



January 2023
SFR-53/22

Priority Groundwater Management Areas and Groundwater Conservation Districts

Report to the 88th Texas Legislature

printed on
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Water Availability Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Priority Groundwater Management Areas and Groundwater Conservation Districts

Report to the 88th Texas Legislature

Prepared by

Texas Commission on Environmental Quality

Texas Water Development Board

SFR-53/22

January 2023

tceq.texas.gov/publications/sfr/legislativereports/reports-to-the-88th-texas-legislature

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Published and distributed by

Texas Commission on Environmental Quality

PO Box 13087

Austin, Texas 78711-3087

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I. Executive Summary

The Texas Commission on Environmental Quality (TCEQ) prepares and submits this report with input from the Texas Water Development Board (TWDB) 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 TWC Chapters 35 and 36.

Acts of the 87th Legislature

During the 87th Legislature there were no legislative changes to TWC Chapters 35 and 36 and no new groundwater conservation districts (GCDs) were created. One Act from this session changed the Special District Local Laws Code related to the make-up of the board of directors for the Fort Bend Subsidence District. And following a court finding in May 2022, the High Plains GCD and Panhandle GCD agreed to adjust the district boundaries in Potter County.

Priority Groundwater Management Areas

There are seven priority groundwater management areas (PGMAs) in Texas, which include all or part of 35 counties. Local, legislative, or TCEQ administrative actions to establish GCDs are still authorized in two PGMAs, but during the 2021-2022 biennium, no actions were taken to create a GCD within either PGMA and no new PGMA studies were initiated.

District Management Plans and Joint Planning Activities

Between Nov. 1, 2020 and Oct. 31, 2022, 28 GCDs were required to submit management plans for TWDB to review and ensure that all documents and information were provided and complete (administratively complete). Of those 28 plans, 22 were due between Nov. 1, 2020 and Oct. 31, 2022, and six plans were due between Nov. 1, 2018 and Oct. 31, 2022. Forty-nine groundwater management plans are due between Nov. 1, 2022 and Oct. 31, 2024.

District representatives held 92 joint planning meetings within groundwater management areas (GMAs) between Sept. 1, 2020, and Aug. 31, 2022. All GMAs proposed and adopted desired future conditions (DFCs) by the statutory deadlines (May 1, 2021, and Jan. 5, 2022, respectively). TWDB is currently reviewing DFC submittals to make sure they are administratively complete and calculating modeled available groundwater (MAG) volumes for the 2021 round of joint planning (third round). To date, in this 2021 round, TWDB has deemed 15 DFC submittals administratively complete and has issued 12 MAG reports.

District Management Plan Performance Review

From Sept. 1, 2020, to Aug. 31, 2022, TWDB's executive administrator (EA) determined that 25 GCD management plans were administratively complete, nine before their due date. The EA made determinations for 16 GCD management plans after their due dates because they were submitted late, but none required a compliance agreement with the TCEQ executive director.

As of December 2022, three GCDs were out of compliance for missing statutory deadlines for readopting their management plans. At the time this report was prepared, two GCDs were in the pre-review process and one GCD's plan was not administratively complete. That district will submit a revised plan to TWDB for review.

On March 9, 2022, a landowner filed a petition seeking a review of Post Oak Savannah GCD (pursuant to TWC Section 36.3011 and Title 30, Texas Administrative Code (30 TAC), Section 293.23). The Petitioner alleged that groundwater in the management area was not adequately protected because the GCD failed to enforce substantial compliance with its rules. Post Oak Savannah GCD submitted a response to the petition. TCEQ's executive director reviewed the petition and the response, found that the GCD was in compliance with applicable rules and recommended that the petition be dismissed. The commission dismissed it on May 18, 2022.

In April 2020 the commission adopted an agreed order incorporating the Starr County GCD review panel's recommendations, the executive director's draft order, and the requested and unopposed changes from the GCD. The district has worked since then to meet the provisions of the agreed order and in August 2022 addressed the last remaining provision thus closing the case.

Groundwater Management Issues and Recommendations

TCEQ identified groundwater management issues are challenges for GCD petition review panels and unclear GCD duties that are subject to commission performance review. TWDB identified an issue with DFCs and MAGs in groundwater management plans.

TCEQ does not recommend any statutory changes to TWC Chapters 35 and 36 to facilitate designating PGMAs or creating and operating GCDs at present.

II. Acts of the 87th Legislature

This chapter describes the actions of the 87th Legislature, 2021, relating to GCDs and information relating to a non-legislative GCD boundary resolution. The GCDs within the state are shown on Figure 1.

According to TWC Chapter 36 and Article XVI Section 59 Texas Constitution, TCEQ evaluates legislation that creates new GCD or modifies existing ones. TCEQ provides Legislative Budget Board Water Development Policy Impact Statements and Governor's Letters to state leadership.

The 87th Legislature did not pass any legislation making changes to TWC Chapters 35 and 36 and no new GCDs were created. One Act of the 87th Legislature made changes to the Special District Local Laws Code (SDLLC) for the Fort Bend Subsidence District.

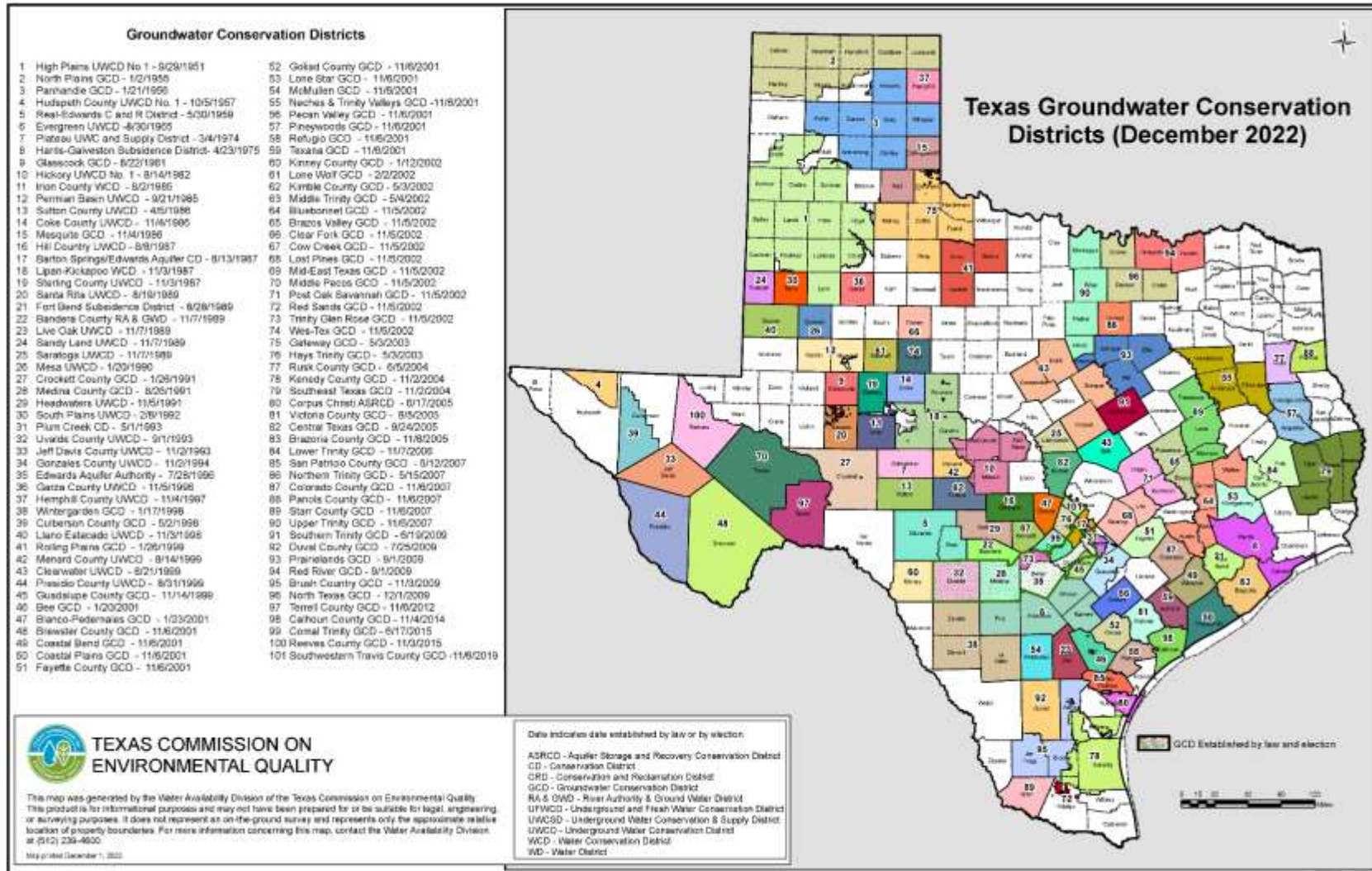
Senate Bill 1117 (Chapter 73) amended SDLLC Subsections 8834.051(e), (g-1), and (i)(2) by changing the number of appointed directors that govern the Fort Bend Subsidence District from 15 to 17. The Act also added one director to represent the City of Fulshear and provides that the mayors in the municipalities of Fort Bend County together appoint one director to represent the county at large. SB 1117 became effective on June 14, 2021.

GCDs Boundary Resolution

The High Plains GCD and Panhandle GCD entered an Agreed Declaratory Judgement on May 19, 2022, in the 108th Judicial District Court of Potter County, Texas (Case No. 110705-E-CV), agreeing to the true boundary between the districts in Potter County.

The court found that “the true boundary lines between the Panhandle District and High Plains District in Potter County, Texas became uncertain with the advent of modern Geographic Information Systems (“GIS”) mapping technology which was unavailable at the time the boundaries were drawn. This GIS mapping technology resulted in a dispute between the Panhandle District and High Plains District over approximately 1,336.73 acres in Potter County.” Following the court's finding, the two districts amicably agreed to a boundary settlement which was memorialized as an official survey and an updated shapefile.

Figure 1. Map of Texas Groundwater Conservation Districts



III. Priority Groundwater Management Areas

This section describes general program activities for priority groundwater management areas (PGMA) during 2021 and 2022. Currently there are seven PGMA in Texas, which include all or part of 35 counties (Figure 2). Local, legislative, or TCEQ administrative actions to establish GCDs are still authorized in two PGMA.

Agency Collaboration

TCEQ evaluates regional water planning and joint GCD planning data and meets with TWDB annually. There are 78 counties without a GCD in Texas. TCEQ staff evaluated data for counties that are not within the boundaries of a PGMA or a confirmed GCD. Staff also evaluated groundwater pumping data in the TWDB Water Use Survey for 2009 - 2019 and compared the pumping to the modeled available groundwater (MAG) values and groundwater availability from the 2022 State Water Plan (collectively, groundwater availability) for the aquifers in those counties. MAG values exist in counties where GCDs in groundwater management areas adopt desired future conditions; some counties do not have MAG values because the aquifers are determined to be non-relevant for the purposes of joint planning. Regional water planning groups assign groundwater availability volumes in counties with no official MAG values. This data comparison in counties not within a PGMA or without a confirmed GCD identified the following:

- In 70 counties, groundwater pumping from each aquifer is less than that aquifer's groundwater availability and the total groundwater pumped is less than the combined groundwater availability in all aquifers.
- In seven counties, either the groundwater pumped from at least one aquifer exceeds that aquifer's groundwater availability or the total groundwater pumped is greater than the combined groundwater availability in all aquifers.
- In one county, groundwater pumping from at least one aquifer exceeds that aquifer's groundwater availability and the total groundwater pumped exceeds the combined groundwater availability in all aquifers.

TCEQ's executive director and TWDB's executive administrator met on Jan. 6, 2022 and discussed the TCEQ evaluation of the regional water planning and joint groundwater planning data. The two met again on Jan. 20, 2023 and discussed the TCEQ evaluation, the completion and delivery of the this report to the 88th Legislature, the need to track 88th Session legislation relating to PGMA and creation of GCDs, and the need for continued data evaluation and coordination for any potential new PGMA studies.

PGMA Status and TCEQ Actions 2021–2022

During 2021-2022, no local, legislative, or TCEQ administrative action was taken for the creation of a GCD in the Reagan, Upton, Midland PGMA territory in Upton and Midland counties or the North-Central Texas Trinity and Woodbine Aquifers PGMA territory in Dallas County. No further TCEQ action is authorized or required in the other designated PGMA (Figure 2).

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 2016, the executive director prepared a report that evaluated five options for groundwater management and of those, recommended adding northeastern Upton County and southeastern Midland County to the Glasscock GCD as the most feasible, practicable, and economic means to achieve groundwater management in the Reagan, Upton, and Midland PGMA. No further local, legislative, or TCEQ administrative action has been taken.

In 2021 - 2022, TCEQ continued to evaluate groundwater availability and use data for Upton and Midland counties. The Upton PGMA portion occupies roughly one-half of Upton County. From 2000 to 2011, groundwater used for irrigation represented roughly 90 percent of all groundwater used in Upton County. From 2011 to 2021, oil and gas activities began to use more groundwater. From 2016 to 2021, oil and gas activities used more groundwater in the Upton PGMA than the estimated irrigation use from all of Upton County. Groundwater used for oil and gas drilling or exploration operations are exempt from GCD permitting authority. The executive director will continue to follow local and legislative actions for groundwater management options in the Reagan, Upton, and Midland PGMA and will continue to evaluate groundwater use data for the Upton and Midland County portions.

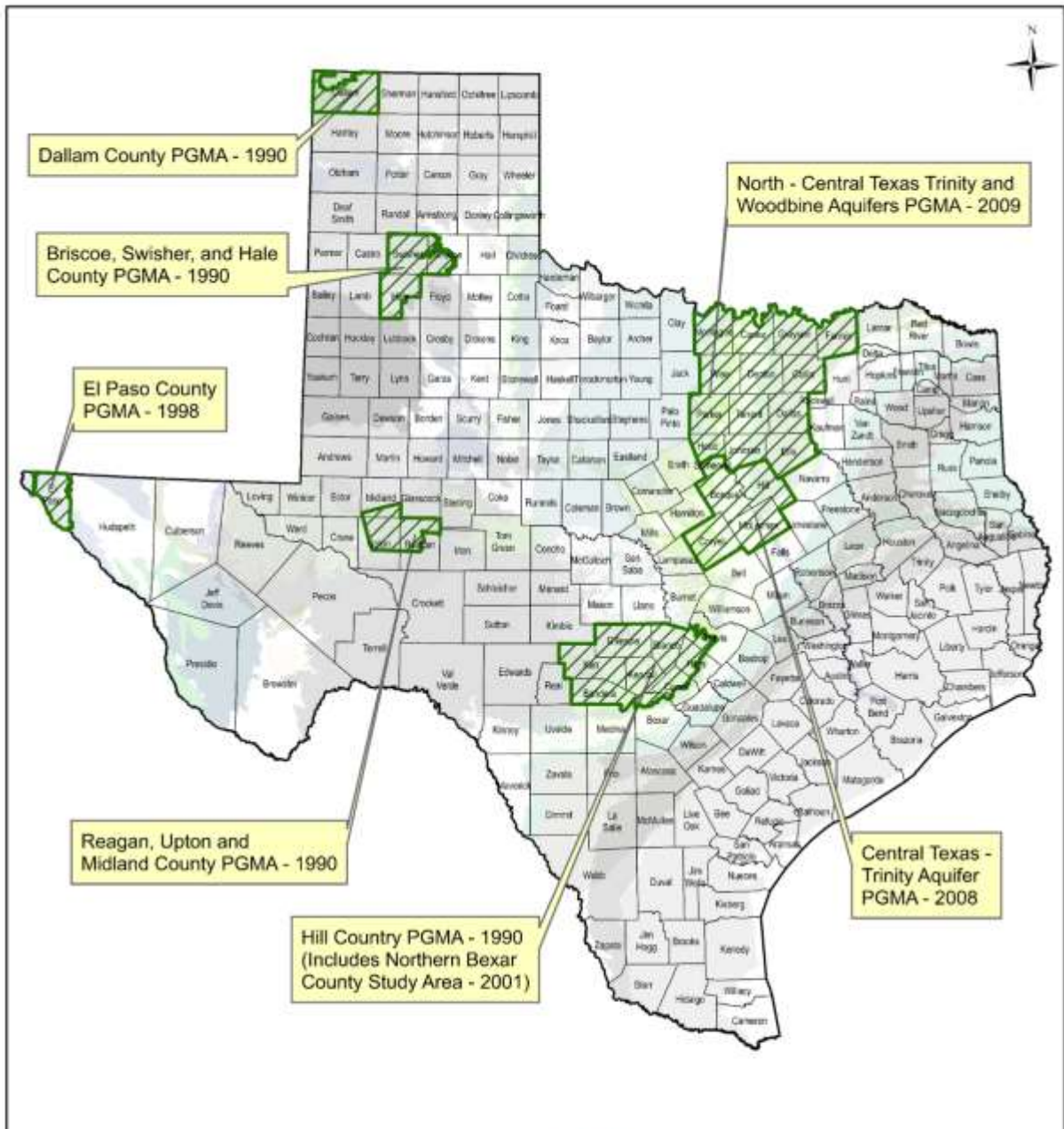
North-Central Texas Trinity and Woodbine Aquifers PGMA




The 13-county North-Central Texas Trinity and Woodbine Aquifers PGMA was designated by TCEQ in February 2009 and through subsequent local and legislative efforts, all counties except for Dallas County are now included in a GCD.

Effective Sept. 1, 2015, TWC Section 36.0151 provided that TCEQ could not, before Sept. 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 applied only to Dallas County. TCEQ has not taken further administrative action to create a GCD for Dallas County or to recommend the addition of Dallas County to an existing GCD.

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 in the State Water Plan for this information and has not needed to exercise this authority.

Figure 2. Map of Priority Groundwater Management Areas



-  Designated PGMA
-  County Boundaries
-  Major and Minor Aquifers



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

This map was generated by the Water Availability Division of the Texas Commission On Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Water Availability Division at (512) 239- 4600.



Map printed December, 2022.

IV. District Management Plans and Joint Planning Activities

This chapter provides an overview of GCD management planning and joint planning activities from Nov. 1, 2020 to Oct. 31, 2022. It describes the GCD management plan adoption, TWDB review of management plans for administrative completeness, changes to groundwater management area (GMA) boundaries, joint planning conducted by GCDs, development of total estimated recoverable storage (TERS), and development of modeled available groundwater (MAG) values for GCD planning and permitting purposes.

Adoption and Approval of District Management Plans

Under TWC Section 36.1072, TWDB reviews groundwater management plans (plans) developed by GCDs under TWC Section 36.1071. TWDB also offers technical assistance in the form of pre-reviews before districts adopt and submit plans for administrative review and approval.

As of Nov. 1, 2022, there are 98 confirmed GCDs subject to statutory groundwater management plan requirements. Between Nov. 1, 2020 and Oct. 31, 2022, 28 GCDs were required to submit plans to TWDB for determination of administrative completeness. Of those 28 plans, 22 had due dates during that period of time, and six plans were due during between Nov. 1, 2018 and Oct. 31, 2020.

As this report was prepared, the executive administrator received plans from 25 GCDs and determined that these plans were administratively complete (Table 1). Of these 25 plans, six were due between Nov. 1, 2018, and Oct. 31, 2020, and 19 plans were due between Nov. 1, 2020, and Oct. 31, 2022.

Table 2 lists the remaining three plans due between Nov. 1, 2020 and Oct. 31, 2022 that have not yet been determined to be administratively complete at report time. Two plans (North Texas GCD and Permian Basin UWCD) are currently in the pre-review stage. An additional plan (Kenedy County GCD) submitted for final review was determined to be administratively incomplete. That district will resubmit the plan for a new pre-review.

From Nov. 1, 2020 to Oct. 31, 2022, the executive administrator approved one amended plan that added MAG and adopted desired future conditions from the 2016 round of joint planning (Table 3). GCDs must update plans within two years of adoption of desired future conditions by the groundwater management area. These updates are typically in the form of amended plans.

Table 4 lists the 49 management plans with due dates between Nov. 1, 2022 and Oct. 31, 2024.

Table 1. Management Plan Approvals

District Name	Plan Due Date	Approval Date
Brewster County GCD ¹	02/27/22	02/25/22
Calhoun County GCD	07/18/22	06/10/22
Central Texas GCD	05/30/22	04/29/22
Clear Fork GCD ²	09/18/21	02/25/22
Clearwater UWCD	02/19/21	12/30/20
Coastal Plains GCD	05/01/20	12/17/20
Culberson County GCD	02/12/19	08/05/21
Evergreen UWCD	03/16/21	03/05/21
Gateway GCD	10/08/20	03/10/21
Hays Trinity GCD	02/19/21	02/19/21
Headwaters GCD	02/15/22	01/11/22
Hemphill County UWCD	08/24/22	06/29/22
Llano Estacado UWCD	09/15/20	12/04/20
Medina County GCD	06/13/21	05/25/22
Menard County UWD	05/30/22	07/22/22
Middle Trinity GCD	04/20/22	07/27/22
Red River GCD	05/12/22	07/27/22
San Patricio County GCD	05/08/22	08/17/22
Southeast Texas GCD	08/03/22	05/03/22
Southern Trinity GCD	09/15/20	09/09/21
Starr County GCD	07/25/19	08/17/21
Texana GCD	06/13/21	09/29/21
Trinity Glen Rose GCD	01/14/21	01/20/21
Uvalde County UWCD	11/03/21	12/17/21
Wintergarden GCD	06/27/21	10/19/21

¹ The first plans for these districts were not administratively complete and were not approved. Approval dates for these plans are for the second submittals that were determined to be administratively complete.

² Ibid.

Table 2. Management Plans Due and Not Approved

District Name	Plan Due Date	Status
Kenedy County GCD	07/18/22	first plan submitted was not administratively complete; district will submit a revised plan to TWDB for review and approval
North Texas GCD	05/12/22	in pre-review stage
Permian Basin UWCD	08/29/22	in pre-review stage

Table 3. Management Plan Amendment Approvals

District Name	Plan Due Date	Approval Date
Red River GCD ³	01/31/19	03/26/21

Table 4. Management Plans Due for Re-Approval in the 2023-2024 Reporting Period

District Name	Plan Due Date
Barton Springs Edwards Aquifer CD	11/21/22
Brazoria County GCD	11/29/22
Duval County GCD	12/14/22
Plum Creek CD	12/18/22
Brush Country GCD	12/19/22
Post Oak Savannah GCD	12/29/22
Guadalupe County GCD	12/29/22
Lost Pines GCD	01/24/23
Bandera County RA & GWD	03/15/23
Kinney County GCD	04/11/23
Comal Trinity GCD	04/25/23
Lipan-Kickapoo WCD	04/25/23
Red Sands GCD	04/25/23
North Plains GCD	04/25/23
Goliad County GCD	06/08/23
Irion County WCD	06/20/23
Sterling County UWCD	06/27/23

³ The amended content for this plan incorporated modeled available groundwater from the 2016 round of joint planning and desired future conditions (DFCs) adopted by GMA 8 on 01/31/2017.

District Name	Plan Due Date
Panola County GCD	07/02/23
Victoria County GCD	07/24/23
Reeves County GCD	08/15/23
Terrell County GCD	10/12/23
Pineywoods GCD	10/18/23
Hill Country UWCD	10/18/23
Bluebonnet GCD	10/31/23
Bee GCD	10/31/23
Crockett County GCD	11/14/23
South Plains UWCD	11/14/23
Fayette County GCD	11/16/23
Jeff Davis County UWCD	12/12/23
Sutton County UWCD	12/12/23
Mesquite GCD	12/20/23
Hudspeth County UWCD #1	12/28/23
McMullen GCD	01/04/24
Blanco-Pedernales GCD	01/23/24
Hickory UWCD #1	01/29/24
Gonzales County UWCD	01/29/24
Pecan Valley GCD	03/15/24
Mesa UWCD	03/19/24
Coke County UWCD	03/19/24
Plateau UWC & SD	05/09/24
Sandy Land UWCD	05/15/24
Refugio GCD	06/28/24
Corpus Christi ASRCD	07/12/24
Kimble County GCD	07/12/24
Mid-East Texas GCD	09/03/24
Neches & Trinity Valleys GCD	09/12/24
Garza County UWCD	09/18/24
Lone Wolf GCD	09/18/24
High Plains UWCD #1	10/25/24

Groundwater Management Areas

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

In 2002, 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, TWDB generally placed a preference on the shallowest aquifer. 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, TWDB aligned GMA boundaries with those of counties and existing GCDs.

TWDB may alter GMA boundaries as required by future conditions and as justified by factual data (TWC Section 35.004). GMAs may request amendments to the boundaries, either as administrative adjustments or substantive changes. Since January 2021, TWDB has made several boundary changes at the request of GMAs, both administrative and substantive, as outlined in Table 5.

Table 5. GMA Boundary Changes Since January 2021

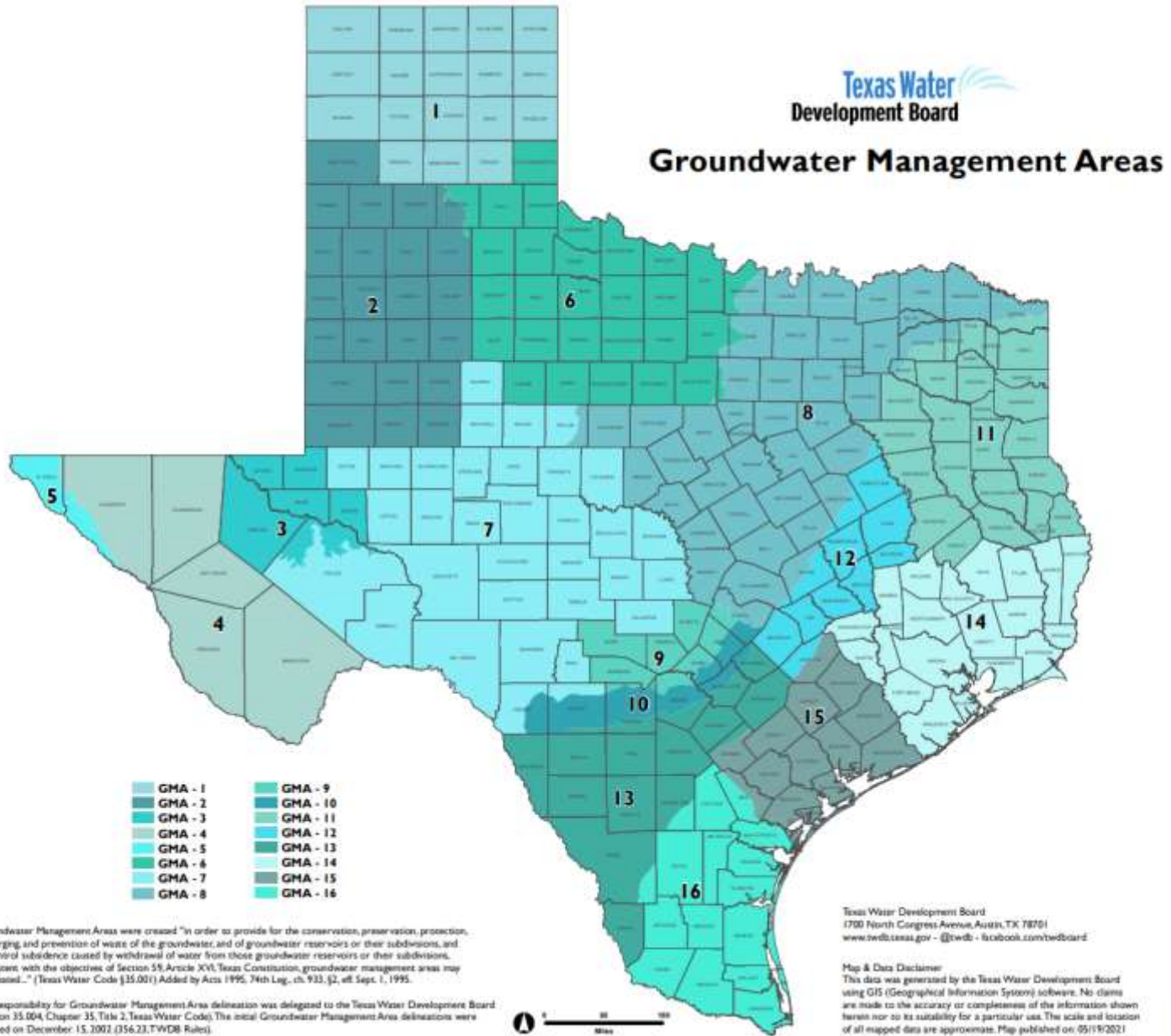
GMA Boundary ⁴	Type of change	Explanation of change	Date approved by TWDB
GMA 6/8	Substantive	<ul style="list-style-type: none"> • The Trinity Aquifer is fully within GMA 8 in Jack, Palo Pinto, and Shackelford counties. • The Cross Timbers Aquifer is primarily within GMA 6. • This change was requested by district representatives in the GMAs. 	03/10/21

⁴ See figure 3, page 14 for GMA locations.

GMA Boundary ⁴	Type of change	Explanation of change	Date approved by TWDB
GMA 8/9/10	Administrative	<ul style="list-style-type: none"> • Aligned boundaries between GMAs 8 and 9 to coincide with Southwestern Travis County GCD boundaries along the Colorado River, such that the district is fully within GMA 9. • Aligned boundaries between GMAs 8 and 10 along the Colorado River. • Aligned boundaries between GMAs 9 and 10 to coincide the Barton Springs/Edwards Aquifer Conservation District, such that the district is fully within GMA 10. This change resembles a closer approximation of the actual boundary formed by the outcrop of the Trinity Aquifer to the northwest in GMA 9 and the outcrop of the Edwards (Balcones Fault Zone) Aquifer to the southeast in GMA 10. • The change between GMAs 8 and 10 were made at the discretion of TWDB. • The changes between GMAs 8 and 9 and GMAs 9 and 10 were requested by district representatives within the GMA. 	05/19/21

Currently, TWDB is reviewing two additional requests for administrative GMA boundary changes: 1) a request from GMAs 7 and 8 such that the Edwards-Trinity (Plateau) Aquifer would be fully within GMA 7 and 2) a request from GMA 15 for and adjustment in Nueces County, such that Corpus Christi ASRCD would be fully within GMA 16. TWDB has requested additional supporting documentation for the second request, including resolutions from each affected GMA supporting the boundary change.

Figure 3. Map of Groundwater Management Areas



Joint Planning Activities

Districts within each GMA meet at least once a year to engage in the joint planning process; coordinate on regional groundwater issues; and review GCD management plans, the accomplishments of the GMA, and proposals to adopt new or amend existing DFCs. Ninety-two GMA meetings were held between Sept. 1, 2020, and Aug. 31, 2022 (Table 6).

The major joint planning task for districts within a GMA is to adopt DFCs for common, shared aquifers. A DFC is the desired, quantified condition of groundwater resources (such as water levels, spring flows, volumes, or subsidence) within a GMA at one or more specified future times. For the 2021 joint planning (third round), all GMAs were required to propose DFCs by May 1, 2021. After public review and comment on the proposed DFCs, the districts were required to reconvene and finally adopt DFCs by Jan. 5, 2022. The number of joint planning meetings this biennium is more than the previous biennium because of the deadlines to meet to propose and adopt DFCs.

TWDB supports joint planning by outlining the overall process and providing reference materials and guidance documents for developing DFCs. TWDB staff also attends GMA meetings, presents information, and answers questions from GMA member districts.

Table 6. Number of Joint Planning Meetings in GMAs During the 2021-2022 Biennium

GMA⁵	Number of Joint Planning Meetings
1	7
2	3
3	2
4	4
6	2
7	6
8	3
9	9
10	8
11	6
12	15
13	8
14	7
15	7
16	5
Total	92

⁵ See figure 3 for GMA locations

Total Estimated Recoverable Storage

TWDB calculates the total estimated recoverable storage (TERS) volume for each aquifer within a GMA, [TWC 36.108(d)(3)]. This 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. TERS are a component of one of nine factors GMAs must consider during DFC development.

TERS volumes provided by TWDB are primarily estimated with groundwater availability models. TWDB completed 15 initial 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.

Initial TERS reports have not been updated since 2014 (except for the supplemental TERS report for GMA 10). You can view these reports on the [TWDB website](#).⁶

Modeled Available Groundwater

After adopting DFCs by the statutory deadline, District representatives within a GMA must submit adopted DFCs and an explanatory report to TWDB for administrative review (TWC Section 36.108). TWDB staff then calculates modeled available groundwater volumes for each aquifer deemed relevant for joint planning purposes by the GMA. Modeled available groundwater is the amount of water that may be produced on an average annual basis to achieve a DFC established under TWC Section 36.108.

TWDB is currently developing MAG reports for the 2021 round of joint planning (third round). To date, TWDB has issued eight MAG reports based on DFCs adopted during the 2021 round of joint planning.

To view DFCs or MAG reports from the current and previous rounds of joint planning, please visit the [TWDB website](#),⁷ select the GMA of interest, and then query the table at the bottom of the webpage.

⁶ www.twdb.texas.gov/groundwater/management_areas/TERS.asp

⁷ www.twdb.texas.gov/groundwater/management_areas/index.asp

V. District Management Plan Performance Review

This chapter describes noncompliance issues related to groundwater conservation district (GCD) management plans. These issues might have been initiated by the executive director of TCEQ, reported by the State Auditor's Office, or petitioned to TCEQ during the biennium.

Performance Review

Per TWC Sections 36.301-36.303, 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 TWDB within statutory deadlines.
- The 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.
- A review panel has submitted a report and recommendation to TCEQ in response to a petition for inquiry of a GCD.

TCEQ rules that pertain to these review actions are in 30 TAC Sections 293.22 and 293.23.

Management Plan Deadlines

In FY 2021, the executive administrator approved management plans for nine GCDs, four of which achieved compliance prior to their due date. The executive administrator approved management plans for seven GCDs after the plan due dates had passed, but none required a compliance agreement with the executive director. The Brewster County GCD plan was determined to not be administratively complete by the executive administrator in August 2021, but the district submitted a revised plan to TWDB, which was approved in February 2022.

In FY 2022, the executive administrator approved 16 GCD management plans, and five of those GCDs achieved compliance prior to their due date. The executive administrator approved management plans for 11 GCDs after the plan due dates had passed. As of October 2022, Kenedy County GCD, North Texas GCD, and Permian Basin UWCD were out of compliance for missing statutory deadlines for plan readoption. The Kenedy County GCD management plan was determined to be administratively incomplete in July 2022, and the district has until January 2023 to submit a revised plan to TWDB. The other two GCDs were in the pre-review stage at TWDB.

State Auditor's Office Reviews

GCDs are subject to review by the State Auditor's Office (SAO) to determine if the GCD is actively engaged in achieving the objectives of its management plan. TCEQ must take appropriate action if the SAO determines that a district is not operational (TWC Section 36.302). Such action, described in TWC Section 36.303, includes any of the following:

- 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.
- Dissolving the district.

TCEQ may also make recommendations to the legislature for actions that it deems necessary to accomplish comprehensive management in the district.

Since 1999, SAO has filed 14 reports with TCEQ, including 131 GCD audit reviews, with some GCDs being audited multiple times. Eleven GCDs were audited for compliance with selected requirements of TWC Chapter 36 in the 2021-2022 biennium and no GCDs were reported being non-operational.

Petitions for GCD Inquiry

TWC Section 36.3011 allows an affected person within a GMA to file a petition with TCEQ requesting a review of specific actions of a GCD.

Post Oak Savannah GCD

On March 9, 2022, a landowner filed a petition pursuant to TWC Section 36.3011 and 30 TAC Section 293.23, seeking a review of Post Oak Savannah GCD. The Petitioner alleged 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.

The Petitioner provided copies of the petition to nine GCDs, including all districts that are within GMA 12 and adjacent to the Post Oak Savannah GCD. These GCDs included the Barton Springs/Edwards Aquifer Conservation District, Bluebonnet GCD, Brazos Valley GCD, Fayette County GCD, Gonzales County UWCD, Lost Pines GCD, Mid-East Texas GCD, Neches & Trinity Valleys GCD, and Post Oak Savannah GCD.

The commission received a response to the petition from the Post Oak Savannah GCD on April 13, 2022. No other responses were received from the other GCDs.

From March 23, 2022, to April 8, 2022, the executive director solicited nominations for volunteers to serve on a five-member review panel to consider the Petitioner's Petition for Inquiry. Three nominations were received; however, one of the individuals was disqualified from serving on the panel. Due to the limited response to the first request,

the executive director issued a second solicitation for volunteers from April 18, 2022, through April 22, 2022. No nominations were received from the second solicitation.

On April 29, 2022, the executive director filed a response recommending the petition be dismissed because the Petitioner had not shown that Post Oak Savannah GCD had failed to enforce substantial compliance with its rules. The executive director reviewed both the Petition for Inquiry and the Post Oak Savannah GCD response; and based on the information contained in these filings, found that Post Oak Savannah GCD had demonstrated it complied with its rules as well as applicable TCEQ rules and TWC statutes. The executive director determined that the groundwater in the management area was being adequately protected, as required by both rule and statute, and recommended the petition be denied. The Office of the Public Interest Counsel of the TCEQ also filed a response recommending the petition be dismissed.

After evaluating the petition and considering the responses and replies to it at the May 18, 2022, agenda meeting, the commission dismissed the petition according to TWC Section 36.3011 and 30 TAC Section 293.23.

Starr County GCD

As reported in the previous biennium, eight GCDs within GMA 16 petitioned TCEQ for an inquiry of the Starr County GCD on Aug. 5, 2019. The petitioners included the Bee GCD, Brush Country GCD, Live Oak County UWCD, McMullen County GCD, Kenedy County GCD, Corpus Christi Aquifer Storage and Recovery Conservation District, San Patricio GCD, and Duval County GCD. The petition alleged that Starr County GCD failed to do all of the following:

- Participate in the GMA 16 joint planning process under TWC Section 36.108.
- Adopt the desired future conditions (DFCs) adopted by the GMA 16 GCDs.
- Update its management plan within two years of GMA 16 adopting new DFCs.

On Sept. 20, 2019, the executive director filed a response with the commission recommending the petition be granted. On Oct. 22, 2019, counsel for the Starr County GCD filed the district's agreed and unopposed motion to grant the petition and appoint the review panel. The commission granted the petition and appointed the panel on Oct. 23, 2019, per TWC Section 36.3011 and 30 TAC Section 293.23.

On March 25, 2020, the commission considered the matter and adopted an order incorporating the review panel's recommendations, the executive director's draft order, and the requested and unopposed changes from Starr County GCD. The order became final on April 27, 2020.

The Starr County GCD has worked since that time to address the provisions of the April 2020 agreed order. After evaluating documentation submitted by the district with respect to the agreed order, TCEQ determined that the district has addressed all the provisions in that order and the case was closed in August 2022.

VI. Groundwater Management Issues

Issue 1: Challenges for Groundwater Conservation District Petition Review Panels

TCEQ appointed the first GCD review panel in October 2019 consisting of five GCD managers and one non-voting TCEQ staff member as recording secretary. The panel encountered several challenges. For example: the review panel did not have access to legal counsel nor to funding, and there was no statutory guidance specific to the purpose and procedures for its public hearings and notice responsibilities.

According to TWC Section 36.3011, an affected person may file a petition with TCEQ requesting an inquiry of a GCD for any of nine reasons related to its required groundwater management responsibilities. If the commission approves the petition, they will appoint a panel that will review the petition and any evidence relevant to the petition. In a public meeting, the review panel will consider and adopt a report to be submitted to the commission.

Members of the 2019-2020 review panel were volunteers who were solicited by the executive director. They each served at the expense of their own GCD, and the members of the panel estimate they each provided between 100 to 300 hours of service. The review panel did an excellent job, and TCEQ appreciates their service to the state. However, based on the challenges they endured, the executive director had concerns that it may be difficult in the future to solicit members and seat a review panel. This concern was validated in April 2022 for another petition when the executive director was unable to solicit a full five-member panel for the commission's consideration.

Issue 2: Unclear GCD Duties and TCEQ Performance Review Actions

In addition, the commission can be petitioned to take action if a GCD does not amend its management plan within two years of the adoption of DFCs or if the GCD does not adopt rules within a year after adoption of the new management plan [TWC Section 36.3011(b) (5 & 6)]. There is no mention of these requirements in Section 36.108 as to what a GCD must do once new DFCs are adopted. Unlike the other performance review items (e.g., adoption or readoption of plan, adoption of rules), TCEQ can only take action on these two items if petitioned.

Statutory guidance is needed on the review panel process, procedure, and counsel, and GCD duties and performance review actions for TCEQ. This guidance could be accomplished by amendments in TWC Chapter 36.

Issue 3: Desired Future Conditions and Modeled Available Groundwater in Groundwater Management Plans

Statute requires TWDB to assist GCDs in their development of groundwater management plans. Under TWC Section 36.1072, the executive administrator must approve a management plan submitted by a GCD if it is administratively complete. TWC Section 36.1071 defines the information required for a management plan to be considered administratively complete. Specifically, the statute requires that districts address DFCs and include MAG in management plans. DFCs and MAG are determined on five-year joint planning cycles by GCDs within groundwater management areas and are subject to change or petition each planning cycle.

There is no statutory guidance on which DFCs and MAG volumes should be included in a groundwater management plan in circumstances where (1) an aquifer was previously relevant for joint planning purposes but is subsequently not, or (2) a DFC is deemed no longer reasonable through a petition process. This issue affects GCDs who are developing plans and TWDB when assisting districts and reviewing plans for administrative completeness. Lack of guidance results in confusion for districts and TWDB on which DFCs and MAG volumes considered in a plan meet the standards for administrative completeness. TWDB has recently encountered both circumstances while assisting districts in developing plans.

To better assist GCDs during plan development, clarify in statute which DFCs and MAG volumes need to be included and considered in a plan in the event of an aquifer being declared non-relevant during joint groundwater planning or if a DFC is deemed no longer reasonable. A statutory clarification would make the management plan development process more efficient for GCDs and TWDB.

VII. 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 PGMA's and the creation and operation of GCDs. TCEQ does not recommend any additional statutory changes to TWC, chapters 35 and 36 to facilitate the designation of PGMA's and the creation and operation of GCDs at present.