Santa Rita Underground Water Conservation District
P.O. Box 849
Big Lake, Texas 76932

Phone: 325-884-2893 **Fax: 325-884-2445** **Email: srwcdist@verizon.net**

March 23, 2020

Jeff Walker
Executive Administrator
Texas Water Development Board
1700 North Congress Avenue
P. O. Box 13231
Austin, Texas 78711-3231

Subject: Santa Rita Underground Water Conservation District Management Plan

Dear Mr. Walker:

The Santa Rita Underground Water Conservation District adopted a revised Management Plan at a public hearing held on March 17, 2020. Attached to this letter are the notices for the public hearing that were posted in the local newspaper, at the Reagan County Courthouse and the District's office. The Resolution for the Adoption of the Management Plan 2020-2025 is also attached.

Sincerely,

Regina R. Gomez
General Manager
Santa Rita Underground Water Conservation District

Santa Rita Underground Water Conservation District

Groundwater Management Plan

2020-2025

Adopted March 17, 2020

Santa Rita Underground Water Conservation District

Groundwater Management Plan

The Santa Rita Underground Water Conservation District (the "District") is a governmental agency and a body politic and corporate. The District was created to serve a public use and benefit, and is essential to accomplish the objectives set forth in Section 59, Article XVI, of the Texas Constitution. The District's boundaries are coextensive with the boundaries of Reagan County, Texas, and all lands and property within these boundaries will benefit from the works and projects that will be accomplished by the District.

Purpose of Management Plan

The 75th Texas Legislature in 1997 enacted Senate Bill 1 ("SB 1") to establish a comprehensive statewide water planning process. In particular, SB 1 contained provisions that required groundwater conservation districts to prepare management plans to identify the water supply resources and water demands that will shape the decisions of each district. SB 1 designed the management plans to include management goals for each district to manage and conserve the groundwater resources within their boundaries. In 2001, the Texas Legislature enacted Senate Bill 2 ("SB 2") to build on the planning requirements of SB 1 and to further clarify the actions necessary for districts to manage and conserve the groundwater resources of the state of Texas.

The Texas Legislature enacted significant changes to the management of groundwater resources in Texas with the passage of House Bill 1763 (HB 1763) in 2005. HB 1763 created a long-term planning process in which groundwater conservation districts (GCDs) in each groundwater management area (GMA) are required to meet and determine the Desired Future Conditions (DFCs) for the groundwater resources within their boundaries by September 1, 2010. In addition, HB 1763 required GCDs, to share management plans with other GCDs in the GMA for review by the other GCDs.

The Santa Rita Underground Water Conservation District's management plan satisfies the requirements of SB 1, SB 2, HB 1763, the statutory requirements of Chapter 36 of the Texas Water Code, and the administrative requirements of the Texas Water Development Board's (TWDB) rules.

District Creation and History

The Santa Rita Underground Water Conservation District was created by the 71st Legislature under the authority of Section 59, Article XVI, of the Texas Constitution and in accordance with Chapter 36 of the Texas Water Code ("Water Code"), by the District Act, Act of May 24, 1989, 71st Legislature, Regular Session, Chapter 653 (Senate Bill 1634).

District Mission

The Mission of the District is to develop rules to provide protection to existing wells, prevent waste, promote conservation, provide a framework that will allow availability and accessibility of groundwater for future generations, protect the quality of the groundwater in the recharge zone of the aquifer, ensure that the residents of Reagan County maintain local control over their groundwater, and operate the District in a fair and equitable manner for all residents of the District.

The District is committed to manage and protect the groundwater resources within its jurisdiction and to work with others to ensure a sustainable, adequate, high quality and cost effective supply of water, now and in the future. The District will strive to develop, promote, and implement water conservation, augmentation, and management strategies to protect water resources for the benefit of the citizens, economy and environment of the District. The preservation of this most valuable resource can be managed in a prudent and cost effective manner through conservation, education, and management. Any action taken by the District shall only be after full considerations and respect has been afforded to the individual property rights of all citizens of the District. This management plan is intended as a tool to focus the thoughts and actions of those given the responsibilities for the execution of District activities. The District Board

of Directors will review the status of all performance standards in this plan annually.

Time Period for this Plan

This plan will become effective upon adoption by the District's Board of Directors and approved as administratively complete by the TWDB. The plan will remain in effect for five (5) years after the date of approval or until a revised plan is adopted and approved.

Demographics

The District boundaries are contiguous with that of Reagan County, Texas. It has an aerial extent of approximately 1,175 miles, or 751,866 acres of land, minus 65,350 acres of Reagan County, which was annexed into the Glasscock Groundwater Conservation District in 1988. Thus, the northern portion of Reagan County is now a patch work of two conservation districts.

The total population of Reagan County is approximately 2,936 persons. The City of Big Lake is the county seat of Reagan County. Other communities within the District, mostly in name only, are Stiles, Best, and Texon. The economy of the District is primarily oil and gas production and agricultural income, derived primarily from cotton and grain sorghum, as well as sheep, meat goats, and beef cattle production. Recreational hunting leases contribute to the economy also.

Topography and Drainage

The District lands are within the Concho River Basin of the Colorado River with the southern and southwestern portions of the District draining into the Pecos River (Rio Grande) Basin. Topographically, the area within the District ranges in altitude from 2,380 feet above sea level in the northwestern part of the District, to 2,860 feet above sea level in the southwestern part of the District.

Groundwater Resources of the Santa Rita UWCD

The Edwards-Trinity (Plateau) Aquifer is the main source of groundwater in Reagan County. This aquifer is located in the entire District, with approximate altitude of the base from 1,900 feet to 2,300 feet above sea level. Water from this aquifer is used primarily for irrigation, human consumption and livestock needs. This aquifer consists of saturated sediments of lower Cretaceous Period Trinity Group formations and overlying limestone of the Washita, Fredericksburg, and Trinity groups. The Antlers sand and Dockum sand are used extensively in the southern and southeastern portions of the District for rural domestic and livestock water. The lower sand unit of the Dockum Group, often referred to as the Santa Rosa Sandstone, is an artesian aquifer in which the water is confined by overlying shale. Wells completed in this zone produce fresh to saline water which has been used mostly for secondary recovery purposes by the oil industry. Reported well yields range from 20 gal/min, where saturated thickness is thin, to more than 100 gal/min within the District.

The Dockum Aquifer also occurs in the District. It does not crop out at the surface within the District; therefore, no recharge from precipitation to the aquifer occurs within the District. Additionally, no water discharges to springs, lakes, streams or rivers within the District.

Chemical quality of Edwards-Trinity (Plateau) water ranges from fresh to slightly saline. The water is typically hard and may vary widely in concentration of dissolved solids; made up of mostly calcium and bicarbonate. Salinity levels are highest in areas of older oil and gas production in the north and west parts of the District. Other areas have unacceptable levels of boron, fluoride, and sulfates. Water levels in the northwestern part of the District continue to decline due to irrigation, however none of this area has experienced declines greater than 60 feet since 1980. Recently, many water wells drilled to supply the drilling of oil wells and the fracking process in some areas of the District has caused older, shallower wells to run dry. The District, through programs and its Rules, strives to ensure the most efficient use of groundwater in order to sustain available

resources for the future while maintaining the economic growth and respecting private property rights of the District.

Surface Water Resources

No surface water management entities exist within the District. There are no surface water impoundments within the District except for those using local groundwater supplies for livestock consumption. There are no surface water entities located within the District to coordinate the development of this plan.

Technical District Information Required by Texas Administrative Code

Estimate of Modeled Available Groundwater in District Based on Desired Future Conditions

Texas Water Code 36.001 defines modeled available groundwater 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 modeled available groundwater report (GAM Run 16-026 MAG v. 2) is included in Appendix C.

The joint planning process set forth in Texas Water Code 36.108 must be collectively conducted by all groundwater conservation districts within the same GMA. The District is a member of GMA 7. GMA 7 adopted revised DFCs for the Dockum Aquifer on September 22, 2016 and Edwards-Trinity (Plateau) Aquifer on March 22, 2018. The adopted DFCs were then forwarded to the Texas Water Development Board for development of the MAG calculations. The submittal package for the DFCs can be found here: http://www.twdb.texas.gov/groundwater/management_areas/DFC.asp

Modeled Available Groundwater for the District

Please refer to Appendix C

Amount of Groundwater Being Used within the District on an Annual Basis

Please refer to Appendix A

Annual Amount of Recharge from Precipitation to the Groundwater Resources within the District

Please refer to Appendix B

Annual Volume of Water that Discharges from the Aquifer to Springs and Surface Water Bodies

Please refer to Appendix B

Estimate of the Annual Volume of Flow into the District, out of the District, and Between Aquifers in the District

Please refer to Appendix B

Projected Surface Water Supply within the District

Please refer to Appendix A

Projected Total Demand for Water within the District

Please refer to Appendix A

Water Supply Needs

Based on supply and demand calculations and projections, it is obvious that there will be times that demand exceeds supply. In this area of the state, and with the type of aquifer that serves the area, this is a normal occurrence that is recognized by the local residents. Efforts are being made by the residents of the District to use the available groundwater resources with maximum efficiency, while monitoring the quality of the groundwater to protect this resource for years to come. The 2017 Texas State Water Plan, in Appendix A, predicts that there will be no groundwater needs between the years 2020 and 2070.

Water Management Strategies

The District continues to encourage water conservation, reuse and weather modification to meet the projected strategies in the TWDB 2017 Texas State Water Plan. Please refer to Appendix A.

Methodology to Track District Progress in Achieving Management Goals

The General Manager of the District will prepare and present an annual report to the Board of Directors evaluating the impact of the District's activities on its goals, management objectives, and performance standards. The Annual Report will be presented within ninety (90) days following the completion of the District's fiscal year.

Action, Procedures, Performance and Avoidance for Plan Implementation

The District will implement and utilize the provisions of this plan as a guide for determining the direction and/or priority for District activities. Operations of the District, agreements entered into by the District and planning efforts in which the District may participate will be consistent with the provisions of this plan.

The District adopted rules and policies relating to the permitting of wells and the production of groundwater. The rules and policies adopted by the District are pursuant to the Texas Water Code Chapter 36 and the provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical evidence available. The District Rules may be found at http://www.santaritauwcd.org .

The District shall treat all citizens with equality. Citizens may apply to the District for discretion in enforcement of the rules on grounds of adverse economic effect or unique local conditions. In granting of discretion to any rule, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

The District may amend the District rules as necessary to comply with changes to Chapter 36 of the Texas Water Code and to ensure the best management practices of the groundwater in the District. The implementation of the rules of the District will be based on the best available scientific and technical data, and on fair and reasonable evaluation.

The District is committed to work and plan with other GCDs in GMA 7. The District will use the management plan as part of its cooperation efforts with the neighboring GCDs. The District will seek cooperation in the implementation of this plan and the management of groundwater within the District.

Management Goals

A. Providing the Most Efficient Use of Groundwater

Objective: Register new wells drilled within the District each year in accordance with District Rules.
Performance Standard: The District will register all new wells drilled and maintain a well database. Wells registered will be reported monthly at regular board meetings. The number of new wells drilled in the District during the past year and the total number wells in the database will be included in the annual report.

B. Controlling and Preventing Waste of Groundwater

Objective: Provide information to the public on eliminating and reducing wasteful practices in the use of groundwater by publishing information on groundwater waste reduction at least once a year.
Performance Standard: Publish one article on the prevention of wasteful practices in one newspaper within the District annually. A copy of the article will be included in the annual report.

C. Controlling and Preventing Subsidence

The District has reviewed the TWDB subsidence risk report for its applicability: *Identification of the Vulnerability of the Major and Minor Aquifers of Texas to Subsidence with Regard to Groundwater Pumping* – TWDB Contract Number 1648302062, by LRE Water: http://www.twdb.texas.gov/groundwater/models/research/subsidence/subsidence.asp.

The District has examined, on pages 1-7 and 1-8 of the LRE report, the major aquifer and minor aquifer subsidence risk maps, and determined that the

subsidence risk for the District is low to medium. The District will be alert to any signs or reports of subsidence that could occur in the future. At this time, this goal is not applicable to the Santa Rita Underground Water Conservation District.

D. Addressing Conjunctive Surface Water Management Issues

There are no surface water management entities within the District. This goal is not applicable to the operations of the Santa Rita Underground Water Conservation District.

E. Addressing Natural Resource Issues

Objective: The District will monitor one or more selected wells within areas of the District where there is oil production, for possible contamination problems which would jeopardize the integrity of the groundwater resource.
Performance Standard: Once each year, at least one well sample will be collected and analyzed for petroleum-related contamination in areas of the District where there is oil production. The number of wells monitored and the water quality results from each well sample will be included in the annual report. District Rules require any water wells drilled associated with oil and gas drilling or production be registered with the District and are required to comply with District construction standards and reporting.

F. Addressing Drought Conditions

Objective: Monitor drought conditions through the Palmer Drought Severity Index (PDSI) by Texas Climatic Divisions on a monthly basis.
Performance Standard: The District will monitor the PDSI and report findings and actions to the District Board on a quarterly basis. If PDSI indicates that the District will experience severe drought conditions, the District will notify all public water suppliers within the District. An additional source of information on drought can be accessed at: https://waterfortexas.org/drought/ .

G. Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement and Brush Control

Objective (Conservation): Provide information to area residents about water conservation at least one time a year.
Performance Standard: The District will publish an article concerning water conservation in one local newspaper at least one time a year. A copy of the article submitted will be included in the annual report given to the Board of Directors.

Objective (Recharge Enhancement): Provide information to area residents about recharge enhancement at least one time a year.
Performance Standard: The District will publish an article concerning recharge enhancement in a local newspaper at least one time a year. A copy of the article submitted will be included in the annual report given to the Board of Directors.

Objective (Rainwater Harvesting): Provide information to area residents about rainwater harvesting at least one time a year.
Performance Standard: The District will publish an article concerning rainwater harvesting in a local newspaper at least one time a year. A copy of the article submitted will be included in the annual report given to the Board of Directors. An additional source of information on rainwater harvesting can be accessed at: https://www.twdb.texas.gov/innovativewater/rainwater/index.asp .

Objective (Precipitation Enhancement): The District will continue to participate in the West Texas Weather Modification Association rainfall enhancement program by attending at least 60% of meetings annually.
Performance Standard: The District will provide a monthly report to the Board of Directors on the West Texas Weather Modification Association activities. Annually provide to the Board of Directors the West Texas Weather Modification Association Annual Report. Annually provide to the Board of Directors the number of meetings attended by at least one (1) District employee or board member.

Objective (Brush Control): Provide information to area residents about brush control at least one time a year.

Performance Standard: The District will publish an article concerning brush control in a local newspaper at least one time a year. A copy of the article submitted will be included in the annual report given to the Board of Directors.

H. Addressing the Desired Future Conditions

Objective: Measure water levels in at least 9 wells within the District by September of each year and evaluate whether the average change in water levels is in conformance with the DFCs adopted by the District.

Performance Standard: Each year the District will provide a summary within the annual report the monitoring activities including the number of wells monitored and the average annual change of water levels and compare them to the DFCs.

List of Appendices

Appendix A – Estimated Historical Groundwater Use and 2017 State Water Plan Datasets

Appendix B – Groundwater Availability Model Run 17-002

Appendix C – Groundwater Availability Model Run 16-026 MAG Version 2

Appendix D – District Rules

Appendix A

Estimated Historical Groundwater Use and 2017 Texas State Water Plan Datasets

Estimated Historical Groundwater Use And 2017 State Water Plan Datasets:

Santa Rita Underground Water Conservation District

by Stephen Allen
Texas Water Development Board
Groundwater Division
Groundwater Technical Assistance Section
stephen.allen@twdb.texas.gov
(512) 463-7317
January 3, 2020

GROUNDWATER MANAGEMENT PLAN DATA:

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

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

The five reports included in this part are:

1. Estimated Historical Groundwater Use (checklist item 2)
   from the TWDB Historical Water Use Survey (WUS)
2. Projected Surface Water Supplies (checklist item 6)
3. Projected Water Demands (checklist item 7)
4. Projected Water Supply Needs (checklist item 8)
5. Projected Water Management Strategies (checklist item 9)
   from the 2017 Texas State Water Plan (SWP)

Part 2 of the 2-part package is the groundwater availability model (GAM) report for the District (checklist items 3 through 5). The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov, (512) 936-0883.

DISCLAIMER:

The data presented in this report represents the most up-to-date WUS and 2017 SWP data available as of 1/3/2020. Although it does not happen frequently, either of these datasets are subject to change pending the availability of more accurate WUS data or an amendment to the 2017 SWP. District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The WUS dataset can be verified at this web address:

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

The 2017 SWP dataset can be verified by contacting Sabrina Anderson (sabrina.anderson@twdb.texas.gov or 512-936-0886).

The values presented in the data tables of this report are county-based. In cases where groundwater conservation districts cover only a portion of one or more counties the data values are modified with an apportioning multiplier to create new values that more accurately represent conditions within district boundaries. The multiplier used in the following formula is a land area ratio: (data value * (land area of district in county / land area of county)). For two of the four SWP tables (Projected Surface Water Supplies and Projected Water Demands) only the county-wide water user group (WUG) data values (county other, manufacturing, steam electric power, irrigation, mining and livestock) are modified using the multiplier. WUG values for municipalities, water supply corporations, and utility districts are not apportioned; instead, their full values are retained when they are located within the district, and eliminated when they are located outside (we ask each district to identify these entity locations).

The remaining SWP tables (Projected Water Supply Needs and Projected Water Management Strategies) are not modified because district-specific values are not statutorily required. Each district needs only "consider" the county values in these tables.

In the WUS table every category of water use (including municipal) is apportioned. Staff determined that breaking down the annual municipal values into individual WUGs was too complex.

TWDB recognizes that the apportioning formula used is not perfect but it is the best available process with respect to time and staffing constraints. If a district believes it has data that is more accurate it can add those data to the plan with an explanation of how the data were derived. Apportioning percentages that the TWDB used are listed above each applicable table.

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

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

Groundwater and surface water historical use estimates are currently unavailable for calendar year 2018. TWDB staff anticipates the calculation and posting of these estimates at a later date.

REAGAN COUNTY

91.77% (multiplier)

All values are in acre-feet

Year	Source	Municipal	Manufacturing	Mining	Steam Electric	Irrigation	Livestock	Total
2017	GW	659	0	8,296	0	20,324	314	29,593
	SW	0	0	0	0	0	35	35
2016	GW	572	0	3,349	0	18,578	123	22,622
	SW	0	0	0	0	0	14	14
2015	GW	761	0	4,462	0	18,482	123	23,828
	SW	0	0	0	0	0	14	14
2014	GW	737	0	5,547	0	22,377	122	28,783
	SW	0	0	0	0	0	14	14
2013	GW	683	0	2,968	0	18,529	122	22,302
	SW	0	0	0	0	0	14	14
2012	GW	595	0	251	0	18,200	157	19,203
	SW	0	0	0	0	0	18	18
2011	GW	704	0	1,299	0	24,194	177	26,374
	SW	0	0	0	0	0	19	19
2010	GW	554	0	526	0	17,790	178	19,048
	SW	0	0	207	0	0	20	227
2009	GW	700	0	457	0	15,329	211	16,697
	SW	0	0	180	0	0	23	203
2008	GW	689	0	389	0	17,852	210	19,140
	SW	0	0	153	0	0	22	175
2007	GW	685	0	0	0	15,594	119	16,398
	SW	0	0	0	0	0	13	13
2006	GW	1,281	0	0	0	17,199	113	18,593
	SW	0	0	0	0	0	13	13
2005	GW	1,280	0	0	0	11,248	141	12,669
	SW	0	0	0	0	0	16	16
2004	GW	1,277	0	0	0	9,525	74	10,876
	SW	0	0	0	0	0	32	32
2003	GW	1,280	0	0	0	9,179	73	10,532
	SW	0	0	0	0	0	32	32
2002	GW	689	0	0	0	13,656	131	14,476
	SW	0	0	0	0	0	56	56

Projected Surface Water Supplies
TWDB 2017 State Water Plan Data

REAGAN COUNTY

91.77% (multiplier)

All values are in acre-feet

RWPG	WUG	WUG Basin	Source Name	2020	2030	2040	2050	2060	2070
F	LIVESTOCK, REAGAN	COLORADO	COLORADO LIVESTOCK LOCAL SUPPLY	38	38	38	38	38	38
F	LIVESTOCK, REAGAN	RIO GRANDE	RIO GRANDE LIVESTOCK LOCAL SUPPLY	3	3	3	3	3	3
	Sum of Projected Surface Water Supplies (acre-feet)			**41**	**41**	**41**	**41**	**41**	**41**

Projected Water Demands
TWDB 2017 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.

REAGAN COUNTY

91.77% (multiplier)

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
F	BIG LAKE	COLORADO	731	796	835	878	907	929
F	COUNTY-OTHER, REAGAN	COLORADO	64	70	72	75	78	80
F	IRRIGATION, REAGAN	COLORADO	17,556	17,260	16,965	16,669	16,379	16,094
F	LIVESTOCK, REAGAN	COLORADO	224	224	224	224	224	224
F	LIVESTOCK, REAGAN	RIO GRANDE	10	10	10	10	10	10
F	MINING, REAGAN	COLORADO	3,594	2,897	2,097	1,200	452	170
F	MINING, REAGAN	RIO GRANDE	271	218	158	90	34	13
	Sum of Projected Water Demands (acre-feet)		**22,450**	**21,475**	**20,361**	**19,146**	**18,084**	**17,520**

Projected Water Supply Needs
TWDB 2017 State Water Plan Data

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

REAGAN COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
F	BIG LAKE	COLORADO	0	0	0	0	0	0
F	COUNTY-OTHER, REAGAN	COLORADO	0	0	0	0	0	0
F	IRRIGATION, REAGAN	COLORADO	0	0	0	0	0	0
F	LIVESTOCK, REAGAN	COLORADO	11	11	11	11	11	11
F	LIVESTOCK, REAGAN	RIO GRANDE	0	0	0	0	0	0
F	MINING, REAGAN	COLORADO	0	0	0	0	0	0
F	MINING, REAGAN	RIO GRANDE	15	15	15	15	15	15
	Sum of Projected Water Supply Needs (acre-feet)		**0**	**0**	**0**	**0**	**0**	**0**

Projected Water Management Strategies
TWDB 2017 State Water Plan Data

REAGAN COUNTY

WUG, Basin (RWPG)

All values are in acre-feet

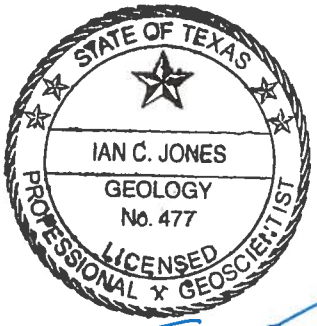
Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
BIG LAKE, COLORADO (F)							
MUNICIPAL CONSERVATION - BIG LAKE	DEMAND REDUCTION [REAGAN]	18	21	22	23	24	24
WATER AUDITS AND LEAK - BIG LAKE	DEMAND REDUCTION [REAGAN]	29	32	33	35	36	37
		47	**53**	**55**	**58**	**60**	**61**
IRRIGATION, REAGAN, COLORADO (F)							
IRRIGATION CONSERVATION - REAGAN COUNTY	DEMAND REDUCTION [REAGAN]	957	1,881	2,773	2,773	2,773	2,773
WEATHER MODIFICATION	WEATHER MODIFICATION [ATMOSPHERE]	1,469	1,469	1,469	1,469	1,469	1,469
		2,426	**3,350**	**4,242**	**4,242**	**4,242**	**4,242**
MINING, REAGAN, COLORADO (F)							
MINING CONSERVATION - REAGAN COUNTY	DEMAND REDUCTION [REAGAN]	274	221	160	91	34	13
		274	**221**	**160**	**91**	**34**	**13**
MINING, REAGAN, RIO GRANDE (F)							
MINING CONSERVATION - REAGAN COUNTY	DEMAND REDUCTION [REAGAN]	21	17	12	7	3	1
		21	**17**	**12**	**7**	**3**	**1**
Sum of Projected Water Management Strategies (acre-feet)		**2,768**	**3,641**	**4,469**	**4,398**	**4,339**	**4,317**

Appendix B

Groundwater Availability Model Run 17-002

GAM Run 17-002: Santa Rita Underground Water Conservation District Groundwater Management Plan

Ian C. Jones, Ph.D., P.G.
Texas Water Development Board
Groundwater Division
Groundwater Availability Modeling Section
(512) 463-6641
March 31, 2017



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GAM RUN 17-002: SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT GROUNDWATER MANAGEMENT PLAN

Ian C. Jones, Ph.D., P.G.
Texas Water Development Board
Groundwater Division
Groundwater Availability Modeling Section
(512) 463-6641
March 31, 2017

EXECUTIVE SUMMARY:

Texas State Water Code, Section 36.1071, Subsection (h) (Texas Water Code, 2015), 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.

The TWDB provides data and information to the Santa Rita Underground Water Conservation District in two parts. Part 1 is the Estimated Historical Water Use/State Water Plan dataset report, which will be provided to you separately by the TWDB Groundwater Technical Assistance Section. Please direct questions about the water data report to Mr. Stephen Allen at (512) 463-7317 or stephen.allen@twdb.texas.gov. Part 2 is the required groundwater availability modeling information and this information includes

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

The groundwater management plan for the Santa Rita Underground Water Conservation District should be adopted by the district on or before February 2, 2018, and submitted to the Executive Administrator of the TWDB on or before March 4, 2018. The current

management plan for the Santa Rita Underground Water Conservation District expires on May 3, 2018.

We used the alternative groundwater model for the Edwards-Trinity (Plateau) Aquifer (Hutchison and others, 2011) and version 1.01 of the groundwater availability model for the High Plains Aquifer System (Deeds and Jigmond, 2015) to estimate the management plan information for the aquifers within Santa Rita Underground Water Conservation District. This report replaces the results of GAM Run 11-003 (Aschenbach, 2011). GAM Run 17-002 meets current standards set after the release of GAM Run 11-003 and uses a newer model for analyzing the Dockum Aquifer. Tables 1 and 2 summarize the groundwater availability model data required by statute and Figures 1 and 2 show the areas of the respective models from which the values in the tables were extracted. If after reviewing the figure, the Santa Rita Underground Water Conservation District determines that the district boundaries used in the assessment do not reflect current conditions, please notify the TWDB at your earliest convenience.

METHODS:

In accordance with the provisions of the Texas State Water Code, Section 36.1071, Subsection (h), the groundwater availability model for the High Plains Aquifer System and the alternative model for the Edwards-Trinity (Plateau) Aquifer were used to estimate information for the Santa Rita Underground Water Conservation District management plan. Water budgets were extracted for the respective historical model periods (1929 through 2012 and 1931 through 2005 for the groundwater availability model for the High Plains Aquifer System and the alternative model for the Edwards-Trinity (Plateau) Aquifer, respectively) using ZONEBUDGET Version 3.01 (Harbaugh, 2009). The average annual water budget values for recharge, surface-water outflow, inflow to the district, and outflow from the district for the aquifers within the district are summarized in this report.

PARAMETERS AND ASSUMPTIONS:

Edwards-Trinity (Plateau) Aquifer

- The one-layer alternative groundwater flow model of the Edwards-Trinity (Plateau) and Pecos Valley aquifers (Hutchison and others, 2011) was used for these simulations. The modified model version was developed to more effectively simulate groundwater conditions. The model was calibrated based on groundwater elevation data from 1930 to 2005.

- The model has one layer which represents the Pecos Valley Aquifer in the northwest portion of the model area, the Edwards-Trinity (Plateau) Aquifer in the middle, and

the Hill Country portion of the Trinity Aquifer in the southeast portion of the model area. A lumped representation of both the Pecos Valley and Edwards-Trinity (Plateau) aquifers was used in the relatively narrow area where the Pecos Valley Aquifer overlies the Edwards-Trinity (Plateau) Aquifer. Only the Edwards-Trinity (Plateau) Aquifer underlies the district.

- The model was run with MODFLOW-2000 (Harbaugh and others, 2000).

Dockum Aquifer

- We used version 1.01 of the groundwater availability model for the High Plains Aquifer System. See Deeds and Jigmond (2015) for assumptions and limitations of the model.
- The model was run with MODFLOW-NWT (Niswonger and others, 2011).
- The groundwater availability model for the High Plains Aquifer System contains four layers:
    - Layer 1—the Ogallala Aquifer and the Pecos Valley Alluvium Aquifer
    - Layer 2—the Rita Blanca Aquifer, the Edwards-Trinity (High Plains) Aquifer, the Edwards-Trinity (Plateau) Aquifer, and pass through cells of the Dockum Aquifer
    - Layer 3—the upper Dockum Group and pass through cells of the lower Dockum Group
    - Layer 4—the lower Dockum Group
- Perennial rivers and reservoirs were simulated using MODFLOW-NWT river package. Springs, seeps, and draws were simulated using MODFLOW-NWT drain package. For this analysis, groundwater discharge to surface water includes groundwater leakage to the river and drain packages.

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 groundwater availability model for the High Plains Aquifer System and the Edwards-Trinity (Plateau) Aquifer within Santa Rita Underground Water Conservation District and averaged over the respective historical calibration periods, as shown in Tables 1 and 2.

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.

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

3. Flow into and out of district—the lateral flow within the aquifer between the district and adjacent counties.

4. Flow between aquifers—the net vertical flow between the aquifer and adjacent aquifers or confining units. This flow is controlled by the relative water levels in each aquifer and aquifer properties of each aquifer or confining unit that define the amount of leakage that occurs.

The information needed for the district's management plan is summarized in Tables 1 and 2. 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.

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

Management Plan requirement	Aquifer or confining unit	Results
Estimated annual amount of recharge from precipitation to the district	Edwards-Trinity (Plateau) Aquifer	35,138
Estimated annual volume of water that discharges from the aquifer to springs and any surface-water body including lakes, streams, and rivers	Edwards-Trinity (Plateau) Aquifer	12
Estimated annual volume of flow into the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	65,946
Estimated annual volume of flow out of the district within each aquifer in the district	Edwards-Trinity (Plateau) Aquifer	99,902
Estimated net annual volume of flow between each aquifer in the district	From the Dockum Aquifer into the Edwards-Trinity (Plateau) Aquifer	175[1]

[1] Calculated from the groundwater availability model for the High Plains Aquifer System

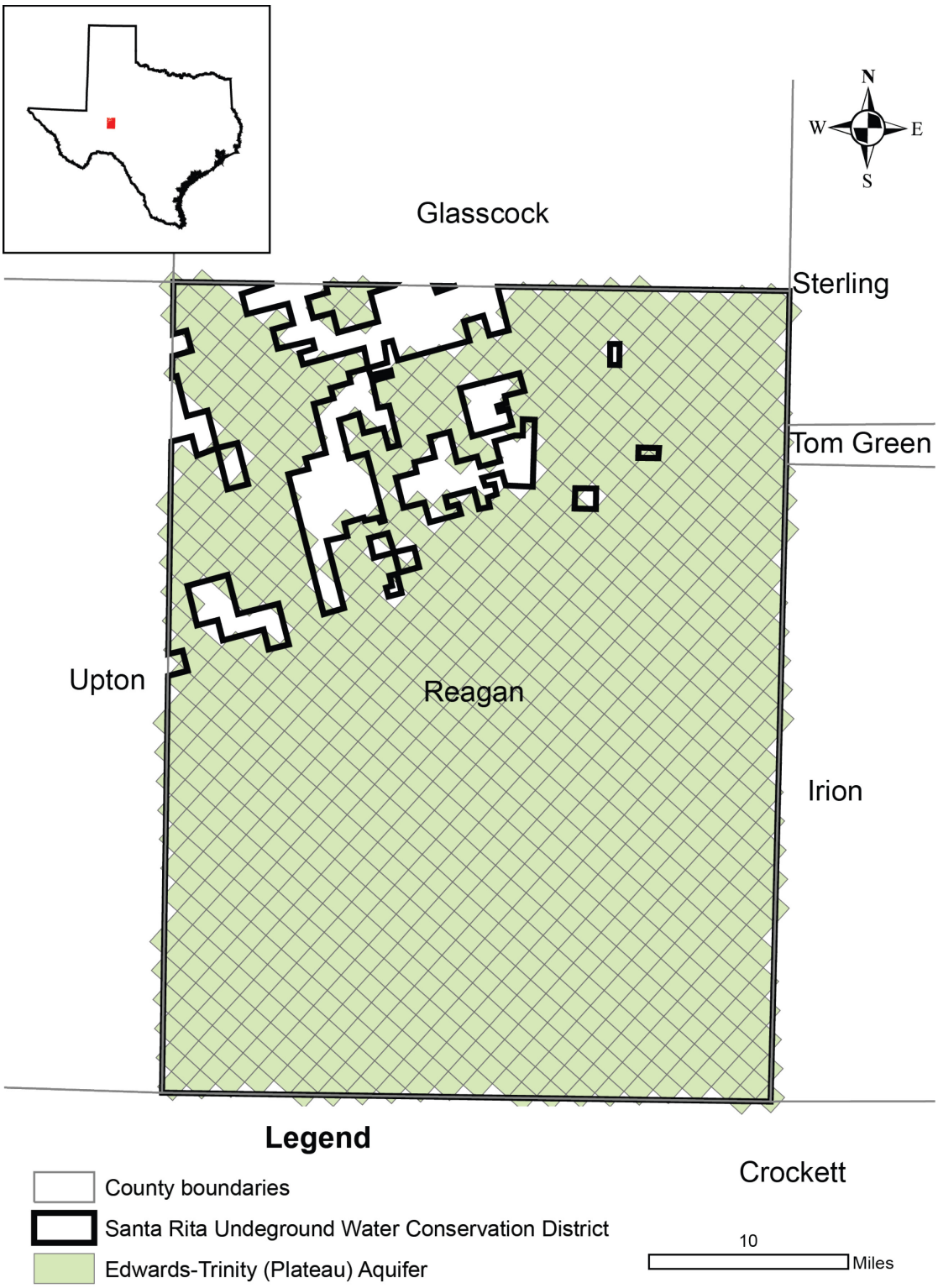

FIGURE 1: AREA OF THE ALTERNATIVE 1-LAYER GROUNDWATER AVAILABILITY MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AQUIFER FROM WHICH THE INFORMATION IN TABLE 1 WAS EXTRACTED (THE EDWARDS-TRINITY (PLATEAU) AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).

TABLE 2: SUMMARIZED INFORMATION FOR THE DOCKUM AQUIFER FOR THE SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT'S GROUNDWATER MANAGEMENT PLAN. ALL VALUES ARE REPORTED IN ACRE-FEET PER YEAR AND ROUNDED TO THE NEAREST 1 ACRE-FOOT.

Management Plan requirement	Aquifer or confining unit	Results
Estimated annual amount of recharge from precipitation to the district	Dockum Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface-water body including lakes, streams, and rivers	Dockum Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Dockum Aquifer	9
Estimated annual volume of flow out of the district within each aquifer in the district	Dockum Aquifer	173
Estimated net annual volume of flow between each aquifer in the district	From the Dockum Aquifer into the Edwards-Trinity (Plateau) Aquifer	175
	From the saline portions of the Dockum Group into the Dockum Aquifer	220

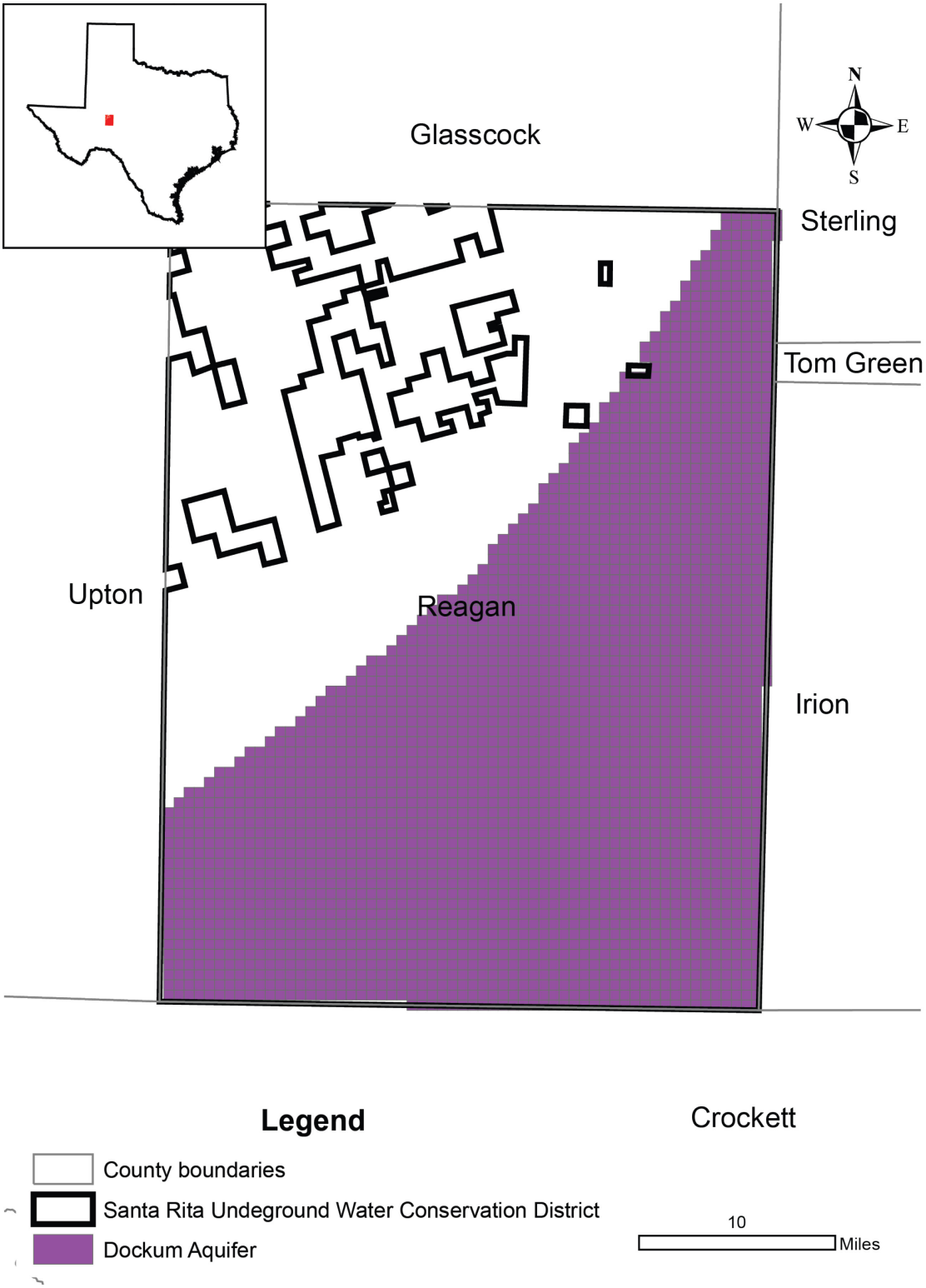

FIGURE 2: AREA OF THE GROUNDWATER AVAILABILITY MODEL FOR THE HIGH PLAINS AQUIFER SYSTEM FROM WHICH THE INFORMATION IN TABLE 2 WAS EXTRACTED (THE DOCKUM AQUIFER EXTENT WITHIN THE DISTRICT BOUNDARY).

LIMITATIONS:

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

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

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

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

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

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Texas Water Code, 2015, http://www.statutes.legis.state.tx.us/docs/WA/pdf/WA.36.pdf.

Appendix C

Groundwater Availability Model Run 16-026

MAG Version 2

GAM Run 16-026 MAG Version 2: Modeled Available Groundwater for the Aquifers in Groundwater Management Area 7

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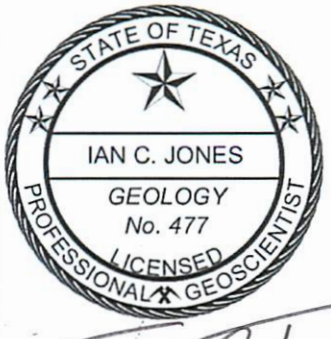
Groundwater Availability Modeling Department
(512) 463-6641
September 21, 2018



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GAM RUN 16-026 MAG VERSION 2: MODELED AVAILABLE GROUNDWATER FOR THE AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7

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Groundwater Division
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September 21, 2018

EXECUTIVE SUMMARY:

We have prepared estimates of the modeled available groundwater for the relevant aquifers of Groundwater Management Area 7—the Capitan Reef Complex, Dockum, Edwards-Trinity (Plateau), Ellenburger-San Saba, Hickory, Ogallala, Pecos Valley, Rustler, and Trinity aquifers. The estimates are based on the desired future conditions for these aquifers adopted by the groundwater conservation districts in Groundwater Management Area 7 on September 22, 2016 and March 22, 2018. The explanatory reports and other materials submitted to the Texas Water Development Board (TWDB) were determined to be administratively complete on June 22, 2018.

The original version of GAM Run 16-026 MAG inadvertently included modeled available groundwater estimates for areas declared not relevant by the groundwater management area and areas that had no desired future conditions for the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers. GAM Run 16-026 MAG Version 2 (this report) contains updates to reported total modeled available groundwater estimates and to Tables 5 and 6 that reflect only relevant portions of the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers.

The modeled available groundwater values are summarized by decade for the groundwater conservation districts (Tables 1, 3, 5, 7, 9, 11, 13) and for use in the regional water planning process (Tables 2, 4, 6, 8, 10, 12, 14). The modeled available groundwater estimates are 26,164 acre-feet per year in the Capitan Reef Complex Aquifer; 2,324 acre-feet per year in the Dockum Aquifer; 474,464 acre-feet per year in the undifferentiated Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers; 22,616 acre-feet per year in the Ellenburger-San Saba Aquifer; 49,936 acre-feet per year in the Hickory Aquifer; 6,570 to 8,019 acre-feet per year in the Ogallala Aquifer; and 7,040 acre-feet per year in the Rustler Aquifer. The modeled available groundwater estimates were extracted from results of model runs using

the groundwater availability models for the Capitan Reef Complex Aquifer (Jones, 2016); the High Plains Aquifer System (Deeds and Jigmond, 2015); the minor aquifers of the Llano Uplift Area (Shi and others, 2016), and the Rustler Aquifer (Ewing and others, 2012). In addition, the alternative 1-layer model for the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers (Hutchison and others, 2011) was used for the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers, except for Kinney and Val Verde counties. In these two counties, the alternative Kinney County model (Hutchison and others, 2011) and the model associated with a hydrogeological study for Val Verde County and the City of Del Rio (EcoKai Environmental, Inc. and Hutchison, 2014), respectively, were used to estimate modeled available groundwater. The Val Verde County/Del Rio model covers Val Verde County. This model was used to simulate multiple pumping scenarios indicating the effects of a proposed wellfield. The model indicated the effects of varied pumping rates and wellfield locations. These model runs were used by Groundwater Management Area 7 as the basis for the desired future conditions for Val Verde County.

REQUESTOR:

Mr. Joel Pigg, chair of Groundwater Management Area 7 districts.

DESCRIPTION OF REQUEST:

In letters dated November 22, 2016 and March 26, 2018, Dr. William Hutchison on behalf of Groundwater Management Area 7 provided the TWDB with the desired future conditions for the Capitan, Dockum, Edwards-Trinity (Plateau), Ellenburger-San Saba, Hickory, Ogallala, Pecos Valley, Rustler, and Trinity aquifers in Groundwater Management Area 7. Groundwater Management Area 7 provided additional clarifications through emails to the TWDB on March 23, 2018 and June 12, 2018 for the use of model extents (Dockum, Ellenburger-San Saba, Hickory, Ogallala, Rustler aquifers), the use of aquifer extents (Capitan Reef Complex, Edwards-Trinity [Plateau], Pecos Valley, and Trinity aquifers), and desired future conditions for the Edwards-Trinity (Plateau) Aquifer of Kinney and Val Verde counties.

The final adopted desired future conditions as stated in signed resolutions for the aquifers in Groundwater Management Area 7 are reproduced below:

Capitan Reef [Complex] Aquifer

> Total net drawdown of the Capitan Reef [Complex] Aquifer not to exceed 56 feet in Pecos County (Middle Pecos [Groundwater Conservation District]) in 2070 as compared with 2006 aquifer levels (Reference: Scenario 4, GMA 7 Technical Memorandum 15-06, 4-8-2015).

Dockum Aquifer

Total net drawdown of the Dockum Aquifer not to exceed 14 feet in Reagan County (Santa Rita [Groundwater Conservation District]) in 2070, as compared with 2012 aquifer levels.

Total net drawdown of the Dockum Aquifer not to exceed 52 feet in Pecos County (Middle Pecos [Groundwater Conservation District]) in 2070, as compared with 2012 aquifer levels.

Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers

Average drawdown for [the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers] in the following [Groundwater Management Area] 7 counties not to exceed drawdowns from 2010 to 2070 […].

County	[…] Average Drawdowns from 2010 to 2070 [feet]
Coke	0
Crockett	10
Ector	4
Edwards	2
Gillespie	5
Glasscock	42
Irion	10
Kimble	1
Menard	1
Midland	12
Pecos	14
Reagan	42
Real	4
Schleicher	8
Sterling	7
Sutton	6

Taylor	0
Terrell	2
Upton	20
Uvalde	2

Total net drawdown *[of the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers]* in Kinney County in 2070, as compared with 2010 aquifer levels, shall be consistent with maintenance of an annual average flow of 23.9 [cubic feet per second] and an annual median flow of 23.9 [cubic feet per second] at Las Moras Springs […].

Total net drawdown [of the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers] in Val Verde County in 2070, as compared with 2010 aquifer levels, shall be consistent with maintenance of an average annual flow of 73-75 [million gallons per day] at San Felipe Springs.

Minor Aquifers of the Llano Uplift Area

Total net drawdowns of [Ellenburger-San Saba Aquifer] levels in 2070, as compared with 2010 aquifer levels, shall not exceed the number of feet set forth below, respectively, for the following counties and districts:

County	[Groundwater Conservation District]	Drawdown in 2070 (feet)
Gillespie	Hill Country [Underground Water Conservation District]	8
Mason	Hickory [Underground Water Conservation District] no. 1	14
McCulloch	Hickory [Underground Water Conservation District] no. 1	29
Menard	Menard County [Underground Water District] and Hickory [Underground Water Conservation District] no. 1	46
Kimble	Kimble County [Groundwater Conservation District] and Hickory	18

	[Underground Water Conservation District] no. 1	
San Saba	Hickory [Underground Water Conservation District] no. 1	5

Total net drawdown of [Hickory Aquifer] levels in 2070, as compared with 2010 aquifer levels, shall not exceed the number of feet set forth below, respectively, for the following counties and districts:

County	[Groundwater Conservation District]	Drawdown in 2070 (feet)
Concho	Hickory [Underground Water Conservation District No. 1]	53
Gillespie	Hill Country UWCD	9
Mason	Hickory [Underground Water Conservation District No. 1]	17
McCulloch	Hickory [Underground Water Conservation District No. 1]	29
Menard	Menard UWD and Hickory [Underground Water Conservation District No. 1]	46
Kimble	Kimble County [Groundwater Conservation District] and Hickory [Underground Water Conservation District No. 1]	18
San Saba	Hickory [Underground Water Conservation District No. 1]	6

Ogallala Aquifer

> Total net [drawdown] of the Ogallala Aquifer in Glasscock County (Glasscock [Groundwater Conservation District]) in 2070, as compared with 2012 aquifer levels, not to exceed 6 feet […].

Rustler Aquifer

> Total net drawdown of the Rustler Aquifer in Pecos County (Middle Pecos GCD) in 2070 not to exceed 94 feet as compared with 2009 aquifer levels.

Additionally, districts in Groundwater Management Area 7 voted to declare that the following aquifers or parts of aquifers are non-relevant for the purposes of joint planning:

- The Blaine, Igneous, Lipan, Marble Falls, and Seymour aquifers.
- The Edwards-Trinity (Plateau) Aquifer in Hickory Underground Water Conservation District No. 1, the Lipan-Kickapoo Water Conservation District, Lone Wolf Groundwater Conservation District, and Wes-Tex Groundwater Conservation District.
- The Ellenburger-San Saba Aquifer in Llano County.
- The Hickory Aquifer in Llano County.
- The Dockum Aquifer outside of Santa Rita Groundwater Conservation District and Middle Pecos Groundwater Conservation District.
- The Ogallala Aquifer outside of Glasscock County.

In response to a several requests for clarifications from the TWDB in 2017 and 2018, the Groundwater Management Area 7 Chair, Mr. Joel Pigg, and Groundwater Management Area 7 consultant, Dr. William R. Hutchison, indicated the following preferences for verifying the desired future condition of the aquifers and calculating modeled available groundwater volumes in Groundwater Management Area 7:

Capitan Reef Complex Aquifer

> Calculate modeled available groundwater values based on the official aquifer boundaries.
>
> Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers

Calculate modeled available groundwater values based on the official aquifer boundaries.

Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

Kinney County

Use the modeled available groundwater values and model assumptions from GAM Run 10-043 MAG Version 2 (Shi, 2012) to maintain annual average springflow of 23.9 cubic feet per second and a median flow of 24.4 cubic feet per second at Las Moras Springs from 2010 to 2060.

Val Verde County

There is no associated drawdown as a desired future condition. The desired future condition is based solely on simulated springflow conditions at San Felipe Spring of 73 to 75 million gallons per day. Pumping scenarios—50,000 acre-feet per year—in three well field locations, and monthly hydrologic conditions for the historic period 1969 to 2012 meet the desired future conditions set by Groundwater Management Area 7 (EcoKai and Hutchison, 2014; Hutchison 2018b).

Minor Aquifers of the Llano Uplift Area

Calculate modeled available groundwater values based on the spatial extent of the Ellenburger-San Saba and Hickory aquifers in the groundwater availability model for the aquifers of the Llano Uplift Area and use the same model assumptions used in Groundwater Management Area 7 Technical Memorandum 16-02 (Hutchison 2016g).

Drawdown calculations do not take into consideration the occurrence of dry cells where water levels are below the base of the aquifer.

Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

Dockum Aquifer

Calculate modeled available groundwater values based on the spatial extent of the groundwater availability model for the Dockum Aquifer.

Modeled available groundwater analysis excludes pass-through cells.

Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

Ogallala Aquifer

Calculate modeled available groundwater values based on the official aquifer boundary and use the same model assumptions used in Groundwater Management Area Technical Memorandum 16-01 (Hutchison, 2016f).

Modeled available groundwater analysis excludes pass-through cells.

Well pumpage decreases as the saturated thickness of the aquifer decreases below a 30-foot threshold.

Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

Rustler Aquifer

Use 2008 as the baseline year and run the model from 2009 through 2070 (end of 2008/beginning of 2009 as initial conditions), as used in the submitted predictive model run.

Use 2008 recharge conditions throughout the predictive period.

Calculate modeled available groundwater values based on the spatial extent of the groundwater availability model for the Rustler Aquifer.

General-head boundary heads decline at a rate of 1.5 feet per year.

Use the same model assumptions used in Groundwater Management Area 7 Technical Memorandum 15-05 (Hutchison, 2016d).

Assume that modeled drawdown verifications within 1 foot achieve the desired future conditions.

METHODS:

As defined in Chapter 36 of the Texas Water Code (TWC, 2011), "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors districts must consider include annual precipitation and production patterns, the estimated amount of pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits.

For relevant aquifers with desired future conditions based on water-level drawdown, water levels simulated at the end of the predictive simulations were compared to specified

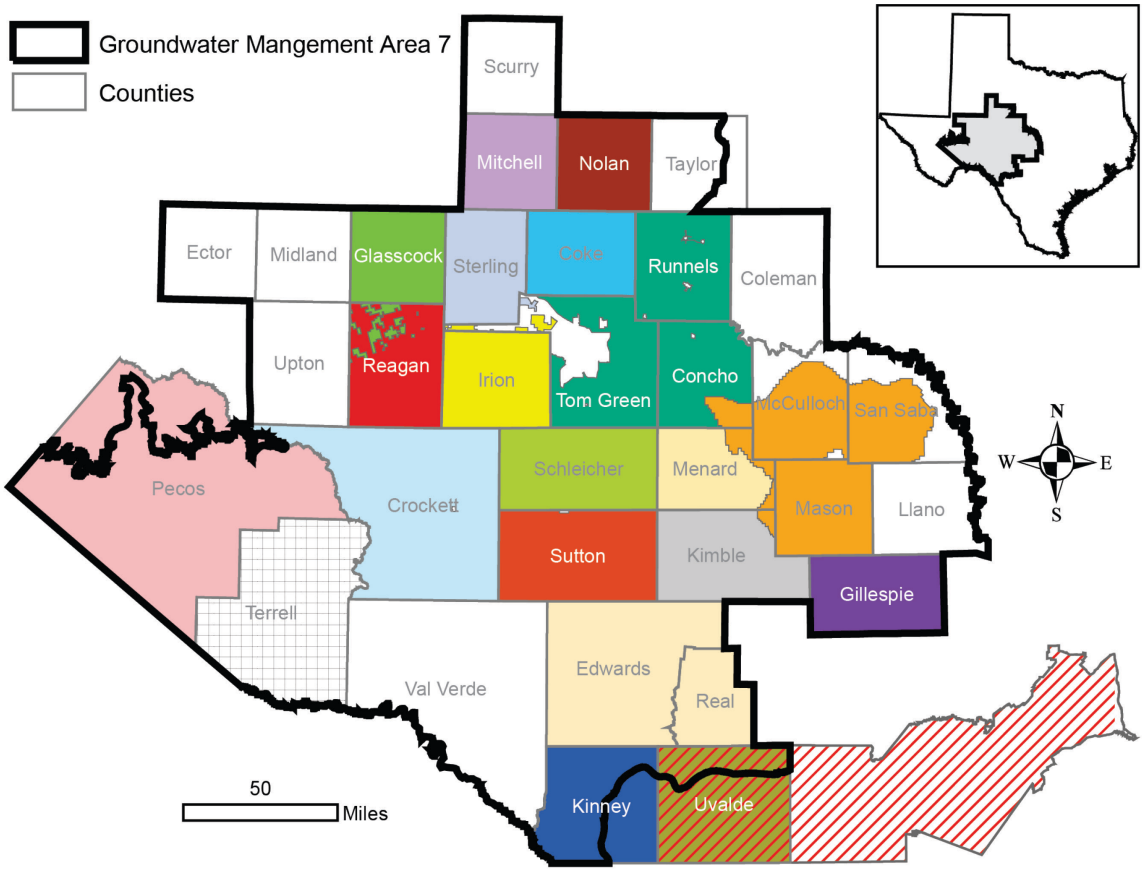
baseline water levels. In the case of the High Plains Aquifer System (Dockum and Ogallala aquifers) and the minor aquifers of the Llano Uplift area (Ellenburger-San Saba and Hickory aquifers), baseline water levels represent water levels at the end of the calibrated transient model are the initial water level conditions in the predictive simulation—water levels at the end of the preceding year. In the case of the Capitan Reef Complex, Edwards-Trinity (Plateau), Pecos Valley, and Trinity, and Rustler aquifers, the baseline water levels may occur in a specified year, early in the predictive simulation. These baseline years are 2006 in the groundwater availability model for the Capitan Reef Complex Aquifer, 2010 in the alternative model for the Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers, 2012 in the groundwater availability model for the High Plains Aquifer System, 2010 in the groundwater availability model for the minor aquifers of the Llano Uplift area, and 2009 in the groundwater availability model for the Rustler Aquifer. The predictive model runs used average pumping rates from the historical period for the respective model except in the aquifer or area of interest. In those areas, pumping rates are varied until they produce drawdowns consistent with the adopted desired future conditions. Pumping rates or modeled available groundwater are reported in 10-year intervals.

Water-level drawdown averages were calculated for the relevant portions of each aquifer. Drawdown for model cells that became dry during the simulation—when the water level dropped below the base of the cell—were excluded from the averaging. In Groundwater Management Area 7, dry cells only occur during the predictive period in the Ogallala Aquifer of Glasscock County. Consequently, estimates of modeled available groundwater decrease over time as continued simulated pumping predicts the development of increasing numbers of dry model cells in areas of the Ogallala Aquifer in Glasscock County. The calculated water-level drawdown averages were compared with the desired future conditions to verify that the pumping scenario achieved the desired future conditions.

In Kinney and Val Verde counties, the desired future conditions are based on discharge from selected springs. In these cases, spring discharge is estimated based on simulated average spring discharge over a historical period maintaining all historical hydrologic conditions—such as recharge and river stage—except pumping. In other words, we assume that past average hydrologic conditions—the range of fluctuation—will continue in the future. In the cases of Kinney and Val Verde counties, simulated spring discharge is based on hydrologic variations that took place over the periods 1950 through 2005 and 1968 through 2013, respectively. The desired future condition for the Edwards-Trinity (Plateau) Aquifer in Kinney County is similar to the one adopted in 2010 and the associated modeled available groundwater is based on a specific model run—GAM Run 10-043 (Shi, 2012).

Modeled available groundwater values for the Ellenburger-San Saba and Hickory aquifers were determined by extracting pumping rates by decade from the model results using

ZONBUDUSG Version 1.01 (Panday and others, 2013). For the remaining relevant aquifers in Groundwater Management Area 7 modeled available groundwater values were determined by extracting pumping rates by decade from the model results using ZONEBUDGET Version 3.01 (Harbaugh, 2009). Decadal modeled available groundwater for the relevant aquifers are reported by groundwater conservation district and county (Figure 1; Tables 1, 3, 5, 7, 9, 11, 13), and by county, regional water planning area, and river basin (Figures 2 and 3; Tables 2, 4, 6, 8, 10, 12, 14).



Groundwater Conservation Districts

- Coke County UWCD
- Crockett County GCD
- Edwards Aquifer Authority
- Glasscock GCD
- Hickory UWCD No. 1
- Hill Country UWCD
- Irion County WCD
- Kimble County GCD
- Kinney County GCD
- Lipan-Kickapoo WCD
- Lone Wolf GCD
- Menard County UWD
- Middle Pecos GCD
- Plateau UWC and Supply District
- Real-Edwards Conservation and Reclamation District
- Santa Rita UWCD
- Sterling County UWCD
- Sutton County UWCD
- Terrell County GCD
- Uvalde County UWCD
- Wes-Tex GCD

FIGURE 1. MAP SHOWING THE GROUNDWATER CONSERVATION DISTRICTS (GCD) IN GROUNDWATER MANAGEMENT AREA 7. NOTE: THE BOUNDARIES OF THE EDWARDS AQUIFER AUTHORITY OVERLAP WITH THE UVALDE COUNTY UNDERGROUND WATER CONSERVATION DISTRICT (UWCD).

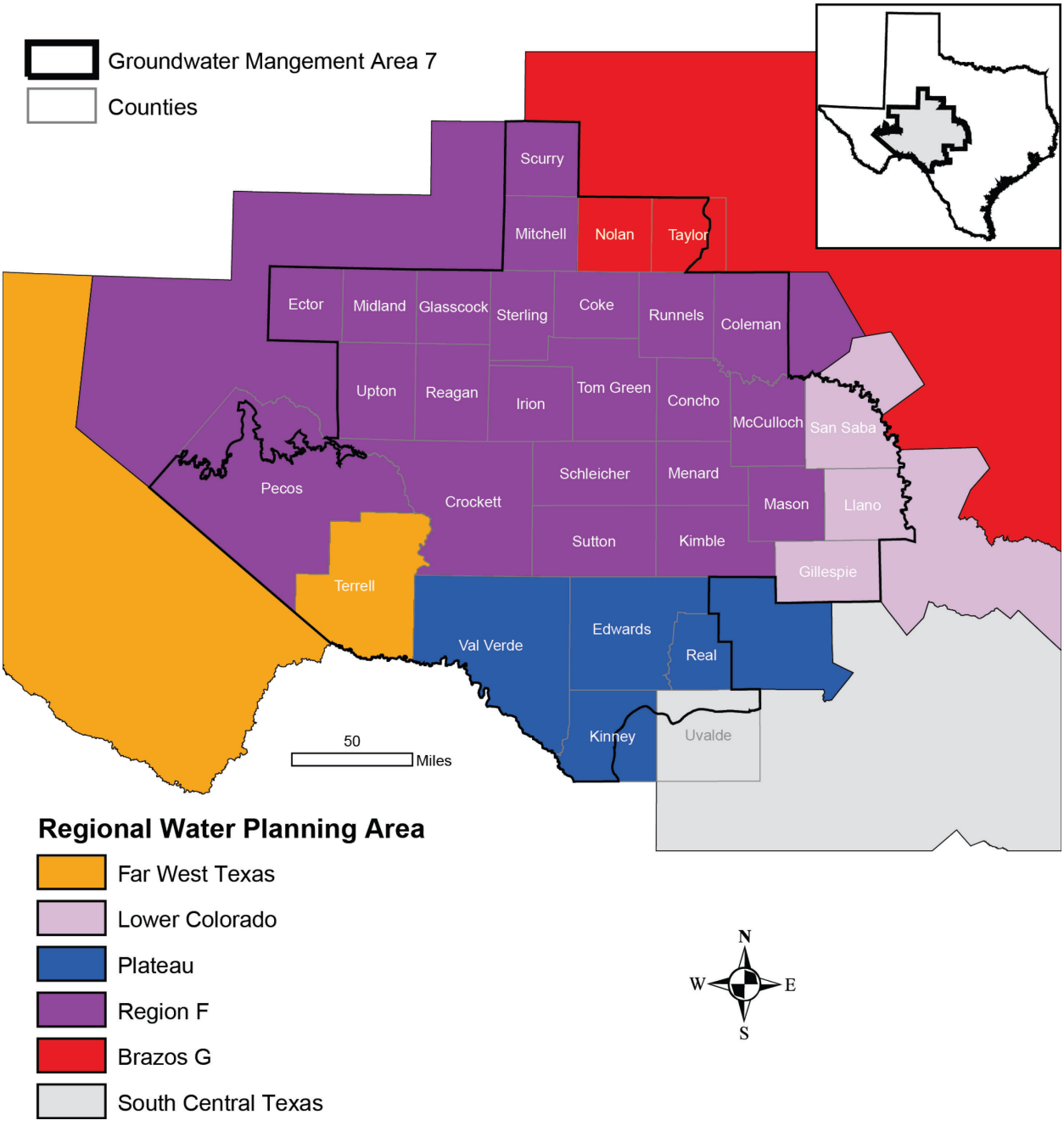


FIGURE 2. MAP SHOWING REGIONAL WATER PLANNING AREAS IN GROUNDWATER MANAGEMENT AREA 7.

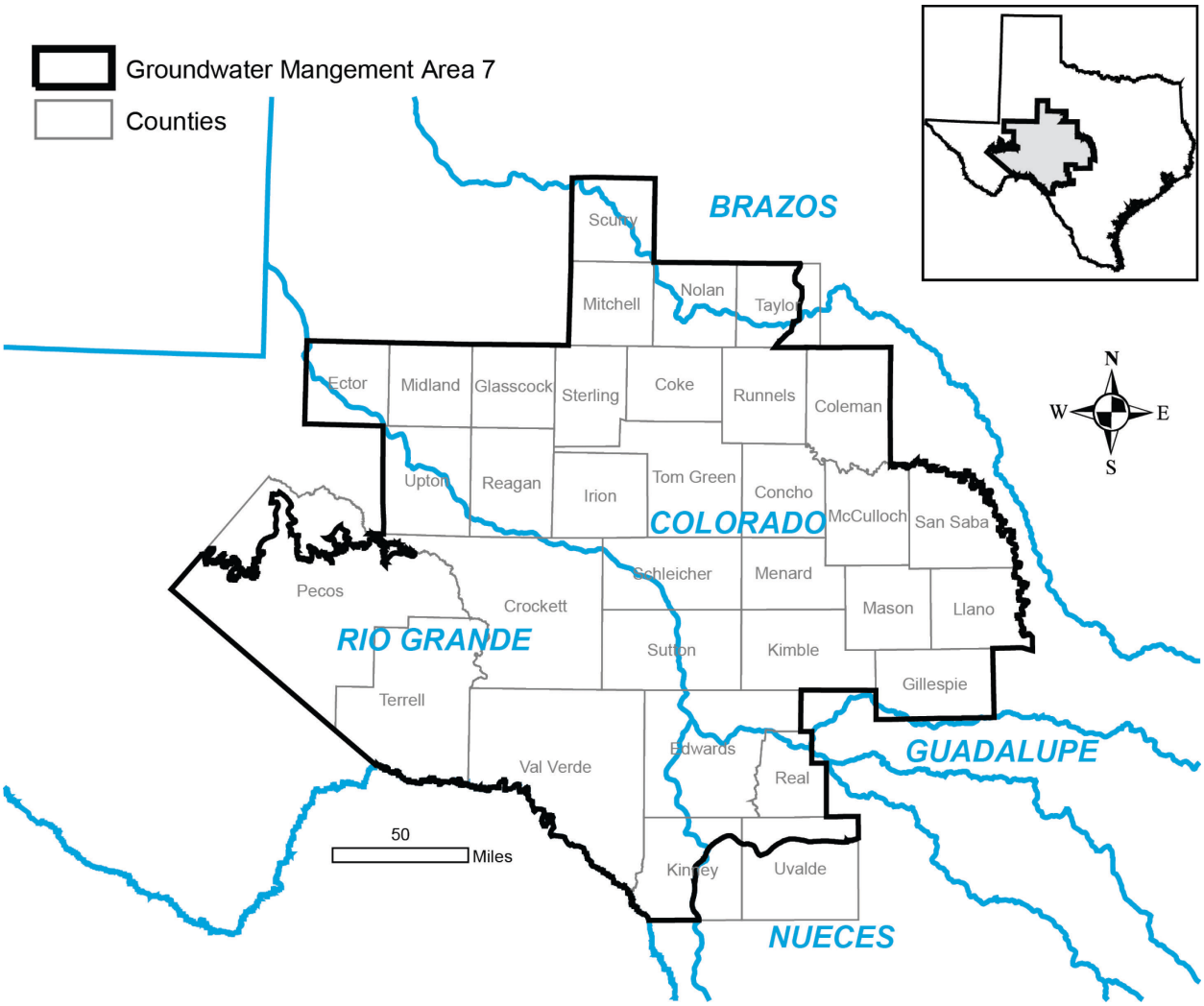


FIGURE 3. MAP SHOWING RIVER BASINS IN GROUNDWATER MANAGEMENT AREA 7. THESE INCLUDE PARTS OF THE BRAZOS, COLORADO, GUADALUPE, NUECES, AND RIO GRANDE RIVER BASINS.

PARAMETERS AND ASSUMPTIONS:

Capitan Reef Complex Aquifer

Version 1.01 of the groundwater availability model of the eastern arm of the Capitan Reef Complex Aquifer was used. See Jones (2016) for assumptions and limitations of the groundwater availability model. See Hutchison (2016h) for details on the assumptions used for predictive simulations.

The model has five layers: Layer 1, the Edwards-Trinity (Plateau) and Pecos Valley aquifers; Layer 2, the Dockum Aquifer and the Dewey Lake Formation; Layer 3, the Rustler Aquifer; Layer 4, a confining unit made up of the Salado and Castile formations, and the overlying portion of the Artesia Group; and Layer 5, the Capitan Reef Complex Aquifer, part of the Artesia Group, and the Delaware Mountain Group. Layers 1 through 4 are intended to act solely as boundary conditions facilitating groundwater inflow and outflow relative to the Capitan Reef Complex Aquifer (Layer 5).

The model was run with MODFLOW-2000 (Harbaugh and others, 2000).

The model was run for the interval 2006 through 2070 for a 64-year predictive simulation. Drawdowns were calculated by subtracting 2006 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7.

During predictive simulations, there were no cells where water levels were below the base elevation of the cell ("dry" cells). Therefore, all drawdowns were included in the averaging.

Drawdown averages and modeled available groundwater volumes are based on the official aquifer boundary within Groundwater Management Area 7.

Dockum and Ogallala Aquifers

Version 1.01 of the groundwater availability model for the High Plains Aquifer System by Deeds and Jigmond (2015) was used to construct the predictive model simulation for this analysis. See Hutchison (2016f) for details of the initial assumptions.

The model has four layers which represent the Ogallala and Pecos Valley Alluvium aquifers (Layer 1), the Edwards-Trinity (High Plains) and Edwards-Trinity (Plateau) aquifers (Layer 2), the Upper Dockum Aquifer (Layer 3), and the Lower Dockum Aquifer (Layer 4). Pass-through cells exist in layers 2 and 3 where the Dockum Aquifer was absent but provided pathway for flow between the Lower Dockum and the Ogallala or Edwards-Trinity (High Plains) aquifers vertically. These pass-through cells were excluded from the calculations of drawdowns and modeled available groundwater.

The model was run with MODFLOW-NWT (Niswonger and others, 2011). The model uses the Newton formulation and the upstream weighting package, which automatically reduces pumping as heads drop in a particular cell, as defined by the user. This feature may simulate the declining production of a well as saturated thickness decreases. Deeds and Jigmond (2015) modified the MODFLOW-NWT code to use a saturated thickness of 30 feet as the threshold—instead of percent of the saturated thickness—when pumping reductions occur during a simulation. It is important for groundwater management areas 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.

The model was run for the interval 2013 through 2070 for a 58-year predictive simulation. Drawdowns were calculated by subtracting 2012 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7.

During predictive simulations, there were no cells where water levels were below the base elevation of the cell ("dry" cells). Therefore, all drawdowns were included in the averaging. Modeled available groundwater analysis excludes pass-through cells.

Drawdown averages and modeled available groundwater volumes are based on the model boundaries within Groundwater Management Area 7 for the Dockum Aquifer and official aquifer boundaries for the Ogallala Aquifer.

Pecos Valley, Edwards-Trinity (Plateau) and Trinity Aquifers

The single-layer alternative groundwater flow model for the Edwards-Trinity (Plateau) and Pecos Valley aquifers used for this analysis. This model is an update to the previously developed groundwater availability model documented in Anaya and Jones (2009). See Hutchison and others (2011a) and Anaya and Jones (2009) for assumptions and limitations of the model. See Hutchison (2016e; 2018c) for details on the assumptions used for predictive simulations.

The groundwater model has one layer representing the Pecos Valley Aquifer and the Edwards-Trinity (Plateau) Aquifer. In the relatively narrow area where both aquifers are present, the model is a lumped representation of both aquifers.

The model was run with MODFLOW-2000 (Harbaugh and others, 2000).

The model was run for the interval 2006 through 2070 for a 65-year predictive simulation. Drawdowns were calculated by subtracting 2010 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7. Comparison of 2010 simulated and measured water levels indicate a root mean squared error of 84 feet or 3 percent of the range in water-level elevations.

Drawdowns for cells with water levels below the base elevation of the cell ("dry" cells) were included in the averaging.

Drawdown averages and modeled available groundwater volumes are based on the official aquifer boundaries within Groundwater Management Area 7.

Edwards-Trinity (Plateau) Aquifer of Kinney County

All parameters and assumptions for the Edwards-Trinity (Plateau) Aquifer of Kinney County in Groundwater Management Area 7 are described in GAM Run 10-043 MAG Version 2 (Shi, 2012). This report assumes a planning period from 2010 to 2070.

The Kinney County Groundwater Conservation District model developed by Hutchison and others (2011b) was used for this analysis. The model was calibrated to water level and spring flux collected from 1950 to 2005.

The model has four layers representing the following hydrogeologic units (from top to bottom): Carrizo-Wilcox Aquifer (layer 1), Upper Cretaceous Unit (layer 2), Edwards (Balcones Fault Zone) Aquifer/Edwards portion of the Edwards-Trinity (Plateau) Aquifer (layer 3), and Trinity portion of the Edwards-Trinity (Plateau) Aquifer (layer 4).

The model was run with MODFLOW-2000 (Harbaugh and others, 2000).

The model was run for the interval 2006 through 2070 for a 65-year predictive simulation. Drawdowns were calculated by subtracting 2010 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7.

Modeled available groundwater volumes are based on the official aquifer boundaries within Groundwater Management Area 7 in Kinney County.

Edwards-Trinity (Plateau) Aquifer of Val Verde County

The single-layer numerical groundwater flow model for the Edwards-Trinity (Plateau) Aquifer of Val Verde County was used for this analysis. This model is based on the previously developed alternative groundwater model of the Kinney County area documented in Hutchison and others (2011b). See EcoKai (2014) for assumptions and

limitations of the model. See Hutchison (2016e; 2018b) for details on the assumptions used for predictive simulations, including recharge and pumping assumptions.

The groundwater model has one layer representing the Edwards-Trinity (Plateau) Aquifer of Val Verde County.

The model was run with MODFLOW-2005 (Harbaugh, 2005).

The model was run for a 45-year predictive simulation representing hydrologic conditions of the interval 1968 through 2013. Simulated spring discharge from San Felipe Springs was then averaged over duration of the simulation. The resultant pumping rate that met the desired future conditions was applied to the predictive period—2010 through 2070—based on the assumption that average conditions over the predictive period are the same as those over the historic period represented by the model run.

Modeled available groundwater volumes are based on the official aquifer boundaries within Groundwater Management Area 7 in Val Verde County.

Rustler Aquifer

Version 1.01 of the groundwater availability model for the Rustler Aquifer by Ewing and others (2012) was used to construct the predictive model simulation for this analysis. See Hutchison (2016d) for details of the initial assumptions, including recharge conditions.

The model has two layers, the top one representing the Rustler Aquifer, and the other representing the Dewey Lake Formation and the Dockum Aquifer.

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

The model was run for the interval 2009 through 2070 for a 61-year predictive simulation. Drawdowns were calculated by subtracting 2009 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7. During predictive simulations, there were no cells where water levels were below the base elevation of the cell (“dry” cells). Therefore, all drawdowns were included in the averaging.

Drawdown averages and modeled available groundwater volumes are based on the model boundaries within Groundwater Management Area 7.

Minor aquifers of the Llano Uplift Area

We used version 1.01 of the groundwater availability model for the minor aquifers in the Llano Uplift Area. See Shi and others (2016) for assumptions and limitations of the model. See Hutchison (2016g) for details of the initial assumptions.

The model contains eight layers: Trinity Aquifer, Edwards-Trinity (Plateau) Aquifer, and younger alluvium deposits (Layer 1), confining units (Layer 2), Marble Falls Aquifer and equivalent units (Layer 3), confining units (Layer 4), Ellenburger-San Saba Aquifer and equivalent units (Layer 5), confining units (Layer 6), Hickory Aquifer and equivalent units (Layer 7), and Precambrian units (Layer 8).

The model was run with MODFLOW-USG beta (development) version (Panday and others, 2013). Perennial rivers and reservoirs were simulated using the MODFLOW-USG river package. Springs were simulated using the MODFLOW-USG drain package.

Drawdown averages and modeled available groundwater volumes are based on the model boundaries within Groundwater Management Area 7.

The model was run for the interval 2011 through 2070 for a 60-year predictive simulation. Drawdowns were calculated by subtracting 2010 simulated water levels from 2070 simulated water levels, which were then averaged over the portion of the aquifer in Groundwater Management Area 7. During predictive simulations, there were no cells where water levels were below the base elevation of the cell ("dry" cells). Therefore, all drawdowns were included in the averaging.

RESULTS:

The modeled available groundwater estimates are 26,164 acre-feet per year in the Capitan Reef Complex Aquifer, 474,464 acre-feet per year in the undifferentiated Edwards-Trinity (Plateau), Pecos Valley, and Trinity aquifers, 22,616 acre-feet per year in the Ellenburger-San Saba Aquifer, 49,936 acre-feet per year in the Hickory Aquifer, 6,570 to 7,925 acre-feet per year in the Ogallala Aquifer, 2,324 acre-feet per year in the Dockum Aquifer, and 7,040 acre-feet per year in the Rustler Aquifer.

The modeled available groundwater for the respective aquifers has been summarized by aquifer, county, and groundwater conservation district (Tables 1, 3, 5, 7, 9, 11, and 13). The modeled available groundwater is also summarized by county, regional water planning area, river basin, and aquifer for use in the regional water planning process (Tables 2, 4, 6, 8, 10, 12, and 14). The modeled available groundwater for the Ogallala Aquifer that achieves the desired future conditions adopted by districts in Groundwater Management Area 7 decreases from 7,925 to 6,570 acre-feet per year between 2020 and 2070 (Tables 9 and 10). This decline is attributable to the occurrence of increasing numbers of cells where

water levels were below the base elevation of the cell ("dry" cells) in parts of Glasscock County. Please note that MODFLOW-NWT automatically reduces pumping as water levels decline.

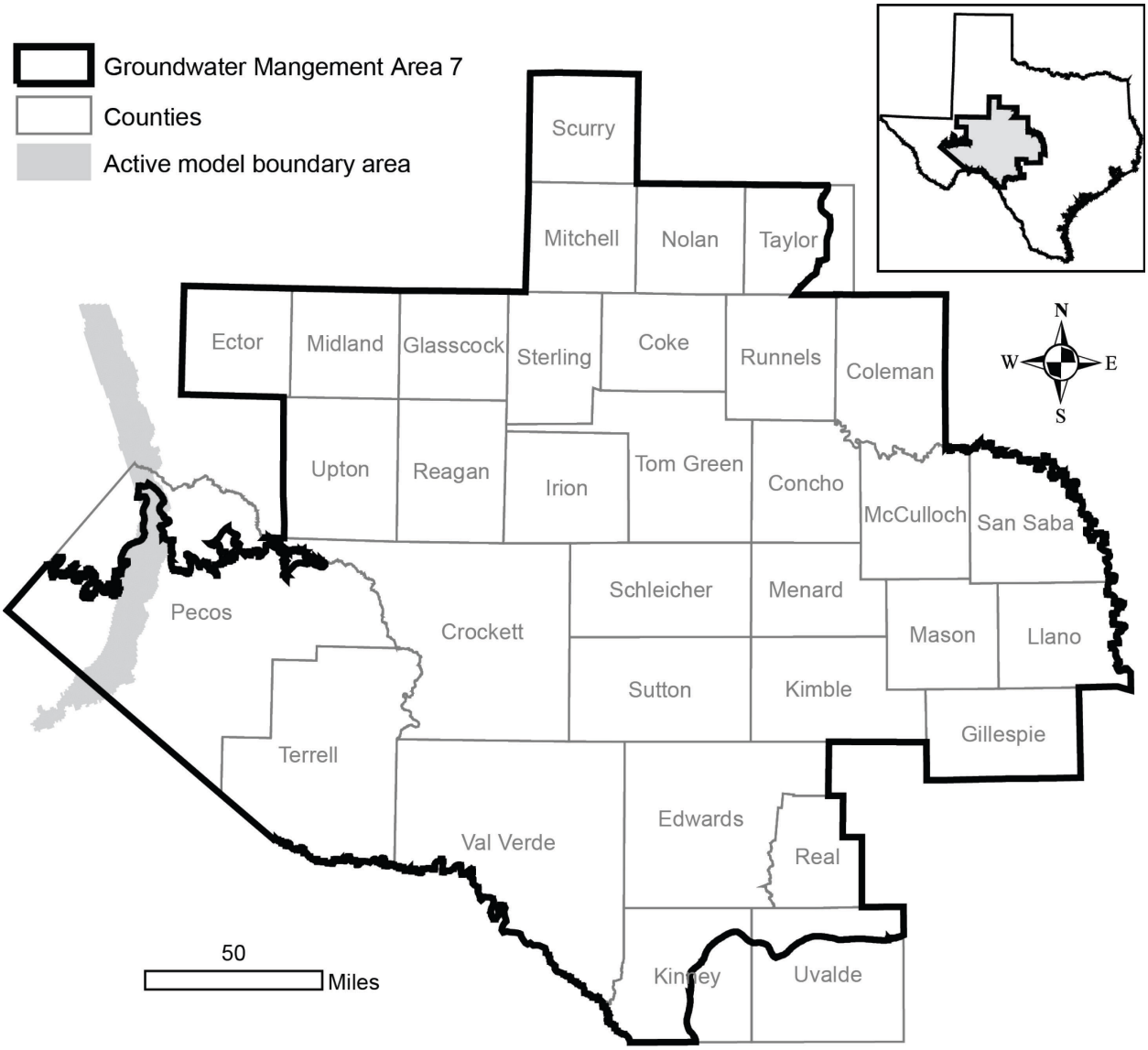


FIGURE 4. MAP SHOWING THE AREAS COVERED BY THE CAPITAN REEF COMPLEX AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE EASTERN ARM OF THE CAPITAN REEF COMPLEX AQUIFER IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 1. MODELED AVAILABLE GROUNDWATER FOR THE CAPITAN REEF COMPLEX AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT AND COUNTY FOR EACH DECADE BETWEEN 2006 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR. GCD IS THE ABBREVIATION FOR GROUNDWATER CONSERVATION DISTRICT.

District	County	Year							
		2006	2010	2020	2030	2040	2050	2060	2070
Middle Pecos GCD	Pecos	26,164	26,164	26,164	26,164	26,164	26,164	26,164	26,164
	Total	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**
GMA 7		**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**

TABLE 2. MODELED AVAILABLE GROUNDWATER FOR THE CAPITAN REEF COMPLEX AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Pecos	F	Rio Grande	26,164	26,164	26,164	26,164	26,164	26,164
		Total	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**
GMA 7			**26,164**	**26,164**	**26,164**	**26,164**	**26,164**	**26,164**

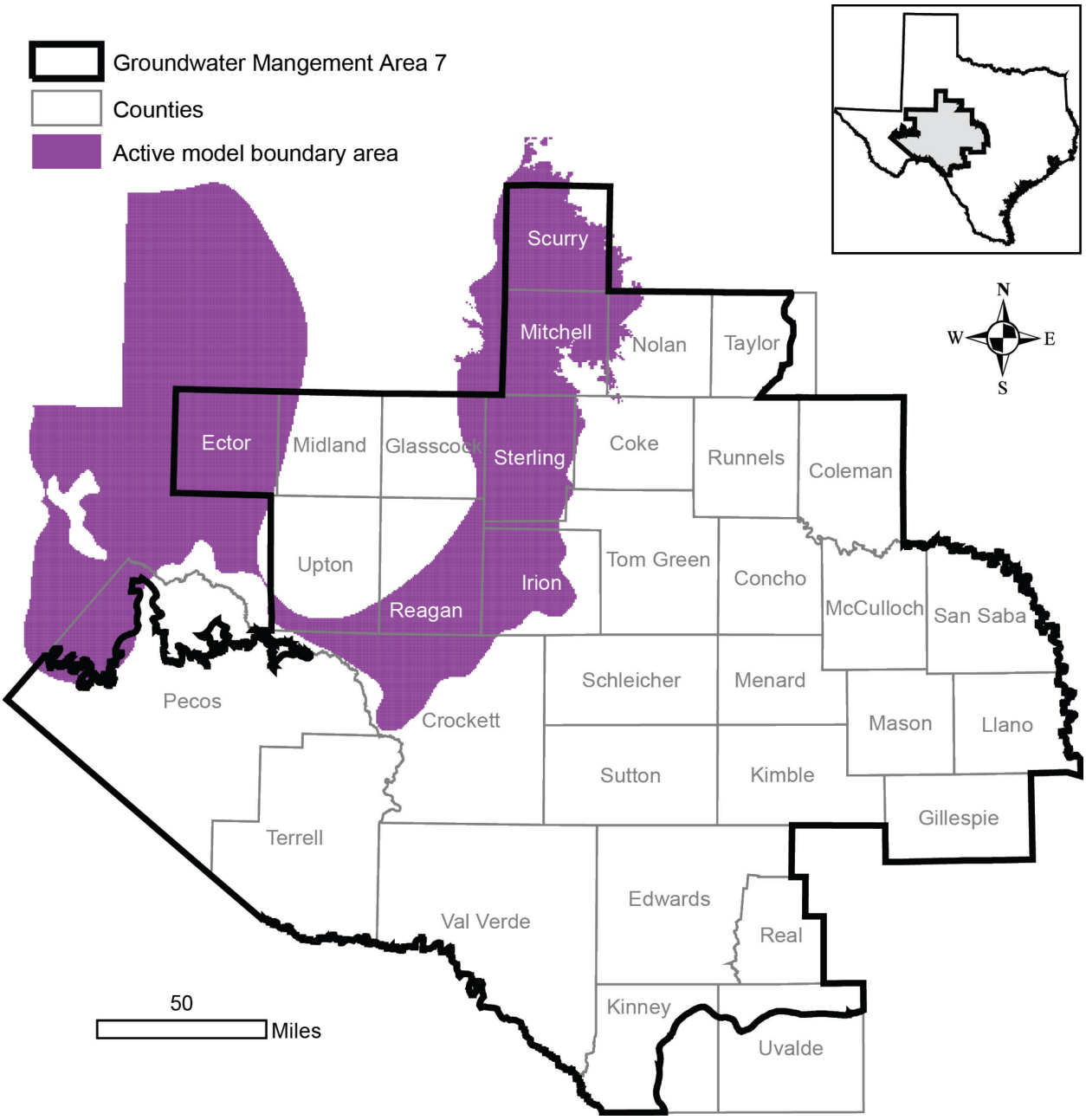


FIGURE 5. MAP SHOWING AREAS COVERED BY THE DOCKUM AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE HIGH PLAINS AQUIFER SYSTEM IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 3. MODELED AVAILABLE GROUNDWATER FOR THE DOCKUM AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT AND COUNTY FOR EACH DECADE BETWEEN 2013 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR. GCD AND UWCD ARE THE ABBREVIATIONS FOR GROUNDWATER CONSERVATION DISTRICT AND UNDERGROUND WATER CONSERVATION DISTRICT, RESPECTIVELY.

District	County	Year						
		2013	2020	2030	2040	2050	2060	2070
Middle Pecos GCD	Pecos	2,022	2,022	2,022	2,022	2,022	2,022	2,022
	Total	**2,022**	**2,022**	**2,022**	**2,022**	**2,022**	**2,022**	**2,022**
Santa Rita UWCD	Reagan	302	302	302	302	302	302	302
	Total	**302**	**302**	**302**	**302**	**302**	**302**	**302**
GMA 7		**2324**	**2,324**	**2,324**	**2,324**	**2,324**	**2,324**	**2,324**

Note: The modeled available groundwater for Santa Rita Underground Water Conservation District excludes parts of Reagan County that fall within Glasscock Groundwater Conservation District. The year 2013 is used because the 2012 desired future condition baseline year for the Dockum Aquifer is an initial condition in the predictive model run.

TABLE 4. MODELED AVAILABLE GROUNDWATER FOR THE DOCKUM AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Pecos	F	Rio Grande	2,022	2,022	2,022	2,022	2,022	2,022
		Total	**2,022**	**2,022**	**2,022**	**2,022**	**2,022**	**2,022**
Reagan	F	Colorado	302	302	302	302	302	302
		Rio Grande	0	0	0	0	0	0
		Total	**302**	**302**	**302**	**302**	**302**	**302**
GMA 7			**2,324**	**2,324**	**2,324**	**2,324**	**2,324**	**2,324**

Note: The modeled available groundwater for Reagan County excludes parts of Reagan County that fall outside of Santa Rita Underground Water Conservation District.

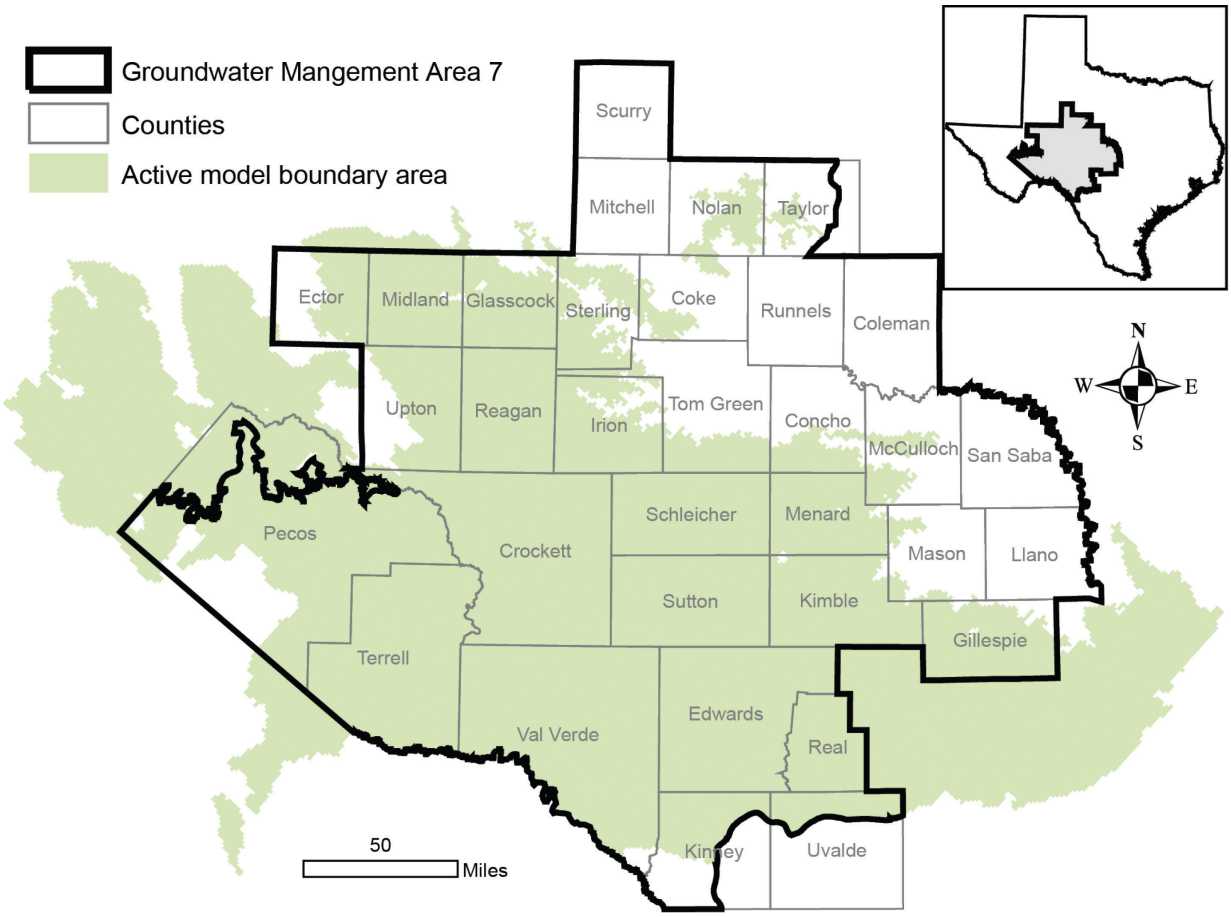


FIGURE 6. MAP SHOWING THE AREAS COVERED BY THE UNDIFFERENTIATED EDWARDS-TRINITY (PLATEAU), PECOS VALLEY, AND TRINITY AQUIFERS IN THE GROUNDWATER AVAILABILITY MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AND PECOS VALLEY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7.

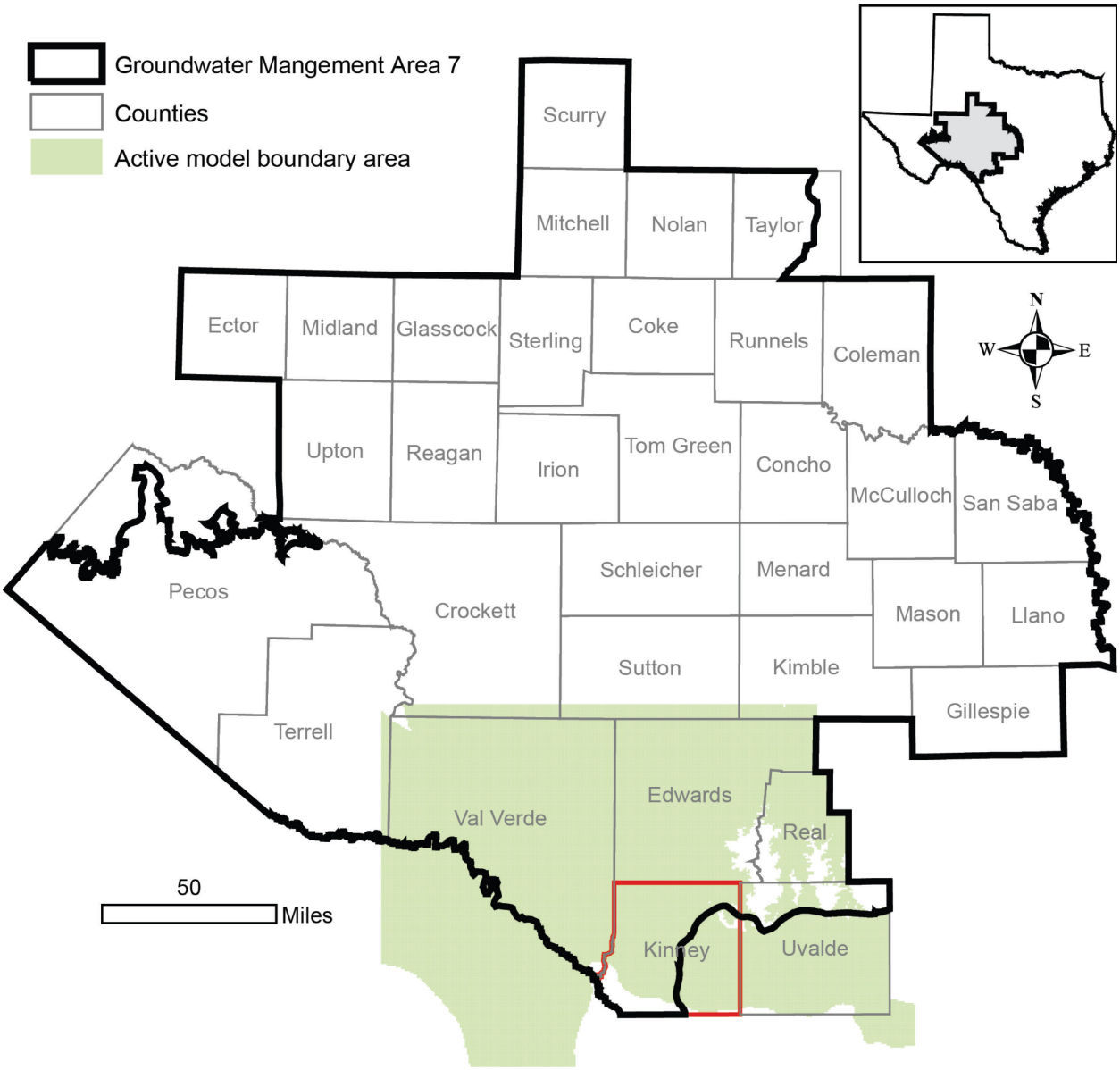


FIGURE 7. MAP SHOWING THE AREAS COVERED BY THE EDWARDS-TRINITY (PLATEAU) AQUIFER IN THE ALTERNATIVE MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AQUIFER IN KINNEY COUNTY.

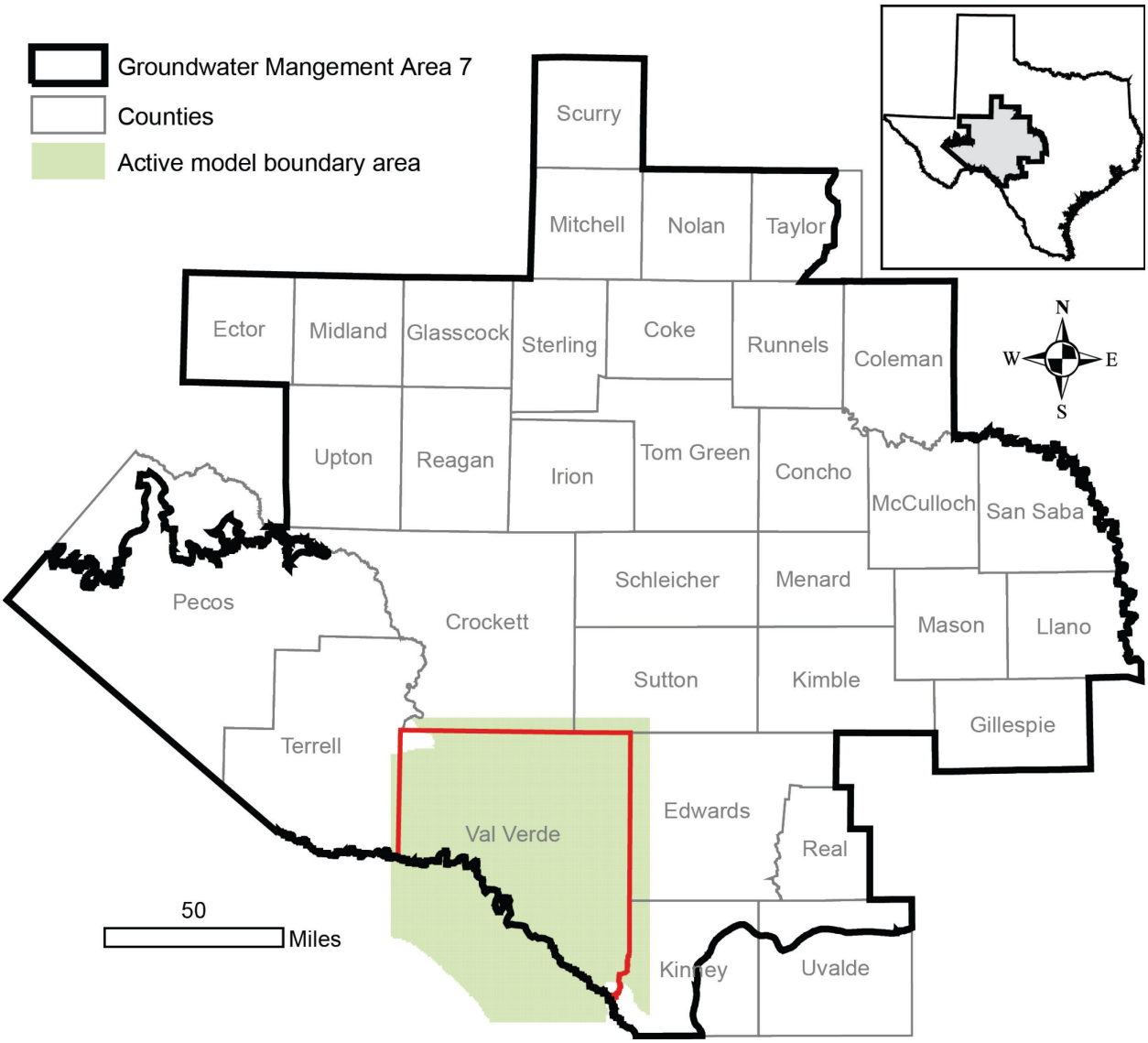


FIGURE 8. MAP SHOWING THE AREAS COVERED BY THE EDWARDS-TRINITY (PLATEAU) AQUIFER IN THE GROUNDWATER FLOW MODEL FOR THE EDWARDS-TRINITY (PLATEAU) AQUIFER IN VAL VERDE COUNTY.

TABLE 5. MODELED AVAILABLE GROUNDWATER FOR THE UNDIFFERENTIATED EDWARDS-TRINITY (PLATEAU), PECOS VALLEY, AND TRINITY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT (GCD) AND COUNTY, FOR EACH DECADE BETWEEN 2006 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR. UWCD IS ABBREVIATION FOR UNDERGROUND WATER CONSERVATION DISTRICT, WCD IS WATER CONSERVATION DISTRICT, UWD IS UNDERGROUND WATER DISTRICT, UWC IS UNDERGROUND WATER CONSERVATION, AND C AND R DISTRICT IS CONSERVATION AND RECLAMATION DISTRICT.

District	County	Year						
		2010	2020	2030	2040	2050	2060	2070
Coke County UWCD	Coke	997	997	997	997	997	997	997
	Total	**997**	**997**	**997**	**997**	**997**	**997**	**997**
Crockett County GCD	Crockett	4,675	4,675	4,675	4,675	4,675	4,675	4,675
	Total	**4,675**	**4,675**	**4,675**	**4,675**	**4,675**	**4,675**	**4,675**
Glasscock GCD	Glasscock	65,186	65,186	65,186	65,186	65,186	65,186	65,186
	Reagan	40,835	40,835	40,835	40,835	40,835	40,835	40,835
	Total	**106,021**	**106,021**	**106,021**	**106,021**	**106,021**	**106,021**	**106,021**
Hill Country UWCD	Gillespie	4,979	4,979	4,979	4,979	4,979	4,979	4,979
	Total	**4,979**	**4,979**	**4,979**	**4,979**	**4,979**	**4,979**	**4,979**
Irion County WCD*	Irion	3,289	3,289	3,289	3,289	3,289	3,289	3,289
	Total	**3,289**	**3,289**	**3,289**	**3,289**	**3,289**	**3,289**	**3,289**
Kimble County GCD	Kimble	1,282	1,282	1,282	1,282	1,282	1,282	1,282
	Total	**1,282**	**1,282**	**1,282**	**1,282**	**1,282**	**1,282**	**1,282**
Kinney County GCD	Kinney	70,341	70,341	70,341	70,341	70,341	70,341	70,341
	Total	**70,341**	**70,341**	**70,341**	**70,341**	**70,341**	**70,341**	**70,341**

TABLE 5. (CONTINUED).

District	County	Year						
		2010	2020	2030	2040	2050	2060	2070
Menard County UWD	Menard	2,217	2,217	2,217	2,217	2,217	2,217	2,217
	Total	**2,217**	**2,217**	**2,217**	**2,217**	**2,217**	**2,217**	**2,217**
Middle Pecos GCD	Pecos	117,309	117,309	117,309	117,309	117,309	117,309	117,309
	Total	**117,309**	**117,309**	**117,309**	**117,309**	**117,309**	**117,309**	**117,309**
Plateau UWC and Supply District	Schleicher	8,034	8,034	8,034	8,034	8,034	8,034	8,034
	Total	**8,034**	**8,034**	**8,034**	**8,034**	**8,034**	**8,034**	**8,034**
Real-Edwards C and R District	Edwards	5,676	5,676	5,676	5,676	5,676	5,676	5,676
	Real	7,523	7,523	7,523	7,523	7,523	7,523	7,523
	Total	**13,199**	**13,199**	**13,199**	**13,199**	**13,199**	**13,199**	**13,199**
Santa Rita UWCD	Reagan	27,398	27,398	27,398	27,398	27,398	27,398	27,398
	Total	**27,398**	**27,398**	**27,398**	**27,398**	**27,398**	**27,398**	**27,398**
Sterling County UWCD	Sterling	2,495	2,495	2,495	2,495	2,495	2,495	2,495
	Total	**2,495**	**2,495**	**2,495**	**2,495**	**2,495**	**2,495**	**2,495**
Sutton County UWCD	Sutton	6,400	6,400	6,400	6,400	6,400	6,400	6,400
	Total	**6,400**	**6,400**	**6,400**	**6,400**	**6,400**	**6,400**	**6,400**
Terrell County GCD	Terrell	1,420	1,420	1,420	1,420	1,420	1,420	1,420
	Total	**1,420**	**1,420**	**1,420**	**1,420**	**1,420**	**1,420**	**1,420**
Uvalde County UWCD	Uvalde	1,993	1,993	1,993	1,993	1,993	1,993	1,993
	Total	**1,993**	**1,993**	**1,993**	**1,993**	**1,993**	**1,993**	**1,993**

TABLE 5. (CONTINUED).

District	County	Year						
		2010	2020	2030	2040	2050	2060	2070
No district		102,415	102,415	102,415	102,415	102,415	102,415	102,415
GMA 7		**474,464**	**474,464**	**474,464**	**474,464**	**474,464**	**474,464**	**474,464**

*The modeled available groundwater for Irion County WCD only includes the portion of the district that falls within Irion County.

TABLE 6. MODELED AVAILABLE GROUNDWATER BY DECADE FOR THE UNDIFFERENTIATED EDWARDS-TRINITY (PLATEAU), PECOS VALLEY, AND TRINITY AQUIFERS IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Coke	F	Colorado	997	997	997	997	997	997
		Total	**997**	**997**	**997**	**997**	**997**	**997**
Crockett	F	Colorado	20	20	20	20	20	20
		Rio Grande	5,427	5,427	5,427	5,427	5,427	5,427
		Total	**5,447**	**5,447**	**5,447**	**5,447**	**5,447**	**5,447**
Ector	F	Colorado	4,925	4,925	4,925	4,925	4,925	4,925
		Rio Grande	617	617	617	617	617	617
		Total	**5,542**	**5,542**	**5,542**	**5,542**	**5,542**	**5,542**
Edwards	J	Colorado	2,305	2,305	2,305	2,305	2,305	2,305
		Nueces	1,631	1,631	1,631	1,631	1,631	1,631
		Rio Grande	1,740	1,740	1,740	1,740	1,740	1,740
		Total	**5,676**	**5,676**	**5,676**	**5,676**	**5,676**	**5,676**
Gillespie	K	Colorado	4,843	4,843	4,843	4,843	4,843	4,843
		Guadalupe	136	136	136	136	136	136
		Total	**4,979**	**4,979**	**4,979**	**4,979**	**4,979**	**4,979**
Glasscock	F	Colorado	65,186	65,186	65,186	65,186	65,186	65,186
		Total	**65,186**	**65,186**	**65,186**	**65,186**	**65,186**	**65,186**

TABLE 6. (CONTINUED).

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Irion	F	Colorado	3,289	3,289	3,289	3,289	3,289	3,289
		Total	**3,289**	**3,289**	**3,289**	**3,289**	**3,289**	**3,289**
Kimble*	F	Colorado	1,282	1,282	1,282	1,282	1,282	1,282
		Total	**1,282**	**1,282**	**1,282**	**1,282**	**1,282**	**1,282**
Kinney	J	Nueces	12	12	12	12	12	12
		Rio Grande	70,329	70,329	70,329	70,329	70,329	70,329
		Total	**70,341**	**70,341**	**70,341**	**70,341**	**70,341**	**70,341**
Menard*	F	Colorado	2,217	2,217	2,217	2,217	2,217	2,217
		Total	**2,217**	**2,217**	**2,217**	**2,217**	**2,217**	**2,217**
Midland	F	Colorado	23,233	23,233	23,233	23,233	23,233	23,233
		Total	**23,233**	**23,233**	**23,233**	**23,233**	**23,233**	**23,233**
Pecos	F	Rio Grande	117,309	117,309	117,309	117,309	117,309	117,309
		Total	**117,309**	**117,309**	**117,309**	**117,309**	**117,309**	**117,309**
Reagan	F	Colorado	68,205	68,205	68,205	68,205	68,205	68,205
		Rio Grande	28	28	28	28	28	28
		Total	**68,233**	**68,233**	**68,233**	**68,233**	**68,233**	**68,233**
Real	J	Colorado	277	277	277	277	277	277
		Guadalupe	3	3	3	3	3	3
		Nueces	7,243	7,243	7,243	7,243	7,243	7,243
		Total	**7,523**	**7,523**	**7,523**	**7,523**	**7,523**	**7,523**

TABLE 6. (CONTINUED).

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Schleicher	F	Colorado	6,403	6,403	6,403	6,403	6,403	6,403
		Rio Grande	1,631	1,631	1,631	1,631	1,631	1,631
		Total	**8,034**	**8,034**	**8,034**	**8,034**	**8,034**	**8,034**
Sterling	F	Colorado	2,495	2,495	2,495	2,495	2,495	2,495
		Total	**2,495**	**2,495**	**2,495**	**2,495**	**2,495**	**2,495**
Sutton	F	Colorado	388	388	388	388	388	388
		Rio Grande	6,022	6,022	6,022	6,022	6,022	6,022
		Total	**6,410**	**6,410**	**6,410**	**6,410**	**6,410**	**6,410**
Taylor	G	Brazos	331	331	331	331	331	331
		Colorado	158	158	158	158	158	158
		Total	**489**	**489**	**489**	**489**	**489**	**489**
Terrell	E	Rio Grande	1,420	1,420	1,420	1,420	1,420	1,420
		Total	**1,420**	**1,420**	**1,420**	**1,420**	**1,420**	**1,420**
Upton	F	Colorado	21,243	21,243	21,243	21,243	21,243	21,243
		Rio Grande	1,126	1,126	1,126	1,126	1,126	1,126
		Total	**22,369**	**22,369**	**22,369**	**22,369**	**22,369**	**22,369**
Uvalde	L	Nueces	1,993	1,993	1,993	1,993	1,993	1,993
		Total	**1,993**	**1,993**	**1,993**	**1,993**	**1,993**	**1,993**
Val Verde	J	Rio Grande	50,000	50,000	50,000	50,000	50,000	50,000
		Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
GMA 7			**474,464**	**474,464**	**474,464**	**474,464**	**474,464**	**474,464**

*The modeled available groundwater for Kimble and Menard counties excludes the parts of the counties that fall within Hickory Underground Water Conservation District No. 1.

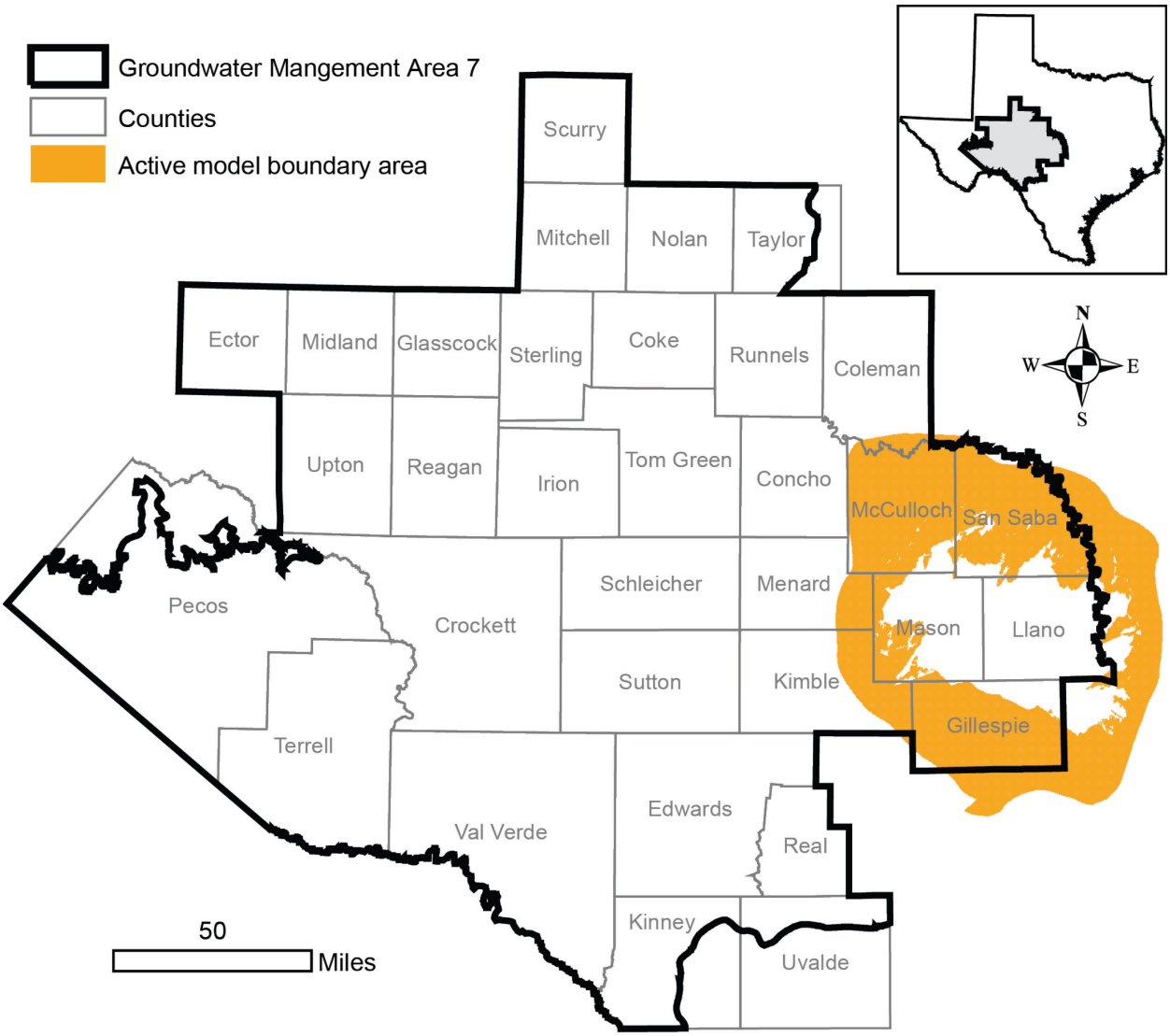


FIGURE 9. MAP SHOWING THE AREAS COVERED BY THE ELLENBURGER-SAN SABA AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE MINOR AQUIFERS OF THE LLANO UPLIFT AREA IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 7. MODELED AVAILABLE GROUNDWATER FOR THE ELLENBURGER-SAN SABA AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT (GCD) AND COUNTY FOR EACH DECADE BETWEEN 2011 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR. UWCD IS THE ABBREVIATION FOR UNDERGROUND WATER CONSERVATION DISTRICT AND UWD IS UNDERGROUND WATER DISTRICT.

District	County	Year						
		2011	2020	2030	2040	2050	2060	2070
Hickory UWCD No. 1	Kimble	344	344	344	344	344	344	344
	Mason	3,237	3,237	3,237	3,237	3,237	3,237	3,237
	McCulloch	3,466	3,466	3,466	3,466	3,466	3,466	3,466
	Menard	282	282	282	282	282	282	282
	San Saba	5,559	5,559	5,559	5,559	5,559	5,559	5,559
	Total	**12,887**	**12,887**	**12,887**	**12,887**	**12,887**	**12,887**	**12,887**
Hill Country UWCD	Gillespie	6,294	6,294	6,294	6,294	6,294	6,294	6,294
	Total	**6,294**	**6,294**	**6,294**	**6,294**	**6,294**	**6,294**	**6,294**
Kimble County GCD	Kimble	178	178	178	178	178	178	178
	Total	**178**	**178**	**178**	**178**	**178**	**178**	**178**
Menard County UWD	Menard	27	27	27	27	27	27	27
	Total	**27**	**27**	**27**	**27**	**27**	**27**	**27**
No District	McCulloch	898	898	898	898	898	898	898
	San Saba	2,331	2,331	2,331	2,331	2,331	2,331	2,331
	Total	**3,229**	**3,229**	**3,229**	**3,229**	**3,229**	**3,229**	**3,229**
GMA 7		**22,616**	**22,616**	**22,616**	**22,616**	**22,616**	**22,616**	**22,616**

Note: The year 2011 is used because the 2010 desired future condition baseline year for the Ellenburger-San Saba Aquifer is an initial condition in the predictive model run.

TABLE 8. MODELED AVAILABLE GROUNDWATER FOR THE ELLENBURGER-SAN SABA AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Gillespie	K	Colorado	6,294	6,294	6,294	6,294	6,294	6,294
		Total	**6,294**	**6,294**	**6,294**	**6,294**	**6,294**	**6,294**
Kimble	F	Colorado	521	521	521	521	521	521
		Total	**521**	**521**	**521**	**521**	**521**	**521**
Mason	F	Colorado	3,237	3,237	3,237	3,237	3,237	3,237
		Total	**3,237**	**3,237**	**3,237**	**3,237**	**3,237**	**3,237**
McCulloch	F	Colorado	4,364	4,364	4,364	4,364	4,364	4,364
		Total	**4,364**	**4,364**	**4,364**	**4,364**	**4,364**	**4,364**
Menard	F	Colorado	309	309	309	309	309	309
		Total	**309**	**309**	**309**	**309**	**309**	**309**
San Saba	K	Colorado	7,890	7,890	7,890	7,890	7,890	7,890
		Total	**7,890**	**7,890**	**7,890**	**7,890**	**7,890**	**7,890**
GMA 7			**22,616**	**22,616**	**22,616**	**22,616**	**22,616**	**22,616**

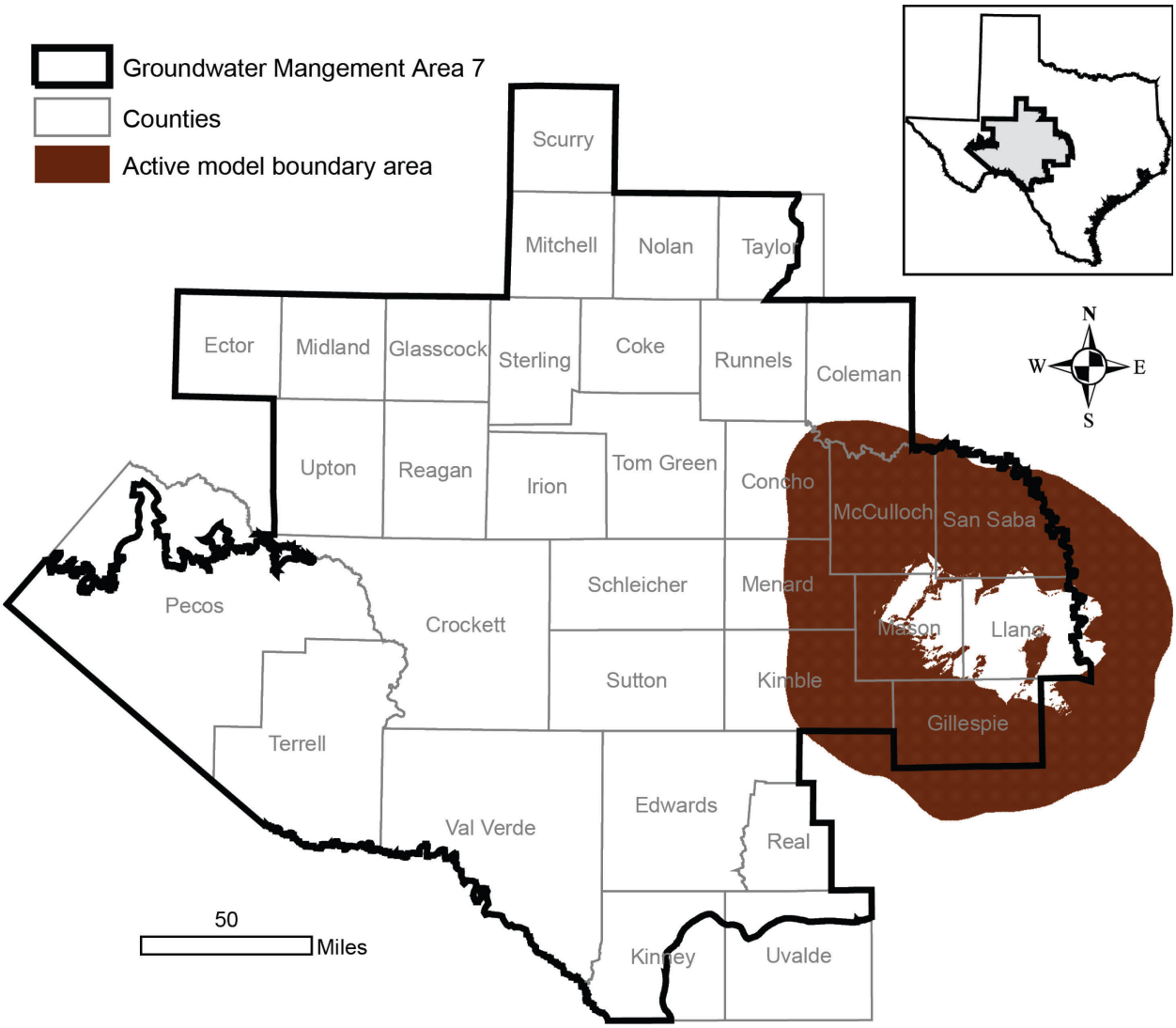


FIGURE 10. MAP SHOWING AREAS COVERED BY THE HICKORY AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE MINOR AQUIFERS OF THE LLANO UPLIFT AREA IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 9. MODELED AVAILABLE GROUNDWATER FOR THE HICKORY AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT (GCD) AND COUNTY FOR EACH DECADE BETWEEN 2011 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR. UWCD IS THE ABBREVIATION FOR UNDERGROUND WATER CONSERVATION DISTRICT AND UWD IS UNDERGROUND WATER DISTRICT.

District	County	Year						
		2011	2020	2030	2040	2050	2060	2070
Hickory UWCD No. 1	Concho	13	13	13	13	13	13	13
	Kimble	42	42	42	42	42	42	42
	Mason	13,212	13,212	13,212	13,212	13,212	13,212	13,212
	McCulloch	21,950	21,950	21,950	21,950	21,950	21,950	21,950
	Menard	2,600	2,600	2,600	2,600	2,600	2,600	2,600
	San Saba	7,027	7,027	7,027	7,027	7,027	7,027	7,027
	Total	**44,843**	**44,843**	**44,843**	**44,843**	**44,843**	**44,843**	**44,843**
Hill Country UWCD	Gillespie	1,751	1,751	1,751	1,751	1,751	1,751	1,751
	Total	**1,751**	**1,751**	**1,751**	**1,751**	**1,751**	**1,751**	**1,751**
Kimble County GCD	Kimble	123	123	123	123	123	123	123
	Total	**123**	**123**	**123**	**123**	**123**	**123**	**123**
Lipan-Kickapoo WCD	Concho	13	13	13	13	13	13	13
	Total	**13**	**13**	**13**	**13**	**13**	**13**	**13**
Menard County UWD	Menard	126	126	126	126	126	126	126
	Total	**126**	**126**	**126**	**126**	**126**	**126**	**126**
No District	McCulloch	2,427	2,427	2,427	2,427	2,427	2,427	2,427
	San Saba	652	652	652	652	652	652	652
	Total	**3,080**	**3,080**	**3,080**	**3,080**	**3,080**	**3,080**	**3,080**
GMA 7		**49,936**	**49,936**	**49,936**	**49,936**	**49,936**	**49,936**	**49,936**

Note: The year 2011 is used because the 2010 desired future condition baseline year for the Hickory Aquifer is an initial condition in the predictive model run.

TABLE 10. MODELED AVAILABLE GROUNDWATER FOR THE HICKORY AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Concho	F	Colorado	27	27	27	27	27	27
		Total	**27**	**27**	**27**	**27**	**27**	**27**
Gillespie	K	Colorado	1,751	1,751	1,751	1,751	1,751	1,751
		Total	**1,751**	**1,751**	**1,751**	**1,751**	**1,751**	**1,751**
Kimble	F	Colorado	165	165	165	165	165	165
		Total	**165**	**165**	**165**	**165**	**165**	**165**
Mason	F	Colorado	13,212	13,212	13,212	13,212	13,212	13,212
		Total	**13,212**	**13,212**	**13,212**	**13,212**	**13,212**	**13,212**
McCulloch	F	Colorado	24,377	24,377	24,377	24,377	24,377	24,377
		Total	**24,377**	**24,377**	**24,377**	**24,377**	**24,377**	**24,377**
Menard	F	Colorado	2,725	2,725	2,725	2,725	2,725	2,725
		Total	**2,725**	**2,725**	**2,725**	**2,725**	**2,725**	**2,725**
San Saba	K	Colorado	7,680	7,680	7,680	7,680	7,680	7,680
		Total	**7,680**	**7,680**	**7,680**	**7,680**	**7,680**	**7,680**
GMA 7			**49,936**	**49,936**	**49,936**	**49,936**	**49,936**	**49,936**

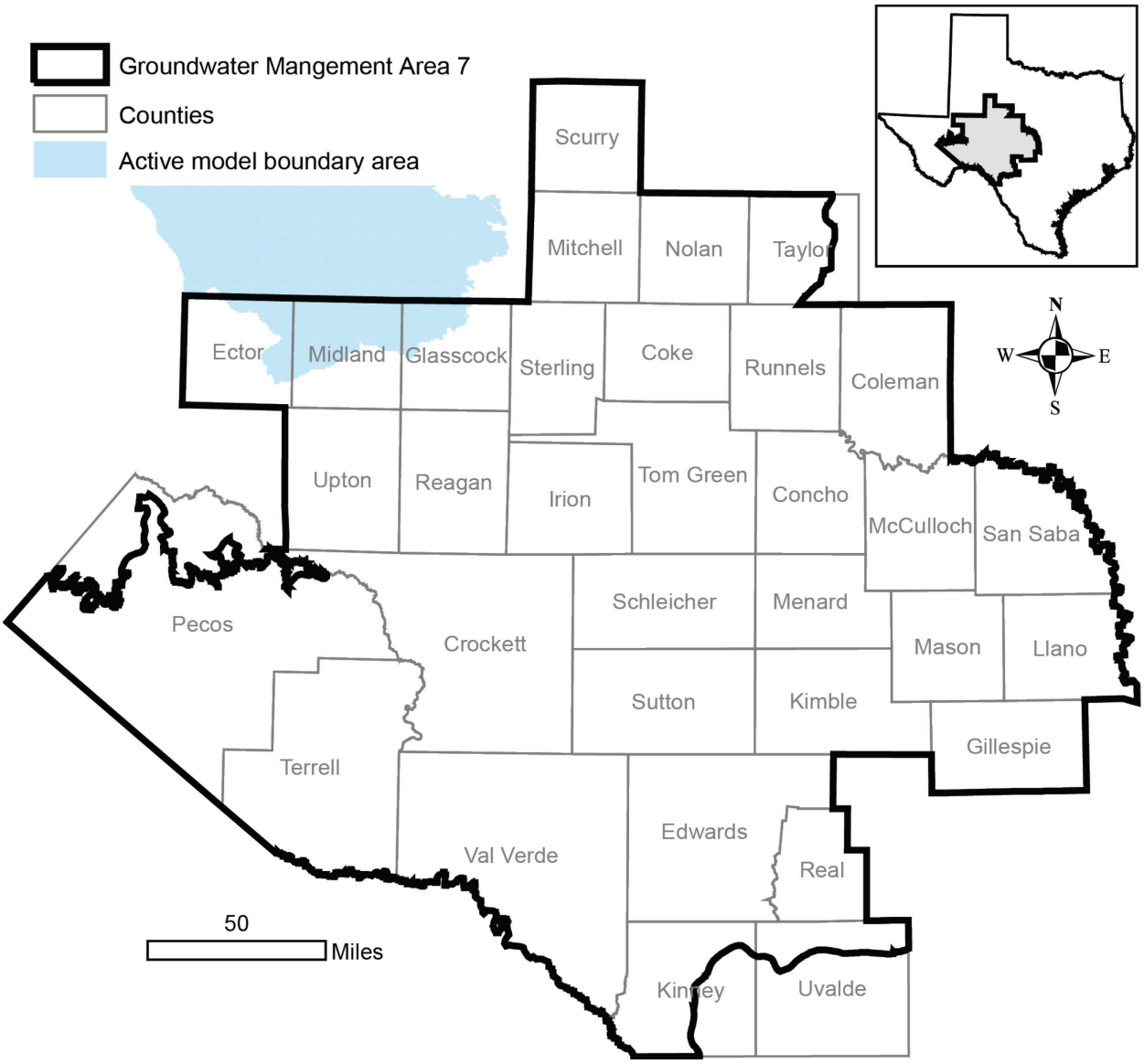


FIGURE 11. MAP SHOWING THE AREAS COVERED BY THE OGALLALA AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE HIGH PLAINS AQUIFER SYSTEM IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 11. MODELED AVAILABLE GROUNDWATER FOR THE OGALLALA AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT (GCD) AND COUNTY FOR EACH DECADE BETWEEN 2013 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

District	County	Year						
		2013	2020	2030	2040	2050	2060	2070
Glasscock GCD	Glasscock	8,019	7,925	7,673	7,372	7,058	6,803	6,570
	Total	**8,019**	**7,925**	**7,673**	**7,372**	**7,058**	**6,803**	**6,570**
GMA 7		**8,019**	**7,925**	**7,673**	**7,372**	**7,058**	**6,803**	**6,570**

Note: The year 2013 is used because the 2012 desired future condition baseline year for the Ogallala Aquifer is an initial condition in the predictive model run.

TABLE 12. MODELED AVAILABLE GROUNDWATER FOR THE OGALLALA AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Glasscock	F	Colorado	7,925	7,673	7,372	7,058	6,803	6,570
		Total	**7,925**	**7,673**	**7,372**	**7,058**	**6,803**	**6,570**
GMA 7			**7,925**	**7,673**	**7,372**	**7,058**	**6,803**	**6,570**

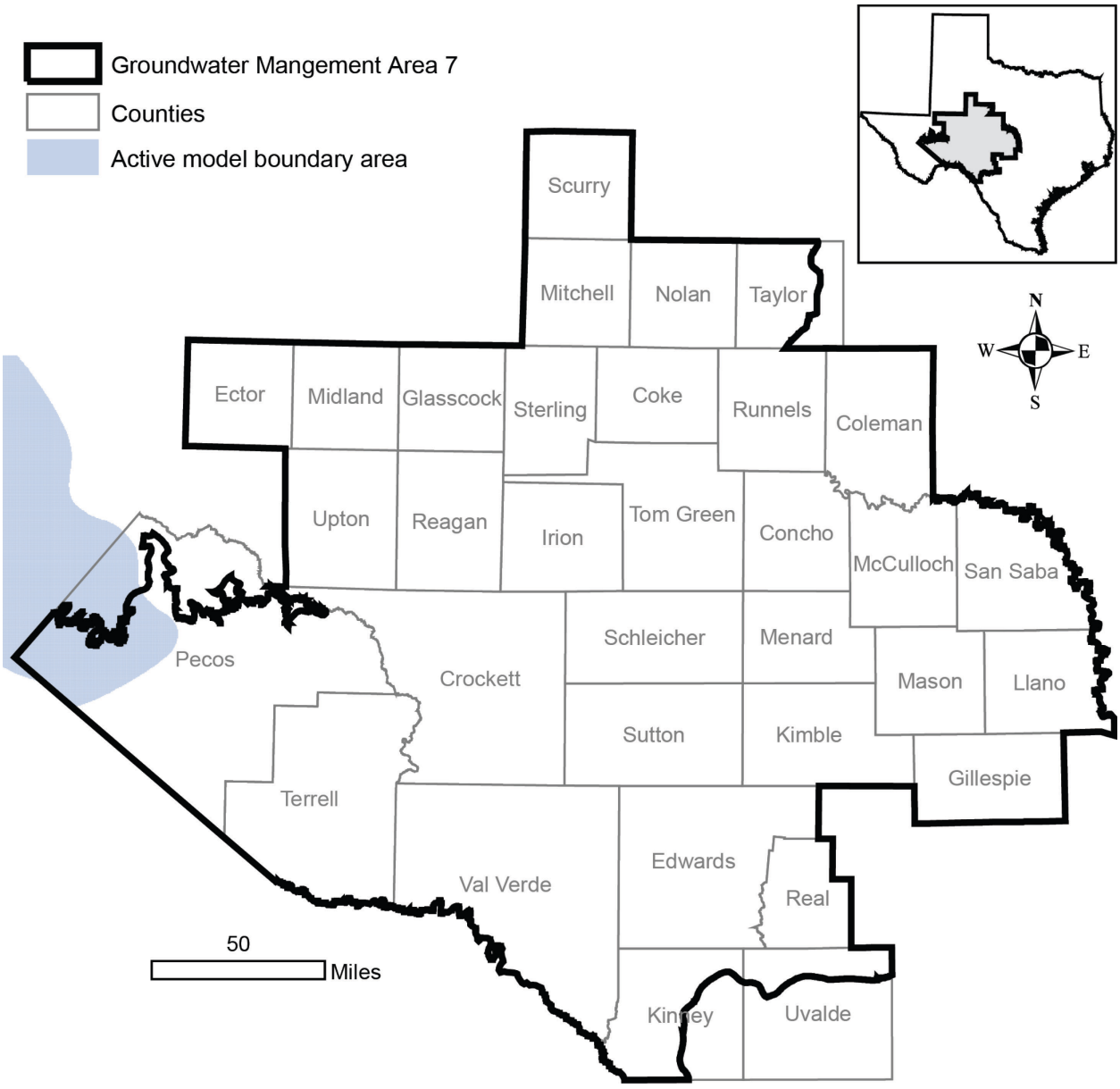


FIGURE 12. MAP SHOWING AREAS COVERED BY THE RUSTLER AQUIFER IN THE GROUNDWATER AVAILABILITY MODEL FOR THE RUSTLER AQUIFER IN GROUNDWATER MANAGEMENT AREA 7.

TABLE 13. MODELED AVAILABLE GROUNDWATER FOR THE RUSTLER AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY DISTRICT AND COUNTY FOR EACH DECADE BETWEEN 2009 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

District	County	Year							
		2009	2010	2020	2030	2040	2050	2060	2070
Middle Pecos GCD	Pecos	7,040	7,040	7,040	7,040	7,040	7,040	7,040	7,040
	Total	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**

TABLE 14. MODELED AVAILABLE GROUNDWATER FOR THE RUSTLER AQUIFER IN GROUNDWATER MANAGEMENT AREA 7 SUMMARIZED BY COUNTY, REGIONAL WATER PLANNING AREA (RWPA), AND RIVER BASIN FOR EACH DECADE BETWEEN 2020 AND 2070. RESULTS ARE IN ACRE-FEET PER YEAR.

County	RWPA	River Basin	Year					
			2020	2030	2040	2050	2060	2070
Pecos	F	Rio Grande	7,040	7,040	7,040	7,040	7,040	7,040
		Rio Grande	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**	**7,040**

LIMITATIONS:

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

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

A key aspect of using the groundwater model to evaluate historical groundwater flow conditions includes the assumptions about the location in the aquifer where historic pumping was placed. Understanding the amount and location of historical 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 streamflow are specific to a particular historical time period.

Because the application of the groundwater model was designed to address regional scale questions, the results are most effective on a regional scale. The TWDB 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 groundwater pumping and groundwater levels in 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.

Model "Dry" Cells

The predictive model run for this analysis results in water levels in some model cells dropping below the base elevation of the cell during the simulation. In terms of water level, the cells have gone dry. However, as noted in the model assumptions the transmissivity of the cell remains constant and will produce water.

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Appendix D

District Rules

SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT

RULES

AMENDED MAY 24, 2016

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Rules of the
Santa Rita Underground Water Conservation District

Rules of the Santa Rita Underground Water Conservation District (the District) as amended are hereby adopted and effective as of May 24, 2016.

In accordance with Section 59 of Article 16 of the Texas Constitution and the District Act, Act of May 24, 1989, 71st Legislature, Regular Session, Chapter 653 (Senate Bill 1634), as amended, and Chapter 36 of the Texas Water Code, the following rules are hereby ratified and adopted as the rules of the District by its Board. All existing rules or parts of existing rules in conflict with these rules are hereby repealed. Each rule as worded herein has been in effect since date of passage and shall be as hereafter amended. If any section, sentence, paragraph, clause, or part of these rules and regulations should be held or declared invalid or for any reason by a final judgment of the courts of this state or of the United States, such decision or holding shall not affect the validity of the remaining portions of these rules; and the Board does hereby declare that it would have adopted and promulgated such remaining portions of such rules irrespective of the fact that any other sentence, section, paragraph, clause, or part thereof may be declared invalid.

The rules, regulations, and modes of procedures herein contained have been adopted for the purpose of simplifying procedure, avoiding delays, saving expense, and facilitating the administration of the groundwater laws of the State and the rules of this District. To the end that these objectives be attained, these rules shall be so construed. These rules may be used as guides in the exercise of discretion, where discretion is vested. However, under no circumstances and in no particular case shall they, or any of them, be construed as a limitation or restriction upon the exercise of any discretion, where such exists.

Nothing in these rules or Chapter 36 of the Texas Water Code shall be construed as granting the authority to deprive or divest a landowner, including a landowner's lessees, heirs, or assigns, of the groundwater ownership and rights described by § 36.002 of the Texas Water Code, recognizing, however, that § 36.002 does not prohibit the District from limiting or prohibiting the drilling of a well for failure or inability to comply with minimum well spacing or tract size requirements adopted by the District; affect the ability of the District to regulate groundwater production as authorized under §§ 36.113, 36.116, or 36.122 or otherwise under Chapter 36 of the Texas Water Code, or a special law governing the District; or require that a rule adopted by the District allocate to each landowner a proportionate share of available groundwater for production from the aquifer based on the number of acres owned by the landowner.

Texas faces a difficult challenge to develop water policies that serve county, state, regional, and individual Texans' interests. In accordance with the Texas Constitution, Section 59 of Article 16, and by statutory enactment by the Texas Legislature and declaration by the Texas Supreme Court, groundwater management by groundwater conservation districts is the state's preferred method of groundwater management in order to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater. The District's locally

elected Board of Directors and staff accomplish this purpose by performing certain duties set forth in the general law of the State, Chapter 36 of the Texas Water Code, and the District Act, and implemented in accordance with these rules.

RULE 1 DEFINITIONS.

Unless the context indicates a contrary meaning, the words hereinafter defined shall have the meaning provided under the definitions in this section of the rules. In the administration of its duties, the District follows these definitions and the definitions of terms set forth in Chapter 36 of the Texas Water Code.

(55) **"Abandoned Well"** means a well that has not been used for six (6) consecutive months. A well is considered to be in use in the following cases:

(a) A non-deteriorated well which contains the casing, pump and pump column in good condition; or

(b) A non-deteriorated well which has been capped with a covering capable of preventing surface pollutants from entering the well and sustain the weight of at least 400 pounds.

(56) **"Affected Person"** means, with respect to a Groundwater Management Are:

(a) an owner of land in the Groundwater Management Area;

(b) a district in or adjacent to the Groundwater Management Area;

(c) a regional water planning group with a water management strategy in the Groundwater Management Area;

(d) a person who holds or is applying for a permit from a district in the Groundwater Management Area;

(e) a person who has groundwater rights in the Groundwater Management Area, or;

(f) any other person defined as affected by a TCEQ rule.

(57) **"Agriculture"** means any of the following activities:

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

(b) the practice of floriculture, viticulture, silviculture, and horticulture, including the cultivation of plants in containers or nonsoil med (confirm meaning), by a nursery grower;

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

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

(e) wildlife management; and

(f) raising or keeping equine animals.

(58) **"Animal Feeding Operation"** means a lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 calendar days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or postharvest residues in the normal growing season over any portion of the lot or facility.

(59) **"Applicant"** means the Well Owner.

(60) **"Aquifer"** or "Groundwater Reservoir" shall mean a specific subsurface water-bearing reservoir having ascertainable boundaries containing groundwater.

(61) "**Aquifer Storage and Recovery Project" or "ASR Project"** means a project involving the injection of water into a geologic formation for the purpose of subsequent recovery and beneficial use by the project operator.

(62) **"ASR"** means aquifer storage and recovery.

(63) **"ASR Injection Well"** means a Class V injection well used for the injection of water into a geologic formation as part of an ASR Project.

(64) **"ASR Recovery Well"** means a well used for the recovery of water from a geologic formation as part of an ASR Project.

(65) **"Authorized Well Site"** shall be:

(a) the location of a proposed well on an application duly filed until such application is denied; or

(b) the location of a proposed well on a valid permit (An authorized well site is not a permit to drill.)

(66) **"Beneficial use"** or **"Use for a Beneficial purpose"** shall mean use for:

(a) agricultural, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational, or pleasure purposes;

(b) exploring for, producing, handling, or treating oil, gas, sulphur, or other minerals; or

(c) any other purpose that is useful and beneficial to the users that do not commit waste as defined in these rules.

(67) **"Best Available Science"** means conclusions that are logically and reasonably derived using statistical or quantitative data, techniques, analyses, and studies that are publicly available to reviewing scientists and can be employed to address a specific scientific question.

(68) **"Board"** shall mean the Board of Directors of the Santa Rita Underground Water Conservation District consisting of (5) five elected or appointed members.

(69) **"Casing"** means a tubular structure installed in the excavated or drilled hole, temporarily or permanently, to maintain the hole sidewalls against caving, and, along with cementing and/or bentonite grouting, prevent surface contaminant infiltration.

(70) **"Concentrated Animal Feeding Operation"** ("CAFO") means any animal feeding operation with the number of animals established in TCEQ's rules, including at least 37,500 chickens (other than laying hens), or that has been designated by the TCEQ's Executive Director as a CAFO because it is a significant contributor of pollutants into or adjacent to water in the state.

(71) **"Desired Future Condition"** means a quantitative description, adopted in accordance with § 36.108 of the Texas Water Code, of the desired, condition of the groundwater resources in a Management Area at one or more specified future times.

(72) **"Deteriorated Well"** means a well, the condition of which will cause, or is likely to cause pollution of any groundwater in this District.

(73) **"Discharge"** means the amount of water that leaves an aquifer by natural or artificial means.

(74) **"District"** shall mean Santa Rita Underground Water Conservation maintaining its principal office in Santa Rita Underground Water Conservation District Office Building, 108 Highway 67 West, Big Lake, Texas. Where applications, reports, and other papers are required to be filed with or sent to "the District," this means the District's

headquarters in the Santa Rita Underground Water Conservation District Office Building, Big Lake, Texas.

(75) **"District Act"** means the District's enabling legislation originally enacted by Act of the 71st Legislature, 1989, Regular Session, Chapter 653 (Senate Bill 1634), as amended by Act of the 81st Legislature, 2009, Regular Session, Chapter 879 (Senate Bill 2520) and Act of the 84th Legislature, 2015, Regular Session, Chapter 1196 (Senate Bill 1336).

(76) **"Domestic Use"** means use to supply the needs of a household for personal needs or for household purposes such as drinking, bathing, heating, cooking, sanitation, or cleaning. This includes the use of water for home landscapes, watering of domestic animals, and home gardening.

(77) **"Drilling Permit"** means a permit issued by the District for a properly spaced well that is capable of producing more than 25,000 gallons of water per day (17.4 gallons per minute).

(78) **"Exempt Well"** means any well for which the District is prohibited from requiring a permit under Texas Water Code § 36.117. Wells used solely for domestic use or livestock or poultry use on 10 acres or less are NOT exempt and must be permitted prior to drilling. For all purposes herein, an exempt well shall be exempt from permitting requirements, but shall not be exempt from either preregistration or registration requirements or spacing rules created hereunder.

(79) **"Export of Groundwater"** means pumping, transferring or transporting groundwater out of the District. The terms "transfer," "transport," or "export" of groundwater are used interchangeably within Chapter 36 of the Texas Water Code and these rules.

(80) **"Groundwater"** means water percolating below the surface of the earth.

(81) **"Groundwater Management Area"** means an area designated and delineated by the TWDB as an area suitable for management of groundwater resources.

(82) **"Licensed Water Well Driller"** shall mean any person who holds a license issued by the State of Texas pursuant to the provisions of the Texas Water Well Drillers Act, as amended, and the substantive rules of the Texas Department of Licensing and Regulation or its successors.

(83) **"Modeled Available Groundwater"** means the amount of water determined by the Executive Administrator of the TWDB and that may be produced on an average annual basis to achieve the Desired Future Condition of the aquifer as determined under § 36.108 of the Texas Water Code.

(84) **"Non-Exempt Well"** means any well not specifically exempted by § 36.117 of the Texas Water Code or these rules. This includes domestic and livestock wells on a tract of land that is 10 acres or less.

(85) **"Notice of Intent to Drill"** means a preregistration form or other form that must be submitted to the District by the landowner or his agent prior to the drilling of an exempt well or monitor well.

(86) **"Open or Uncovered Well"** means any artificial excavation drilled or dug for the purpose of producing groundwater and that is not capped or covered as required by the Texas Water Code.

(87) **"Owner" or "Well Owner"** means the person who holds a possessory interest in: (1) the land upon which a well is located or to be located, and who has authority to and who may lawfully produce groundwater from this land and/or (2) the well itself as long as this person has the authority to produce groundwater from the land on which the well is located, as evidenced by written documentation that establishes the consent of the landowner to this person's ownership and operation of the well; provided, however, that this person may authorize in writing another person to act on his/her behalf with respect to matters regulated by the District. The ownership and rights of the owners of the land and their lessees and assigns in groundwater are hereby recognized, and nothing in this code shall be construed as depriving or divesting the owners or their lessees and assigns of the ownership or rights, except as those rights may be limited or altered by rules promulgated by the District. A rule promulgated by the District may not discriminate between owners of land that is irrigated for production and owners of land or their lessees and assigns whose land that was irrigated for production is enrolled or participating in a federal conservation program.

(88) **"Permitted Well"** means any artificial excavation drilled or dug for the purpose of producing groundwater that:

(a) is not exempt by § 36.117 of the Texas Water Code;

(b) is properly registered with the District; and

(c) has been issued a permit by the District.

(89) **"Person"** shall mean any individual, partnership, firm, state governmental agency, political subdivision, corporation, or legal entity.

(90) **"Plugging"** means an absolute sealing of the entire well bore with cement and/or approved bentonite grout.

(91) **"Pollution"** means the alteration of the physical, thermal, chemical or biological quality of, or the contamination or degradation of, any groundwater in the District that renders

the groundwater harmful, detrimental, or injurious to humans, animal life, vegetation, property, or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(92) **"Preregistration"** means the completion and submission of a preregistration form prior to the drilling of an exempt well and production of water.

(93) **"Production Permit"** is synonymous with "Operating Permit," both terms which mean the type of a permit that authorizes the operation and production from a water well.

(94) **"Project operator"** means a person holding an authorization under this subchapter to undertake an aquifer storage and recovery project.

(95) **"Recharge"** means the amount of water that infiltrates to the water table of an aquifer.

(96) **"Registered Well"** means and includes and artificial excavation to produce or that is producing water for any purpose that has been properly recorded with the District.

(97) **"SOAH"** means the State Office of Administrative Hearings

(98) **"TCEQ"** means the Texas Commission on Environmental Quality or its successor.

(99) **"Transportation Facility"** is any system for exporting water, which may include a pipeline, channel, ditch, watercourse or other natural or artificial facilities, or any combination of such facilities, pertaining to any or all water which is produced from a well or wells located or to be located within the District, any or all of which is used or intended for use outside the boundaries of the District.

(100) **"TWDB"** means the Texas Water Development Board.

(101) **"Waste"** as used herein shall have the same meaning defined by the Legislature, as follows:

(a) the withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threatens to cause intrusion into the reservoir of water unsuitable for agricultural, gardening, domestic, or stock raising purposes;

(b) the flowing or producing of wells from a groundwater reservoir if the water produced is not used for a beneficial purpose;

(c) escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater;

(d) the pollution or harmful alteration of groundwater in a groundwater reservoir by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground;

(e) willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than the owner of the well unless such discharge is authorized by permit, rule, or order issued by the Commission under Chapter 26;

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

(g) for water produced from an artesian well, "waste" has the meaning assigned by § 11.205 of the Texas Water Code.

(102) **"Water"** shall mean groundwater.

(103) **"Water Well Drillers rules"** shall mean the administrative rules that apply to the drilling of water wells, as set forth in 16 Texas Administrative Code § 76.1000 (Texas Department of Licensing and Regulation, Technical Requirements – Locations and Standards of Completion for Wells).

(104) **"Well"** or **"Water Well"** shall mean any facility, device, or method used to withdraw groundwater within the District.

(105) **"Well Report"** or **"Driller's Log"** means a record, made at the time of drilling, showing the depth, thickness, character of the different strata penetrated, location of any water bearing strata, depth, size and character of casing installed, together with any other data or information required by the State or this Board and recorded on forms prescribed either by the State regulatory agency with jurisdiction thereof or by this Board.

(106) **"Well system"** means two or more wells owned, operated, or otherwise under the control of the same person and that are the source of groundwater that is put to the same beneficial use at the same location of use. Groundwater production authorized by permit for a well system is considered to be aggregated and assigned to the entire well system.

(107) **"Withdrawal"** means extracting groundwater by pumping or any other method.

RULE 1A DRILLING AND OPERATING PERMITS REQUIRED.

No person, firm, or corporation may drill or operate a well without first obtaining a permit from the District.

Rules for filing all applications:

(g) If the applicant is an individual, the application shall be signed by the applicant or his duly appointed agent. The agent may be requested to present satisfactory evidence of his authority to represent the applicant.

(h) If the application is by a partnership, the applicant shall be designated by the firm name followed by the words "partnership" and the application shall be signed by a least one of the general partners who is duly authorized to bind all of the partners.

(i) In the case of a corporation, public district, county or municipality, the application shall be signed by a duly authorized official. A copy of the resolution or other authorization to make the application may be required by the officer or agent receiving the application.

(j) In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate.

RULE 1B PERMIT EXEMPTIONS.

(a) A district may exempt wells from the requirement of obtaining a drilling permit, an operating permit, or any other permit required by this chapter or the district's rules.

(b) A district may not require any permit issued by the district for:

(1) drilling or operating a well used solely for domestic use or for providing water for livestock or poultry if the well is located or to be located on a tract of land larger than 10 acres and drilled, completed, or equipped so that it is incapable of producing more than 25,000 gallons of groundwater a day;

(2) drilling a water well used solely to supply water for a rig that is actively engaged in drilling or exploration operations for an oil or gas well permitted by the Railroad Commission of Texas provided that the person holding the permit is responsible for drilling and operating the water well and the water well is located on the same lease or field associated with the drilling rig; or

(3) drilling a water well authorized under a permit issued by the Railroad Commission of Texas under Chapter 134, Texas Natural Resources Code, or for production from the well to the extent the withdrawals are required for mining activities regardless of any subsequent use of the water.

For purposes of an exemption under this subsection, the terms "livestock use" and "poultry use" do not include livestock or poultry operations that fall under the definition

of "Animal Feeding Operation" or "Concentrated Animal Feeding Operation" set forth in District Rule 1.

(c) A district may not restrict the production of any well that is exempt from permitting under Subsection (b)(l).

(d) Notwithstanding Subsection (b), the District may require an exempt well to be permitted by the District and to comply with all District rules in order to be operated if:

(1) the groundwater withdrawals that were exempted under Subsection (b)(2) are no longer used solely to supply water for a rig that is actively engaged in drilling or exploration operations for an oil or gas well permitted by the Railroad Commission of Texas; or

(2) the groundwater withdrawals that were exempted under Subsection (b)(3) are no longer necessary for mining activities or are greater than the amount necessary for mining activities specified in the permit issued by the Railroad Commission of Texas under Chapter 134, Natural Resources Code.

(e) An entity holding a permit issued by the Railroad Commission of Texas under Chapter 134, Natural Resources Code, that authorizes the drilling of a water well shall report monthly to the District:

(1) the total amount of water withdrawn during the month;

(2) the quantity of water necessary for mining activities; and

(3) the quantity of water withdrawn for other purposes.

(f) Notwithstanding Subsection (d), a district may not require a well exempted under Subsection (b)(3) to comply with the spacing requirements of the district.

(g) A district may not deny an application for a permit to drill and produce water for hydrocarbon production activities if the application meets all applicable rules as promulgated by the district.

(h) A water well exempted under Subsection (a) or (b) shall:

(1) be registered in accordance with rules promulgated by the district; and

(2) be equipped and maintained so as to conform to the district's rules requiring installation of casing, pipe, and fittings to prevent the escape of groundwater from a groundwater reservoir to any reservoir not containing groundwater and to prevent the pollution or harmful alteration of the character of the water in any groundwater reservoir.

(i) The driller of a well exempted under Subsection (a) or (b) shall file the drilling log with the district.

(j) A well to supply water for a subdivision of land for which a plat approval is required by Chapter 232, Local Government Code, is not exempted under Subsection (b).

(k) Groundwater withdrawn from a well exempt from permitting or regulation under this section and subsequently exported outside the boundaries of the district is subject to any applicable production and export fees under §§ 36.122 and 36.205 of the Texas Water Code.

(l) This chapter applies to water wells, including water wells used to supply water for activities related to the exploration or production of hydrocarbons or minerals. This chapter does not apply to production or injection wells drilled for oil, gas, sulphur, uranium, or brine, or for core tests, or for injection of gas, saltwater, or other fluids, under permits issued by the Railroad Commission of Texas.

RULE 1C STANDARD PERMIT PROVISIONS.

All permits are granted subject to the District Act, these Rules, the District Management Plan, Drought Management Plan, orders of the Board, and the laws of the State of Texas. In addition to any special provisions or other requirements incorporated into the permit, each permit issued shall contain the following standard permit provisions:

(a) This permit is granted in accordance with the provisions of the District Act, Texas Water Code, and the Rules, Management Plan, Drought Management Plan and orders of the District, and acceptance of this permit constitutes an acknowledgment and agreement that the permittee will comply with the Texas Water Code, the District Act, the District Rules, Management Plan, Drought Management Plan, orders of the District Board, and all the terms, provisions, conditions, requirements, limitations and restrictions embodied in this permit.

(b) This permit confers no vested rights in the holder, and it may be revoked or suspended, or its terms may be modified or amended pursuant to the provisions of the District Act.

(c) The operation of the well for the authorized withdrawal must be conducted in a non-wasteful manner.

(d) The permittee must keep records of the amount of groundwater produced and the purpose of the production and agrees to make those records available for District inspection, if requested by the District, on a regular basis, send such records to the District. Immediate written notice must be given to the District by the permittee in the event the well is either polluted or causing pollution of the aquifer.

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

(f) The application pursuant to which this permit has been issued is incorporated in this permit, and this permit is granted on the basis of and contingent upon the accuracy of the information supplied in that application and in any amendments to the application. A

finding that false information has been supplied is grounds for immediate revocation of the permit. In the event of conflict between the provisions of this permit and the contents of the application, the provisions of this permit shall control.

(g) Violation of this permit's terms, conditions, requirements, or special provisions shall subject the permit holder to civil penalties, injunction from further well operation and production, and other legal action as provided by the District Rules.

RULE 1D PERMIT REQUIREMENTS.

(a) When to Apply: The owner of any well to be drilled after January 1, 2009, shall file the permit application prior to drilling the well at the District's principal office in Reagan County, 108 Hwy 67 West, Big Lake, Texas.

(b) All permit applications shall set forth the following:

(1) the exact proposed location of the well to be drilled as provided in the application including the county, the section, block, survey, and township; labor and league; and exact number of feet to the two nearest nonparallel property lines (legal survey line); or other adequate legal description;

(2) estimated rated at which water will be withdrawn;

(3) the proposed use of the well to be drilled, whether municipal, industrial, or irrigation, livestock, domestic, or other beneficial use;

(4) the size the pump to be installed upon completion of permitted well;

(5) the approximate date drilling operations are to begin;

(6) the location of the three (3) nearest wells within a quarter of a mile of the proposed location, and the names and addresses of the owners thereof;

(7) an agreement by the applicant that a completed well registration and log will be furnished to the District (on forms furnished by it) by the applicant or well driller upon completion of this well and prior to the production of water there from (except for such production as may necessary to drilling and testing such well);

(8) the name and address of the owner of the land upon which the well location is to be made;

(10) if the applicant is other than the owner of the property, documentation showing the applicable authority to construct and operate each well for the proposed use;

(11) a declaration that the applicant will comply with the District's Rules and Management Plan;

(12) such additional data as may be required by the Board; and

(13) if groundwater is proposed to be transferred out of the District, the applicant shall describe and provide any relevant information with regard to the following:

(i) the availability of water in the District and in the proposed receiving area during the period for which the water supply is requested;

(ii) the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District; and

(iii) how the proposed transfer is consistent with the approved regional water plan and District Management Plan.

For well systems, the applicant shall provide the information required in this subsection for each well that is part of the well system.

(c) PERMIT DEPOSIT: Each application for a Drilling Permit must be accompanied by a $50.00 deposit. Said deposit shall be returned to the applicant by the District if:

(1) The application is denied;

(2) If the application is granted, upon receipt of correctly completed registration and log of well; or

(3) If said permit location is abandoned without having been drilled, upon return and surrender of said permit marked "abandoned" by the applicant.

In the event neither the registration and log of the well, nor the permit marked abandoned is returned to such District within six (6) months after the approval date of the permit or the extension date thereof, the said deposit shall become property of the District. All deposits heretofore made or which shall hereafter be made shall become the property of the District if such registration and log or permit has not been returned or is not returned to the District with which deposit was made within six (6) months from the approval date of the permit.

(d) No person shall hereafter begin to drill or drill a well, or increase the size of a well or pump therein, which well could reasonably be expected to produce, or a pump designed to produce, in excess of 25,000 gallons of water per day (17.36 gal/min), without having first applied to the Board, and had issued a permit to do so, unless the drilling and operation of the well is exempt by statutory law or by these rules. Drilling a well without a required permit or operating a well at a higher rate of production than the rate approved for the well is declared to be illegal, wasteful per se, and a nuisance.

(e) It is a violation of the District Rules for a well owner, well operator, or water well driller to drill a non-exempt well until an application for a Drilling Permit has been filed with

the District and approved. It is also a violation of the District Rules for a water well driller to fail to submit an approved copy of the Drilling Permit along with the Well Report that is required to be submitted to the District. A violation occurs on the first day the drilling, alteration, or operation begins and continues each day thereafter until the appropriate permits are approved.

RULE 1E OPERATING PERMIT REQUIREMENTS.

(a) AUTOMATIC PERMIT: The District shall automatically grant an Operating Permit for each nonexempt well in the District that was in existence before August 19, 1989, and is capable or producing more than 25,000 gallons per day but not more than 100,000 gallons per day. For all other nonexempt wells, an Operating Permit must be secured in order to lawfully operate a nonexempt well, and a permit amendment secured if the permit holder desires to change terms of the Operating Permit. One application containing the information required under Rule 1D(b) may be filed prior to the drilling and operation of a new nonexempt well or well system.

(b) The permit may also contain provisions relating to the means and methods of export outside the district of groundwater produced within the District.

RULE 2 PROCESSING AND ACTION ON PERMIT APPLICATIONS.

(a) Drilling Permit Applications:

(1) Upon receipt of a properly completed application and prior to the issuance of a permit or amended permit, District staff may inspect the proposed well location to verify compliance with District rules. After inspection or upon verification of the information in the application, if the completed permit application complies with the District rules, upon the applicant's written request and consent, the District's General Manager is delegated the authority by the Board and the General Manager may issue the Drilling Permit without notice and hearing before the Board or, upon request by the applicant or at the General Manager's discretion, the application may be set for hearing before the District's Board. If the application is granted by the General Manager, the applicant assumes the risk that its application may be subsequently protested and the General Manager shall provide the appropriate 10-day hearing notice under Rule 21 for the next regular Board meeting to apprise the Board of the General Manager's issuance of the permit, and to allow any qualified person under Rule 21 to protest the application.

(2) If the application does not comply with District rules, the application must be either amended to bring it into compliance with the rules or a properly completed application for an exception to the rules must be filed with the District and presented to the Board so that, following notice and hearing, a ruling can be made on the application for an exception. The notice and hearing requirements set forth under District Rule 21 shall apply to an application for a drilling permit or an application for a drilling permit exception.

(3) An application shall be considered filed when properly filled out, completed, signed and received by the District. Such application shall be prepared on forms provided by the District and shall be in writing and shall be prepared in accordance with and contain the information called for in the form of application, if any, prescribed by the Board, and all instructions which may have been issued by the Board with respect to the filing of an application. Otherwise, the application will not be considered.

(b) Operating Permit Applications:

Within 60 days after the date an administratively complete application is submitted, the District shall take action to set the application for a preliminary hearing before the District's Board. The preliminary hearing shall be held within 35 days after the setting of the date, and the District's Board shall act on the application within 60 days after the date the final hearing on the application is concluded. Notice of the hearing and hearing procedure are set forth under District Rules 19-21. As mandated by § 36.113 of the Texas Water Code, before granting or denying a permit application, the District's Board shall consider whether:

(1) the application conforms to the requirements prescribed by this chapter and is accompanied by the prescribed fees;

(2) the proposed use of water unreasonably affects existing groundwater and surface water resources or existing permit holders;

(3) the proposed use of water is dedicated to any beneficial use;

(4) the proposed use of water is consistent with the district's certified water management plan;

(5) the applicant has agreed to avoid waste and achieve water conservation;

(6) the applicant has agreed that reasonable diligence will be used to protect groundwater quality and that the applicant will follow well plugging guidelines at the time of well closure; and

(7) for those hearings conducted by SOAH under Rule 21(i), the Board shall consider the Proposal for Decision and Findings of Fact and Conclusions of Law issued by SOAH.

(c) The District, to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve the applicable Desired Future Condition established for the aquifers in the District. In issuing permits, the District shall manage total groundwater production on a long-term basis to achieve the applicable Desired Future Condition and shall consider:

(1) the Modeled Available Groundwater;

(2) TWDB's Executive Administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by District Rule 1B and § 36.117 of the Texas Water Code;

(3) the amount of groundwater authorized under permits previously issued by the District;

(4) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District; and

(5) yearly precipitation and production patterns.

(d) In reviewing a proposed export of groundwater out of the District, the District shall consider the following:

(1) the availability of water in the District and in the proposed receiving area during the period for which the water supply is requested;

(2) the projected effect of the proposed export on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District; and

(3) the approved regional water plan and certified District management plan.

(e) The District may not impose more restrictive permit conditions on exporters than the District imposes on in-district users.

RULE 3 TIME DURING WHICH A PERMIT SHALL REMAIN VALID AND PERMIT RENEWAL.

(a) Any Drilling Permit granted hereunder shall be valid if the work permitted shall have been completed within four (4) months from the filing date of the application. It shall thereafter be void. Provided, however, that the District, for good cause, may extend the life of such permit for an additional four (4) months if a written application for such extension shall have been made to the District during the first four (4) month period. Provided, further, that when it is made known to the Board that a proposed project will take more time to complete, the General Manager, upon receiving written application may grant such time as is reasonably necessary to complete such a project.

(b) Any Operating Permit granted hereunder shall be valid for a term of five (5) years, subject to renewal. A renewal request form shall be provided by the District prior to expiration of the permit term, and shall be filed with the District no later than January 15th of the new year for which the permit renewal is requested. The General Manager may rule on any renewal application that seeks renewal with the identical permit conditions in the existing permit without notice, hearing, or further action by the Board, or with such notice and hearing as the General Manager deems practical and necessary

under the circumstances. Any permit holder seeking renewal may appeal the General Manager's ruling by filing, within ten calendar days of notice of the General Manager's ruling, a written request for a hearing before the Board. The Board will hear the applicant's appeal at the next available regular Board meeting. The General Manager shall inform the Board of any renewal applications granted or denied. On the motion of any Board member, and a majority concurrence in the motion, the Board may overrule the action of the General Manager. The General Manager may authorize an applicant for a permit renewal to continue operating under the conditions of the prior permit, subject to any changes necessary under proportional adjustment regulations or these rules, for any period in which the renewal application is the subject of a hearing.

(c) The District shall, without a hearing, renew or approve an application to renew an operating permit before the date on which the permit expires, provided that:

(1) the application is submitted in a timely manner; and

(2) the permit holder is not requesting a change related to the renewal that would require a permit amendment under the District's rules.

(d) The District is not required to renew a permit under District Rule 3(c) if the applicant:

(1) is delinquent in paying a fee required by the District;

(2) is subject to a pending enforcement action for a substantive violation of a District permit, order, or rule that has not been settled by agreement with the District or a final adjudication; or

(3) has not paid a civil penalty or has otherwise failed to comply with an order resulting from a final adjudication of a violation of a District permit, order, or District rule.

(e) If the District is not required to renew a permit under District Rule 3(d), the permit remains in effect until the final settlement or adjudication on the matter of the substantive violation.

(f) If the holder of an operating permit, in connection with the renewal of a permit or otherwise, requests a change that requires an amendment to the permit under District rules, the permit as it existed before the permit amendment process remains in effect until the later of:

(1) the conclusion of the permit amendment or renewal process, as applicable; or

(2) a final settlement or adjudication on the matter of whether the change to the permit requires a permit amendment.

(g) If the permit amendment process results in the denial of an amendment, the permit as it existed before the permit amendment process shall be renewed under District Rule 3(c) without penalty, unless subsection (d) of District Rule 3 applies to the applicant.

(h) The District may initiate an amendment to an operating permit, in connection with the renewal of a permit or otherwise, in accordance with District rules. If the District initiates an amendment to a operating permit, the permit as it existed before the permit amendment process shall remain in effect until the conclusion of the permit amendment or renewal process, as applicable.

RULE 4 REQUIREMENT OF DRILLER'S LOG, CASING, AND PUMP DATA.

(a) Complete records shall be kept and reports thereof made to the District concerning the drilling, maximum production potential, equipping and completion of all wells drilled either by a licensed driller or an individual land owner. Such records shall include an accurate driller's well log, and any geophysical or electric log, if available, and such additional data concerning the description of the well, its potential, hereinafter referred to as "maximum rate of production" and its actual equipment as may be required by the District. Such records shall be filed with the District within 60 days after the completion of the well.

(b) Subject to the Water Well Drillers rules, every licensed well driller shall deliver either in person, by fax, email, or send by first-class mail, a photocopy of the State Well Report to the District within 60 days from the completion or cessation of drilling, deepening, or otherwise altering a well.

(c) No person shall produce water from any well hereafter drilled and equipped within the District, except that necessary to the drilling and testing of such well and equipment, unless or until the District has been furnished an accurate driller's log, any electric log which shall have been made, and a registration of the well correctly furnishing all available information required on the forms furnished by the District.

RULE 5 WELL REGISTRATION.

(a) REGISTRATION REQUIRED: Well Registration is required for all existing and future exempt and non-exempt wells in the District and shall be accomplished by filing a registration form on a form and in the manner required by the District.

(b) All existing and future exempt and non-exempt wells drilled in the District shall be registered with the District and shall be known as Authorized Well Sites.

(c) Registration shall include the following information, submitted on forms provided by the District:

(1) name and address of the well owner;

(2) the exact location of the well, including-block, section, survey and the distance to the two nearest intersecting property lines or survey lines, or another adequate legal description;

(3) coordinates (Latitude/Longitude) for the well location;

(4) the proposed uses of the underground water to be produced such as domestic, livestock, irrigation, industrial, municipal, or other beneficial use;

(5) the size of the well;

(6) a description of the well construction, including depth and size of wellbore and depth and size casing;

(7) the depth of the water level in the well if the well is already drilled;

(8) the name and address of the driller and the approximate date the well was drilled or is to be drilled;

(9) pump size; and

(10) gallons per minute (GPM) being produced.

(d) WHEN TO REGISTER: All nonexempt and exempt wells shall be registered. The owner of an exempt well drilled after January 1, 2009, shall register the exempt well at least one day prior to drilling the well. The District will collect registration information for all exempt wells drilled before January 1, 2009. The owner of an exempt well drilled before the effective date of this rule should be cooperative with the District in its efforts to register all such wells.

(e) The District's authorization of all Permitted Wells and Authorized Well Sites is conditional, may be revoked, suspended, or modified by the District's Board if the person to whom the authorization was issued does not comply with the rules of the District, does not comply with the terms and conditions stated in the drilling permit, or abandons the well. The District shall provide reasonable notice and opportunity for hearing under the District's permitting rules before revoking, suspending, or modifying any authorization under this rule.

(f) WHERE TO REGISTER: A well owner must file the required registration information at the District's principal office at Big Lake, Texas.

(g) RE-REGISTRATION: If the owner of a registered well plans to change the use of the water, increase the production rate of the water, or to substantially alter the size of the well or well pump in a manner that does not require a permit, the owner must re-register the well.

(h) CHANGE OF OWNERSHIP: If there is a change in well ownership and no other change to the well or Authorized Well Site, the new well owner must submit a change of

ownership notice to the District within 90 days of the transfer of ownership. It is a violation of the District Rules for any person or entity to produce groundwater from any well without first having:

(1) applied to and received approval for a new permit from the District; or

(2) submitted a notice of change of ownership to the District for existing wells or authorized well sites within 90 days of the transfer of ownership.

RULE 6 PREREGISTRATION REQUIRED FOR EXEMPT WELLS.

(a) Completed Preregistration forms for the drilling, reworking, redrilling, or reequipping of an exempt well or monitor well must be filed with the District prior to proceeding with the work. Preregistration is required for all wells defined as exempt under Rule 1B. It is a violation of the District Rules for any person or entity to drill, rework, redrill, or reequip an exempt well until a well preregistration form has been filed with and approved by the District.

(b) Preregistration shall be submitted on forms provided by the District. Preregistration forms must be administratively complete to be considered by the District.

(c) The application to drill, rework, redrill, or reequip an exempt well may be submitted to the district in person, by fax, mail, or email by the owner of the land or his duly appointed agent, including a partner, operator, driller, or any other person who has the authority to construct the well and/or operate the well for the proposed use.

RULE 7 MINIMUM SPACING OF WATER WELLS.

(a) DISTANCE REQUIREMENTS: No well to be drilled subsequent to the date of enactment of this rule shall be drilled such that said well shall be located nearer than 660 feet from the nearest property line; provided that the Board, in order to prevent waste or to prevent confiscation of property, may grant exceptions to permit drilling within shorter distance than above described when the Board shall determine that such exceptions are necessary either to prevent waste or to prevent confiscation of property. All water wells must adhere to the following spacing limitations:

(1) a minimum of 50 feet from any watertight sewage and liquid waste facility;

(2) a minimum horizontal distance of 150 feet from any concentrated source of contamination, such as existing or proposed livestock or poultry yards, privies, and septic system absorption field; and

(3) a well shall be located at a site not generally subject to flooding; provided however, that if a well must be placed in a flood prone area, it shall be completed with a watertight sanitary well seal and steel casing extending a minimum of 24 inches above known flood level.

(b) In the interest of protecting life and for the purpose of preventing waste and preventing confiscation of property, the Board reserves the right in particular subterranean water zones and/or reservoirs to enter special orders increasing or decreasing distances provided by this rule.

(c) In applying this rule and in applying every special rule with relation to spacing in all of the subterranean water zones and/or reservoirs underlying the confines of this District, no subdivision of property will be regarded in applying such spacing rule or in determining the matter of confiscation if such subdivision took place subsequent to the promulgation and adoption of the original spacing rule;

(d) Any subdivision of property creating a tract of such size and shape that it is necessary to obtain an exception to the spacing rule before a well can be drilled thereon is a voluntary subdivision and not entitled to a permit to prevent confiscation of property if it were either:

(1) segregated from a larger tract in contemplation of water resource development; or

(2) segregated by fee title conveyance from a larger tract after the spacing rule became effective and the voluntary subdivision rule attached;

The date of attachment of the voluntary subdivision rule is the date of discovery of underground water production in a certain continuous reservoir regardless of the subsequent lateral extensions of such reservoir, provided that such rule does not attach in the case of a segregation of a small tract by fee title conveyance which is not located in an underground water production area having a discovery date of such segregation. The date of attachment of the voluntary subdivision rule for a reservoir under any special circumstances which the Board deems sufficient to provide for an exception, may be established other than above so that innocent parties may have their rights protected.

(e) WELL DENSITY: Subject to these rules, no more than a cumulative total of 16 wells, whether drilled prior to or subsequent to enactment of this rule, shall be permitted per survey section (640 acres) (hereinafter referred to as "drilled to density"). In the event the applicant owns less than a full section, or the survey section contains more or less than 640 acres, then the number of wells permitted for said tract shall be proportionately increased or reduced so that the total number of wells permitted shall be established by dividing the number of acres owned by the number of acres in the section and multiplying by 16.

RULE 8 EXCEPTION TO SPACING RULE.

(a) In order to protect vested property rights, to prevent waste, or to prevent confiscation of property, the Board may grant exception to the spacing and well density regulations. This rule shall not be construed so as to limit the power of the Board, and the powers stated are cumulative only of all other powers possessed by the Board.

(b) If an exception to such spacing and well density regulations is desired, application shall be submitted by the applicant in writing to the Board at its District Office on forms furnished by the District. Incomplete applications will not be accepted by the District. The application shall explain the circumstances justifying an exception to the spacing and well density provisions. The application shall be accompanied by a plat or sketch, drawn to scale of one inch equaling 660 feet. The plat or sketch shall show accurately to scale all wells within a quarter mile of the immediate area and shall show accurately to scale of wells within a quarter mile of the proposed well site. The application shall also contain the name and addresses of all property owners adjoining the tract on which the well is to be located and the ownership of the wells within a quarter mile of the proposed location. Such application and plat shall be certified by some person actually acquainted with facts who shall state that all the facts therein are true and correct.

(c) Such exception may be granted 10 days after written notice has been given to the applicant and all adjoining owners and all well owners within a quarter mile of the proposed location and after a public hearing at which all interested parties may appear and be heard, and after the Board has decided that an exception should be granted. Provided, however, that if all such owners execute a waiver in writing stating that they do not object to the granting or refusing of such application without notice of hearing except to the applicants. The applicant may also waive notice or hearing or both.

(d) Any subdivision of property creating a tract of such size and shape that it cannot comply with the spacing requirements of this section shall be considered a voluntary subdivision and shall not be eligible for an exception to the spacing requirements.

RULE 9 PLACE OF DRILLING OF WELL.

After an application for a drilling permit has been granted, the well, if drilled, must be drilled in compliance with all District rules. If the well should be commenced or drilled at a different location, greater than 30 feet from the location given on the drilling permit application, the drilling or operation of such well may be enjoined by the District pursuant to Chapter 36 of the Texas Water Code. The District shall have the right to confirm reported distances and inspect the wells or well locations.

RULE 9A WELL DRILLING, COMPLETION, CAPPING AND PLUGGING.

(a) RESPONSIBILITIES OF THE WELL DRILLER AND LANDOWNER: All well drillers, landowners drilling their own wells, and persons having a well drilled, deepened, or altered shall adhere to the provisions of Texas Department of Licensing and Regulation, Title 16, Texas Administrative Code § 76.702, Well Drilling, Completion, Capping and Plugging as contained in the State Water Well Drillers and Water Well Pump Installers Rules, as amended, prescribing the location of wells and proper drilling, completion, capping, and plugging of wells.

(b) LOCATION AND STANDARDS OF COMPLETION FOR WELLS: Wells shall be located and completed in accordance with the provisions of Texas Department of

Licensing and Regulation, §76.1000, Locations and Standards of Completion for Wells, as amended.

(c) REPORTING UNDESIRABLE WATER OR CONSTITUENTS: All well drillers including landowners drilling their own wells shall adhere to the provisions of the State Water Well Drillers and Pump Installers Rules, Texas Department of Licensing and Regulation, §76.701 and any subsequent changes or amendments, when reporting any undesirable water or constituents that have been encountered.

(d) STANDARDS OF COMPLETION FOR WATER WELLS ENCOUNTERING UNDESIRABLE WATER OR CONSTITUENTS: If a water well driller or landowner drilling his/her own well knowingly encounters undesirable water or constituents and the well is not plugged or made into a completed monitoring well, the driller shall complete the well in accordance with Texas Department of Licensing and Regulation, §76.1001, Standards of Completion for Water Wells Encountering Undesirable Water or Constituents, as amended.

(e) STANDARDS FOR WELLS PRODUCING UNDESIRABLE WATER OR CONSTITUENTS: Wells completed to produce undesirable water shall be completed in accordance with Texas Department of Licensing and Regulation, §76.1002, Standards for Wells Producing Undesirable Water or Constituents, as amended.

(f) RE-COMPLETIONS: The landowner shall have the continuing responsibility of insuring the integrity of the well in accordance with Texas Department of Licensing and Regulation, §76.1003, Re-completions, as amended.

(g) STANDARDS FOR CAPPING AND PLUGGING OF WELLS AND PLUGGING WELLS THAT PENETRATE UNDESIRABLE WATER OR CONSTITUENT ZONES: Wells must be capped and plugged in accordance with Texas Department of Licensing and Regulation, §76.1004, Standards for Capping and Plugging of Wells and Plugging Wells that Penetrate Undesirable Water or Constituent Zones, as amended.

(h) STANDARDS FOR WATER WELLS: Wells drilled prior to August 1989, unless abandoned, shall be grandfathered without further modification unless the well is found to be a threat to public health and safety or to water quality as described in the provisions of the Texas Department of Licensing and Regulation, §76.1005, Standards for Water Wells, as amended.

RULE 10 STANDARDS OF WELL COMPLETION.

(a) The space between the borehole and the casing shall be filled from ground level to a depth of not less than 10 feet below the land surface or wellhead with cement slurry.

(b) A concrete slab or sealing block shall be poured around the well casing, whether plastic or steel. The concrete block will extend at least two (2) feet from all sides of the well casing, and have a minimum thickness of four (4) inches and slope downward from the well casing.

(c) The concrete block shall be separated from the well casing by a plastic or mastic coating or sleeve to prevent bonding of the slab to the casing.

(d) The surface of the slab should be sloped to drain away from the well.

(e) The top of the casing shall extend a minimum of one (1) foot above the top of the ground surface.

(f) The well casing shall be capped or completed in a manner that will prevent pollutants from entering the well.

RULE 11 REWORKING OR REPLACING OF WELL.

(a) No person shall rework, redrill, or re-equip a well in a manner that would increase the maximum rate of production of water from such well beyond any previous actual rate of production of such well as established by Rule 1D(d) above without first having made an application to the Board, and having been granted a permit by the Board to do so. Nor shall any person replace a well without a permit from the Board. A replacement well, in order to be considered as such, must be drilled within 150 feet of the old well and not elsewhere. It must not be located closer to any other well or Authorized Well Site located within one mile of the proposed relocation site unless the new location complies with the minimum spacing requirements set out in Rule 7; otherwise the replacement well shall be considered to be a new well for which application must be made under Rule 1D above; provided, however, that the Board may grant an exception to this spacing limitation without notice or hearing in any instance where the replacement well is placed farther away from any existing wells or Authorized Well Sites located within one mile of the proposed relocation site. The location of the old well (the well being replaced) shall be protected in accordance with the spacing rules of the District until the replacement well is drilled and tested. The landowner or his agent must within 120 days of issuance of the permit declare in writing to the District which one of these wells he desires to place into production. If the landowner does not notify the District of his choice within 120 days, then it will be conclusively presumed that the new well is the well he desires to retain. Immediately after determining which well will be retained for production, the other well shall be:

(1) properly plugged;

(2) properly equipped in such a manner that it cannot produce more than 25,000 gallons of water a day; or

(3) closed in accordance with § 756.001 or § 756.002 of the Texas Health & Safety Code. Violation of this subsection is a criminal misdemeanor punishable by a fine of not less than $100.00 or more than $500.00.

(b) The size of maximum rate of production of a well shall not be hereafter changed to a larger size of capacity so as to substantially increase the rate of production of a well without a permit from the Board. (For example, increasing the size of the well bore from six inches to eight inches.) Such permit may be granted only after written notice to

adjacent owners and owners of a well within a quarter of a mile from such well and after a decision by the Board in writing that they have no objection to the proposed changed, then the Board may proceed to decide such matter. Provided that if the well is sufficient distance from other wells to comply with spacing regulations for new wells of the desired capacity, the Board may proceed to act on such application.

(c) No person shall be required to equip and produce any wells to its maximum rate of production; provided, however, that for purposes of reworking, or replacing a well pursuant to Rule 11 hereof, the maximum rate of production of each well established hereunder shall be considered the actual production rate even though said well is produced at a lesser rate of production

(d) In the event the application meets all spacing requirements and no contest is filed, the Board may grant such application without further action.

RULE 12 CHANGED CONDITIONS.

The decision of the Board on any matter within its jurisdiction may be reconsidered by it on its own motion or upon motion showing changed conditions, or upon the discovery of new or different conditions or facts after the hearing or after having announced a ruling or decision, or, after having finally granted or denied an application, it shall give notice to all persons who were proper parties to the original action, and such persons shall be entitled to a hearing thereon if they file request therefore within 15 days from the date of the mailing of such notice.

RULE 13 RIGHT TO ENTER LAND TO INSPECT, TEST, CAP, LOCATE, AND SEAL WELLS.

(a) Any authorized officer, employee, agent, or representative of the District shall have the right at all reasonable times to enter upon the lands on which a well or wells may be located within the boundaries of the District to:

(1) inspect such well or wells;

(2) to read, or interpret any meter, wire box or other instrument for the purpose of measuring production of water from said well or wells;

(3) determine the pumping capacity of said well or wells;

(4) measure the water level or obtain water samples for determining the water quality of said well or wells;

(5) test the pump and the power unit of the well or wells;

(6) cap wells that are open in violation of § 36.118 of the Texas Water Code, as amended, or §76.702, Texas Department of Licensing and Regulation, Water Well Drillers and Water Well Pump Installers Rules, as amended;

(7) determine the coordinates (location) of said well or wells using GPS or other available methods;

(8) make any other reasonable and necessary inspection and/or test that may be required or necessary for the information or the enforcement of the rules and regulations of the District; or

(9) seal wells as authorized by court order under Rule 14.

(b) Prior to entering upon property for the purpose of conducting an inspection or investigation, the person seeking access must give notice in writing or in person or by telephone to the owner, lessee, or operator, agent, or employee of the well owner or lessee, as determined by information contained in the application or other information on file with the District. Notice is not required if prior permission is granted to enter without notice. Inspections and investigations must be conducted at reasonable times, and must be consistent with the establishment's rules and regulations concerning safety, internal security, and fire protection. The District representative or representatives conducting such investigations must identify themselves and present credentials upon request of the owner, lessee, operator, or person in charge of the well or property. Inhibiting or prohibiting access to any Board Member or District agents or employees who are attempting to conduct an investigation under the District's rules constitutes a violation and subjects the person who is inhibiting or prohibiting access, as well as any other person who authorizes or allows such action, to the penalties set forth in Chapter 36 of the Texas Water Code. The operation of any well may be enjoined by the Board immediately upon refusal to permit gathering of information as above provided from such well or wells.

RULE 14 SEALING OF PROHIBITED WELLS.

(a) Pursuant to a court order, the District may, upon orders from the judge of the courts, seal wells that are prohibited from withdrawing groundwater within the District, to ensure that a well is not operating in violation of the District Rules. A well may be sealed when:

(1) no application has been made for a permit to drill a new water well which is not excluded or exempted;

(2) no application form has been filed for a permit to withdraw groundwater from an existing well which is not excluded or exempted from the requirement that a permit be obtained in order to lawfully withdraw groundwater;

(3) no application form has been filed for a change to a permit to withdraw groundwater from an existing well;

(4) no permit has been issued prior to the operation of a non-exempt well; or

(5) the Board has denied, canceled or revoked a drilling permit or the operating authority to produce groundwater from a well.

(b) The well may be sealed by physical means, and tagged to indicate that the well has been sealed by the District, and other appropriate action may be taken as necessary to preclude operation of the well or to identify unauthorized operation of the well.

(c) Tampering with, altering, damaging, or removing the seal of a sealed well, or in any other way violating the integrity of the seal, or pumping of groundwater from a well that has been sealed constitutes a violation of these rules and subjects the person performing that action, as well as any well owner or primary operator who authorizes or allows that action, to such penalties as provided by the District Rules.

RULE 15 OPEN WELLS TO BE CLOSED OR CAPPED.

Every owner or operator of any land within the District, upon which is located any open or uncovered well is, and shall be, required to close or cap the same set forth below and in accordance with Chapter 36 of the Texas Water Code and subsequent changes thereto:

(a) The District may require the owner or lessee of land on which an open or uncovered well is located to keep the well closed or capped with a covering capable of sustaining weight of not less than 400 pounds, except when said well is in actual use by the owner or operator thereof; and no such owner or operator shall permit or allow any open or uncovered well to exist in violation of this requirement.

(b) Officers, agents and employees of the District are authorized to serve or cause to be served notice upon any owner or operator of a well in violation of this rule, thereby requesting such owner and/or operator of such well with a covering in compliance herewith.

RULE 16 FAILURE TO COMPLY WITH CAPPING OR PLUGGING RULES.

In the event any owner or operator fails to comply with the request to either cap or plug a well(s) within 30 days, a written notice shall be delivered to the owner of said well or wells either by certified mail or by priority mail with confirmation of delivery requesting compliance with the rule within 10 days of receipt of the written notice. If, after the 10-day period, an inspection of the well or wells reveals that the landowner has not complied with the request or refuses to plug or cap a well, any officer, agent, or employee of the District may go upon said land and plug or cap said well in manner complying with this rule and the Well Drillers and Water Well Pump Installers Rules and all expenditures thereby incurred shall constitute a lien upon the land where such well is located. Any officer, agent, or employee of the District is authorized to perfect said lien by the filing of the affidavit authorized by § 36.118 of the Texas Water Code as amended. All of the powers and authority granted in such section are hereby adopted by the District, and its officers, agents, and employees are hereby bestowed with all of such powers and authority.

RULE 17 FINAL ORDERS AND DECISIONS OF THE BOARD.

The orders and decisions of the Board in any uncontested application or proceeding shall become final on the day it is entered by the Board. All orders and decisions of the Board in contested applications, appeals or other proceedings shall contain a statement that the same was contested.

In such event the order will become final after 15 days from the entry thereof and be binding on the parties thereto unless a Motion for Rehearing is filed under Rule 18 hereof. In the event of an appeal of a decision or order of the Board, the decision or order shall not become final until all appeals have been exhausted.

RULE 18 REQUEST FOR REHEARING AND APPEAL.

(a) To appeal any decision of the District, including any determination made by the General Manager, concerning any matter not covered under any other section of these rules, a request for reconsideration may be filed with the District within 20 calendar days of the date of the decision. Such a request for reconsideration must be in writing and must state clear and concise grounds for the request. The Board will make a decision on the request for reconsideration within forty-five (45) calendar days. Failure of the Board to grant or deny the request for reconsideration within forty-five (45) calendar days of the date of filing shall constitute denial of the request.

(b) The Board may, in a proper case, find that an emergency exists and that substantial injustice will result from delay. In that event, and upon recitation of such finding, the order of the Board will become final on the date of the announcement of the order by the Board, and motion for rehearing will be considered thereon.

(c) An applicant in a contested or uncontested hearing on an application or a party to a contested hearing may request written findings of fact and conclusions of law within twenty (20) calendar days of the Board's decision. The Board shall provide certified copies of the findings and conclusions to the person who requested them, and to each designated party, not later than the 35th day after the date the Board receives the request.

(1) A person who receives a certified copy of the findings and conclusions from the board may request a rehearing before the Board not later than the 20th day after the date the Board issues the findings and conclusions. A party to a contested hearing must first make a request for written findings and conclusions under Subsection (a) of this rule before submitting a request for rehearing.

(2) A request for rehearing must be filed in the District office and must state clear and concise grounds for the request. The person requesting a rehearing must provide copies of the request to all parties to the hearing.

(3) If the Board grants a request for rehearing, the Board shall, after proper notice, schedule the rehearing not later than the 45th calendar day after the date the request is granted.

(4) The failure of the Board to grant or deny a request for rehearing before the 91st calendar day after the date the request is submitted is a denial of the request.

(d) A decision by the Board on a permit or permit amendment application is final:

(1) if a request for rehearing is not filed on time, on the expiration of the period for filing a request for rehearing;

(2) if a request for rehearing is filed on time and the Board denies the request for rehearing, on the date the Board denies the request for rehearing; or

(3) if a request for rehearing is filed on time and the Board grants the request for rehearing:

(i) on the final date of the rehearing if the Board does not take further action;

(ii) if the Board takes further action after rehearing, on the expiration of the period for filing a request for rehearing on the Board's modified decision if a request for rehearing is not timely filed; or

(iii) if the Board takes further action after rehearing and another request for rehearing on this Board action is timely filed, then Subsections 3(i) and (iii) of this rule shall govern the finality of the Board's decision.

(e) The applicant or party to a contested case hearing must exhaust all administrative remedies with the District prior to seeking judicial relief from a District decision on a permit or permit amendment application. After all administrative remedies are exhausted with the District, an applicant or a party to a contested case hearing must file suit in a court of competent jurisdiction in Pecos County to appeal the District's decision on a permit or permit amendment application within 60 (sixty) calendar days after the date the District's decision is final. An applicant or party to a contested case hearing is prohibited from filing suit to appeal a District's permitting decision if a request for rehearing was not timely filed.

RULE 19 RULES GOVERNING PROTEST.

(g) NOTICE OF PROTESTS: In the event anyone should desire to protest or oppose any pending matter before the Board, a written notice of protest or opposition shall be filed with the Board on or before the date on which such application or matter has been set for hearing. For the convenience of the Board, it is urged that protest be filed at least five (5) working days before the board meeting or hearing date.

(h) PROTEST REQUIREMENTS: Protests shall be submitted in writing with a duplicate copy to the opposite party or parties and shall comply in substance with § 36.415 of the Texas Water Code and the following requirements:

(1) each protest shall show the name and address of the Protestant and show that Protestant has read either the application or a notice relative thereto published by the Board;

(2) each protest shall describe the potential protestant's personal justiciable interest related to a legal right, duty, privilege, power, or economic interest that is within a district's regulatory authority;

(3) each protest shall describe how the justiciable interest may be affected by the activities contemplated by a permit or permit amendment application; and

(4) protestant should call attention to any amendment of the application of adjustment which if made, would result in withdrawal of the protest.

(i) CONTESTED APPLICATIONS OR PROCEEDINGS DEFINED: An application, appeal, motion or proceedings pending before the Board is considered contested when either protestants or interveners, or both, files the notice of protest as above set out and appears at the hearing held on the application, motion or proceeding and present testimony or evidence in support of their contentions, or present a question or questions of law with regard to the application, motion or proceedings. Where neither protestants nor intervenors so appear and offer testimony or evidence in support of their contentions, or raise a question of law with reference to any pending application, motion or proceeding, the same shall be considered as uncontested.

(j) In the event of a contested hearing each party shall furnish other parties to the proceeding with a copy of all motions, amendments or briefs filed with the Board, and on the same day filed with the Board.

(e) REQUEST FOR HEARING AT STATE OFFICE OF ADMINISTRATIVE HEARINGS: If an application is contested, any party to the hearing may request that the District contract with SOAH to conduct the hearing on the application. A request that the hearing be conducted by SOAH must be made to the Board no later than five (5) calendar days before the date that the preliminary hearing on the application is set to begin.

RULE 20 GENERAL RULES OF PROCEDURE FOR HEARING.

The District conducts five general types of hearings: (1) hearings involving permit matters governed by Rule 21, in which the rights, duties, or privileges of a party are determined after an opportunity for an adjudicative hearing; (2) rulemaking hearings involving matters of general applicability that implement, interpret, or prescribe the law or District policy, or that describe the procedure or practice requirements of the District governed by Rule 22; (3) hearings on the Desired Future Conditions governed by Rule 23; (4) show cause hearings governed by Rule 27(c); and hearings on the appeal of the reasonableness of a Desired Future Condition under Rule 28. Any matter designated for hearing before the Board may be conducted by a Presiding Officer and quorum of the Board or referred by the Board for hearing before a Hearings Examiner. A permit hearing may be conducted by SOAH if required under Rules 19(e) and 21(i).

(a) Hearings conducted by the District will be conducted in such manner as the Board deems most suitable to the particular case. It is the purpose of the Board to obtain all the relevant information and testimony pertaining to the issue before it as conveniently,

inexpensively and expeditiously as possible without prejudicing the rights of either applicants or protestants. The Presiding Officer may conduct the preliminary and evidentiary hearings or other proceedings in the manner the Presiding Officer deems most appropriate for the particular hearing. The Presiding Officer has the authority to:

(1) set hearing dates, other than the preliminary hearing date for permit matters set by the General Manager in accordance with Rule 2(b);

(2) convene the hearing at the time and place specified in the notice for public hearing;

(3) establish the jurisdiction of the District concerning the subject matter under consideration;

(4) rule on motions and on the admissibility of evidence and amendments to pleadings;

(5) designate and align parties and establish reasonable time limits and the order for testimony and presentation of evidence;

(6) administer oaths to all persons presenting testimony;

(7) examine witnesses;

(8) issue subpoenas when required to compel the attendance of witnesses or the production of papers and documents;

(9) require the taking of depositions and compel other forms of discovery under these rules—discovery will be conducted upon such terms and conditions, and at such times and places, as directed by the Hearings Examiner or Presiding Officer; unless specifically modified by order of the Hearings Examiner or Presiding Officer, discovery will be governed by, and subject to the limitations set forth in, the Texas Rules of Civil Procedure. In addition to the forms of discovery authorized under the Texas Rules of Civil Procedure, the parties may exchange informal requests for information, either by agreement or by order of the Hearings Examiner or Presiding Officer;

(10) ensure that information and testimony are introduced as conveniently and expeditiously as possible, without prejudicing the rights of any party to the proceeding;

(11) conduct public hearings in an orderly manner in accordance with these rules;

(12) recess any hearing from time to time and place to place;

(13) reopen the record of a hearing for additional evidence when necessary to make the record more complete;

(14) exercise any other appropriate powers necessary or convenient to effectively carry out the responsibilities of Presiding Officer; and

(15) permit hearings may be conducted informally when, in the judgment of the Hearings Examiner or Presiding Officer, the conduct of a proceeding under informal procedures will result in a savings of time or cost to the parties, lead to a negotiated or agreed settlement of facts or issues in controversy, and not prejudice the rights of any party. If all parties reach a negotiated or agreed settlement that settles the facts or issues in controversy, the proceeding will be considered an uncontested case and the General Manager will summarize the evidence, including findings of fact and conclusions of law based on the existing record and any other evidence submitted by the parties at the hearing.

(b) After giving proper notice, hearings may be held in conjunction with any Regular or Special called meeting of the Board or hearings may be scheduled at other times as deemed appropriate by the Board. All hearings will be held at the District office unless the Board determines that another location would be more appropriate for a specific hearing.

(c) REPORTING: Hearings and other proceedings will be recorded on audio cassette tape or, at the discretion of the Presiding Officer, may be recorded by a certified shorthand reporter. The District does not prepare transcriptions for the public of hearings or other proceedings recorded on audio cassette tape on District equipment, but will arrange for a party in interest to have access to the recording. Subject to availability of space, any party at interest may, at its own expense, arrange for a reporter to report the hearing or other proceeding or for recording of the hearing or other proceeding. The cost of reporting or transcribing a permit hearing may be assessed by the Presiding Officer.

(1) If a proceeding other than a permit hearing is recorded by a reporter, and a copy of the transcript of testimony is ordered by any person, the testimony will be transcribed and the original transcript filed with the papers of the proceeding at the expense of the person requesting the transcript of testimony. Copies of the transcript of testimony of any hearing or other proceeding thus reported may be purchased from the reporter.

(2) On the request of a party to a contested hearing, the Presiding Officer shall have the hearing transcribed by a court reporter. The Presiding Officer may assess any court reporter transcription costs against the party that requested the transcription or among the parties to the hearing. Except as provided by this subsection, the Presiding Officer may exclude a party from further participation in a hearing for failure to pay in a timely manner costs assessed against that party under this subsection. The Presiding Officer may not exclude a party from further participation in a hearing as provided by this subsection if the parties have agreed that the costs assessed against that party will be paid by another party.

(3) If a hearing is uncontested, the Presiding Officer may substitute minutes for the hearing report required under these rules and § 36.410 of the Texas Water Code for a method of recording the hearing provided by § 36.410(a).

RULE 21 PERMIT HEARINGS.

(a) Notices of all permit hearings of the District shall be prepared by the General Manager, and shall, at a minimum, state the following information:

(1) the name and address of the applicant;

(2) the name or names of the owner or owners of the land if different from the applicant;

(3) the time, date, and location of the hearing;

(4) the address or approximate proposed location of the well, if different than the address of the applicant;

(5) a brief explanation of the proposed permit or permit amendment, including any requested amount of groundwater, the purpose of the proposed use, and any change in use;

(6) a general explanation of the manner by which a person may contest the application, including information regarding the need to appear at the hearing or submit a motion for continuance on good cause under these rules; and

(7) any other information the Board or General Manager deems relevant and appropriate to include in the notice.

(b) Not later than 10 days prior to the date of the hearing, notice shall be:

(1) posted by the General Manager, with the Board President's approval, at a place readily accessible to the public in the District office;

(2) provided by the General Manager, with the Board President's approval, to the County Clerk of Reagan County, whereupon the County Clerk shall post the notice on a bulletin board at a place convenient to the public in the county courthouse annex;

(3) provided to the applicant by regular mail;

(4) provided to any person who has requested notice under subsection (d) of this rule by regular mail, facsimile, or electronic mail; and

(5) provided to property owners within the "area of influence" by regular mail, facsimile, or electronic mail.

(c) A person may request notice from the District of a hearing on a permit or a permit amendment application. The request must be in writing and is effective for the remainder of the calendar year in which the request is received by the district. To receive notice of a hearing in a later year, a person must submit a new request. An affidavit of an officer or employee of the district establishing attempted service by first class mail, facsimile, or email to the person in accordance with the information provided by the person is proof that notice was provided by the district. Failure to provide notice under this subsection does not invalidate an action taken by the District at the hearing.

(d) The Board shall conduct an evidentiary hearing on a permit or permit amendment application if a party appears to protest that applications or if the General Manager proposes to deny an application in whole or in part, unless the applicant or other party in a contested hearing requests the District to contract with SOAH to conduct the evidentiary hearing, as set forth in Rules 19(e) and 21(i). If no one appears at the initial, preliminary hearing and the General Manager proposes to grant the application, the permit or permit amendment application is considered to be uncontested, and the General Manager may act on the permit application without conducting an evidentiary hearing on the application. Unless one of the parties in a contested hearing requests a continuance and demonstrates good cause for the continuance, the Board may conduct the preliminary and evidentiary hearings on the same date.

(e) UNCONTESTED HEARINGS: If no one appears at the initial, preliminary hearing, the permit or permit amendment application is considered to be uncontested.

(1) The Board may take action on any uncontested application at a properly noticed public meeting held at any time after the public hearing at which the application is scheduled to be heard. The Board may issue a written order to:

(i) grant the application;

(ii) grant the application with special conditions; or

(iii) deny the application.

(2) An applicant may, not later than the 20th day after the date the Board issues an order granting the application, demand a contested case hearing if the order:

(i) includes special conditions that were not part of the application as finally submitted; or

(ii) grants a maximum amount of groundwater production that is less than the amount requested in the application.

(3) If, during a contested case hearing, all interested persons contesting the application withdraw their protests or are found by the Board not to have a justiciable interest affected by the application, or the parties reach a negotiated or agreed settlement which, in the judgment of the Board, settles the facts or issues

in controversy, the proceeding will be considered an uncontested hearing and the Board may take any action authorized under District Rule 21(f)(1).

(f) WHO MAY APPEAR: Beyond protestants designated by the Presiding Officer, the Board shall have discretion to allow anyone else to appear to offer evidence or argument relevant to the application. All parties appearing must complete a hearing registration form provided by the District.

(g) ADMISSIBILITY OF EVIDENCE: Except as modified by these rules and to the extent consistent with these rules and Chapter 36 of the Texas Water Code and the District Act, the Texas Rules of Evidence govern the admissibility and introduction of evidence; however, evidence not admissible under the Texas Rules of Evidence may be admitted if it is of the type commonly relied upon by reasonably prudent persons in the conduct of their affairs. In addition, evidence may be stipulated by agreement of all parties. It is intended that needful and proper evidence shall be conveniently, inexpensively and speedily produced while preserving the substantial rights of the parties to the proceedings. When a proceeding will be expedited and the interests of the parties not substantially prejudiced, testimony may be received in written form. The written testimony of a witness, either in narrative or question and answer form, may be admitted into evidence upon the witness being sworn and identifying the testimony as a true and accurate record of what the testimony would be if given orally. The witness will be subject to clarifying questions and to cross-examination, and the prepared testimony will be subject to objection.

(h) CONCLUSION OF HEARING CONDUCTED BY THE DISTRICT:

(1) Closing the Record; Proposal for Decision: At the conclusion of the presentation of evidence and any oral argument, the Hearings Examiner or Presiding Officer may either close the record or keep it open and allow the submission of additional evidence, exhibits, briefs, or proposed findings and conclusions from one or more of the parties. No additional evidence, exhibits, briefs, or proposed findings and conclusions may be filed unless permitted or requested by the Hearings Examiner or Presiding Officer. After the record is closed, the Hearings Examiner or Presiding Officer shall prepare and submit a Proposal for Decision ("PFD") to the Board, applicant, and each person who provided comments or each designated party not later than the 30th day after the date a hearing is concluded. The PFD will include a summary of the evidence, together with the Hearings Examiner's or Presiding Officer's findings and conclusions and recommendations for action. The Presiding Officer may direct the General Manager or another District representative to prepare the PFD and recommendations required by this Rule.

(2) Upon completion and issuance of the Hearings Examiner's or Presiding Officer's PFD, a copy will be submitted to the Board and delivered to each party to the proceeding. In a contested case, delivery to the parties will be by certified mail. If the hearing was conducted by a quorum of the Board and if the Presiding Officer prepared a record of the hearing as provided by § 36.408(a) of the Texas Water Code, the Presiding Officer shall determine whether to prepare and submit

a PFD under this section, but shall not be required to prepare a PFD. If a PFD is prepared, then prior to Board action any party in a contested case may file written exceptions to the Hearings Examiner's or Presiding Officer's PFD, and any party in an uncontested case may request an opportunity to make an oral presentation of exceptions to the Board. Upon review of the PFD and exceptions, the Hearings Examiner or Presiding Officer may reopen the record for the purpose of developing additional evidence, or may deny the exceptions and submit the PFD and exceptions to the Board. The Board may, at any time and in any case, remand the matter to the Hearings Examiner or Presiding Officer for further proceedings.

(3) Time for Board Action on Certain Permit Matters: In the case of hearings involving original permit applications, or applications for permit renewals or amendments, the Hearings Examiner's or Presiding Officer's PFD should be submitted, and the Board should act, within 60 calendar days after the close of the hearing record. The Board shall consider the PFD at a final hearing. Additional evidence may not be presented during this final hearing, however the parties may present oral argument to summarize the evidence, present legal argument, or argue an exception to the PFD. A final hearing may be continued in accordance with Rule 24(f) and § 36.409 of the Texas Water Code if good cause is shown.

(i) HEARINGS CONDUCTED BY THE STATE OFFICE OF ADMINISTRATIVE HEARINGS: If timely requested by the applicant or other party to a contested hearing in accordance with Rule 19(e), the District shall contract with SOAH to conduct the hearing on the application. All hearings that are required to be held by SOAH shall be conducted as follows:

(1) The Board shall determine whether the hearing will be held in Travis County or at the District Office or other regular meeting place of the Board, after considering the interests and convenience of the parties, and the expense of a contract with SOAH.

(2) The party requesting that the hearing be conducted by SOAH shall pay all costs associated with the contract for the hearing and shall make a deposit with the District in an amount that is sufficient to pay the estimated contract amount before the hearing begins. If the total cost for the contract exceeds the amount deposited by the paying party at the conclusion of the hearing, the party that requested the hearing shall pay the remaining amount due to pay the final price of the contract. If there are unused funds remaining from the deposit at the conclusion of the hearing, the unused funds shall be refunded to the paying party.

(3) Upon execution of a contract with SOAH and receipt of the deposit from the appropriate party or parties, the District's Presiding Officer shall refer the application in accordance with the contract. The Presiding Officer's referral shall be in writing and shall include procedures established by the Presiding Officer; a copy of the permit application, all evidence admitted at the preliminary hearing, the District's rules and other relevant policies and precedents, the District Management Plan, and the District Act; and guidance and the District's

interpretation regarding its regulations, permitting criteria, and other relevant law to be addressed in a Proposal for Decision and Findings of Fact and Conclusions of Law to be prepared by SOAH. The District or Presiding Officer may not attempt to influence the Finding of Facts or the Administrative Law Judge's application of the law in a contested case except by proper evidence and legal argument. SOAH may certify one or more questions to the District's Board seeking the District Board's guidance on District precedent or the District Board's interpretation of its regulations or other relevant law, in which case the District's Board shall reply to SOAH in writing.

(4) A hearing conducted under this rule is governed by SOAH's procedural rules, in Subchapters C, D, and F, Chapter 2001, Texas Government Code; and, to the extent, not inconsistent with these provisions, any procedures established by the Presiding Officer.

(5) The District's Board shall conduct a hearing within 45 calendar days of receipt of the Proposal for Decision and Findings of Fact and Conclusions of Law issued by SOAH, and shall act on the application at this hearing or no later than 60 calendar days after the date that the Board's final hearing on the application is concluded in a manner consistent with § 2001.058 of the Texas Government Code. At least 10 calendar days prior to this hearing, the Presiding Officer shall provide written notice to the parties of the time and place of the Board's hearing under this subsection by mail and facsimile, for each party with a facsimile number.

(6) The Board may change a finding of fact or conclusion of law made by the Administrative Law Judge, or may vacate or modify an order issued by the Administrative Law Judge, only if the Board determines:

(i) that the Administrative Law Judge did not properly apply or interpret applicable law, District rules, written policies, or prior administrative decisions;

(ii) that a prior administrative decision on which the Administrative Law Judge relied is incorrect or should be changed; or

(iii) that a technical error in a finding of fact should be changed.

RULE 22 RULEMAKING HEARINGS.

(a) GENERAL PROCEDURES FOR RULEMAKING HEARINGS: The Presiding Officer will conduct the rulemaking hearing in the manner the Presiding Officer deems most appropriate to obtain all relevant information pertaining to the subject of the hearing as conveniently, inexpensively, and expeditiously as possible. A quorum of the District's Board will participate in all rulemaking hearings, which will render a hearing report unnecessary.

(b) SUBMISSION OF PUBLIC COMMENTS: Any interested person may submit written statements, protests or comments, briefs, affidavits, exhibits, technical reports, or other documents relating to the subject of the hearing. Such documents must be submitted no later than the time of the hearing; provided, however, that the Presiding Officer may grant additional time for the submission of documents. Any person desiring to testify on the subject of the hearing must so indicate on the registration form provided at the hearing. The Presiding Officer will establish the order of testimony and may limit the number of times a person may speak, the time period for oral presentations, and the time period for raising questions. In addition, the Presiding Officer may limit or exclude cumulative, irrelevant, or unduly repetitious presentations.

(c) CONCLUSION OF RULEMAKING HEARING: At the conclusion of the hearing, the Board may take action on the subject matter of the hearing, take no action, or postpone action until a future meeting or hearing of the Board. When adopting, amending, or repealing any rule, the District shall:

(1) consider all groundwater uses and needs;

(2) develop rules that are fair and impartial;

(3) consider the groundwater ownership and rights described by § 36.002 of the Texas Water Code;

(4) consider the public interest in conservation, preservation, protection, recharging, and prevention of waste of groundwater, and of groundwater reservoirs or their subdivisions, and in controlling subsidence caused by withdrawal of groundwater reservoirs or their subdivision, consistent with the objectives of Section 59, Article XVI, Texas Constitution;

(5) consider the goals developed as part of the District Management Plan under § 36.1071 of the Texas Water Code; and

(6) not discriminate between land that is irrigated for production and land that was irrigated for production and enrolled or participating in a federal conservation program.

(d) NOTICE OF RULEMAKING HEARINGS: Notices for all rulemaking hearings must include a brief explanation of the subject matter of the hearing, the time, date, and place of the hearing, location or Internet site at which a copy of the proposed rules may be reviewed or copied, if the District has a functioning Internet site, and any other information deemed relevant by the General Manager or Board. Not less than 20 calendar days prior to the date of a rulemaking hearing, the General Manager shall:

(1) post notice in a place readily accessible to the public at the District office;

(2) provide notice to the County Clerk of Reagan County;

(3) publish notice in one or more newspapers of general circulation in the District;

(4) provide notice by mail, facsimile, or electronic mail to any person who has requested notice under Subsection (e) of this rule; and

(5) make available a copy of all proposed rules at a place accessible to the public during normal business hours, and post an electronic copy on the District's Internet site, if the District has a functioning internet site.

(e) A person may submit to the District a written request for notice of a rulemaking hearing. Such a request is effective for the remainder of the calendar year in which the request is received by the District. To receive notice of a rulemaking hearing in a later year, a person must submit a new request. Failure to provide notice under this subsection does not invalidate an action taken by the District at a rulemaking hearing.

(f) EMERGENCY RULES: The Board may adopt an emergency rule without prior notice and/or hearing if the Board finds that a substantial likelihood of imminent peril to the public health, safety, or welfare, or a requirement of state or federal law, requires adoption of a rule on less than 20 calendar days' notice. The Board shall prepare a written statement of the reasons for this finding. An emergency rule adopted shall be effective for not more than 90 calendar days after its adoption by the Board. The Board may extend the 90-day period for an additional 90 calendar days if notice of a hearing on the final rule is given not later than the 90th calendar day after the date the rules is adopted. An emergency rule adopted without notice and/or a hearing must be adopted at a meeting conducted under Chapter 551, Texas Government Code.

RULE 23 HEARINGS ON DESIRED FUTURE CONDITIONS.

(a) Upon receipt of proposed Desired Future Conditions from the Groundwater Management Area's district representatives, a public comment period of 90 calendar days commences, during which the District will receive written public comments and conduct at least one hearing to allow public comment on the proposed Desired Future Conditions relevant to the District. The District will make available at the District office a copy of the proposed Desired Future Conditions and any supporting materials, such as the documentation of factors considered under Subsection 36.108(d) and groundwater availability model run results. At least 10 calendar days before the hearing, the Board must post notice that includes:

(1) the proposed Desired Future Conditions and a list of any other agenda items;

(2) the date, time, and location of the hearing;

(3) the name, telephone number, and address of the person to whom questions or requests for additional information may be submitted;

(4) the names of the other districts in the District's management area; and

(5) information on how the public may submit comments.

(b) Except as provided by this subsection, the hearing and meeting notice must be provided in the manner prescribed for a rulemaking hearing under Rule 22(d) and § 36.101(d) of the Texas Water Code.

(c) After the public hearing, the District shall compile for consideration at the next joint planning meeting a summary of relevant comments received, any suggested revisions to the proposed Desired Future Conditions, and the basis for any suggested revisions.

(d) As soon as possible after the District receives the Desired Future Conditions resolution and explanatory report from the Groundwater Management Area's district representatives pursuant to § 36.108(d-3) of the Texas Water Code, the Board shall adopt the Desired Future Conditions in the resolution and explanatory report that apply to the District. The Board shall issue notice of its meeting at which it will take action on the Desired Future Conditions in accordance with Subsection (a) of this rule.

RULE 24 GENERAL PROCEDURAL RULES.

(a) COMPUTING TIME: In computing any period of time prescribed or allowed by these rules, by order of the Board, or by any applicable statute, the day of the act, event or default from which designated period of the time begins to run, is not to be included, but the last day of the period so computed is to be included, unless it be a Saturday, Sunday or legal holiday, in which event the period runs until the end of the next day which is neither a Saturday, Sunday nor a legal holiday on which the District's office is closed.

(b) TIME LIMIT: Applications, requests, or other papers or documents required or permitted to be filed under these rules or by law must be received for filing at the District office at 108 Hwy 67 West, Big Lake, Texas. The date of receipt and not the date of posting is determinative.

(c) PROCEDURES NOT OTHERWISE PROVIDED FOR: If in connection with any hearing, the Board determines that there are no statutes or other applicable rules resolving particular procedural questions then before the Board, the Board will direct the parties to follow procedures consistent with the purpose of these rules, the District Act, and Chapter 36 of the Texas Water Code.

(d) MINUTES AND RECORDS OF THE DISTRICT: All official documents, reports, records and minutes of the District are available for public inspection and copying in accordance with the Texas Public Information Act. Upon written application of any person, the District will furnish copies of its public records, subject to the provisions of Chapter 552, Texas Government Code. Persons who are furnished copies may be assessed reproduction fees as provided in Chapter 552 and regulations of the Office of the Attorney General.

(e) HEADINGS AND CAPTIONS: All section and other headings and captions contained in these rules are for reference purposes only and do not affect in any way the meaning or interpretation of these rules.

(f) CONTINUANCE: Any meeting, workshop, or hearing may be continued from time to time and date to date without published notice after the initial notice has been provided, in conformity with the Texas Open Meetings Act.

RULE 25 MANAGEMENT PLAN.

(a) The Board shall adopt a Management Plan that specifies the acts, procedures, performance and avoidance necessary to minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, to prevent interference between wells, to prevent degradation of water quality, to prevent waste, and to avoid impairment of a Desired Future Conditions. The District shall use the District's rules to implement the Management Plan.

(b) The Board will review and readopt or amend the plan at least every fifth year after its last approval by TWDB. If the Board considers a new plan necessary or desirable, based on evidence presented at a hearing, including the District's best available data, groundwater availability, a new plan will be adopted and submitted to TWDB in accordance with TWDB rules. The District will amend its plan to address goals and objectives consistent with achieving the Desired Future Conditions within two years of the adoption of the Desired Future Conditions by the Groundwater Management Area.

(c) The District will update its rules, if necessary, to implement the Desired Future Conditions before the first anniversary of the date that TWDB approves the District Management Plan that has been updated to include the adopted Desired Future Conditions.

RULE 26 WASTE AND DEGRADATION OF QUALITY OF GROUNDWATER.

(a) Groundwater shall not be produced within, or used within or beyond the District's boundaries, in such a manner or under such conditions as to constitute waste as defined in the "Definitions" set forth in these rules.

(b) Any person producing or using groundwater shall use every possible precaution, in accordance with the most approved methods, to stop and prevent waste of such water.

(c) No person shall pollute or harmfully alter the character of the groundwater reservoir of the District by means of saltwater or other deleterious matter admitted from other stratum or strata or from the surface of the ground.

(d) No person shall commit waste as the term is defined by the "Definitions."

(e) Pollution or Degradation of Quality of Groundwater:

(1) No person shall cause pollution or harmfully alter the character of the underground water of the District by means of salt water or other deleterious matter admitted from another stratum or strata or from the surface of the ground, or from the operation of a well.

(2) No person shall cause pollution or harmfully alter the character of the underground water of the District by activities on the surface of the ground which cause or allow pollutants to enter the groundwater through recharge features, whether natural or manmade.

(3) No person shall cause degradation of the quality of groundwater.

(f) Orders to Prevent Waste, Pollution, or Degradation of Quality of Groundwater:

After providing 15 (fifteen) calendar days' notice to affected parties and an opportunity for a hearing, the Board may adopt orders to prohibit or prevent waste, pollution, or degradation of the quality of groundwater. If the factual basis for the order is disputed, the Board shall direct that an evidentiary hearing be conducted prior to consideration and decision on the entry of such an order. If the Board President or his or her designee determines that an emergency exists requiring the immediate entry of an order to prohibit waste or pollution and protect the public health, safety, and welfare, he or she may enter a temporary order without notice and hearing provided, however, the temporary order shall continue in effect for the lesser of 15 (fifteen) calendar days or until a hearing can be conducted. In such an emergency, the Board President or his or her designee is also authorized, without notice or hearing to pursue a temporary restraining order, injunctive, and other appropriate relief in a court of competent jurisdiction.

RULE 27 INVESTIGATIONS AND ENFORCEMENT.

(a) CONDUCT OF INVESTIGATION: Investigations or inspections by the District that require entrance upon property must be conducted in accordance with District Rule 13(b).

(b) RULE ENFORCEMENT; ENFORCEMENT HEARING: If it appears that a person has violated or is violating any provision of the District's rules, the District may employ any of the following means, or a combination thereof, in providing notice of the violation:

(1) Informal Notice: The officers, staff or agents of the District acting on behalf of the District may inform the person of the violation via telephone by informing, or attempting to inform, the appropriate person to explain the violation and the steps necessary to cure the violation. The information received by the District through this informal notice concerning the violation and the date and time of the telephone call will be documented and will remain in the District's files. Nothing in this subsection shall limit the authority of the District to take action, including emergency actions or any other appropriate enforcement action, without prior notice provided under this subsection.

(2) Written Notice of Violation: The District may inform the person of the violation through written notice of violation. Each notice of violation issued herein shall explain the basis of the violation, identify the rule or order that has been violated or is currently being violated, and list specific required actions that must be satisfactorily completed to cure a past or present violation to address each violation raised, and may include the payment of applicable civil penalties.

Notice of a violation issued herein shall be provided through a delivery method in compliance with these Rules. Nothing in this Subsection shall limit the authority of the District to take action, including emergency actions or any other appropriate enforcement action, without prior notice provided under this subsection.

(3) Compliance Meeting: The District may hold a meeting with any person whom the District believes to have violated, or to be violating, a District rule or order to discuss each such violation and the steps necessary to satisfactorily remedy each such violation. The General Manager may conduct a compliance meeting without the Board, unless otherwise determined by the Board President or General Manager. The information received in any meeting conducted pursuant to this subsection concerning the violation will be documented, along with the date and time of the meeting, and will be kept on file with the District. Nothing in this subsection shall limit the authority of the District to take action, including emergency actions or any other appropriate enforcement action, without prior notice provided under this subsection.

(c) SHOW CAUSE HEARINGS:

(1) Upon recommendation of the General Manager to the Board or upon the Board's own motion, the Board may order any person that it believes has violated or is violating any provision of the District's rules or District order to appear before the Board at a public meeting, held in accordance with the Texas Open Meetings Act, and called for such purpose and to show cause of the reasons an enforcement action, including the assessment of civil penalties and initiation of a suit in a court of competent jurisdiction in Reagan County, should not be pursued against the person made the subject of the show cause hearing. The Presiding Officer may employ the procedural rules in District Rules 20 and/or 21.

(2) No show cause hearing under subsection (a) of this Rule may be conducted unless the District serves, on each person made the subject of the show cause hearing, a written notice ten (10) calendar days prior to the date of the hearing. Such notice shall include all of the following information:

(i) the time, date, and place for the hearing;

(ii) the basis of each asserted violation;

(iii) the rule or order that the District believes has been violated or is currently being violated; and

(iv) a request that the person duly appear and show cause of the reasons an enforcement action should not be pursued.

(3) The District may pursue immediate enforcement action against the person cited to appear in any show cause order issued by the District where the person cited fails to appear and show cause of the reasons an enforcement action should not be pursued.

(4) Nothing in this rule shall constrain the authority of the District to take action, including emergency actions or any other enforcement action, against a person at any time, regardless of whether the District decides to hold a hearing under this Section.

(d) REMEDIES:

(1) The Board shall consider the appropriate remedies to pursue against an alleged violator during the show cause hearing, including assessment of a civil penalty, injunctive relief, or assessment of a civil penalty and injunctive relief. In assessing civil penalties, the Board may determine that each day that a violation continues shall be considered a separate violation. The civil penalty for a violation of any District rule is hereby set at the lower of $10,000.00 per violation or a lesser amount determined after consideration, during the enforcement hearing, of the criteria in subsection (2) of this rule.

(2) In determining the amount of a civil penalty, the Board of Directors shall consider the following factors:

(i) compliance history;

(ii) efforts to correct the violation and whether the violator makes a good faith effort to cooperate with the District;

(iii) the penalty amount necessary to ensure future compliance and deter future noncompliance;

(iv) any enforcement costs related to the violation; and

(v) any other matters deemed necessary by the Board.

(3) The District shall collect all past due fees and civil penalties accrued that the District is entitled to collect under the District's rules. The District shall provide written notice of the alleged violation and show cause hearing by certified mail, return receipt requested, hand delivery, first class mail, facsimile, email, FedEx, UPS, or any other type of public or private courier or delivery service. If the District is unable to provide notice to the alleged violator by any of these forms of notice, the District may tape the notice on the door of the alleged violator's office or home, or post notice in the newspaper of general circulation in the District and within the county in which the alleged violator resides or in which the alleged violator's office is located. Any person or entity in violation of these rules is

subject to all past due fees and civil penalties along with all fees and penalties occurring as a result of any violations that ensue after the District provides written notice of a violation. Failure to pay required fees will result in a violation of the District's rules and such failure is subject to civil penalties.

(4) The District may afford an opportunity to the alleged violator to cure a violation through coordination and negotiation with the District.

(5) After conclusion of the show cause hearing and decision by the District's Board to enter an enforcement order, the District may commence suit to enforce its order without further action by the District's Board. Any suit shall be filed in a court of competent jurisdiction in Reagan County. If the District prevails in a suit brought under this Section, the District may seek and the court shall grant, in the interests of justice and as provided by § 36.066(h) of the Texas Water Code, in the same action, recovery of attorney's fees, costs for expert witnesses, and other costs incurred by the District before the court.

(e) CAPPING AND PLUGGING OF WELLS:

(1) In addition to capping requirements and authorized action by the District under Rule 9A(g), the District may require a well to be capped to prevent waste, prevent pollution, or prevent further deterioration of a well casing. The well must remain capped until such time as the conditions that led to the capping requirement are eliminated. If well pump equipment is removed from a well and the well will be re-equipped at a later date, the well must be capped, provided however that the casing is not in a deteriorated condition that would permit co-mingling of water strata, in which case the well must be plugged. The cap must be capable of sustaining a weight of at least four hundred (400) pounds and must be constructed with a water tight seal to prevent entrance of surface pollutants into the well itself, either through the well bore or well casing.

(2) As stated in Rule 9A(g), a deteriorated or abandoned well must be plugged in accordance with the Texas Department of License and Regulation, Water Well Drillers and Pump Installers Rules (16 TAC Chapter 76). It is the responsibility of the landowner to see that such a well is plugged to prevent pollution of the underground water and to prevent injury to persons and animals. Registration of the well is required prior to, or in conjunction with, well plugging.

Any person that plugs a well in the District must submit a copy of the plugging report to the District and the Texas Department of License and Regulation within 30 (thirty) calendar days of plugging completion.

(3) If the owner or lessee fails or refuses to plug or cap the well in compliance with this rule and District standards within 30 (thirty) calendar days after being requested to do so in writing by an officer, agent, or employee of the District, then, upon Board approval, any person, firm, or corporation employed by the

District may go on the land and plug or cap the well safely and securely, pursuant to Texas Water Code § 36.118.

Reasonable expenses incurred by the District in plugging or capping a well constitute a lien on the land on which the well is located.

The District shall perfect the lien by filing in the deed records an affidavit, executed by any person conversant with the facts, stating the following:

(i) the existence of the well;

(ii) the legal description of the property on which the well is located;

(iii) the approximate location of the well on the property;

(iv) the failure or refusal of the owner or lessee, after notification, to close the well within 30 (thirty) calendar days after the notification;

(v) the closing of the well by the District, or by an authorized agent, representative, or employee of the District; and

(vi) the expense incurred by the District in closing the well.

RULE 28 APPEAL OF DESIRED FUTURE CONDITIONS.

(a) Not later than 120 calendar days after the date on which the District adopts a Desired Future Condition under § 36.108(d-4) of the Texas Water Code, a person determined by the District to be an affected person may file a petition appealing the reasonableness of a Desired Future Condition. The petition must include:

(1) evidence that the petitioner is an affected person;

(2) a request that the District contract with SOAH to conduct a hearing on the petitioner's appeal of the reasonableness of the Desired Future Condition;

(3) evidence that the districts did not establish a reasonable Desired Future Condition of the groundwater resources within the relevant Groundwater Management Area.

(b) Not later than 10 calendar days after receiving a petition described by Subsection (a), the District's Presiding Officer shall determine whether the petition was timely filed and meets the requirements of Rule 28(a) and, if so, shall submit a copy of the petition to the TWDB. If the petition was untimely or did not meet the requirements of Rule 28(a), the District's Presiding Officer shall return the petition to the petitioner advising of the defectiveness of the petition. Not later than 60 calendar days after receiving a petition under Rule 28(a), the District shall:

(1) contract with SOAH to conduct the requested hearing; and

(2) submit to SOAH a copy of any petitions related to the hearing requested under Rule 28(a) and received by the district.

(c) A hearing under District Rule 28 must be held:

(1) at the District office or Reagan County Courthouse unless the District's Board provides for a different location; and

(2) in accordance with Chapter 2001, Texas Government Code, and SOAH's rules.

Not less than ten (10) calendar days prior to the date of the hearing, notice may be provided by regular mail to landowners who, in the discretion of the General Manager, may be affected by the application.

(d) Not less than ten (10) calendar days prior to the date of the SOAH hearing under this rule, notice shall be issued by the District and meet the following requirements:

(1) state the subject matter, time, date and location of the hearing;

(2) be posted at a place readily accessible to the public at the District's office;

(3) be provided to the County Clerk of Reagan County, whereupon the County Clerk shall post the notice on a bulletin board at a place convenient to the public in the County Courthouse; and

(4) be sent to the following individuals and entities by certified mail, return receipt requested; hand delivery; first class mail; facsimile; email; FedEx; UPS; or any other type of public or private courier or delivery service:

(i) the petitioner;

(ii) any person who has requested notice in writing to the District;

(iii) each nonparty district and regional water planning group located within the same Groundwater Management Area as a district named in the petition;

(iv) TWDB's Executive Administrator; and

(v) TCEQ's Executive Director.

If the District is unable to provide notice by any of these forms of notice, the District may tape the notice on the door of the individual's or entity's office or home, or post notice in the newspaper of general circulation in the District and

within the county in which the person or entity resides or which the person's or entity's office is located.

(e) Before a hearing is conducted under this rule, SOAH shall hold a prehearing conference to determine preliminary matters, including:

(1) whether the petition should be dismissed for failure to state a claim on which relief can be granted;

(2) whether a person seeking to participate in the hearing is an affected person who is eligible to participate; and

(3) which affected persons shall be named as parties to the hearing.

(f) The petitioner shall pay the costs associated with the contract for the hearing conducted by SOAH under this Rule. The petitioner shall deposit with the District an amount sufficient to pay the contract amount before the hearing begins. After the hearing, SOAH may assess costs to one or more of the parties participating in the hearing and the District shall refund any money exceeding actual hearing costs to the petitioner. SOAH shall consider the following in apportioning costs of the hearing:

(1) the party who requested the hearing;

(2) the party who prevailed in the hearing;

(3) the financial ability of the party to pay the costs;

(4) the extent to which the party participated in the hearing; and

(5) any other factor relevant to a just and reasonable assessment of costs.

(g) On receipt of the SOAH Administrative Law Judge's findings of fact and conclusions of law in a proposal for decision, which may include a dismissal of a petition, the District shall issue a final order stating the District's decision on the contested matter and the District's findings of fact and conclusions of law. The District may change a finding of fact or conclusion of law made by the Administrative Law Judge, or may vacate or modify an order issued by the Administrative Law Judge, as provided by Section 2001.058(e), Texas Government Code.

(h) If the District vacates or modifies the proposal for decision, the District shall issue a report describing in detail the District's reasons for disagreement with the Administrative Law Judge's findings of fact and conclusions of law. The report shall provide the policy, scientific, and technical justifications for the District's decision.

(i) If the District in its final order finds that a Desired Future Condition is unreasonable, not later than the 60th calendar day after the date of the final order, the District shall

coordinate with the districts in the Groundwater Management Area at issue to reconvene in a joint planning meeting for the purpose of revising the Desired Future Condition found to be unreasonable in accordance with the procedures in § 36.108 of the Texas Water Code.

The Administrative Law Judge may consolidate hearings requested under this rule that affect two or more districts. The Administrative Law Judge shall prepare separate findings of fact and conclusions of law for each district included as a party in a multidistrict hearing.

RULE 29 AQUIFER STORAGE AND RECOVERY (ASR).

(a) As a general matter, TCEQ has exclusive jurisdiction over the regulation and permitting of ASR Injection Wells. However, the District has concurrent jurisdiction over an ASR Injection Well that also functions as an ASR Recovery Well. The District is entitled to notice of and may seek to participate in an ASR permitting matter pending at TCEQ and, if the District qualifies as a party, in a contested hearing on an ASR application.

(b) The provisions of District Rule 29 apply to an ASR recovery well that also functions as an ASR injection well.

(c) A project operator shall:

(1) register an ASR injection well and ASR recovery well associated with the aquifer storage and recovery project if a well is located in the District;

(2) submit to the District the monthly report required to be provided to TCEQ under § 27.155 of the Texas Water Code, at the same time the report is submitted to TCEQ; and

(3) submit to the District the annual report required to be provided to TCEQ under § 27.156 of the Texas Water Code, at the same time the report is submitted to TCEQ.

(d) If an aquifer storage and recovery project recovers an amount of groundwater that exceeds the volume authorized by TCEQ to be recovered under the project, the project operator shall report to the District the volume of groundwater recovered that exceeds the volume authorized to be recovered in addition to providing the report required by District Rule 29(c)(2).

(e) Except as provided by District Rule 29(f), the District may not require a permit for the drilling, equipping, operation, or completion of an ASR injection well or an ASR recovery well that is authorized by TCEQ.

(f) Each ASR recovery well that is associated with an aquifer storage and recovery project is subject to the permitting, spacing, and production requirements of the District if the amount of groundwater recovered from the wells exceeds the volume authorized by TCEQ to be recovered under the project. The requirements of the District apply only to

the portion of the volume of groundwater recovered from the ASR recovery well that exceeds the volume authorized by TCEQ to be recovered.

(g) A project operator may not recover groundwater from an aquifer storage and recovery project in an amount that exceeds the volume authorized by TCEQ to be recovered under the project unless the project operator complies with the applicable requirements of the District as described by this rule.

(h) The District may not assess a production fee or export fee or surcharge for groundwater recovered from an ASR recovery well, except to the extent that the amount of groundwater recovered under the aquifer storage and recovery project exceeds the volume authorized by TCEQ to be recovered.

(i) The District may consider hydrogeologic conditions related to the injection and recovery of groundwater as part of an aquifer storage and recovery project in the planning for and monitoring of the achievement of a Desired Future Condition for the aquifer in which the wells associated with the project are located.

* * * *

PUBLIC HEARING
Santa Rita Underground Water Conservation District

Tuesday, March 17, 2020
6:00 p.m.
Santa Rita UWCD Office
108 Hwy 67 West
Big Lake, TX 76932

The Santa Rita Underground Water Conservation District will hold a Public Hearing at 6:00 p.m. on March 17, 2020, to discuss, consider and receive public comments, and potentially act upon the adoption of the District's 5-year Management Plan (2020-2025). The Plan may be reviewed at the District office Monday through Friday during office hours from 9:00 a.m. to 5:00 p.m. If you have any questions, please contact Regina Gomez at (325) 277-3493.

FILED at 12:30 PM
Reagan County

MAR 06 2020

Terri Curry
County and District Clerk
By Dep

NOTICE OF THE SPECIAL MEETING
OF THE
SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

Place: Santa Rita U.W.C.D.
108 Hwy 67 West
Big Lake, Texas

Date: Tuesday, March 17, 2020

Time: 6:00 P.M.

Public Hearing Agenda

1. Call to Order
2. Present the 2020-2025 Management Plan
3. Accept public comments on the 2020-2025 Management Plan
4. Adjourn

Special Meeting Agenda

5. Call to Order
6. Discussion and Possible Action to Adopt the 2020-2025 Management Plan by Resolution
7. Any person wishing to speak to the Board will be allowed 5 minutes – D/A
8. Approve Minutes from the February 19, 2020 special board meeting--D/A
9. Pay Bills and Discuss District Finances—D/A
10. West Texas Weather Modification Association—D/A
11. Well Permit Applications—D/A
12. Manager's Report—D/A
13. Any other District Business—D/A
14. Adjourn

****During the meeting, the Board may go into executive session for any of the purposes authorized under the Texas Open Meeting Act, Chapter 551 of the Texas Government Code, for any item on the above agenda or as otherwise authorized by law.**

Regina R. Gomez
District Manager

FILED at 12:20 P M
Reagan County

MAR 06 2020

Terri Curry
County and District Clerk
By: Dep

Santa Rita Underground Water Conservation District

108 Hwy 67 West P.O. Box 849
Big Lake, Texas 76932

Phone: 325-884-2893 Fax: 325-884-2445 website: www.santaritauwcd.org

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ADOPTION OF MANAGEMENT PLAN 2020-2025

WHEREAS, The Santa Rita Underground Water Conservation District (the District) was created by the 71st Legislature under the authority of Section 59, Article XVI, of the Texas Constitution and in accordance with Chapter 36 of the Texas Water Code, as amended; and

WHEREAS, the District is required by Chapter 36, §36.1071 of the Texas Water Code to develop and adopt a Management Plan; and

WHEREAS, the District is required by Chapter 36, §36.1072 of the Texas Water Code to review and re-adopt the plan with or without revisions at least once every five (5) years and to submit the adopted Management Plan to the Executive Administrator of the Texas Water Development Board for review and approval; and

WHEREAS, the District's readopted revised Management Plan shall be approved by the Executive Administrator if the plan is administratively complete; and

WHEREAS, the District Board of Directors, after reviewing the existing Management Plan, has determined that this plan should be revised and replaced with the new five (5) year Management Plan expiring in 2025; and

WHEREAS, the District Board of Directors has determined that the five (5) year Management Plan addresses the requirements of Chapter 36, §36.1071.

NOW, THEREFORE, be it resolved that the Board of Directors of the Santa Rita Underground Water Conservation District, following notice and hearing, hereby adopts this five (5) year Management Plan; and

FURTHER, it be resolved, that this new Management Plan shall become effective immediately upon adoption.

Adopted this 17th day of March, 2020, by the Board of Directors of the Santa Rita Underground Water Conservation District.

Attesting Signature

Presiding Officer

From: Regina Gomez <srwcdist@verizon.net>
To: glasscockgroundwater <glasscockgroundwater@yahoo.com>
Subject: Santa Rita Underground Water Conservation District Management Plan
Date: Mon, Mar 23, 2020 3:51 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello!

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: icwcd <icwcd@verizon.net>
Subject: Santa Rita Underground Water Conservation DIstrict 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 3:56 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello!

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: scuwcd <scuwcd@verizon.net>
Subject: Santa Rita Underground Water Conservation District 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 3:58 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello, Diana !

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: jgrant <jgrant@crmwd.org>
Subject: Santa Rita UWCD 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 3:59 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello, Mr. John Grant, Chairman Region F Water Planning Group,

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: manager <manager@suttoncountyuwcd.org>
Subject: Santa Rita UWCD 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 4:00 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello, Meredith !

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: crockettcountygcd <crockettcountygcd@gmail.com>
Subject: Santa Rita UWCD 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 4:01 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello!

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office

From: Regina Gomez <srwcdist@verizon.net>
To: permianbasin <permianbasin@pbuwcd.com>
Subject: Santa Rita UWCD 2020-2025 Management Plan
Date: Mon, Mar 23, 2020 4:02 pm
Attachments: SRUWCD2020MgmtPlan.docx (33K)

Hello, Everyone!

Attached is the Santa Rita Underground Water Conservation District Management Plan for 2020-2025. This plan was adopted by the District's Board of Directors on March 17, 2020.
If you have any questions, please don't hesitate to contact me.

I hope everyone is staying safe and healthy during this critical time.

Best Regards,

Regina Gomez

General Manager
Santa Rita UWCD
PO Box 849
Big Lake, Texas 76932
325-277-3493 cell ph
325-884-2893 office