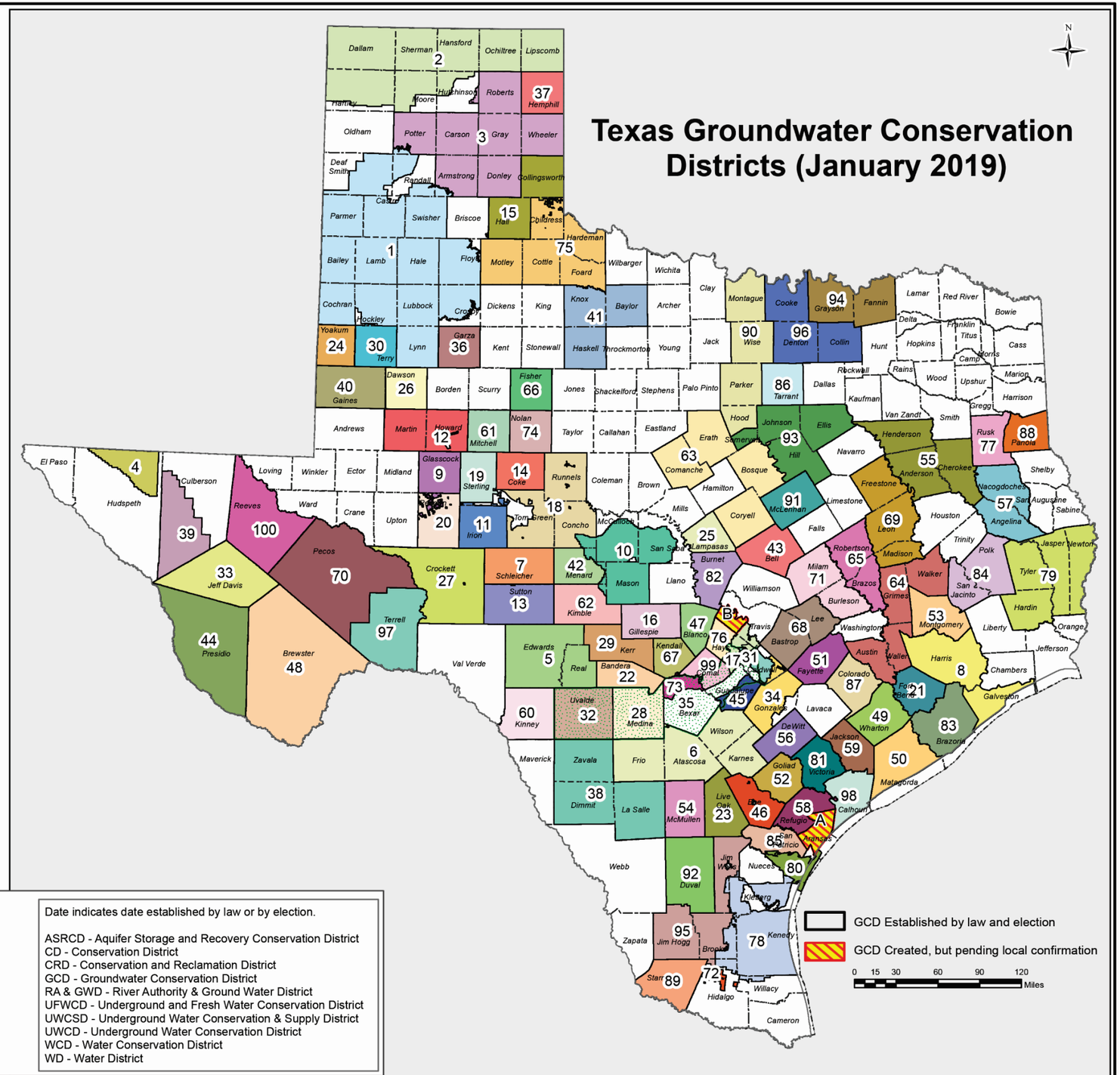
Figure 1. Map of Texas Groundwater Conservation Districts

Groundwater Conservation Districts

1 High Plains UWCD No.1 - 9/29/1951
2 North Plains GCD - 1/2/1955
3 Panhandle GCD - 1/21/1956
4 Hudspeth County UWCD No. 1 - 10/5/1957
5 Real-Edwards C and R District - 5/30/1959
6 Evergreen UWCD -8/30/1965
7 Plateau UWC and Supply District - 3/4/1974
8 Harris-Galveston Subsidence District- 4/23/1975
9 Glasscock GCD - 8/22/1981
10 Hickory UWCD No. 1 - 8/14/1982
11 Irion County WCD - 8/2/1985
12 Permian Basin UWCD - 9/21/1985
13 Sutton County UWCD - 4/5/1986
14 Coke County UWCD - 11/4/1986
15 Mesquite GCD - 11/4/1986
16 Hill Country UWCD - 8/8/1987
17 Barton Springs/Edwards Aquifer CD - 8/13/1987
18 Lipan-Kickapoo WCD - 11/3/1987
19 Sterling County UWCD - 11/3/1987
20 Santa Rita UWCD - 8/19/1989
21 Fort Bend Subsidence District - 8/28/1989
22 Bandera County RA & GWD - 11/7/1989
23 Live Oak UWCD - 11/7/1989
24 Sandy Land UWCD - 11/7/1989
25 Saratoga UWCD - 11/7/1989
26 Mesa UWCD - 1/20/1990
27 Crockett County GCD - 1/26/1991
28 Medina County GCD - 8/26/1991
29 Headwaters UWCD - 11/5/1991
30 South Plains UWCD - 2/8/1992
31 Plum Creek CD - 5/1/1993
32 Uvalde County UWCD - 9/1/1993
33 Jeff Davis County UWCD - 11/2/1993
34 Gonzales County UWCD - 11/2/1994
35 Edwards Aquifer Authority - 7/28/1996
36 Garza County UWCD - 11/5/1996
37 Hemphill County UWCD - 11/4/1997
38 Wintergarden GCD - 1/17/1998
39 Culberson County GCD - 5/2/1998
40 Llano Estacado UWCD - 11/3/1998
41 Rolling Plains GCD - 1/26/1999
42 Menard County UWCD - 8/14/1999
43 Clearwater UWCD - 8/21/1999
44 Presidio County UWCD - 8/31/1999
45 Guadalupe County GCD - 11/14/1999
46 Bee GCD - 1/20/2001
47 Blanco-Pedernales GCD - 1/23/2001
48 Brewster County GCD - 11/6/2001
49 Coastal Bend GCD - 11/6/2001
50 Coastal Plains GCD - 11/6/2001
51 Fayette County GCD - 11/6/2001
52 Goliad County GCD - 11/6/2001
53 Lone Star GCD - 11/6/2001
54 McMullen GCD - 11/6/2001
55 Neches & Trinity Valleys GCD -11/6/2001
56 Pecan Valley GCD - 11/6/2001
57 Pineywoods GCD - 11/6/2001
58 Refugio GCD - 11/6/2001
59 Texana GCD - 11/6/2001
60 Kinney County GCD - 1/12/2002
61 Lone Wolf GCD - 2/2/2002
62 Kimble County GCD - 5/3/2002
63 Middle Trinity GCD - 5/4/2002
64 Bluebonnet GCD - 11/5/2002
65 Brazos Valley GCD - 11/5/2002
66 Clear Fork GCD - 11/5/2002
67 Cow Creek GCD - 11/5/2002
68 Lost Pines GCD - 11/5/2002
69 Mid-East Texas GCD - 11/5/2002
70 Middle Pecos GCD - 11/5/2002
71 Post Oak Savannah GCD - 11/5/2002
72 Red Sands GCD - 11/5/2002
73 Trinity Glen Rose GCD - 11/5/2002
74 Wes-Tex GCD - 11/5/2002
75 Gateway GCD - 5/3/2003
76 Hays Trinity GCD - 5/3/2003
77 Rusk County GCD - 6/5/2004
78 Kenedy County GCD - 11/2/2004
79 Southeast Texas GCD - 11/2/2004
80 Corpus Christi ASRCD - 6/17/2005
81 Victoria County GCD - 8/5/2005
82 Central Texas GCD - 9/24/2005
83 Brazoria County GCD - 11/8/2005
84 Lower Trinity GCD - 11/7/2006
85 San Patricio County GCD - 5/12/2007
86 Northern Trinity GCD - 5/15/2007
87 Colorado County GCD - 11/6/2007
88 Panola County GCD - 11/6/2007
89 Starr County GCD - 11/6/2007
90 Upper Trinity GCD - 11/6/2007
91 Southern Trinity GCD - 6/19/2009
92 Duval County GCD - 7/25/2009
93 Prairielands GCD - 9/1/2009
94 Red River GCD - 9/1/2009
95 Brush Country GCD - 11/3/2009
96 North Texas GCD - 12/1/2009
97 Terrell County GCD - 11/6/2012
98 Calhoun County GCD - 11/4/2014
99 Comal Trinity GCD - 6/17/2015
100 Reeves County GCD - 11/3/2015

Pending Confirmation

A - Aransas County GCD
B- Southwestern Travis County GCD



Texas Commission on Environmental Quality

TCEQ

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Map printed January 2, 2019.

Date indicates date established by law or by election.

ASRCD - Aquifer Storage and Recovery Conservation District
CD - Conservation District
CRD - Conservation and Reclamation District
GCD - Groundwater Conservation District
RA & GWD - River Authority & Ground Water District
UFWCD - Underground and Fresh Water Conservation District
UWCSD - Underground Water Conservation & Supply District
UWCD - Underground Water Conservation District
WCD - Water Conservation District
WD - Water District

III. Priority Groundwater Management Areas

This section describes the general Priority Groundwater Management Area program activities in 2017 and 2018, the status of GCD creation action in designated PGMAs, and other current and pending PGMA activities.

Currently there are seven PGMAs in Texas, which include all or part of 35 counties (Figure 2). Local, legislative or TCEQ administrative actions to establish GCDs are still required in four PGMAs.

Program Planning

The TCEQ and TWDB staff met in January 2019 to discuss ongoing PGMA activities and the evaluation of regional water planning and joint GCD planning data to identify potential PGMA study areas. The TCEQ staff evaluated this data for 87 counties that are not within the boundaries of a confirmed GCD. For each of these 87 counties the TCEQ staff evaluated groundwater pumpage data for 2009 - 2016 and compared the pumpage to the MAG values for the aquifers in those counties. This data comparison identified that:

- at least one aquifer had groundwater pumpage that exceeded that aquifer's MAG, and in four counties the total groundwater pumpage exceeded all total aquifer MAGs amounts;
- at least one aquifer had groundwater pumpage that exceeded that aquifer's MAG amount in ten counties. One of these counties is Travis County, which was legislatively created as partial county GCD. The GCD has not been confirmed by voters; and
- total groundwater pumpage was less than all aquifer MAG amounts in 73 counties. One of these counties is Aransas County, which was legislatively created as a GCD. The GCD has not been confirmed by the voters.

The TCEQ Executive Director met with the TWDB Executive Administrator in January 2017 and January 2019. They discussed the completion and delivery of the PGMA/GCD Report to the 86th Legislature; the need to track 86th Session legislation relating to PGMAs and creation of GCDs in PGMAs; the continued coordination, planning and prioritization for potential new PGMA studies; and the need for continued GCD creation action in the designated PGMAs.

Four counties that currently do not have groundwater conservation districts and are not located within a designated PGMA were discussed at the January 2019 meeting as potential areas of concern that may need follow up PGMA assessment as more data become available.

Williamson County

- Groundwater pumping from the Trinity Aquifer in 2016 was estimated at 1,648 ac-ft. The estimate included all subdivisions of the Trinity Aquifer. This compares with nearly 2,600 ac-ft estimated in the drought year of 2011. The

Trinity Aquifer MAGs are subdivided as follows: Glen Rose – 2,203 ac-ft/yr, Travis Peak – 2,891 ac-ft/yr, Hensell – 753 ac-ft/yr, and Hosston – 1,938 ac-ft/yr. The total MAG for all subdivisions of the Trinity Aquifer is 7,785 ac-ft.

- The DFC (through 2070) for the Trinity Aquifer includes a drawdown of 77 feet for the Glen Rose, a drawdown of 173 feet for the Travis Peak, a drawdown of 73 feet for the Hensell, and a drawdown of 177 feet for the Hosston.
- The 2016 reported groundwater pumping of 13,455 ac-ft for the Edwards Balcones Fault Zone Aquifer is more than three times the MAG for the Edwards Balcones Fault Zone Aquifer of 3,462 ac-ft/yr from 2020 to 2070.
- The total MAG for all aquifers in the county ranges from 9,725 to 9,742 ac-ft/yr from 2020 to 2070, and 2016 total groundwater pumpage was 15,319 ac-ft. The groundwater use values are the best-available data and are derived from self-reporting (89%) and estimates (11%), noting that not all entities may report water use.
- Though total water use has increased from 61,990 ac-ft in 2005 to 83,496 ac-ft in 2016, groundwater use has decreased from 21,211 ac-ft to 17,642 ac-ft across all sectors.
- Water levels in wells near Florence that are screened in the Trinity Aquifer have declined approximately 100 feet since 2006. Drawdowns in the Trinity Aquifer in the Georgetown (Sun City) area have approached 200 feet since 2006. Water level declines have also been a concern north into Bell County (Clearwater UWCD), and west into Burnet County (Central Texas GCD).
- Declining water levels in wells screened in the Trinity Aquifer indicate that the DFC for the Trinity Aquifer in Williamson County may not be attainable over the planning period extending to 2070.
- Water demand exceeds the existing supplies from 2020 – 2070. Total water demand is projected to increase proportionally to the projected demand from the municipal sector from 2020 – 2070.
- Additional surface water supplies from Brazos River Authority, and the Highland Lakes of the Lower Colorado River Authority are planned to meet increasing demand in the municipal sector.
- Additional groundwater supplies from the Carrizo-Wilcox Aquifer in Lee and Burleson counties, Trinity Aquifer in Bell County, Edwards (BFZ) Aquifer in Williamson County are planned to meet increasing demand in all sectors.
- An Aquifer Storage and Recovery project is planned for Lake Granger in eastern Williamson County

Jefferson County

- In Jefferson County, the 2016 reported groundwater pumpage of 10,923 ac-ft for the Gulf Coast Aquifer system is more than four times the MAG for the Gulf Coast Aquifer system of 2,525 ac-ft/yr from 2020 to 2070. The MAG for the Gulf Coast Aquifer system is the only MAG for the county.
- The DFCs for Jefferson County Gulf Coast aquifer members are 15 feet decline after 61 years for the Chicot member and 17 feet decline for the Evangeline

member after 61 years. Monitoring data that show aquifer levels, on a county-wide basis, are within DFC limits.

- Monitor wells showing post-2000 water level data indicate that aquifer levels can recover from declines through several mechanisms: local aquifer recharge, continuation of relatively low county-wide pumping, and lateral recharge from the Gulf Coast aquifer.
- The highest groundwater use in Jefferson County is for municipal purposes, representing about 4% of total county water use. There is no intent for future surface water supplies to replace current groundwater usage, only to meet growing manufacturing demand. Jefferson County is projected to meet all future 50-year water demands and potential shortages through conservation and by expanding the existing surface water contracts from Lower Neches Valley Authority. The East Texas Regional Water Planning Area confirms the river authority approval of expanding surface water contracts.
- The TWDB statewide study of vulnerability of Texas aquifers to pumping-induced subsidence indicates that Jefferson County has a moderate risk of land subsidence. Geophysical studies by Lamar University do not reveal widespread subsidence in Jefferson County, although local areas may have experienced nearly 3 feet of land subsidence.

Lamar County

- For Lamar County, the 2016 reported groundwater pumpage was 5,776 ac-ft for the Blossom Aquifer. This reported pumpage is more than 14 times the previous MAG of 394 ac-ft/yr for the Blossom Aquifer. There is no longer a MAG for the Blossom Aquifer as this aquifer was designated as “non-relevant” for planning purposes in 2017.
- The Blossom Aquifer supplied 5,667 ac-ft for irrigation use in 2016. This amount is more than 14 times the previous MAG that was based on a DFC adopted in 2009. After the most recent cycle of groundwater joint planning the Blossom Aquifer no longer has a DFC.
- There are surface water strategies planned (Pat Mayse pipeline Lake/Reservoir) to supplement the existing supplies to meet the projected shortages of water for irrigation. By 2050, extending surface water contracts are recommended to satisfy manufacturing demands. The existing supplies for municipal use are 30,000 ac-ft more than projected demands for 2020 through 2070.
- The TWDB 2017 Interactive State Water Plan lists drilling more water wells to increase production of the Blossom Aquifer to meet demands and shortages in the county. Some ambiguity exists concerning the actual source aquifers. Some production out of the Paluxy and Woodbine aquifers may be reported as production from the Woodbine.
- Surface water use in 2016 is approximately 66%, groundwater use is approximately 33%.
- The TWDB is currently evaluating the Blossom Aquifer in Lamar County for possible identification of brackish groundwater resources. The evaluation will also involve possible designation of brackish groundwater production zones and associated long-term production volumes.

Scurry County

- The 2016 reported groundwater pumpage was 6,980 ac-ft for the Dockum Aquifer. In 2017 the Dockum Aquifer was designated as "non-relevant" for planning purposes and no longer has a DFC or a MAG. However, the previous MAG for the Dockum Aquifer was 1,209 ac-ft/yr which is approximately 17% of the 2016 pumping estimate for the Dockum in Scurry County.
- The Dockum Aquifer in Scurry County has some areas of fresh to saline groundwater quality and would be considered a limited resource for "fresh" water with total dissolved solids content of less than 1,000 mg/l. The TWDB is currently evaluating the Dockum Aquifer in Scurry County for possible identification of brackish groundwater resources. The evaluation will also involve possible designation of brackish groundwater production zones and associated long-term production volumes.
- Based on the 2016 regional water plan, projected shortages for irrigation range from 6,106 ac-ft/yr to 4,430 ac-ft/yr from 2020 to 2070. Projected shortages for livestock of 92 ac-ft/yr will be addressed by pumping groundwater from an unnamed local alluvial aquifer.
- Municipal demands will be addressed by conservation and additional supplies from the Colorado River Municipal Water District.

Status and TCEQ Actions 2017 – 2018

During 2017–2018, several actions occurred related to GCD creation within one of the designated PGMAs. The 85th Legislature created the Southwestern Travis County GCD in the Hill Country PGMA. No legislation was filed during the 85th Legislature for the creation of a GCD in the PGMA territory in Briscoe County, nor a local action took place for creation of a GCD. No local, legislative or TCEQ administrative action was taken in 2017–2018 for the creation of a GCD in the PGMA territory in Upton and Midland counties.

Hill Country PGMA

In the "Recommendations" section of the Report to the 85th Legislature, the TCEQ stated that a statutory action was needed to incorporate all of the territory in the Travis County portion of the Hill Country PGMA into a GCD; either by creating a new GCD or combining the area into an existing GCD.

HB 4345, 85th Regular Session, 2017 (Effective September 1, 2017), created the new Southwestern Travis County GCD in Travis County with the enactment of Chapter 8871 of the Special District Local Laws Code (see the "New GCDs" in this report). The district was created subject to a confirmation election. Because this election was not held in May 2018, the new GCD was not confirmed. The District will work towards a subsequent election opportunity before May 2020. Until such time the temporary directors may act with limited powers. Additional questions were asked of the Office of Attorney General regarding the options available to address this issue, and those are discussed in the "New GCDs" section of this report.

No TCEQ actions are required for GCD creation efforts in the Hill Country PGMA at present.

Briscoe, Hale, Swisher County PGMA

The portion of Briscoe County within this PGMA has not created a new nor joined an existing GCD. By order issued on December 12, 2014, the TCEQ found that the creation of a new stand-alone GCD to manage the Briscoe PGMA was not practicable and that adding the Briscoe PGMA to the High Plains Underground Water Conservation District No. 1 (HPUWCD) was the most feasible and practicable option for the protection and management of the groundwater resources. The TCEQ order recommended that the western portion of Briscoe County within the PGMA be added to the HPUWCD.

On March 13, 2015, the HPUWCD board of directors voted not to add the Briscoe PGMA to the HPUWCD.

After exhausting its administrative options and in accordance with Water Code, §35.013(i), in January 2017 the TCEQ recommended statutory action by the 85th Legislature for the future management of the Briscoe County PGMA.

No legislation was filed during the 85th Legislature to address the issue. Since the option for TCEQ to create a stand-alone GCD in the PGMA portion of Briscoe County remains unpracticable, no further TCEQ action is anticipated.

Reagan, Upton, Midland County PGMA

Within this PGMA, the portions in Upton and Midland counties have not created new nor joined an existing GCD. In October 2014, *The Executive Director's Draft Report for Reagan, Upton, and Midland County Priority Groundwater Management Area – Northeastern Upton and Southeastern Midland Counties* was filed with the TCEQ. The stakeholder comment period ended on January 30, 2015, with only one comment submitted.

In December 2016, *The Executive Director's Report for Reagan, Upton, and Midland County Priority Groundwater Management Area – Northeastern Upton and Southeastern Midland Counties* was filed with the TCEQ. The report evaluates the five options for groundwater management and recommends the option to add northeastern Upton County and southeastern Midland County to Glasscock GCD as the most feasible, practicable, and economic means to achieve groundwater management in the Reagan, Upton, and Midland PGMA.

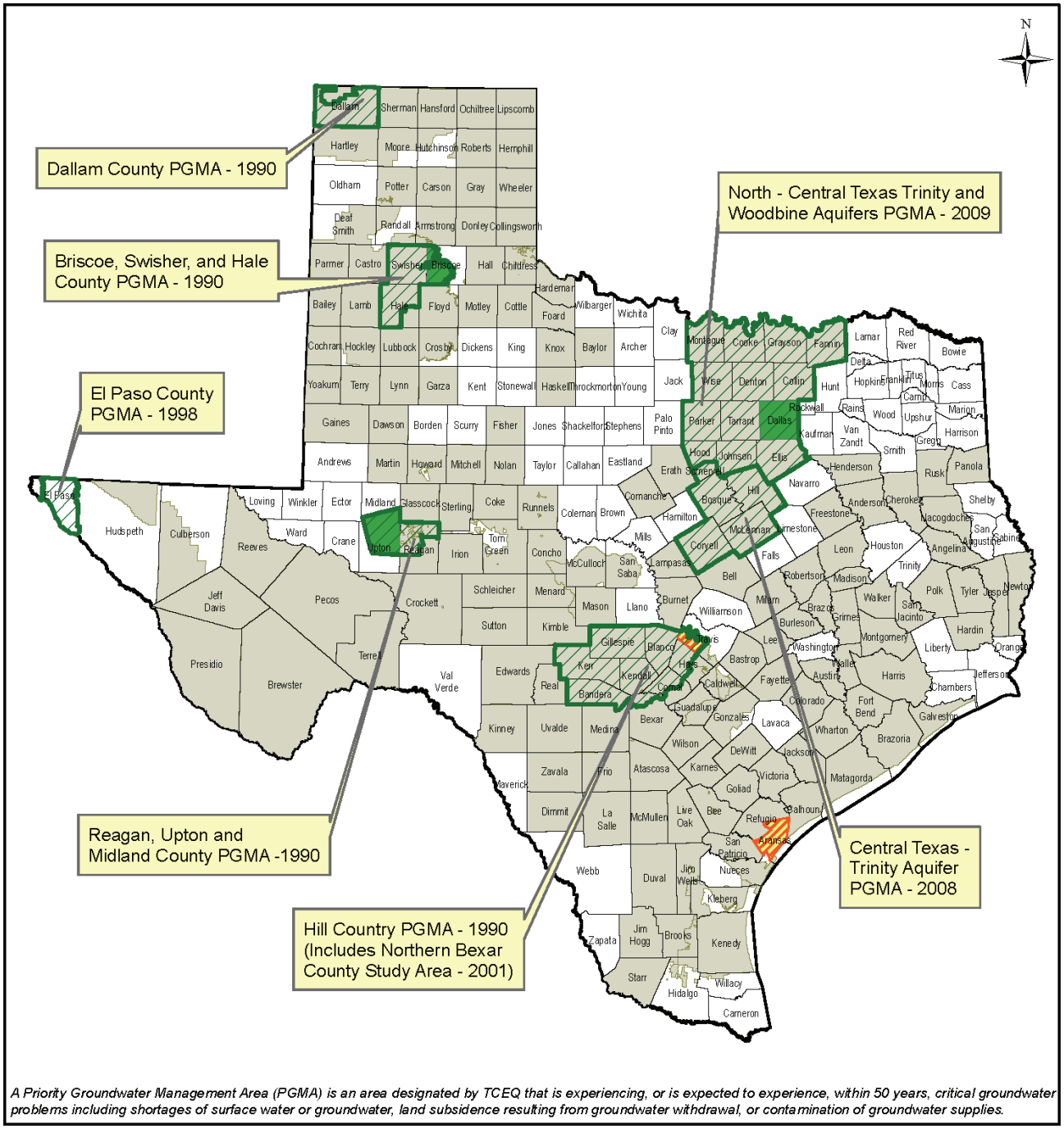
The TCEQ will track actions to establish a GCD for the Upton and Midland PGMA during the 86th Legislature. If legislative or other actions do not establish a GCD for this portion of the PGMA, TCEQ will continue administrative actions to establish a GCD in accordance with TWC, Section 35.008 and 30 TAC Section 293.19(b), by referring the matter to the State Office of Administrative Hearings (SOAH) to conduct a contested case hearing. After the hearing on the merits, the SOAH administrative law judge will file his or her proposal for decision with TCEQ. Then, the Commission will consider and adopt the most feasible and practicable option for a groundwater management for Midland and Upton counties.

North-Central Texas Trinity and Woodbine Aquifers PGMA

The 13-county North-Central Texas Trinity and Woodbine Aquifers PGMA was designated by TCEQ in February 2009 and subsequently through local and legislative efforts, all of the counties except for Dallas County have been included in a GCD. Effective September 1, 2015, TWC, Section 36.0151 provides that the TCEQ may not, before September 1, 2021, create a GCD in a PGMA county with a population greater than 2.3 million in which the annual amount of surface water used is more than 50 times the annual amount of groundwater produced. This provision applies only to Dallas County. TCEQ action regarding Dallas County may be required in accordance with TWC, Sections 35.012 and 35.013, and 30 TAC, Section 293.19(a) if a GCD is not established through local or legislative efforts before September 1, 2021.

The TWC, Section 36.0151 also authorizes TCEQ to charge an annual fee not to exceed $500 to such a county for the purpose of studying compliance and groundwater consumption in that county. To date, TCEQ has relied on the data contained in the State Water Plan for this information and has not had a need to exercise this authority.

Figure 2. Map of Priority Groundwater Management Areas



A Priority Groundwater Management Area (PGMA) is an area designated by TCEQ that is experiencing, or is expected to experience, within 50 years, critical groundwater problems including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, or contamination of groundwater supplies.

- Areas in PGMA not in a GCD
- County Boundaries
- Confirmed Groundwater Conservation Districts
- Designated PGMA
- Unconfirmed Groundwater Conservation Districts

0 25 50 100 150 200 Miles

Texas Commission on Environmental Quality

TCEQ

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Map printed November 5, 2018.

IV. District Management Plans and Joint Planning Activities

This chapter provides an overview of groundwater conservation district management planning and joint planning activities that occurred in 2017 and 2018. It describes the adoption and approval of Groundwater Conservation District management plans, changes to groundwater management area (GMA) boundaries, joint planning conducted by GCDs, the development of total estimated recoverable storage (TERS), and development of MAG values for planning and permitting purposes.

Adoption and Approval of District Management Plans, 2017-2018 Biennium
(November 1, 2016 to October 31, 2018)

As of November 1, 2018, there are 98 confirmed GCDs subject to groundwater management plan requirements, and two unconfirmed districts, Aransas County GCD and Southwestern Travis County GCD. One confirmed district, Reeves County GCD, was required to submit an initial groundwater management plan during the 2017-2018 biennium (Table 1), and 36 districts, out of 41 that were due for reapproval, submitted plans that were approved by the TWDB Executive Administrator (Table 1). Of those 36 plans, one plan was due during the 2015-2016 biennium (November 1, 2014 to October 31, 2016), 33 plans were due during the 2017-2018 biennium, and two plans are due during the upcoming 2019-2020 biennium (November 1, 2018 to October 31, 2020). The TWDB Executive Administrator did not have the opportunity to review and approve two plans in Table 2 for the reasons listed. During the 2017-2018 biennium, six amended groundwater management plans that added new values of modeled available groundwater were approved by the TWDB Executive Administrator (Table 3). Table 4 lists the 48 groundwater management plans that will be due during the 2019-2020 biennium.

Table 1. Management Plan Approvals (November 1, 2016 to January 4, 2019)

District Name	Plan Due Date*	Approval Date*
Bandera County RA & GWD	05/28/2018	03/15/2018
Bee GCD	09/19/2018	10/31/2018
Brazoria County GCD	02/20/2018	11/29/2017
Brush Country GCD	04/08/2018	12/18/2017
Barton Springs/Edwards Aquifer CD	01/07/2018	11/21/2017
Calhoun County GCD	11/04/2017	07/18/2017
Central Texas GCD	07/06/2017	05/30/2017
Comal Trinity GCD	06/17/2018	04/25/2018
Duval County GCD	10/09/2017	12/14/2017
Goliad County GCD	07/29/2018	06/08/2018
Guadalupe County GCD	01/23/2018	12/29/2017

District Name	Plan Due Date*	Approval Date*
Headwaters GCD	02/13/2018	02/15/2017
Hemphill County UWCD	09/27/2017	08/24/2017
Hill Country UWCD	07/29/2018	final received
Hudspeth County UWCD No. 1	07/05/2018	12/28/2018
Irion County WCD	08/26/2018	06/20/2018
Kenedy County GCD	09/04/2017	07/18/2017
Kinney County GCD	07/02/2018	04/11/2018
Lipan-Kickapoo WCD	06/24/2018	04/25/2018
Lost Pines GCD	11/07/2017	01/24/2018
McMullen GCD	08/09/2018	01/04/2019
Menard County UWD	03/19/2017	05/30/2017
Middle Trinity GCD	05/14/2017	04/20/2017
North Plains GCD	07/28/2018	04/25/2018
North Texas GCD	06/19/2017	05/12/2017
Panhandle GCD	05/14/2017	04/19/2017
Panola County GCD	05/15/2018	07/02/2018
Permian Basin UWCD	10/31/2017	08/29/2017
Plum Creek CD	01/07/2018	12/18/2017
Post Oak Savannah GCD	12/17/2017	12/29/2017
Prairielands GCD	07/30/2017	12/14/2016
Red River GCD	07/03/2017	05/12/2017
Red Sands GCD	08/13/2017	04/25/2018
Reeves County GCD	11/03/2018 *(initial submittal)*	08/15/2018 *(initial approval)*
San Patricio County GCD	06/19/2017	05/08/2017
Southeast Texas GCD	10/18/2017	08/03/2017
Sterling County UWCD	08/26/2018	06/27/2018
Terrell County GCD	11/21/2018	final received
Uvalde County UWCD	10/03/2016	11/03/2016
Victoria County GCD	10/15/2018	07/24/2018

* *Unless otherwise indicated, date indicates when an existing plan was readopted and submitted to TWDB, or the date that TWDB approved the readopted plan.*

Table 2. Management Plans Due and Not Approved (November 1, 2016 to January 4, 2019)

District Name	Plan Due Date	Status
Coke County UWCD	08/30/2018	manager needs extra assistance
Santa Rita UWCD	05/03/2018	no plan submitted

Table 3. Management Plan Amendment Approvals (November 1, 2016 to January 4, 2019)

District Name	Plan Due Date	Approval Date
Coastal Bend GCD	n/a	08/27/2018
Colorado County GCD	n/a	05/21/2018
Neches & Trinity Valleys GCD	n/a	05/31/2018
Refugio GCD	n/a	07/30/2018
Texana GCD	n/a	08/06/2018
Victoria County GCD	n/a	07/24/2018

Table 4. Management Plans Due in the 2019-2020 Reporting Period (November 1, 2018 to October 31, 2020)

District Name	Plan Due Date	Plan
Jeff Davis County UWCD	12/02/2018	Re-approval
Fayette County GCD	12/02/2018	Re-approval
Bluebonnet GCD	12/02/2018	Re-approval
Pineywoods GCD	12/03/2018	Re-approval
Crockett County GCD	12/17/2018	Re-approval
Lone Star GCD	12/17/2018	Re-approval
Sutton County UWCD	12/20/2018	Re-approval
Blanco-Pedernales GCD	01/08/2019	Re-approval
South Plains UWCD	01/13/2019	Re-approval
Culberson County GCD	02/12/2019	Re-approval
Gonzales County UWCD	02/18/2019	Re-approval
Hickory UWCD No. 1	02/27/2019	Re-approval
Plateau UWC & SD	03/05/2019	Re-approval
Mesa UWCD	03/10/2019	Re-approval
Mesquite GCD	03/25/2019	Re-approval
Corpus Christi ASRCD	04/12/2019	Re-approval
Pecan Valley GCD	05/07/2019	Re-approval
Real-Edwards C & RD	05/30/2019	Re-approval
Sandy Land UWCD	06/06/2019	Re-approval
Kimble County GCD	07/11/2019	Re-approval
Starr County GCD	07/25/2019	Re-approval
Mid-East Texas GCD	08/04/2019	Re-approval
Neches & Trinity Valleys GCD	08/06/2019	Re-approval
Refugio GCD	08/25/2019	Re-approval
Garza County UWCD	09/08/2019	Re-approval
High Plains UWCD No. 1	09/25/2019	Re-approval
Lower Trinity GCD	09/30/2019	Re-approval
Lone Wolf GCD	10/16/2019	Re-approval
Saratoga UWCD	10/16/2019	Re-approval

District Name	Plan Due Date	Plan
Colorado County GCD	11/03/2019	Re-approval
Brewster County GCD	01/05/2020	Re-approval
Presidio County UWCD	01/15/2020	Re-approval
Glasscock GCD	01/15/2020	Re-approval
Coastal Bend GCD	01/15/2020	Re-approval
Cow Creek GCD	02/02/2020	Re-approval
Wes-Tex GCD	02/10/2020	Re-approval
Brazos Valley GCD	03/12/2020	Re-approval
Coastal Plains GCD	05/01/2020	Re-approval
Northern Trinity GCD	06/11/2020	Re-approval
Southern Trinity GCD	09/15/2020	Re-approval
Llano Estacado UWCD	09/15/2020	Re-approval
Upper Trinity GCD	09/15/2020	Re-approval
Live Oak UWCD	09/15/2020	Re-approval
Rolling Plains GCD	09/15/2020	Re-approval
Middle Pecos GCD	09/15/2020	Re-approval
Rusk County GCD	10/08/2020	Re-approval
Gateway GCD	10/08/2020	Re-approval
Clear Fork GCD	10/20/2020	Re-approval

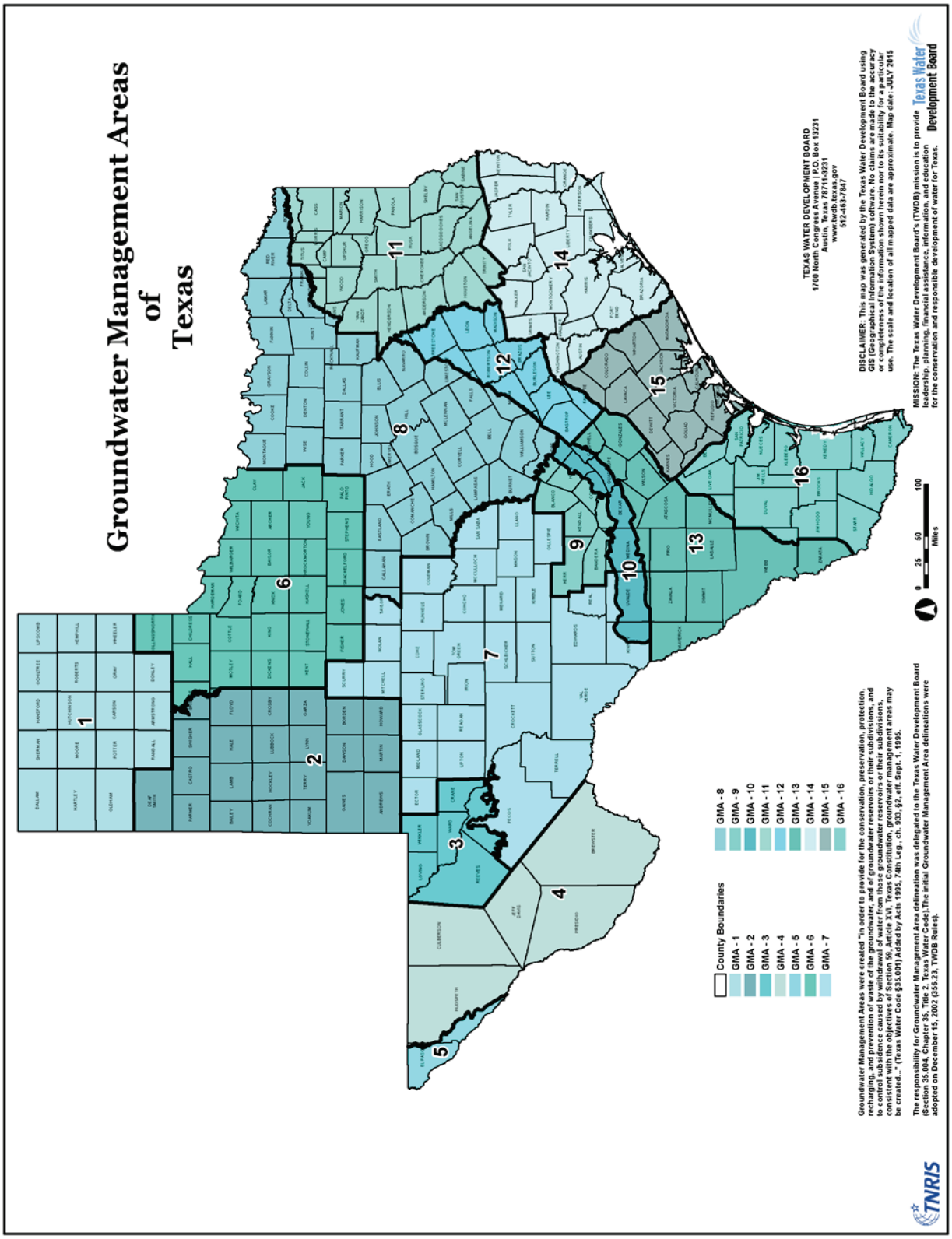
Groundwater Management Areas

A groundwater management area (GMA) is an area delineated by the TWDB as most suitable for managing groundwater resources. The primary purpose for the delineation of GMAs is to facilitate joint planning by GCDs that manage the same aquifer.

In 2002, the TWDB adopted boundaries for 16 GMAs, which cover the entire state (Figure 3). These boundaries were delineated primarily using the boundaries of the major aquifers of Texas. In areas with multiple major aquifers, the TWDB generally placed a preference on the shallowest aquifer. The TWDB divided several of the major aquifers into multiple GMAs. These divisions were made based on variations in hydrogeologic characteristics and current water-use patterns, and they coincided with natural features as much as possible. Where possible, the TWDB aligned GMA boundaries with those of counties and existing GCDs.

No boundary changes to GMAs were requested during this biennium.

Figure 3. Map of Groundwater Management Areas



Joint Planning Activities

Districts within each GMA are required to meet at least once per year. Sixty-five GMA meetings were held between September 1, 2016 and August 31, 2018, and Table 5 shows the number of meetings for each GMA. This number is more than the previous biennium because the GMAs were finalizing the adoption of their desired future conditions (DFCs). A DFC is defined by participating GCDs within a GMA as part of the joint planning process, and means the desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a management area at one or more specified future times.

TWDB staff has supported the joint planning process by outlining the overall process for developing DFCs and modeled available groundwater. TWDB staff attended GMA meetings, presented information, and answered questions from GMA member districts.

The major joint planning task within a GMA is to adopt DFCs. During this current round, all GMAs proposed their DFCs, and as of August 31, 2018, all the GMAs have adopted final DFCs. All of the documents from the 2016 round of joint planning can be viewed at <www.twdb.texas.gov/groundwater/dfc/2016jointplanning.asp>.

Table 5. Number of Joint Planning Meetings in GMAs (September 1, 2016 through August 31, 2018)

GMAs	Joint Planning Meetings
1	3
2	2
3	2
4	1
6	3
7	6
8	3
9	3
10	10
11	5
12	7
13	4
14	7
15	5
16	4
Total	**65**

Total Estimated Recoverable Storage

TWDB staff calculated the total estimated recoverable storage (TERS) volume for each aquifer within a GMA, as required by TWC, Section 36.108(d)(3). The TERS volume represents the estimated amount of groundwater within an aquifer that accounts for recovery scenarios that range between 25 percent and 75 percent of the porosity-adjusted aquifer volume. The TWDB completed 15 TERS reports and one supplemental TERS report for GMAs between March 2013 and June 2014. By June 2014, districts in all GMAs had received TERS reports covering the major and minor aquifers in their areas. A supplemental aquifer TERS report for GMA 10 was issued on December 9, 2016. The total estimated recoverable storage reports may be viewed on the TWDB website: <http://www.twdb.texas.gov/groundwater/management_areas/TERS.asp>.

Petitions Challenging DFCs

A person with a legally defined interest in groundwater located within a GMA can file a petition with a GCD challenging the reasonableness of adopted DFCs for an aquifer. GMA 14 adopted DFCs for aquifers within GMA 14 on April 29, 2016. The Lone Star GCD (District) adopted the approved DFCs applicable to the District on August 9, 2016. The cities of Conroe and Magnolia filed petitions appealing the reasonableness of the DFCs on December 2, 2016. Quadvest LP filed a petition appealing the reasonableness of the DFCs on December 6, 2016. Effective January 30, 2017, the SOAH and the District entered into an Interlocal Cooperation Contract for SOAH to conduct the hearing on the reasonableness of the DFCs and perform related services as contemplated under Section 36.1083 of the TWC. On April 10, 2017, the TWDB provided a study containing a scientific and technical analysis of the DFC adopted by the District. On November 6, 2017, the District and Cities approved a settlement agreement that included a draft Proposal for Decision and a draft Final Order settling the petitions appealing the reasonableness of the DFCs. Quadvest did not object to the draft Proposal for Decision or Final Order.

Modeled Available Groundwater

TWC, Section 36.108 requires GCDs to submit the adopted DFCs of the aquifers to the TWDB. Districts in all GMAs met the May 1, 2016 deadline for proposing to adopt DFCs. In addition, all GMAs have submitted their DFC and explanatory reports, and the TWDB Executive Administrator declared all of them administratively complete.

TWDB staff issued 15 MAG reports based on DFCs adopted during the second round of joint planning. These estimates were provided to GCDs and regional water planning groups.

To view DFCs or modeled available groundwater reports, please visit the TWDB website at: <http://www.twdb.texas.gov/groundwater/management_areas/index.asp>, select the GMA of interest, and then query the table at the bottom of the web page.

TWDB Rule Amendments

In 2017, the 85th Texas Legislature passed HB 2215 which amended various sections of Chapter 36 of the Texas Water Code to revise the deadline for a DFC adoption by GCDs within a GMA. The TWDB proposed revisions to the relevant groundwater management rules, (31 TAC, Chapter 356. The proposed rules were published for public comment on December 22, 2017, the public comment period closed on January 22, 2018, and the TWDB adopted the rules on March 21, 2018. The following description includes the changes in the 31 TAC, Chapter 356 related to Groundwater Management:

Section 356.31 is revised to implement a change to TWC, §36.108(d-3) made by HB 2215. The change requires that DFCs must be approved by a resolution adopted by a two-thirds vote of all the GCD representatives in a GMA not later than January 5, 2022. Subsequent DFCs must be proposed and finally adopted by the district representatives before the end of each successive five-year period after that date.

V. District Management Plan Performance Review

This chapter describes 2017 and 2018 noncompliance issues related to groundwater conservation district management plans that were initiated by the Executive Director of the TCEQ, reported by the State Auditor's Office, or petitioned to the TCEQ.

Performance Review

In accordance with the TWC, §§36.301 – 36.303, the TCEQ is responsible for GCD performance review and action if any of the following occur:

- a GCD management plan is not adopted, readopted, or submitted to the Executive Administrator of the TWDB within statutory deadlines;
- the TWDB Executive Administrator denies approval of a submitted management plan and the GCD either does not address and obtain management plan approval within statutory deadlines or has exhausted all appeals of the denial;
- the State Auditor determines that a GCD is not operational; or
- a review panel has submitted a report and recommendation to TCEQ in response to a petition for inquiry of a GCD.

The TCEQ rules that pertain to GCD management plan performance review actions are contained in 30 TAC, §293.22.

Management Plan Deadlines

As of January 4, 2019, two GCDs were out of compliance. Santa Rita UWCD and Coke County UWCD are expected to be operating under a compliance agreement soon.

In 2017, the TWDB approved the management plans for 15 GCDs, 13 of which achieved compliance prior to their due date. The TWDB approved management plans for two GCDs after the plans' due dates but neither GCD required a compliance agreement.

Prior to January 4, 2019, the TWDB approved 22 GCD management plans, and 14 of those GCDs achieved compliance prior to their due date. The TWDB approved management plans for seven GCDs after the plans' due dates, but none of the GCDs required a compliance agreement. Red Sands GCD missed its management plan readoption and submittal deadline but came into compliance prior to signing a compliance agreement.

State Auditor's Office Reviews

GCDs are subject to review by the SAO under TWC, § 36.302. Under § 36.302(f), the TCEQ must take appropriate action if the SAO determines that a district is not actively engaged in achieving the objectives of its management plan. Such action, described in TWC, § 36.303, includes requiring a district to take or refrain from certain actions; dissolving the GCD's board and calling for the election to form a new board; requesting

that the Office of the Attorney General appoint a receiver for the district to collect the GCD's assets and perform the GCD's business; or dissolving the district. The commission may also make recommendations to the legislature actions that it deems necessary to accomplish comprehensive management in the district.

The SAO conducted five audits of GCDs in FY2017 and produced a report in May 2018 describing their findings (*An Audit Report on Selected Groundwater Conservation Districts*, Texas State Auditor's Office, Report 18-030, May 2018). For each district auditors reviewed their achievement of selected groundwater management plan goals and compliance with selected statutory requirements for each district's fiscal year 2017. The SAO made the following statements regarding the GCDs that were audited for this report:

- Starr County GCD was not actively engaged in the achievement of its management plan goals and ensuring compliance with statutory requirements. As a result, the district achieved only one of its management plan goals and complied with one of the applicable Water Code requirements. The SAO report recommended that the District either work with the TCEQ or develop and implement processes to meet its management goals and statutory requirements. TCEQ staff has been communicating with the District, however limited actions have taken place so far.
- Terrell County GCD did not achieve the majority of its management plan goals. However, it fully complied with all but one of the applicable requirement of the Water Code.
- Duval County GCD fully or partially achieved the majority of its management plan goals and fully complied with all applicable Texas Water Code requirements.
- Brush Country GCD fully achieved most of its management plan goals and fully complied with all applicable requirements of the Water Code.
- Post Oak Savannah GCD fully achieved all of its management plan goals and fully complied with all applicable requirements of the Water Code.

Petitions for Inquiry

TWC §36.3011 allows an affected person within a groundwater management area to file a petition with TCEQ requesting a review of specific actions of a GCD.

On February 14, 2018, a landowner filed a petition pursuant to TWC, §36.3011 and 30 TAC, §293.23, seeking a review of Post Oak Savannah GCD. The Petitioner alleged that the groundwater in the management area is not adequately protected by the rules adopted by Post Oak Savannah GCD, and that groundwater in the management area is not adequately protected due to the failure of Post Oak Savannah GCD to enforce substantial compliance with its rules and abide by its District mission.

The Petitioner provided copies of the Petition to seven GCDs, including all districts that are within GMA 12 and adjacent to District. These GCDS were: Bluebonnet GCD, Brazos Valley GCD, Clearwater Underground Water Conservation District, Fayette County GCD, Lost Pines GCD, Mid-East Texas GCD, and Post Oak Savannah GCD.

The Commission received responses to the Petition from three GCDs, including Post Oak Savannah GCD. On April 6, 2018, the ED filed a response recommending the petition should be dismissed because the Petitioner has not shown that Post Oak's Savannah GCD rules are not protective of groundwater or that District has failed to enforce substantial compliance with its rules. Furthermore, the Petition raises issues that the Commission does not have jurisdiction to govern. Specifically, what is in District's Groundwater Well Assistance Program (GWAP) because the development of a GWAP is not required or mentioned in TCEQ rules and is not required by Chapter 36 of the TWC. Office of the Public Interest Counsel of the TCEQ also filed a response recommending the petition be dismissed on the same day as the ED.

After evaluation of the petition, and consideration of the responses and replies to the petition at its May 9, 2018 agenda meeting, the Commission dismissed the petition in accordance with TWC, Section 36.3011 and 30 TAC, §293.23.

VI. Recommendations

Texas Water Code, Section (§) 35.018, requires this report to include recommendations for changes to Chapters 35 and 36 that would facilitate the creation of PGMAs and the creation and operation of GCDs. **The TCEQ recommends that additional statutory changes to TWC, Chapters 35 and 36 to facilitate the designation of PGMAs and the creation and operation of GCDs are not needed at this time**.

In the Hill Country PGMA, no TCEQ actions are required for GCD creation efforts in the PGMA at present. HB 4345, 85th Regular Session, 2017 (Effective September 1, 2017), created the new Southwestern Travis County GCD in Travis County with the enactment of Chapter 8871 of the Special District Local Laws Code. The District was created pursuant to a confirmation election requirement.

The TCEQ recognizes and acknowledges that crafting local groundwater management solutions for non-GCD areas in the PGMAs is generally preferred by citizens over state agency administrative mandates to create a new or join an existing GCD. Local and legislative actions or TCEQ administrative actions to establish groundwater conservation districts are still required in all or part of four counties in three PGMAs.

- Western Briscoe County in the Briscoe, Hale, Swisher County PGMA
- Southeast Midland County and Northeast Upton County in the Reagan, Upton, Midland County PGMA
- Dallas County in the North Central Texas – Trinity & Woodbine Aquifers PGMA

In Briscoe, Hale, Swisher County PGMA, the TCEQ has exhausted its GCD creation administrative options and in accordance with Water Code, §35.013(i), in January 2017 the TCEQ recommended statutory action by the 85th Legislature for the future management of the Briscoe County PGMA. No legislation was filed during the 85th Legislature to address the issue. Since the option for TCEQ to create a stand-alone GCD in the PGMA portion of Briscoe County remains unpracticable, no further TCEQ action is anticipated.

In the Reagan, Upton, Midland County PGMA, the TCEQ will track legislative and local actions to establish a GCD for the Upton and Midland PGMA during the 86th Legislature. If legislative or local actions do not establish a GCD for the PGMA, TCEQ will continue administrative actions to establish a GCD in accordance with TWC, Section 35.008 and 30 TAC Section 293.19(b).

In the North Central Texas – Trinity & Woodbine Aquifers PGMA, the TCEQ may not create a GCD before September 1, 2021 in Dallas County. In accordance with the September 1, 2015, amendment of TWC, §36.0151(f), the TCEQ may not create a GCD before September 1, 2021, in areas in which the annual amount of surface water used is more than 50 times the annual amount of groundwater produced; that is located in a priority groundwater management area; and that has a population greater than 2.3 million. In practice, this amendment applies only to Dallas County in the North-Central Texas Trinity and Woodbine Aquifers PGMA.