

TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT

Groundwater Management Plan

Originally Adopted: July 25, 2013

Approved by the Texas Water Development Board: _____

MANAGEMENT PLAN TABLE OF CONTENTS

	<u>Page</u>
I. DISTRICT OBJECTIVES	1
II. PURPOSE OF GROUNDWATER MANAGEMENT PLAN.....	1
III. DISTRICT INFORMATION.....	1
IV. CRITERIA FOR PLAN APPROVAL	3
V. ESTIMATES OF TECHNICAL INFORMATION REQUIRED BY 31 TAC § 356.52 AND TEX. WATER CODE § 36.1071	3
VI. CONSIDER THE WATER SUPPLY NEEDS AND WATER MANAGEMENT STRATEGIES INCLUDED IN THE ADOPTED STATE WATER PLAN	6
VII. DETAILS ON THE MANAGEMENT OF GROUNDWATER SUPPLIES IN THE DISTRICT	6
VIII. ACTIONS, PROCEDURES, PERFORMANCE AND AVOIDANCE FOR PLAN IMPLEMENTATION	8
IX. METHODOLOGY FOR TRACKING PROGRESS TO ACHIEVE THE DISTRICT'S MANAGEMENT GOALS	8
X. DISTRICT GOALS, MANAGEMENT OBJECTIVES AND PERFORMANCE STANDARDS.....	8
XI. MANAGEMENT GOALS DETERMINED NOT APPLICABLE TO THE DISTRICT	12
APPENDICES A - J	BEGINNING ON PAGE 15

I. DISTRICT OBJECTIVES

The mission of the Terrell County Groundwater Conservation District ("District") is to conserve, preserve and protect the quality and quantity of the groundwater resources for the citizens of Terrell County. The District recognizes that groundwater conservation districts are the state's preferred method of groundwater management and will work with local stakeholders towards achieving its objectives. The District will accomplish its objectives by working to lessen interference between water wells, minimize drawdown of groundwater levels, prevent the waste of groundwater, and reduce the degradation of groundwater quality within the District while helping the local economy maintain and improve its current condition. The District will also use the authority granted in its enabling act in Chapter 8837 of the Texas Special District Local Laws Code (the "District Act") and all applicable state laws to protect and maintain the groundwater resources within the District's boundaries.

II. PURPOSE OF GROUNDWATER MANAGEMENT PLAN

The purpose of this Management Plan is to provide a planning tool for the District as it works to manage, protect, and conserve the groundwater resources within its boundaries and to meet the requirements of Chapter 36 of the Texas Water Code and Texas Water Development Board ("TWDB") rules in Title 31 Texas Administrative Code Chapter 356. This Management Plan currently contains the best available hydrogeological and technical information provided by the TWDB for the groundwater resources of the District. As the District obtains more site-specific groundwater information, the District will update and amend this Management Plan as necessary.

III. DISTRICT INFORMATION

A. District Creation

The District was created by the 82nd Texas Legislature, Regular Session, in 2011 through the enactment of House Bill 2859. The creation of the District was confirmed by the citizens located in Terrell County at an election held on November 6, 2012. The District contains the authority and responsibilities specified in the District Act, Chapter 36 of the Texas Water Code, TWDB Rules, this Management Plan, and the District Rules, as they may be adopted and amended.

B. District Board of Directors

The Board of Directors is made up of five members appointed by the Terrell County Commissioners Court in accordance with the District Act.

C. Authority of District

The District has the authority and duties given to groundwater conservation districts by Texas Water Code Chapter 36, TWDB rules in 31 Texas Administrative Code ("TAC") Chapter 356, and the District Act. The District exercises its authority to preserve and protect the groundwater resources of the District through the adoption and implementation of this Management Plan and District rules, as they may be adopted and amended.

D. Location and Extent of District Boundaries

The District's boundaries consist of the entire territory within Terrell County.

E. Groundwater Resources of District

All of the territory within the District is located in the outcrop of the Edwards-Trinity (Plateau) Aquifer.

A diagram of the Edwards-Trinity Plateau aquifer can be found at Appendix A. The TWDB generally describes the groundwater resources of the Edwards Trinity Plateau aquifer as follows:

"The Edwards-Trinity (Plateau) Aquifer is a major aquifer extending across much of the southwestern part of the state. The water-bearing units are composed predominantly of limestone and dolomite of the Edwards Group and sands of the Trinity Group. Although maximum saturated thickness of the aquifer is greater than 800 feet, freshwater saturated thickness averages 433 feet. Water quality ranges from fresh to slightly saline, with total dissolved solids ranging from 100 to 3,000 milligrams per liter, and water is characterized as hard within the Edwards Group. Water typically increases in salinity to the west within the Trinity Group. Elevated levels of fluoride in excess of primary drinking water standards occur within Glasscock and Irion counties. Springs occur along the northern, eastern, and southern margins of the aquifer primarily near the bases of the Edwards and Trinity groups where exposed at the surface. San Felipe Springs is the largest exposed spring along the southern margin. Of groundwater pumped from this aquifer, more than two-thirds is used for irrigation, with the remainder used for municipal and livestock supplies. Water levels have remained relatively stable because recharge has generally kept pace with the relatively low amounts of pumping over the extent of the aquifer."¹

¹ George, Mace, and Petrossian, Aquifers of Texas, Texas Water Development Board Report 380, July 2011, p. 35, available at: http://www.twdb.texas.gov/publications/reports/numbered_reports/doc/R380_AquifersofTexas.pdf.

IV. CRITERIA FOR PLAN APPROVAL

A. Planning Horizon

This Management Plan is adopted to be effective for a five (5) year planning period, which will begin on the date TWDB approves this plan. In accordance with Section 36.1072(e) of the Texas Water Code, the District will review and re-adopt its Management Plan, with or without amendments, every five years and will re-submit its Management Plan for TWDB approval after re-adoption. The District will also update its Management Plan within two years of the adoption of desired future conditions by Groundwater Management Area 7 ("GMA 7") in accordance with Section 36.1082(b)(5) of the Texas Water Code.

B. Plan Adoption

Public notices demonstrating that this Management Plan was adopted after the required public hearings and District Board meeting are attached to this plan as Appendix B.

C. Board Resolution

A certified copy of the resolution of the Board of Directors of the District adopting this Management Plan is attached to this plan as Appendix C.

D. Coordination with Surface Water Management Entities

The District provided each of the surface water management entities within its boundaries with copies of this plan to coordinate on the development of this plan. Sample correspondence sent to each surface water management entity and a list of the surface water management entities who were provided a copy of the plan are attached to this plan as Appendix D.

V. ESTIMATES OF TECHNICAL INFORMATION REQUIRED BY 31 TAC 356.52 AND TEX. WATER CODE § 36.1071

A. Modeled available groundwater in the district based on the desired future condition established under Tex. Water Code 36.108 — 31 TAC §356.52 (a)(5)(A) and Tex. Water Code §36.10701(e)(3)(A)

Modeled available groundwater is defined in Section 36.001(25) of the Texas Water Code as "the amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition established under Section 36.108." The desired

future condition of the aquifer may only be determined through joint planning with other groundwater conservation districts in the same GMA as required by Section 36.108 of the Texas Water Code. Desired future condition is defined in Section 36.001(30) as “a quantitative description, adopted in accordance with Section 36.108, of the desired condition of the groundwater resources in a management area at one or more specified future times.”

The District is part of GMA 7 and the groundwater conservation districts of GMA 7 last adopted desired future conditions for the Edwards Trinity (Plateau) Aquifer on July 29, 2010. The desired future condition adopted for the District is an average drawdown of no more than seven (7) feet for the Edwards Trinity (Plateau) Aquifer, and is based on Scenario 10 of the TWDB GAM run 09-35. The Modeled Available Groundwater estimate associated with this desired future condition that applies to the District is 1,443 acre feet. The modeled available groundwater and desired future condition information for the District is in Appendix E.

B. Amount of groundwater being used within the district on an annual basis — 31 TAC §356.52 (a)(5)(B), 31 TAC §356.10(2) and Tex. Water Code §36.1071(e)(3)(B)

To estimate the annual amount of groundwater being used in the District, the District relies on TWDB’s Annual Water Use Survey data. Because responses to the TWDB survey are voluntary, the TWDB Water Use Survey Data is subject to variations in the completeness or accuracy of the data. The most recent year for which TWDB has Water Use Survey Data is 2010, and the amount of groundwater use in the District for 2010 is 800 acre feet. Details on the total amount of groundwater use based on TWDB Water Use Survey Data are attached to this plan as Appendix F.

C. Annual amount of recharge from precipitation to the groundwater resources within the district — 31 TAC §356.52 (a)(5)(C) and Tex. Water Code §36.1071(e)(3)(C)

The estimate of the annual amount of recharge from precipitation to the aquifer within the District is based on Groundwater Availability Model (“GAM”) 13-012. GAM 13-012 provides that the annual amount of recharge from precipitation to the aquifer within the District is 41,490 acre feet. GAM 13-012 was conducted by the TWDB and is the most recent GAM available to assess the hydrogeology of the groundwater resources in the District. GAM 13-012 and the recharge data received from the TWDB are attached to this plan as Appendix G.

- D. For each aquifer, the annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams, and rivers — 31 TAC §356.52 (a)(5)(D) and Tex. Water Code §36.1071(e)(3)(D)**

The estimate of the annual amount of water discharged to surface water systems by the groundwater resources of the District based on GAM 03-12 is 46,671 acre feet. GAM 13-012 and details on the amount of water discharged to surface water systems in the District are provided in Appendix G.

- E. Annual volume of flow into and out of the district within each aquifer and between aquifers in the district, if a groundwater availability model is available — 31 TAC §356.52 (a)(5)(E) and Tex. Water Code §36.1071(e)(3)(E)**

(1) Estimated annual volume of flow into the district within each aquifer in the district

The estimate of the amount of water flowing into the District within each aquifer in the District based on GAM 13-012 is 77,577 acre feet. GAM 13-012 and details on the amount of water flowing into the District within each aquifer are attached to this plan as Appendix G.

(2) Estimated annual volume of flow out of the district within each aquifer in the district

The estimates of the amount of water flowing out of the District within each aquifer in the District based on GAM 13-012 is 72,976 acre feet. GAM 13-012 and details on the amount of water flowing out of the District within each aquifer are attached to this plan as Appendix G.

(3) Estimated net annual volume of flow between each aquifer in the district

The estimate of the net annual volume of flow between each aquifer in the District based on GAM 13-012 is 0 acre feet. GAM 13-012 and details on the amount of water flowing between each aquifer in the District are attached to this plan as Appendix G.

- F. Projected surface water supply in the district, according to the most recently adopted state water plan — 31 TAC §356.52 (a)(5)(F) and Tex. Water Code §36.1071(e)(3)(F)**

The most recently adopted state water plan is the 2012 State Water Plan. This Plan indicates a projected surface water supply for the District of approximately 152 acre feet per year for years 2010 through 2060. Data received from TWDB on the amount of surface water supply in the District is attached to this plan as Appendix H.

G. Projected total demand for water in the district according to the most recently adopted state water plan — 31 TAC §356.52 (a)(5)(G) and Tex. Water Code §36.1071(e)(3)(G)

The 2012 State Water Plan indicates a projected total water demand for the area within the District of 753 acre feet per year for year 2060. Details on the total demand for water in the District based on the 2012 State Water Plan are attached to this plan as Appendix I.

VI. CONSIDER THE WATER SUPPLY NEEDS AND WATER MANAGEMENT STRATEGIES INCLUDED IN THE ADOPTED STATE WATER PLAN — Tex. Water Code §36.1071(e)(4)

The District has reviewed the 2012 State Water Plan data on water supply needs and water management strategies within the District. TWDB defines “water supply needs” as the projected water demands that are in excess of existing water supplies for a water user group or wholesale water provider. TWDB defines “recommended water management strategy” as a specific project or action to increase water supply or maximize existing supply to meet a specific need. There are no water supply needs projected for the District in the 2012 State Water Plan, which means that there are also no recommended water management strategies for the District. A table of the data showing that there are no projected water supply needs in the District is provided in Appendix J.

VII. DETAILS ON THE MANAGEMENT OF GROUNDWATER SUPPLIES IN THE DISTRICT — 31 TAC §356.52(a)(4)

The Texas Legislature has established that groundwater conservation districts are the state's preferred method of groundwater management. Chapter 36 of the Texas Water Code requires the District to work within GMA 7 to establish desired future conditions for the aquifers within the District's boundaries, have management goals that address the desired future conditions and modeled available groundwater calculations in this Management Plan, and then adopt and enforce rules to manage the groundwater resources in a way that allows the adopted desired future conditions to be achieved. The District will use the regulatory tools it has been given by Chapter 36 to properly address the groundwater issues within its boundaries, including groundwater supply and groundwater quality. While using its regulatory tools to accomplish the District's statutory objectives, the District will give strong consideration to the economic

and cultural activities which occur within the District and which rely upon the continued use of groundwater.

One of the District's objectives is to lessen the interference between wells. The District plans to establish spacing rules which require new wells to be spaced a certain distance from existing or previously permitted wells. Another way the District can work to lessen interference between wells is to require all existing and new wells to register with the District once the District develops permanent rules. This requirement will allow the District to have information on the location and proximity of all wells within its boundaries.

The District intends to help prevent the contamination of groundwater from abandoned and deteriorated water wells. Wells that have been abandoned or have not been properly maintained can cause surface contamination to quickly reach the groundwater resources of the District. To address this issue, the District is planning to require that all abandoned, deteriorated, or replaced wells be plugged in compliance with the Water Well Drillers and Pump Installers Rules of the Texas Department of Licensing and Regulation. The District will also require capping of water wells that well owners plan to use at a later date. This will likely help to eliminate waste, prevent pollution, and stop future deterioration of well casing.

The District also plans to use the regulatory tools granted to districts by Chapter 36 to preserve and protect the existing use of groundwater within its boundaries. The Texas Legislature gives the District the authority to protect existing users of groundwater, which are those individuals or entities currently invested in and using groundwater or the groundwater resources within the District for a beneficial purpose. The Texas Legislature also provides the authority to preserve historic use by historic users, which are those individuals or entities who used groundwater beneficially in the past. The District strives to protect existing and historic use in accordance with Chapter 36, the District's rules, and the goals and objectives of this Management Plan.

In order to better manage the groundwater resources within the District's boundaries, the District may establish management zones and adopt different rules for each subdivision of an aquifer or geologic strata located in whole or in part within the boundaries of the District or each geographic area overlying a subdivision of an aquifer located in whole or in part within the boundaries of the District. As previously stated, the District will also adopt rules to regulate groundwater withdrawals by means of spacing and/or production limits. The factors to be considered in deciding whether to grant or deny a permit or limit groundwater withdrawals should include those factors set forth in Chapter 36 of the Texas Water Code and the District's rules.

VIII. ACTIONS, PROCEDURES, PERFORMANCE AND AVOIDANCE FOR PLAN IMPLEMENTATION — Tex. Water Code §36.1071(e)(2)

The District will use its Management Plan to direct the District's efforts to conserve and protect the groundwater resources within its jurisdiction. The District will make certain that all rules development, regulatory activities, and planning are consistent with this Management Plan.

The rules for the District will be developed in coordination with the management goals and technical information provided in this Management Plan. The District's rules will be consistent with the provisions of this Management Plan and Chapter 36 of the Texas Water Code. The enforcement of the rules will be driven by the hydrogeological and technical information available to the District, including the information provided in this Management Plan.

Section 36.108 of the Texas Water Code requires the District to work and plan with other groundwater conservation districts in GMA 7. The District will use this Management Plan as part of its cooperation efforts with the groundwater conservation districts in GMA 7.

IX. METHODOLOGY FOR TRACKING PROGRESS TO ACHIEVE THE DISTRICT'S MANAGEMENT GOALS — 31 TAC §356.5 (a)(4)

To track its progress in achieving its management goals and objectives, the District will prepare an annual report ("Annual Report") to be submitted to and reviewed by its Board of Directors. The Annual Report will be submitted to the Board of Directors no later than 120 days following the end of the previous calendar year. The Annual Report will address the District's performance regarding each of the management goals and objectives in this plan for the previous fiscal year. Completion of the Annual Report will begin following the end of calendar year 2015. The District will maintain a copy of the Annual Report for public review in its records after the Annual Report has been adopted by the Board of Directors.

X. DISTRICT GOALS, MANAGEMENT OBJECTIVES AND PERFORMANCE STANDARDS — 31 TAC §356.51

Each of the District's management goals, objectives, and performance standards are provided in this Section X. As required by TWDB rules, each management goal is time-based and quantifiable. For each management goal, the District has a clear management objective that is specific and provides time-based statements of future outcomes and an associated performance standard that allows the District to evaluate the effectiveness of the District's activities.

A. Providing the Most Efficient Use of Groundwater - 31 TAC §356.52 (a)(1)(A) and Tex. Water Code §36.1071(a)(1).

1. Objective: The District's rules will require the registration of all existing and new wells within the District's boundaries. The District will establish a well registration process in the District's rules.

Performance Standard: The District Board will review and discuss the number of existing and new wells registered with the District during at least one meeting of the Board each year.

2. Objective: The District's rules will require permits for all groundwater use located in the District that is considered to be non-exempt from the District's permitting requirements based upon Chapter 36 of the Texas Water Code and the District's rules. The District will establish a permitting process in the District's rules.

Performance Standard: The District will accept and process permit applications for all non-exempt groundwater use pursuant to the permitting process described in the District rules. The District Board will review and discuss the number of permit applications accepted and processed by the District during at least one meeting of the Board each year.

B. Controlling and Preventing Waste of Groundwater - 31TAC §356.52 (a)(1)(B) and Tex. Water Code §36.1071(a)(2)

1. Objective: Each year the District will provide information to the public on reducing and preventing the waste of groundwater. The District will use one of the methods set forth below to provide information to the public:
 - a. offer public presentations on groundwater issues, including waste prevention;
 - b. sponsor an educational program or course;
 - c. distribute literature packets or brochures;
 - d. provide information on the District's web site addressing the prevention of waste; or
 - e. submit newspaper articles to the newspapers of general circulation within the District for publication.

Performance Standard: The District will provide information to the public on reducing and preventing the waste of groundwater at least once each year.

2. Objective: The District will prohibit waste as defined by Chapter 36 of the Texas Water Code within its boundaries and will implement this prohibition through its rules.

Performance Standard: The District Board will review and discuss the number of well owners who violated the District's prohibition on waste and any action taken by the District during at least one Board meeting each year.

C. Addressing Conjunctive Surface Water Management Issues – 31 TAC §356.52 (a)(1)(D) and Tex. Water Code §36.1071(a)(4)

1. Objective: The District will send a District representative to attend meetings of the Far West Texas Regional Water Planning Group ("Region E").

Performance Standard: A representative of the District will attend at least one Region E meeting each calendar year and will provide an update to the District Board at a District Board meeting.

E. Addressing Natural Resource Issues which Impact the Use and Availability of Groundwater, and which are Impacted by the Use of Groundwater - 31TAC §356.52 (a)(1)(E); and Tex. Water Code §36.1071(a)(5)

1. Objective: The District will monitor water quality on an annual basis within the District by obtaining water quality samples from at least one water well in the District.

Performance Standard: The District's Annual Report will include a summary of the number of water quality samples obtained and the results of the water quality tests for each well sampled.

F. Addressing Drought Conditions - 31TAC §356.52 (a)(1)(F) and Tex. Water Code §36.1071(a)(6)

1. Objective: The District will access the updated Palmer Drought Severity Index ("PDSI") map and will check for updates to the Drought Preparedness Council Situation Report ("Situation Report") posted on the following website: <http://www.txdps.state.tx.us/dem/sitrepindex.htm>.

Performance Standard: The District will review and discuss current drought conditions based on information from PDSI maps and Situation Reports during at least one Board meeting each year.

G. Addressing Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, or Brush Control, where Appropriate and Cost Effective - 31TAC §356.52 (a)(1)(G) and Tex. Water Code §36.1071(a)(7).

1. Objective: The District will provide information to the public on water conservation by one of the following methods:
 - a. distribute literature packets or brochures within the District;
 - b. provide information to the public on the District's web site;
 - c. conduct public presentations;
 - d. submit newspaper articles to newspapers of general circulation in the District for publication; or
 - e. present exhibits at local public events.

Performance Standard: The District will provide information to the public on water conservation at least once each year.

2. Objective: The District will promote rainwater harvesting by providing information to the public by one of the following methods:
 - a. distribute literature packets or brochures within the District;
 - b. provide information to the public on the District's web site;
 - c. conduct public presentations;
 - d. submit newspaper articles to newspapers of general circulation in the District for publication; or
 - e. present exhibits at local public events.

Performance Standard: The District will provide information on rainwater harvesting to the public at least once each year.

3. Objective: The District will inform the public about the benefits of brush control by one of the following methods:
 - a. distribute literature packets or brochures within the District;
 - b. provide information to the public on the District's web site;
 - c. conduct public presentations;
 - d. submit newspaper articles to newspapers of general circulation in the District for publication; or
 - e. present exhibits at local public events.

Performance Standard: The District will provide information to the public on brush control at least once each year.

G. Addressing in a Quantitative Manner the Desired Future Conditions of the Groundwater Resources - 31TAC §356.52(a)(1)(H) and Tex. Water Code § 36.1071(a)(8).

1. Objective – The District will develop a groundwater well network to monitor water well levels within the District. The District will work with

the TWDB, the United States Geological Survey, and any other applicable agencies and develop a plan to utilize data from existing monitoring wells in the District for purposes of monitoring water levels. The District will also develop a plan for adding new monitoring wells into its monitoring network. The District will take periodic readings from the monitoring wells in its monitoring well network and will utilize the information to help implement its regulatory and permitting program. The District will use the data received from its monitoring well network to monitor water level trends and actual achievement of its desired future conditions.

Performance Standard – Upon development of the District’s monitoring well network, a summary of the District’s monitoring well network, including the number and general location of each of the wells in the network, will be included in the District’s Annual Report.

2. Objective – Upon development of the District’s monitoring well network, the District will conduct water level measurements from at least 50% of the wells in the network on an annual basis.

Performance Standard – The District’s Annual Report will evaluate water level measurements taken during the previous calendar year and will include a discussion of the water levels and progress towards achieving the District’s desired future condition.

3. Objective – After the District adopts permanent rules, the District will monitor estimates of non-exempt groundwater production within the District for use in evaluating achievement of the desired future condition.

Performance Standard – After the District adopts permanent rules, the District will provide an update on the estimates of non-exempt groundwater production within the District and will include a discussion of the estimates in light of the desired future condition.

XI. MANAGEMENT GOALS DETERMINED NOT APPLICABLE TO THE DISTRICT

- A. Addressing Precipitation Enhancement - 31 TAC §356.52(a)(1)(G) and Tex. Water Code § 36.1071(a)(7).**

The District recognizes the significant expense associated with precipitation enhancement programs and is currently unable to develop a precipitation enhancement program for this reason.

- B. Addressing Recharge Enhancement – 31 TAC §356.52(a)(1)(G) and Tex. Water Code §36.1071(a)(7).**

Recharge enhancement is not an appropriate goal for the District at this time. The District was confirmed by the voters in November 2012 and the costs associated with recharge enhancement make such an effort cost-prohibitive for the District at this time.

C. Controlling and Preventing Subsidence – 31 TAC 356.52(a)(1)(C).

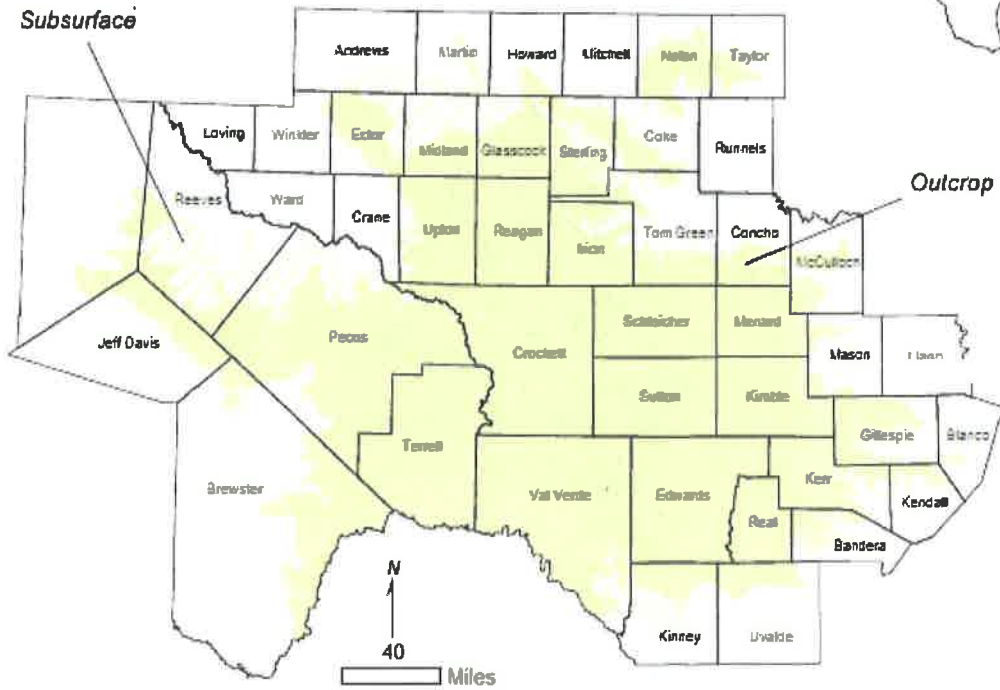
The District has not been advised as to any subsidence issues that exist within the boundaries of the District. Therefore, this management goal is not applicable.

APPENDICES LIST

- Appendix A Diagram of the Edwards Trinity (Plateau) Aquifer
- Appendix B Public Notices
- Appendix C Board Resolution Adopting Management Plan
- Appendix D Evidence of Coordination with Surface Water Management Entities
- Appendix E Information on Modeled Available Groundwater / Desired Future Conditions (31 TAC §356.52(a)(5)(A) / Tex. Water Code §36.1071(e)(3)(A))
- Appendix F Information on Water Use (31 TAC §§356.52(a)(5)(B) and 356.10(2) / Tex. Water Code §36.1071(e)(3)(B))
- Appendix G Information in GAM 13-012 on Recharge, Volume of Water that Discharges to Surface Water, and Annual Volume of Flow Into the District, Out of the District, and Between Aquifers in the District (31 TAC §§356.52(a)(5)(C)-(E) / Tex. Water Code §§36.1071(e)(3)(C)-(E))
- Appendix H Information on Projected Surface Water Supplies (31 TAC §356.52(a)(5)(F) / Tex. Water Code §36.1071(e)(3)(F))
- Appendix I Information on Projected Total Demand for Water (31 TAC §356.52(a)(5)(G) / Tex. Water Code §36.1071(e)(3)(G))
- Appendix J Information on Water Supply Needs in the District (Tex. Water Code §36.1071(e)(4))

APPENDIX A

Edwards-Trinity (Plateau) Aquifer



APPENDIX B

TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT
NOTICE OF HEARING ON DISTRICT MANAGEMENT PLAN
JULY 25, 2013

Notice is hereby given that the Board of Directors of the Terrell County Groundwater Conservation District ("District") will hold a public hearing on Thursday, July 25, 2013, beginning at 5:00 p.m. at the Commissioners Courtroom, Terrell County Courthouse, 105 East Hackberry, Sanderson, Texas 79848, to discuss, consider, receive public comments, and potentially act upon adoption of the District Management Plan.

All interested members of the public are invited to attend. At the conclusion of the hearing or any time or date thereafter, the proposed Management Plan may be adopted in the form presented or as amended based upon comments received from the public, the Texas Water Development Board, District staff, attorneys, consultants, or members of the Board of Directors without any additional notice. Any person who desires to appear at the hearing and present comment or other information on the proposed Management Plan may do so in person, by counsel, or both. Comments may be presented verbally or in written form. Limits may be placed on the amount of time that each person is allowed to present verbal comments. The hearing posted in this notice may be recessed from day to day or continued where appropriate.

A copy of the proposed Management Plan may be requested by email to ezoch@lglawfirm.com and may be reviewed or copied at the Terrell County Clerk's office, 105 East Hackberry, Sanderson, Texas 79848. Any person who wishes to receive more detailed information on this notice should contact Erin Zoch at (512) 322-5843.

The District is committed to compliance with the Americans with Disabilities Act (ADA). Any person with a disability who needs special accommodations should call (512) 322-5843 at least 24 hours in advance if accommodation is needed.

No. _____
FILED: TIME 2:20 p.m.

JUL 02 2013
Martha Allan
CLERK, COUNTY COURT, TERRELL CO., TEXAS

BY: *Brittany Livers* DEPUTY

Terrell County News Leader

412 E. Oak, P. O. Box 99
Sanderson, TX 79848
432/345-2676
editor@tcnewsleader.com

Affidavit of Publication

State of Texas
County of Terrell

I, JIM STREET, authorized to sign on behalf of the *Terrell County News Leader*, under oath state the following is true and correct.

The *Terrell County News Leader* is a general circulation newspaper, which is published weekly in Sanderson, Terrell County, Texas. The attached notice was published on the date(s) indicated below.

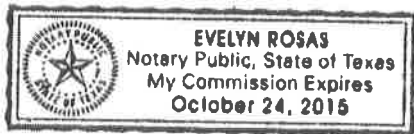
Date(s) of publication: July 5, 2013.

Name and Address of advertiser:

Attn: ERIN Zoch
LLOYD GOSSELINK
816 Congress Avenue, Ste 1900
AUSTIN TEXAS 78701

AUTHORIZED SIGNATURE

TITLE: EDITOR/PUBLISHER



SUBSCRIBED AND SWORN TO
BEFORE ME ON THE

5 OF July, 2013.

Evelyn Rosas
NOTARY SIGNATURE

DIRECTORY CLASSIFIEDS & SERVICE

BUSINESS & SERVICE DIRECTORY

ACCOMMODATIONS

GRANNY'S GUEST HOUSE
3 Bedroom/1 Bath House. Kitchen, Porch. Available for overnight guests, club meetings and luncheons. 705 Fourth Street. 432/345-2949.

AUTO BODY

SPEEDY'S BODY SHOP
Auto Body & Auto Glass. For Estimates Call 432/345-2574 or Stop by 211 E. Oak Street in Sanderson.

AD SPACE FOR SALE

THIS AD SPACE IS FOR SALE. ADVERTISE YOUR BUSINESS IN THE NEWS LEADER TODAY BY CALLING (432)345-2676.

DOZER SERVICE

RARE EARTH dozer service. Specializing in ranch roads, clearing and dirt tanks, etc. Call Marty Nemeec at home 432-837-7386 or cell 432-923-2825.

FIREWOOD

OAK & MESQUITE FIREWOOD, \$350.00 delivered, \$300.00 you pick up, \$185 for 1/4 cord. Call Carlos Galvan 432-238-8861.

THIS AD SPACE

FOR SALE, CALL 345-2676

HELP WANTED

Terrell County Road & Bridge Department is accepting applications for full-time Tech-1/Level-2. Applications can be obtained in the County Clerk's office at the Courthouse during regular business hours. Terrell County is an Equal Opportunity Employer. Applications will be received through 5:00 p.m., July 12, 2013.

GIFTS & FLOWERS

'TIS THE REASON Gifts for all occasions and beautiful flowers. Free delivery in town. 220 E. Oak. 432/345-2222

PROPANE SERVICE

SANDERSON PROPANE COMPANY
Propane gas sales and service. Located on Oak and Wilson Street. 432/345-2464.

PROPANE SERVICE

WTG FUELS
"Now servicing Sanderson and surrounding Counties on Wednesday" For delivery please contact Marathon Office (432)386-4422. *No Minimum*

REAL ESTATE

Schoolmaster Realty and Auctions. Serving Sanderson, Terrell County and West of the Pecos. Kenn Norris, Broker/Auctioneer. Direct (432)940-9425 * (432)345-2276 View our listings at www.sandersontxrealestate.com
RESIDENTIAL
COMMERCIAL
LAND

WELL SERVICE

PLATEAU WATER WELL, Fort Stockton, Texas. Windmill and submersible pumps. 432/336-8457 or 432/290-5578.

FOR SALE

1994 FORD PICKUP, F150 XL, 4 wheel drive, Nice Interior, \$3500 Firm, call 432/345-2344 for info.

HOUSE FOR SALE

112 **Cargile**
Three bedroom, two full baths, double carport, storage shed with 4-H pens, with appliances. Must see. 361/815-5501

Classified Advertising Rates

The rate for Classified Advertising is 20 cents per word with a \$4.00 minimum. There is an additional \$3.00 for Display Classified ads.

Rates for Business & Service Directory ads are \$1.75 per week for in-town advertisers and \$2.25 per week for out-of-town advertisers for a minimum of eight weeks. 25 word limit... Additional words are 20 cents. Obituaries are 20 cents per word.

SANDERSON REAL ESTATE, Inc.
122 W. Oak
432-345-2969

Lloyd Gully - Broker

HOMES

NEWLY REMODELED ADOBE

2 Bdrm, 1.5 Bath, approx. 1400sqft \$89,500

3 BDRM, 2 BATH HOME On Hwy 90 Just west of Sanderson \$54,000

ASK ABOUT HOMES FOR SALE

OFFICE

OFFICE FOR LEASE at 116 W. Oak, Sanderson \$250 per month

LAND

Sizes from 50 acres and up some with SELLER FINANCING

See all of our listings at www.sre-inc.com

HOUSE FOR SALE

HOUSE 3bd/2b/2car garage, approx. 2100 sq.ft., brick home; large lot, beautiful trees, grand patio, eat-in kitchen, formal dining. 1000 N. Kniveton, Iraan, Tx. Contact: Dana @432-557-9711; Carl @432-432-302-1020

505 **KERR AVE** Large 3 BR, 2BA House, established fenced front yard. Serious inquires only, call 979/289-0364

PUBLIC NOTICE

TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT NOTICE OF HEARING ON DISTRICT MANAGEMENT PLAN JULY 25, 2013

Notice is hereby given that the Board of Directors of the Terrell County Groundwater Conservation District ("District") will hold a public hearing on Thursday, July 25, 2013, beginning at 5:00 p.m. at the Commissioners Courtroom, Terrell County Courthouse, 105 East Hackberry, Sanderson, Texas 79848, to discuss, consider, receive public comments, and potentially act upon adoption of the District Management Plan.

All interested members of the public are invited to attend. At the conclusion of the hearing or any time or date thereafter, the proposed Management Plan may be adopted in the form presented or as amended based upon comments received from the public, the Texas Water Development Board, District staff, attorneys, consultants, or members of the Board of Directors without any additional notice. Any person who desires to appear at the hearing and present comment or other information on the proposed Management Plan may do so in person, by counsel, or both. Comments may be presented verbally or in written form. Limits may be placed on the amount of time that each person is allowed to present verbal comments. The hearing posted in this notice may be recessed from day to day or continued where appropriate.

A copy of the proposed Management Plan may be requested by email to erzoch@slawfirm.com and may be reviewed or copied at the Terrell County Clerk's office, 105 East Hackberry, Sanderson, Texas 79848. Any person who wishes to receive more detailed information on this notice should contact Erin Zoch at (512) 322-5843.

The District is committed to compliance with the Americans with Disabilities Act (ADA). Any person with a disability who needs special accommodations should call (512) 322-5843 at least 24 hours in advance if accommodation is needed.

Who to contact

For help or complaints to government officials, here are the people to contact at the various levels.

President Barack Obama The White House Washington, D.C. 20500 202/456-1414	Governor Rick Perry P. O. Box 12482 Austin, TX 78701 512/463-2000
US Sen. John Cornyn 517 Hart Office Building Washington, D.C. 20510 202/224-2934	Sen. Carlos Uresti P. O. Box 12068, Capitol Station Austin, Texas 78711 512/463-0119
US Sen. Ted Cruz 517 Hart Office Building Washington, D.C. 20510 202/224-2934	State Rep. Poncho Nevarez P. O. Box 2910 Austin, Texas 78768 512/463-0566
US Rep. Pete Gallego 431 Cannon House Office Building Washington, D.C. 20515 202/225-4511	Terrell County Judge Chago Flores P. O. Box 4810 432/345-2421
Terrell County Sheriff Clint McDonald P. O. Box 320 Sanderson, TX 79848 432/345-2525	Terrell County ISD Superintendent Gary Hamilton P. O. Box 747 Sanderson, TX 79848 432/345/2515

Support Local Businesses ... They are here for YOU!

**NOTICE OF MEETING AND PUBLIC HEARING
OF THE
TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT**

at the
**Commissioners Courtroom
Terrell County Courthouse
105 East Hackberry
Sanderson, TX 79848**

Thursday, July 25, 2013

Public Hearing on District Management Plan

The Public Hearing will begin at 5 p.m.

- 1. Call to order, declare public hearing open to the public, and take roll.**
- 2. Review and discuss draft District Management Plan.**
- 3. Public Comment (verbal comments limited to 3 minutes each; written comments may also be submitted for the Board's consideration).**
- 4. Adjourn public hearing on Management Plan or continue it to a future date.***

***At the conclusion of the public hearing or any time or date thereafter, the draft Management Plan may be adopted in the form presented or as amended based upon comments received from the public, the Texas Water Development Board, attorneys, consultants, or members of the Board of Directors without any additional notice.**

Public Meeting

The Regular Board Meeting will begin immediately upon adjournment of the above-noticed Public Hearing.

- 1. Call to order, declare meeting open to the public, and take roll.**
- 2. Discuss, consider, and act on minutes of the June 27, 2013 Board Meeting.**
- 3. Discuss, consider, and potentially act on adoption of District Management Plan.**
- 4. Discuss, consider, and act on District financial and revenue issues:**
 - a. Preparing District Budget.**
 - b. Contracting for Tax Collections.**
 - c. Setting up District Bank Depository/Account.**
- 5. Discuss, consider, and act on District Rules.**
- 6. Discuss, consider, and act on date and time for next meeting of Board of Directors.**

7. **Discuss, consider, and act on new business for next meeting agenda.**
8. **Public comment.**
9. **Adjourn.**

The above agenda schedule represents an estimate of the order for the indicated items and is subject to change at any time. These public meetings are available to all persons regardless of disability. If you require special assistance to attend the meeting, please call (512) 322-5829 at least 24 hours in advance of the meeting to coordinate any special physical access arrangements.

At any time during the meeting and in compliance with the Texas Open Meetings Act, Chapter 551, Government Code, Vernon's Texas Codes, Annotated, the Terrell County Groundwater Conservation District Board may meet in executive session on any of the above agenda items or other lawful items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gift (§551.073); personnel matters (§551.074); and deliberation regarding security devices (§551.076). Any subject discussed in executive session may be subject to action during an open meeting.

No. _____

FILED: TIME 10:50

M. Allen JUL 22 2013
CLERK, COUNTY COURT, TERRELL CO., TEXAS

BY: RJ. Brotherton DEPUTY

APPENDIX C

Resolution 2013-06

**A RESOLUTION OF THE BOARD OF DIRECTORS OF TERRELL COUNTY
GROUNDWATER CONSERVATION DISTRICT ADOPTING THE DISTRICT'S
GROUNDWATER MANAGEMENT PLAN**

WHEREAS, the Terrell County Groundwater Conservation District ("District") was created by Chapter 8837 of the Texas Special District Local Laws Code (Chapter 336, Acts of the 82nd Legislature (2011)) ("Enabling Act") and under the authority of Section 59, Article XVI of the Texas Constitution and Chapter 36 of the Texas Water Code;

WHEREAS, under the direction of the Board of Directors of the District (the "Board"), and in accordance with Sections 36.1071 and 36.1072 of the Texas Water Code, and 31 Texas Administrative Code Chapter 356, the District has developed its Management Plan;

WHEREAS, as part of the process of developing its Management Plan, the District requested and received the technical assistance of the Texas Water Development Board (the "TWDB");

WHEREAS, the Board and the District's legal counsel reviewed and analyzed the District's best available data, groundwater availability modeling information, and other information and data required to be in the Management Plan;

WHEREAS, the District issued the notice in the manner required by state law and held a public hearing on July 25, 2013, to receive public and written comments on the Management Plan at the Terrell County Commissioners Courtroom, 105 East Hackberry, Sanderson, Texas 79848;

WHEREAS, the Board finds that the attached Management Plan meets all of the requirements of Chapter 36, Water Code, and 31 Texas Administrative Code Chapter 356; and

WHEREAS, the Board met in a public meeting on July 25, 2013, properly noticed in accordance with appropriate state law, and considered adoption of the attached Management Plan.

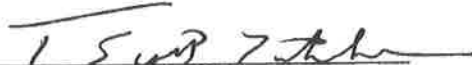
NOW, THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT THAT:

1. The above recitals are true and correct.
2. The Board of Directors for the District hereby adopts the attached Management Plan as the Management Plan for the District;

3. The Board of Directors and the District's legal counsel are further authorized to take all steps necessary to implement this resolution and submit the Management Plan, with any changes approved by the Board of Directors based on comments received from the public, the Board of Directors, the District's legal counsel, or the TWDB, to the TWDB for approval of the Management Plan;
4. The Board of Directors and the District's legal counsel are further authorized to take any and all action necessary to coordinate with the TWDB as may be required in furtherance of TWDB's approval pursuant to the provisions of Section 36.1072 of the Texas Water Code;
5. The President of the Board of Directors and the District's legal counsel are further authorized to take all necessary action to implement this resolution; and
6. This resolution shall take effect immediately upon adoption.

PASSED AND APPROVED THE 25th DAY OF JULY, 2013.

ATTEST:


Board President


Board Secretary

APPENDIX D

August 26, 2013

Mr. Jason Wrinkle
Desert Program Manager
The Nature Conservancy - Texas
P.O. Box 150
Dryden, Texas 78851

RE: Terrell County Groundwater Conservation District Management Plan

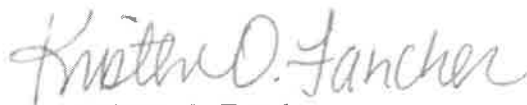
Dear Mr. Wrinkle:

Enclosed please find a copy of the Terrell County Groundwater Conservation District ("District") Management Plan developed and adopted in accordance with Chapter 36 of the Texas Water Code and Title 31 Texas Administrative Code Chapter 356. The District's mission is to conserve, preserve, and protect the quality and quantity of the groundwater resources for the citizens within Terrell County. The Texas Legislature created the District in 2011 and the voters of Terrell County confirmed the creation of the District on November 6, 2012.

The District Management Plan is the product of a public planning process that culminated in the adoption of the plan at the July 25, 2013, District Board Meeting. The District submits the enclosed Management Plan to you in accordance with Section 36.1071(a) of the Texas Water Code in an effort to coordinate with you on the District's management goals.

Please feel free to contact me if you have any questions or comments regarding the enclosed District Management Plan or other District activities.

Sincerely,



Kristen O. Fancher
Attorney for the District

Enclosure: Copy of District's Adopted Management Plan

August 26, 2013

Mr. Tom Lowrance, Operator
Terrell County WCID 1
P.O. Box 569
Sanderson, Texas 79848

RE: Terrell County Groundwater Conservation District Management Plan

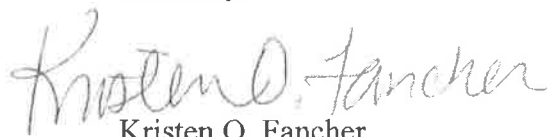
Dear Mr. Lowrance:

Enclosed please find a copy of the Terrell County Groundwater Conservation District ("District") Management Plan developed and adopted in accordance with Chapter 36 of the Texas Water Code and Title 31 Texas Administrative Code Chapter 356. The District's mission is to conserve, preserve, and protect the quality and quantity of the groundwater resources for the citizens within Terrell County. The Texas Legislature created the District in 2011 and the voters of Terrell County confirmed the creation of the District on November 6, 2012.

The District Management Plan is the product of a public planning process that culminated in the adoption of the plan at the July 25, 2013, District Board Meeting. The District submits the enclosed Management Plan to you in accordance with Section 36.1071(a) of the Texas Water Code in an effort to coordinate with you on the District's management goals.

Please feel free to contact me if you have any questions or comments regarding the enclosed District Management Plan or other District activities.

Sincerely,



Kristen O. Fancher
Attorney for the District

Enclosure: Copy of District's Adopted Management Plan

APPENDIX E

**GAM RUN 10-043 MAG (VERSION 2):
MODELED AVAILABLE GROUNDWATER FOR THE
EDWARDS-TRINITY (PLATEAU), TRINITY, AND
PECOS VALLEY AQUIFERS IN
GROUNDWATER MANAGEMENT AREA 7**

by Jerry Shi, Ph.D., P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5076
November 12, 2012



The seal appearing on this document was authorized by Jianyou (Jerry) Shi, P.G. 11113 on November 12, 2012.

This page is intentionally blank.

GAM RUN 10-043 MAG (VERSION 2): MODELED AVAILABLE GROUNDWATER FOR THE EDWARDS-TRINITY (PLATEAU), TRINITY, AND PECOS VALLEY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7

by Jerry Shi, Ph.D., P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-5076
November 12, 2012

EXECUTIVE SUMMARY:

The modeled available groundwater values for Groundwater Management Area 7 for the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers are summarized in Table 1. These values are also listed by county (Table 2), river basin (Table 3), and regional water planning area (Table 3). The modeled available groundwater values for the relevant aquifers in Groundwater Management Area 7 were initially based on Scenario 10 of GAM Run 09-035. In GAM Run 09-035, the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers were simulated and reported together. Though the desired future condition statement, specifying an average drawdown of 7 feet, only explicitly references the Edwards-Trinity (Plateau) Aquifer, it is the intent of the districts to also incorporate the Trinity and Pecos Valley aquifers. This was confirmed by Ms. Caroline Runge of Menard Underground Water District acting on behalf of Groundwater Management Area 7 in an e-mail to Ms. Sarah Backhouse at the Texas Water Development Board on June 6, 2012. The results here, therefore, contain information for each of these three aquifers. The modeled available groundwater from the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers in Groundwater Management Area 7 that achieves the requested desired future conditions is approximately 449,400 acre-feet per year from 2010 to 2060.

Earlier draft versions of this report showed modeled available groundwater for portions of the Edwards-Trinity (Plateau) Aquifer within the Lipan-Kickapoo Water Conservation District, the Lone Wolf Groundwater Conservation District, the Hickory Underground Water Conservation District No. 1, and the portion of the Trinity Aquifer within the Uvalde Underground Water Conservation District. However, Groundwater Management Area 7 declared those counties "not relevant" for joint planning purposes. Since modeled available groundwater only applies to areas with a specified desired future condition, we updated this report to depict modeled available groundwater only in counties with specified desired future conditions.

The modeled available groundwater for Kinney County Groundwater Conservation District previously reported in Draft GAM Run 10-043 MAG (Shi and Oliver, 2011) dated January 26, 2011, has been updated in a new model run and is presented in this report. The new model run is an update of Scenario 3 of Groundwater Availability Modeling Task 10-027, which meets the desired future conditions for the area adopted by the districts of Groundwater Management Area 7.

REQUESTOR:

Mr. Allan Lange of Lipan-Kickapoo Water Conservation District on behalf of Groundwater Management Area 7.

DESCRIPTION OF REQUEST:

In a letter dated August 13, 2010, Mr. Lange provided the Texas Water Development Board (TWDB) with the desired future conditions of the Edwards-Trinity (Plateau) Aquifer in Groundwater Management Area 7. On June 6, 2012 TWDB clarified through e-mail with Ms. Caroline Runge of Menard Underground Water District acting on behalf of Groundwater Management Area 7 that the intent of the districts within Groundwater Management Area 7 was to also incorporate the Trinity and Pecos Valley aquifers, except where explicitly stated as non-relevant in the desired future conditions of the Edwards-Trinity (Plateau) Aquifer. The desired future conditions for the aquifer[s], as described in Resolution # 07-29-10-9 and adopted July 29, 2010 by the groundwater conservation districts within Groundwater Management Area 7, are described below:

1) An average drawdown of 7 feet for the Edwards-Trinity (Plateau)[, Pecos Valley, and Trinity] aquifer[s], except for the Kinney County [Groundwater Conservation District], based on Scenario 10 of the TWDB [Groundwater Availability Model] run 09-35 which is incorporated in its entirety into this resolution; and

2) In Kinney County, that drawdown which is consistent with maintaining, at Las Moras Springs, an annual average flow of 23.9 [cubic feet per second] and a median flow of 24.4 [cubic feet per second] based on Scenario 3 of the Texas Water Development Board's flow model presented on July 27, 2010; and

3) the Edwards-Trinity [Aquifer] is not relevant for joint planning purposes within the boundaries of the Lipan-Kickapoo [Water Conservation District], the Lone Wolf [Groundwater Conservation District], and the Hickory Underground Water Conservation District No. 1; and

4) the Trinity (Hill Country) portion of the aquifer is not relevant for joint planning purposes within the boundaries of the Uvalde [Underground Water Conservation District] in [Groundwater Management Area] 7.

METHODS, PARAMETERS AND ASSUMPTIONS:

The desired future condition for Kinney County was evaluated in a new model run (Shi and others, 2012). The new model run is an update of Scenario 3 of Groundwater Availability Modeling (GAM) Task 10-027 (Hutchison, 2010a). Both model runs were based on the MODFLOW-2000 model developed by the TWDB to assist with the joint planning process regarding the Kinney County Groundwater Conservation District (Hutchison and others, 2011b). In both model runs, the total pumping in Kinney County, which lies within Groundwater Management Areas 7 and 10, was maintained at approximately 77,000 acre-feet per year to achieve the desired future conditions at Las Moras Springs. Details regarding this new model run are summarized in Shi and others (2012).

The desired future condition for the remaining areas in Groundwater Management Area 7 was based on Scenario 10 of GAM Run 09-035 using a MODFLOW-2000 model developed by the TWDB (Hutchison and others, 2011a). Details regarding this scenario can be found in Hutchison (2010b). In GAM Run 09-035, the Edwards-Trinity (Plateau), Trinity, Pecos Valley, and Trinity aquifers were simulated and reported together. The desired future condition statement specifying of an average drawdown of 7 feet, which is achieved in the above simulation, only explicitly references the Edwards-Trinity (Plateau) Aquifer. By stating that the above simulation is “incorporated in its entirety” into the resolution, it is the intent of the districts to also incorporate the Trinity and Pecos Valley aquifers. The results below, therefore, contain information on the Trinity and Pecos Valley aquifers in addition to the Edwards-Trinity (Plateau) Aquifer. This interpretation has been confirmed by Ms. Caroline Runge on behalf of Groundwater Management Area 7 to Ms. Sarah Backhouse at the Texas Water Development Board.

The locations of the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers are shown in Figure 1.

RESULTS:

The modeled available groundwater values from aquifers in Groundwater Management Area 7 that achieve the desired future conditions is approximately 445,000 acre-feet per year for the Edwards-Trinity (Plateau) aquifer, 2,500 acre-feet per year for the Trinity Aquifer, and 1,600 acre-feet per year for the Pecos Valley Aquifer (Tables 1, 2, and 3). These tables contain the modeled available groundwater for the aquifers subdivided by county, regional water planning area, and river basin for use in the regional water planning process. These areas are shown in Figure 2.

Tables 4, 5, and 6 show the modeled available groundwater for the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers summarized by county, regional water planning area, and river basin, respectively, within Groundwater Management Area 7.

The modeled available groundwater for the aquifers within and outside the groundwater conservation districts in Groundwater Management Area 7 where they were determined to be relevant for the purposes of joint planning are presented in Table 7. As shown in Table 7, the modeled available groundwater within the groundwater conservation districts in Groundwater Management Area 7 is approximately 370,000 acre-feet per year from 2010 to 2060.

LIMITATIONS:

The groundwater model used in developing estimates of modeled available groundwater is the best available scientific tool that can be used to estimate the pumping that will achieve the desired future conditions. Although the groundwater model used in this analysis is the best available scientific tool for this purpose, it, like all models, has limitations. In reviewing the use of models in environmental regulatory decision-making, the National Research Council (2007) noted:

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

A key aspect of using the groundwater model to develop estimates of modeled available groundwater is the need to make assumptions about the location in the aquifer where future pumping will occur. As actual pumping changes in the future, it will be necessary to evaluate the amount of that pumping as well as its location in the context of the assumptions associated with this analysis. Evaluating the amount and location of future pumping is as important as evaluating the changes in groundwater levels, spring flows, and other metrics that describe the condition of the groundwater resources in the area that relate to the adopted desired future condition.

Given these limitations, users of this information are cautioned that the modeled available groundwater numbers should not be considered a definitive, permanent description of the amount of groundwater that can be pumped to meet the adopted desired future condition. Because the application of the groundwater model was designed to address regional scale questions, the results are most effective on a regional scale. Texas Water Development Board makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor future groundwater pumping as well as whether or not they are achieving their desired future conditions. Because of the limitations of the groundwater model and the assumptions in this analysis, it is important that the groundwater conservation districts work with Texas Water Development Board to refine these modeled available groundwater numbers given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future.

GAM Run 10-043 MAG (Version 2): Modeled Available Groundwater for the Edwards-Trinity (Plateau), Trinity, and Pecos Valley aquifers in Groundwater Management Area 7

November 12, 2012

Page 7 of 15

REFERENCES:

Hutchison, William R., 2010a, GAM Task 10-027: Texas Water Development Board, GAM Task 10-027 Report, 7 p.

Hutchison, William R., 2010b, GAM Run 09-035 (version 2): Texas Water Development Board, GAM Run 09-035 Report, 10 p.

Hutchison, William R., Jones, Ian, and Anaya, Roberto, 2011a, Update of the Groundwater Availability Model for the Edwards-Trinity (Plateau) and Pecos Valley Aquifers of Texas, Texas Water Development Board, 59 p.

Hutchison, William R., Shi, Jerry, and Jigmond, Marius, 2011b, Groundwater Flow Model of the Kinney County Area, Texas Water Development Board, 138 p.

Shi, Jerry, Ridgeway, Cindy, and French, Larry, 2012, Draft GAM Task Report 12-002: Modeled Available Groundwater in Kinney County (April 11, 2012).

Shi, Jerry and Oliver, Wade, 2011, GAM Run 10-043 MAG (January 26, 2011).

Texas Water Development Board, 2007, Water for Texas - 2007—Volumes I-III; Texas Water Development Board Document No. GP-8-1, 392 p.

November 12, 2012

Page 12 of 15

TABLE 6. MODELED AVAILABLE GROUNDWATER FOR THE EDWARDS-TRINITY (PLATEAU), TRINITY, AND PECOS VALLEY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7 BY RIVER BASIN FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR.

River Basin	Year					
	2010	2020	2030	2040	2050	2060
Brazos	633	633	633	633	633	633
Colorado	207,392	207,392	207,392	207,392	207,392	207,392
Guadalupe	139	139	139	139	139	139
Nueces	10,527	10,527	10,527	10,527	10,527	10,527
Rio Grande	230,720	230,720	230,720	230,720	230,720	230,720
Total	449,411	449,411	449,411	449,411	449,411	449,411

TABLE 7. MODELED AVAILABLE GROUNDWATER FOR THE EDWARDS-TRINITY (PLATEAU), TRINITY, AND PECOS VALLEY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7 BY GROUNDWATER CONSERVATION DISTRICT FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR.

Groundwater Conservation District	Year					
	2010	2020	2030	2040	2050	2060
Coke County UWCD	998	998	998	998	998	998
Crockett County GCD	4,685	4,685	4,685	4,685	4,685	4,685
Glasscock GCD	106,075	106,075	106,075	106,075	106,075	106,075
Hill Country UWCD	4,996	4,996	4,996	4,996	4,996	4,996
Irion County WCD	2,435	2,435	2,435	2,435	2,435	2,435
Kimble County GCD	1,283	1,283	1,283	1,283	1,283	1,283
Kinney County GCD	70,338	70,338	70,338	70,338	70,338	70,338
Menard County UWD	2,194	2,194	2,194	2,194	2,194	2,194
Middle Pecos GCD	117,386	117,386	117,386	117,386	117,386	117,386
Plateau UWC and SD	8,050	8,050	8,050	8,050	8,050	8,050
Real-Edwards CRD	13,167	13,167	13,167	13,167	13,167	13,167
Santa Rita UWCD	27,416	27,416	27,416	27,416	27,416	27,416
Sterling County UWCD	2,497	2,497	2,497	2,497	2,497	2,497
Sutton County UWCD	6,438	6,438	6,438	6,438	6,438	6,438
Uvalde County UWCD (Edwards-Trinity Plateau)	1,635	1,635	1,635	1,635	1,635	1,635
Wes-Tex GCD	693	693	693	693	693	693

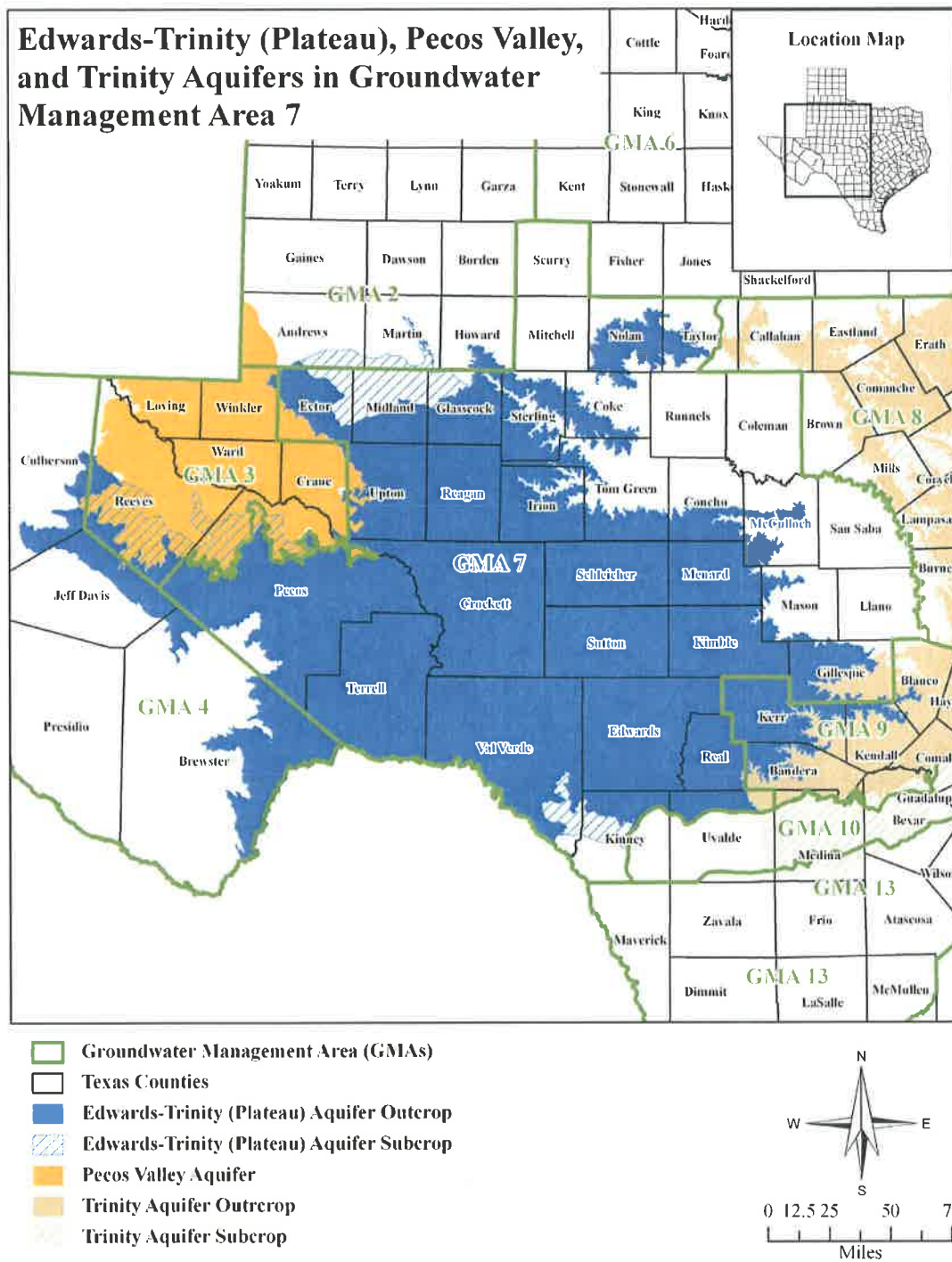


FIGURE 1. MAP SHOWING THE BOUNDARY OF THE EDWARDS-TRINITY (PLATEAU), PECOS VALLEY, AND TRINITY AQUIFERS ACCORDING TO THE 2007 STATE WATER PLAN (TWDB, 2007).

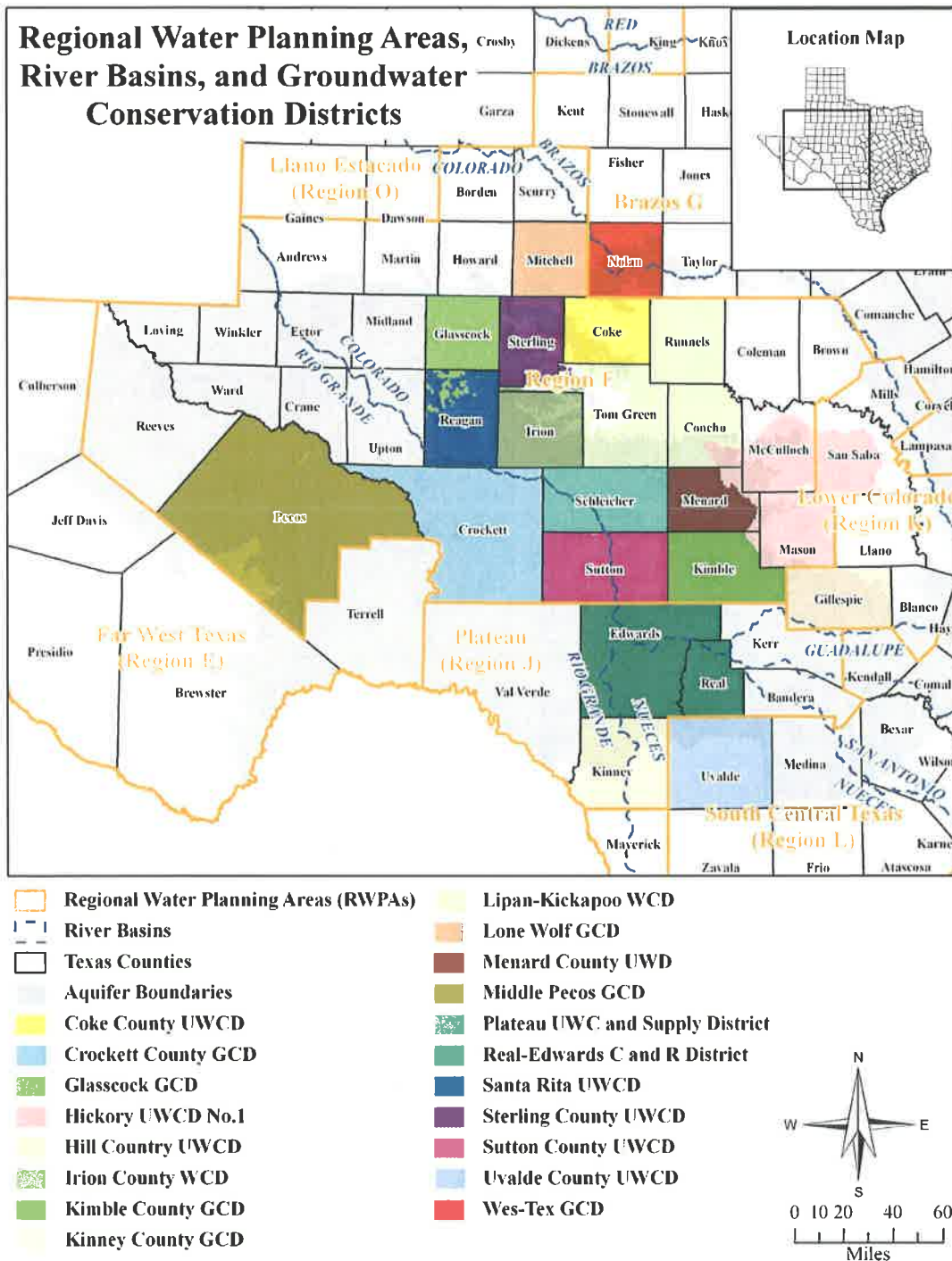


FIGURE 2. MAP SHOWING REGIONAL WATER PLANNING AREAS, GROUNDWATER CONSERVATION DISTRICTS, COUNTIES, AND RIVER BASINS IN AND NEIGHBORING GROUNDWATER MANAGEMENT AREA 7.

APPENDIX F

Estimated Historical Water Use

TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water historical use estimates are currently unavailable for calendar years 2005, 2011 and 2012. TWDB staff anticipates the calculation and posting of these estimates at a later date.

TERRELL COUNTY

All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	360	0	0	257	5	500	1,122
	SW	0	0	0	0	0	0	0
1980	GW	372	0	0	450	0	557	1,379
	SW	0	0	0	182	0	29	211
1984	GW	346	0	0	242	0	415	1,003
	SW	0	0	0	0	0	21	21
1985	GW	389	0	0	400	0	368	1,157
	SW	0	0	0	0	0	19	19
1986	GW	353	0	0	400	0	449	1,202
	SW	0	0	0	0	0	23	23
1987	GW	326	0	0	400	16	389	1,131
	SW	0	0	0	0	0	20	20
1988	GW	344	0	0	600	12	435	1,391
	SW	0	0	0	0	0	22	22
1989	GW	360	0	0	389	42	382	1,173
	SW	0	0	0	0	0	20	20
1990	GW	324	0	0	388	42	385	1,139
	SW	0	0	0	0	0	20	20
1991	GW	324	0	0	388	26	411	1,149
	SW	0	0	0	0	0	22	22
1992	GW	327	0	0	388	32	357	1,104
	SW	0	0	0	0	0	19	19
1993	GW	312	0	0	494	32	327	1,165
	SW	0	0	0	0	0	17	17
1994	GW	314	0	0	494	32	324	1,164
	SW	0	0	0	0	0	17	17
1995	GW	240	0	0	494	32	302	1,068
	SW	0	0	0	0	0	16	16
1996	GW	263	0	0	494	32	248	1,037
	SW	0	0	0	0	0	13	13
1997	GW	203	0	0	494	27	260	984

Estimated Historical Water Use and 2012 State Water Plan Dataset,

Terrell County Groundwater Conservation District

April 3, 2013

Page 3 of 8

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

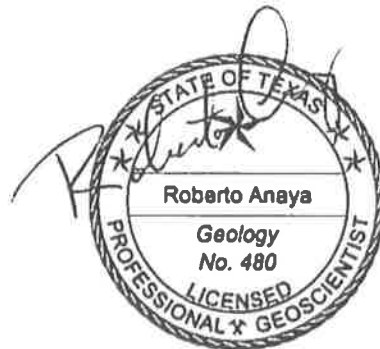
Groundwater and surface water historical use estimates are currently unavailable for calendar years 2005, 2011 and 2012. TWDB staff anticipates the calculation and posting of these estimates at a later date.

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1997	SW	0	0	0	0	0	14	14
1998	GW	237	0	0	494	26	309	1,066
	SW	0	0	0	0	0	16	16
1999	GW	222	0	0	494	26	335	1,077
	SW	0	0	0	0	0	18	18
2000	GW	228	0	0	0	26	292	546
	SW	0	0	0	80	0	15	95
2001	GW	210	0	0	0	21	280	511
	SW	0	0	0	184	0	15	199
2002	GW	186	0	0	0	21	234	441
	SW	0	0	0	207	0	13	220
2003	GW	181	0	0	0	21	189	391
	SW	0	0	0	716	0	10	726
2004	GW	149	0	0	0	21	207	377
	SW	0	0	0	754	0	11	765
2006	GW	172	5	0	0	0	211	388
	SW	0	0	0	545	0	4	549
2007	GW	172	4	0	340	0	170	686
	SW	0	0	0	23	0	4	27
2008	GW	178	4	0	0	0	193	375
	SW	0	0	0	162	0	4	166
2009	GW	197	4	0	205	104	206	716
	SW	0	0	0	545	23	4	572
2010	GW	204	0	0	230	184	182	800
	SW	0	0	0	745	40	4	789

APPENDIX G

GAM RUN 13-012: TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN

by Roberto Anaya, P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-6115
April 23, 2013



The seal appearing on this document was authorized by Roberto Anaya, P.G. 480 on April 23, 2013.

This page is intentionally blank

GAM RUN 13-012: TERRELL COUNTY GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN

by Roberto Anaya, P.G.
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-6115
April 23, 2013

EXECUTIVE SUMMARY:

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

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

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

The groundwater management plan for the Terrell County Groundwater Conservation District should be adopted by the district on or before August 8, 2015 and submitted to the executive administrator of the TWDB on or before September 7, 2015.

This report discusses the methods, assumptions, and results from model runs using the groundwater availability model (version 1.01) for the Edwards-Trinity (Plateau) and Pecos Valley aquifers (Anaya and Jones, 2009). Table 1 summarizes the groundwater availability model data required by the statute, and Figure 1 shows the area of the model from which the values in the table were extracted. GAM Run 13-012 meets current standards including a refinement of using the extent of the official aquifer boundaries within the district. If after review of the figures, Terrell County Groundwater Conservation District determines that the district boundaries used in the assessment do not reflect current conditions, please notify the Texas Water Development Board immediately. Per statute TWDB is required to provide the districts with data from the official groundwater availability models; however, the TWDB has also approved, for planning purposes, an alternative model that can have water budget information extracted for the district. The alternative model is the 1-layer alternative model for the Edwards-Trinity (Plateau) and Pecos Valley aquifers (Hutchison and others, 2011). Please contact the author of this report if a comparison report using this model is desired.

METHODS:

In accordance with the provisions of the Texas State Water Code, Section 36.1071, Subsection (h), the groundwater availability model for the Edwards-Trinity (Plateau) and Pecos Valley aquifers was run for this analysis. Terrell County Groundwater Conservation District Water budgets for the historical model periods were extracted using ZONEBUDGET Version 3.01 (Harbaugh, 2009) The average annual water budget values for recharge, surface water outflow, inflow to the district, outflow from the district, net inter-aquifer flow (upper), and net inter-aquifer flow (lower) for the portions of the aquifers located within the district are summarized in this report.

PARAMETERS AND ASSUMPTIONS:

Edwards-Trinity (Plateau) Aquifer

- We used version 1.01 of the groundwater availability model for the Edwards-Trinity (Plateau) and Pecos Valley aquifers. See Anaya and Jones (2009) for assumptions and limitations of the groundwater availability model for the Edwards-Trinity (Plateau) and Pecos Valley aquifers. The Pecos Valley Aquifer does not occur within Terrell County and therefore no groundwater budget values are included for it in this report.
- This groundwater availability model includes two layers within Terrell County which generally represent the Edwards Unit (Layer 1) and the Trinity Unit (Layer 2) of the Edwards-Trinity (Plateau) Aquifer. Individual water budgets for the District were determined for the Edwards-Trinity (Plateau) Aquifer (Layer 1 and Layer 2 combined).
- For Terrell County, groundwater in the Edwards-Trinity (Plateau) Aquifer is generally fresh with total dissolved solids of less than 500 milligrams per liter except for a small area near the town of Sheffield along the Pecos River in the northwestern part of the county (Reese and Buckner, 1980).
- The model was run with MODFLOW-96 (Harbaugh and McDonald, 1996).

RESULTS:

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

- Precipitation recharge—The areally distributed recharge sourced from precipitation falling on the outcrop areas of the aquifers (where the aquifer is exposed at land surface) within the district.
- Surface water outflow—The total water discharging from the aquifer (outflow) to surface water features such as streams, reservoirs, and drains (springs).
- Flow into and out of district—The lateral flow within the aquifer between the district and adjacent counties.

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

The information needed for the District’s management plan is summarized in Table 1. It is important to note that sub-regional water budgets are not exact. This is due to the size of the model cells and the approach used to extract data from the model. To avoid double accounting, a model cell that straddles a political boundary, such as a district or county boundary, is assigned to one side of the boundary based on the location of the centroid of the model cell. For example, if a cell contains two counties, the cell is assigned to the county where the centroid of the cell is located (Figure 1).

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

<i>Management Plan requirement</i>	<i>Aquifer or confining unit</i>	<i>Results</i>
Estimated annual amount of recharge from precipitation to the groundwater resources within the district	Edwards-Trinity (Plateau) Aquifer	41,490
Estimated annual volume of water that discharges from the aquifer to springs and any surface water bodies, including lakes, streams, and rivers	Edwards-Trinity (Plateau) Aquifer	46,671
Estimated annual volume of flow into the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	77,577
Estimated annual volume of flow out of the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	72,976
Estimated net annual volume of flow between each aquifer in the district	Not Applicable	0

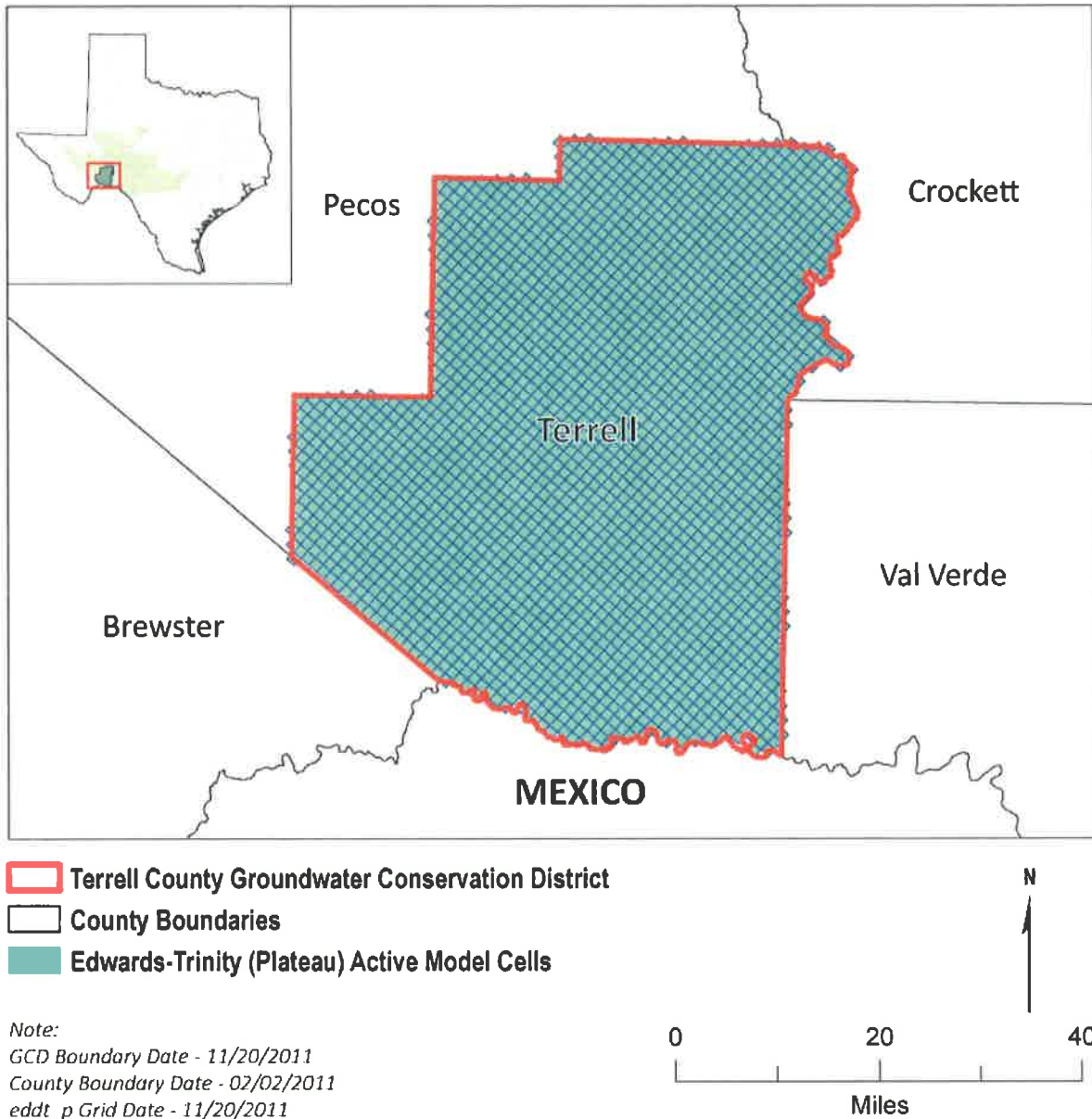


FIGURE 1: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AND PECOS VALLEY AQUIFERS FROM WHICH THE INFORMATION IN TABLE 1 WAS EXTRACTED (THE EDWARDS-TRINITY (PLATEAU) AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).

LIMITATIONS

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

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

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

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

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

REFERENCES:

- Anaya, R., and Jones, I., 2009, Groundwater Availability Model for the Edwards-Trinity (Plateau) and Pecos Valley Aquifers, 103 p.,
http://www.twdb.texas.gov/groundwater/models/gam/eddt_p/ET-Plateau_Full.pdf
- Harbaugh, A. W., 2009, Zonebudget Version 3.01, A computer program for computing subregional water budgets for MODFLOW ground-water flow models, U.S. Geological Survey Groundwater Software.
- Harbaugh, A. W., and McDonald, M. G., 1996, User's documentation for MODFLOW-96, an update to the U.S. Geological Survey modular finite-difference groundwater-flow model: U.S. Geological Survey Open-File Report 96-485, 56 p.
- Hutchison, W. R., Jones, I., and Anaya, R., 2011, Update of the Groundwater Availability Model for the Edwards-Trinity (Plateau) and Pecos Valley Aquifers of Texas, 60 p.,
http://www.twdb.texas.gov/groundwater/models/alt/eddt_p_2011/alt1_eddt_p.asp
- National Research Council, 2007, Models in Environmental Regulatory Decision Making Committee on Models in the Regulatory Decision Process, National Academies Press, Washington D.C., 287 p.
- Reece, R., and Buckner, A. W., 1980, Occurance and Quality of Ground Water in the Edwards-Trinity (Plateau) Aquifer in the Trans-Pecos Region of Texas, 41 p.,
http://www.twdb.texas.gov/publications/reports/numbered_reports/doc/R255/report255.asp

APPENDIX H

Projected Surface Water Supplies

TWDB 2012 State Water Plan Data

TERRELL COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
E	IRRIGATION	RIO GRANDE	LOWER RIO GRANDE RIVER COMBINED RUN-OF-RIVER	152	152	152	152	152	152
Sum of Projected Surface Water Supplies (acre-feet/year)				152	152	152	152	152	152

APPENDIX I

Projected Water Demands

TWDB 2012 State Water Plan Data

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

TERRELL COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
E	SANDERSON	RIO GRANDE	200	205	201	198	197	197
E	COUNTY-OTHER	RIO GRANDE	38	39	38	37	37	37
E	MINING	RIO GRANDE	142	142	142	142	142	142
E	IRRIGATION	RIO GRANDE	78	77	75	73	72	70
E	LIVESTOCK	RIO GRANDE	307	307	307	307	307	307
Sum of Projected Water Demands (acre-feet/year)			765	770	763	757	755	753

APPENDIX J

Projected Water Supply Needs

TWDB 2012 State Water Plan Data

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

TERRELL COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
E	COUNTY-OTHER	RIO GRANDE	1	0	1	2	2	2
E	IRRIGATION	RIO GRANDE	568	569	571	573	574	576
E	LIVESTOCK	RIO GRANDE	104	104	104	104	104	104
E	MINING	RIO GRANDE	0	0	0	0	0	0
E	SANDERSON	RIO GRANDE	881	876	880	883	884	884
Sum of Projected Water Supply Needs (acre-feet/year)			0	0	0	0	0	0

Outline of Proposed Rulemaking

The Terrell County Groundwater Conservation District's ("District's") rules will be consistent with the provisions of its Management Plan and Chapter 36 of the Texas Water Code. The enforcement of the rules will be driven by the hydrogeological and technical information available to the District, including the information provided in this Management Plan. The rules for the District will be developed in coordination with the management goals and technical information provided in this Management Plan, and will include consideration of the following proposed rules:

- One of the District's objectives is to lessen the interference between wells. The District plans to establish spacing rules which require new wells to be spaced a certain distance from existing or previously permitted wells. Another way the District can work to lessen interference between wells is to require all existing and new wells to register with the District once the District develops permanent rules. This requirement will allow the District to have information on the location and proximity of all wells within its boundaries.
- The District intends to help prevent the contamination of groundwater from abandoned and deteriorated water wells. Wells that have been abandoned or have not been properly maintained can cause surface contamination to quickly reach the groundwater resources of the District. To address this issue, the District is planning to require in its rules that all abandoned, deteriorated, or replaced wells be plugged in compliance with the Water Well Drillers and Pump Installers Rules of the Texas Department of Licensing and Regulation. The District will also require in its rules the capping of water wells that well owners plan to use at a later date. This will likely help to eliminate waste, prevent pollution, and stop future deterioration of well casing.
- The District also plans to use the regulatory tools granted to districts by Chapter 36, including its rules, to preserve and protect the existing use of groundwater within its boundaries. The Texas Legislature gives the District the authority to protect existing users of groundwater, which are those individuals or entities currently invested in and using groundwater or the groundwater resources within the District for a beneficial purpose. The Texas Legislature also provides the authority to preserve historic use by historic users, which are those individuals or entities who used groundwater beneficially in the past. The District strives to protect existing and historic use in accordance with Chapter 36, the District's rules, and the goals and objectives of this Management Plan.
- In order to better manage the groundwater resources within the District's boundaries, the District may establish management zones and adopt different rules for each subdivision of an aquifer or geologic strata located in whole or in part within the boundaries of the District or each geographic area overlying a subdivision of an aquifer located in whole or in part within the boundaries of the District. As previously stated, the District will also adopt rules to regulate groundwater withdrawals by means of spacing and/or production limits. The factors to be considered in deciding whether to grant or deny a permit or limit groundwater withdrawals should include those factors set forth in Chapter 36 of the Texas Water Code and the District's rules.