

SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT MANAGEMENT PLAN

Management Plan 2007-2012

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srwcdist@verizon.net Santa Rita Underground Water Conservation District P.O. Box 849 Big Lake, TX 76932

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Management Plan 2007-2012

Whereas, the Santa Rita Underground Water Conservation District was created in accordance with Article 16, Section 59 of the 71st Legislature(1989) P. 2153, Ch.653 S.B. 1634 and Chapters 50 and 52 of the Texas Water Code, as amended; and

Whereas, the District is required by SB1 through Chapter 36.1071 of the Texas Water Code to develop and adopt a new Management Plan; and

Whereas, the District Board of Directors has determined that the new 5 year Management Plan addresses the requirements of Chapter 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 new 5 year Management Plan to replace the existing Management Plan; and

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

Adopted this June 19, 2007 by the Board of Directors of the Santa Rita Underground Water Conservation District.

George Tucker, President

Rusty Owens, Secretary

Dale Calley, Vice President

Bobby Shelton

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

Executive Administrator Texas Water Development Board Austin, TX 78711-3231

Dear Administrator:

Attached is a copy of the adopted Management Plan of the Santa Rita Underground Water Conservation District (SRUWCD) as required by 36.1072(a) of the Texas Water Code. A copy of the SRUWCD Board of Directors resolution adopting the plan is attached.

Upon receipt of your certification of this Management Plan, it is the intent of the Board of Directors that this plan replace the existing 5 year Management Plan that was adopted by the District in 1998.

The SRUWCD Management Plan was developed during open meetings of the Board as required by the Open Meetings Act. Documentation that notice and hearing requirements were followed is presented as a separate attachment.

No surface water entities exist within the District.

Sincerely,

NOTICE OF THE REGULAR CALLED MEETING OF THE SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT **BOARD OF DIRECTORS**

Place: Santa Rita U.W.C.D.

Hwy 67 West

Date: June 19, 2007

Time: 6:00 P.M.

- 1. Any Person wishing to speak to the Board will be allowed 5 minutes. - D
- 2. Addition to Minutes from April 17, 2007 Regular Meeting – D/A
- 3. Approve Minutes from May 15, 2007 Regular Meeting - D/A
- 4. Approve Audit of 2005-2006 Fiscal Year
- 5. Pay Bills and Discuss District Finances - D/A
- 6. Public Hearing on Management Plan – D/A
- 7. Adoption of Management Plan - D/A
- 8. West Texas Weather Modification Association-D/A
- 9. Well Permit Applications - D/A
- 10. Manager's Report - D/A

FILED at at 9:40 Reagan County

JUN 15 2007

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

District Goal

The overall objectives of this District are to maintain local individual control of the underground water supply, to gather data, and to create awareness of the need to manage for a better water supply.

The District provides information regarding the conservation, preservation/protection, recharge, and prevention of waste of the underground water reservoirs. This management plan will help provide guidance to accomplish the overall objective of the District. The plan is an open-ended document and can be revised or updated as needed to help meet the District's goals and objectives.

- Continue to update equipment and services provided to the taxpayers of Santa Rita U.W.C.D.
- Continue to encourage well owner compliance with the rules and regulations of Santa Rita U.W.C.D.

Particularly:

- a. Well permitting (new wells).
- b. Well spacing.
- c. Protection of the aquifer from pollution.
- d. Prohibit the waste of water.
- e. Open or abandoned wells to be capped or plugged.
- Continue to inventory the groundwater resources by:
 - Monitoring and recording water levels and well depths.
 - b. Testing water samples by chemical and/or bacterial analysis

by certified labs.

- c. Assisting the Texas Commission on Environmental Quality and/or the Texas Water Development Board in any research or studies pertinent to the depletion or contamination of the aquifer.
- 4. Strive to protect the underground water from pollution by:
 - Investigating any complaint or concern that individuals might have pertaining to:
 - 1. Oil Field pollution or contamination
 - 2. Salt Water Disposal Wells.
 - Agriculture related or other chemicals that may be infiltrating the aquifer.
 - Any other possible problem that occurs which might endanger water quality.
- 5. Promote public education/conservation of water by:
 - a. Distributing existing water education materials.
 - Assisting any farmer or rancher requesting technical assistance or information that the District has available, or access to, concerning water quality and quantity.
 - c. Instructing the public when problems are found, of the proper treatment or corrective action necessary to make the water safe for consumption.
 - d. Provide Hydrogeologic information (depth to water, well depth, etc.) to individuals with water wells.
 - Offering any other service or information that might be pertinent to protecting water quality and quantity.
- Distribute information regarding water related legislation which will impact the people of the Santa Rita U.W.C.D. as well as the people of Texas.
- Encourage the formation of new underground water conservation districts to promote local underground water conservation protection issues.

Santa Rita Underground Water Conservation District

Time Period for this Plan

This plan becomes effective upon certification by the Texas Water Development Board and replaces the existing management plan which was adopted by the Board of Directors on August 18, 1998. This new plan remains in effect until a revised plan is certified or September 1, 2012, which ever is earlier.

Statement of Guiding Principles

The primary concern of the residents of this District regarding groundwater is the potential contamination of the groundwater from the vast amount of oil and gas production and the activities involved in the production of oil and gas. In 1988 there was an attempt by Glasscock County Underground Water Conservation District to annex the major portion of Reagan into their district. The residents of Reagan County asked Senator Bill Sims to introduce legislation creating the Santa Rita Underground Water Conservation District. During the legislative process, the original Bill was compromised; allowing residents of Reagan County a short time to annex their surface interests into Glasscock Underground Water Conservation District. Thus, the northern portion of Reagan became of patchwork of two conservation districts.

The District recognizes that the groundwater resources of this region are of vital importance to the residents, and that this resource must be managed and protected from contamination and overdraft. The greatest threat to prevent the District from achieving the stated mission is from State Mandates and agency bureaucrats who have little understanding of local conditions and the Railroad Commissioners' lack of regulation on the use of groundwater for drilling, fracing and secondary recovery operations. This management plan is intended as a tool to focus the thoughts and actions of those given the responsibility for the operation of District activities.

General Description

The Santa Rita Underground Water Conservation District was created by Acts of the 71st Legislative (1989) and was confirmed by residents shortly thereafter to be funded by ad valorem tax. It became an active District on January 1st, 1990 with the hiring of a Manager and a Secretary. The District adopted Rules and By Laws the same year, which were revised in 1995. In 1991 the District adopted its first management plan. With adoption of these rules, the District implemented regulation of all water wells. The current members of the Board of Directors are: George Tucker, President, Dale Calley, Vice President, Rusty Owens, Secretary, Bobby Shelton, Member, and Jerry Floyd, Member. The District Manager is Cindy Weatherby. The Santa Rita Underground Water Conservation District covers all but 65,350 acres of Reagan County. The economy of the District is primarily oil and gas production, and agricultural income is

derived primarily from cotton and grain sorghum as well as sheep, meat goats, and beef cattle production. Recreational hunting leases contribute to the income of the residents also.

Location and Extent

The Santa Rita U.W.C.D. has an aerial extent of approximately 1175 square miles, or 751,866 acres of land, minus 65,350 acres which was annexed into the Glasscock County U.W.C.D. The total population of Reagan County is approximately 3326 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. Land use in the District is for agricultural purposes, of which approximately 7200 acres is farm land, and the balance in range land. Lands owned by the University of Texas covers 218,105 acres of the District. The only major aquifer underlying the District is the Edwards-Trinity (Plateau). Most of the farm land within the District is in the Northwestern portion of the County. Irrigation covers approximately 3500 acres. The principle method of irrigation has been furrow irrigation using underground pipelines and surge valves; with a few LEPA and Drip systems also.

Topography and Drainage

The lands within the Santa Rita U.W.C.D. 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 2380 feet above sea level in the Northwestern part of the District, to 2860 feet above sea level in the southwestern part of the District.

Groundwater Resources of the Santa Rita U.W.C.D.

The Edwards-Trinity(Plateau) Aquifer is located in all of the District with approximate altitude of the base from 1900' to 2300' 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 age 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.

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 part 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.

The source of fresh ground water in the region is precipitation in the immediate area, and in areas mainly to the north and west. The direct infiltration of rainfall is minimal, because most of the water is evaporated or transpired by plants. Water that escapes runoff, evaporation, and transpiration migrates downward by gravity until it reaches the zone of saturation. Currently the District is using the Region F-Regional Water Plan Reagan County projections as well as estimates of recharge and availability rates. The data sets describe the saturated thickness and yield, where the product of these two factors describes water in storage. When combined with recharge and production values, these estimates can be used by the District to derive goals for future estimates of available groundwater combined with the management area process. Currently within the District, there is an estimated 29,008 acre-feet of recoverable water in storage in the Edwards-Trinity (Plateau) aquifer, 49 acre-feet in the Dockum Aquifer, and 40 acre-feet from direct reuse. There is an estimated 41 acre-feet in surface water from private stock tanks. The existing total usable amount of groundwater in the District is 29,108 acre-feet on an annual basis.

Annual Amount of Additional Natural or Artificial Recharge in Santa Rita Underground Water Conservation District

Based on Region F-Table 3-1 Annual Groundwater Availability, the estimated natural annual recharge within the District is 19,591 acre-feet per year to the Edward-Trinity (Plateau) aquifer. The Colorado River Municipal Water District's 1994 Summary Weather Modification Report indicated 23% enhancement to rainfall. Based upon this figure an additional 3,718 acre-feet of additional recharge could feasibly be realized by participating in a weather enhancement program.

Based on Texas Water Development Report 359, the Dockum Aquifer also occurs within the district. The Dockum Aquifer does not crop out at the surface within in the district; therefore no recharge from precipitation to the aquifer occurs with in the district. Additionally, no water discharges to springs, lakes, streams, or rivers within the district.

Since the District does not cover <u>all</u> of Reagan County, all estimates except irrigation are based on a percentage derived by dividing the amount of acres within the District by the total number of acres contained within Reagan County. The percentage used to develop these estimates is 0.9136.

Table 1 contains water-budget data for each layer that constitutes the GAM for the Edwards-Trinity (Plateau) aquifer in Reagan County. These layers, the Edwards and Trinity aquifers, constitute Layers 1 and 2 in the model.

Total recharge from precipitation for Reagan County for 1980, based on the GAM, was approximately 22,500 acre-feet (Table 1). Average recharge for Reagan County for the period 1971 through 2000, based on the GAM, was 21,100 acre-feet (see table in GAM run 04-17 and GAM run 07-22).

Table 1. Water budget for Reagan County from the Edwards-Trinity (Plateau) Aquifer Groundwater Availability Model provided by the TWDB. Flow terms expressed in acrefeet per year.

Flow Term	In	Out	In-Out
Layer 1: Edwards			
Horiz. Exchange	3,400	4,000	-600
Vertical exchange (lower)	80	20,300	-20,200
Wells	0	840	-840
Drains (springs)	0	840	-840
Recharge	22,500	0	22,500
Head-dep. Bounds	n/a	n/a	n/a
Stream leakage	n/a	n/a	n/a
Sum of the layer	25,980	25,980	0
Layer 2: Trinity			
Horiz. Exchange	9,800	9,580	200
Vertical exchange (upper)	20,300	80	20,200
Wells	0	23,040	-23,040
Drains (springs)	n/a	n/a	n/a
Recharge	20	0	20
Head-dep. Bounds	3,740	1,160	2,580
Stream leakage	n/a	n/a	n/a
Sum of the layer	33,860	33,860	

Historical Groundwater use in Santa Rita Underground Water Conservation District

During the eight years ending in 2003, annual groundwater usage in the Reagan County portion of the District has varied from a high of 9,047 ac/ft to a low of 3,359 ac/ft. The annual estimated usage within the District for the 5 years is as follows:

2003 - 3,359 ac/ft

2002 - 3,898 ac/ft 2001 - 3,582 ac/ft 2000 - 4,187 ac/ft 1999 - 4,659 ac/ft 1998 - 9,047 ac/ft 1997 - 6,983 ac/ft 1996 - 6,835 ac/ft

Since the District does not cover <u>all</u> of Reagan County, all estimates except irrigation are based on a percentage derived by dividing the amount of acres within the District by the total number of acres contained within Reagan County. The percentage used to develop these estimates is 0.9136. Irrigation estimates are based on 10 percent of total irrigation. Estimates of the total usable amount of groundwater in the District are based on Texas Water Development Board Water Use Survey-Estimated Groundwater pumpage for Reagan County. The District does not express an opinion as to the accuracy of the information, since these estimates were developed for regional planning purposes, and not for District planning purposes.

Projected Demands for Water in the Santa Rita Underground Water Conservation District

Reagan County Projected Water Demands Region F - 2007 State Water Plan

RWPG	River Basin	Category	WUG	2000	2010	2020	2030	2040	2050	2060
F	Colorado	Municipal	Big Lake	811	924	1020	1068	1065	1027	978
F	Colorado	Municipal	County- Other	112	128	141	148	147	142	135
F	Colorado	Mining	Mining	1742	2036	2165	2235	2303	2370	2436
F	Colorado	Irrigation	Irrigation	15,879	36,597	35,990	35,385	34,779	34,174	33,579
F	Colorado	Livestock	Livestock	209	253	253	253	253	253	253
F	Rio Grande	Livestock	Livestock	16	19	19	19	19	19	19
	Total Proj	ected Water	Demands per year) =	18,769	39,957	39,588	39,108	38,566	37,985	37,400

Since the District does not cover <u>all</u> of Reagan County, county-wide data are not necessarily the best representative data for the District. The following data have been proportionally adjusted based upon District area coverage relative to the total county area. The data in the following table are more representative of the projected District water demands.

Santa Rita Underground Water Conservation District Projected Water Demands Region F - 2007 State Water Plan

RWPG	River Basin	Category	WUG	2000	2010	2020	2030	2040	2050	2060
F	Colorado	Municipal	Big Lake	811	924	1,020	1,068	1,065	1,027	978
F	Colorado	Municipal*	County- Other	102	117	129	135	134	130	123
F	Colorado	Mining*	Mining	1,591	1,860	1,978	2,042	2,104	2,165	2,226
F	Colorado	Irrigation**	Irrigation	1,588	3,660	3,599	3,539	3,478	3.417	3,358
F	Colorado	Livestock*	Livestock	191	231	231	231	231	231	
F	Rio Grande	Livestock*	Livestock	15	17	17	17	17	150000	231
	Total Pro	ected Water					- ''	- 17	17	17
		(acre-feet	per year) =	4,298	6,809	6,974	7,032	7,030	6,988	6,933

^{*} All estimates except irrigation are based on a percentage derived by dividing the amount of acres within the District by the total number of acres contained within Reagan County. The percentage used to develop these estimates is 0.9136.

Surface Water Resources of Santa Rita Underground Water Conservation District

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

WUG	River Basin	Source Type	Source Name	2000	2010	2020	2030	2040	2050	2060
Livestock	Colorado	Surface Water	Livestock Local Supply	42	38	38	20	20	20	20
Livestock	Rio	Surface	Livestock Local	72	30	30	30	38	38	38
LIVOOLOGK	Grande	Water	Supply	3	3	3	3	3	3	3
7	otal Projec	ted Surface	e Water Supplies	45	41	41	41	41	41	41
	Livestock Livestock	Livestock Colorado Livestock Rio Grande	Livestock Colorado Surface Water Livestock Rio Surface Grande Water Total Projected Surface	Livestock Colorado Surface Water Supply Rio Surface Livestock Local Supply Livestock Rio Surface Livestock Local Livestock Local	Livestock Colorado Surface Water Supply 42 Livestock Rio Grande Water Supply 3 Total Projected Surface Water Supplies 3	Livestock Colorado Surface Water Supply 42 38 Livestock Grande Water Supply 3 3 Total Projected Surface Water Supplies 45	Livestock Colorado Surface Water Supply 42 38 38 Livestock Grande Water Supply 3 3 3 Total Projected Surface Water Supplies 45 45 45 45 45 45 45 45 45 45 45 45 45	Livestock Colorado Surface Water Supply 42 38 38 38 Livestock Grande Water Supply 3 3 3 3 3 Total Projected Surface Water Supplies 45 45 45 45 45 45 45 45 45 45 45 45 45	Livestock Colorado Surface Water Supply 42 38 38 38 38 38 38 Livestock Grande Water Supply 3 3 3 3 3 3 3 3 3 3	Livestock Colorado Surface Water Supply 42 38 38 38 38 38 38 38 38 38 38 38 38 38

^{**} Irrigation estimates are based on 10 percent (0.10) of total irrigation.

<u>Projected Water Management Strategies of the Santa Rita Underground</u> <u>Water Conservation District</u>

The projected water management strategies for Reagan County that are derived from the 2007 State Water Plan are listed below.

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Reagan County Projected Water Management Strategies

Region F - 2007 State Water Plan

20 200 100		Total Pr	ojected W	ater Manageme (acre-fee	nt Strategies et per year) =		494	494	494	494	494	494
F	Irrigation	Reagan	Colorado	Irrigation Conservation	Conservation	Reagan	494	494	494	494	494	494
RW PG	WUG	WUG County	River Basin	Water Management Strategy	Source Name	Source County	2010	2020	2030	2040	2050	2060

Projected Water Needs of the Santa Rita Underground Water Conservation District

The projected water needs for Reagan County that are derived from the 2007 State Water Plan are listed below.

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Reagan County Projected Water Needs Region F - State Water Plan

RWPG	wug	County	River Basin	2010	2020	2030	2040	2050	2060
F	Big Lake	Reagan	Colorado	0	0	0	0	0	0
F	County- Other	Reagan	Colorado	0	0	0	0	0	0
F	Mining	Reagan	Colorado	0	0	0	0	0	0
F	Irrigation	Reagan	Colorado	10,997	10,607	10,116	9,559	8,976	8,393
F	Livestock	Reagan	Colorado	0	0	0	0	0	0
F	Livestock	Reagan	Rio Grande	0	0	0	0	0	0
	Total Pro	jected Water (acre-feet	Demands per year) =	10,997	10,607	10,116	9,559	8,976	8,393

Potential Demand and Supply Issues Solutions

The supply and demand totals for 2010 are as follows:

Projected Supplies	
Groundwater From Edwards-Trinity aquifer	3,933 acre-feet per year
Groundwater From Dockum aquifer	9 acre-feet per year
Direct Reuse	40 acre-feet per year
Surface Water	41 acre-feet per year
Total Projected Supply	4,023 acre-feet per year
Total Projected Demand	7,187 acre-feet per year
Balance (Shortage)	3,164 acre-feet per year

All estimates of the total usable amount of groundwater in the district, the amount of recharge, the projected water supply and demand for water in the district, and the water supply needs are based on data supplied by the Region F-Tables 2 and 5 County Projected Water Demands and Water Supplies and the District does not express an opinion as to the accuracy of the information since these estimates were developed for regional planning purposes and not for District planning purposes.

Since the District does not cover <u>all</u> of Reagan County, all estimates except irrigation are based on a percentage derived by dividing the amount of acres within the District by the total number of acres contained within Reagan County. The percentage used to develop these estimates is 0.9136. Irrigation estimates are based on 10 percent of total irrigation.

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.

Management of Groundwater Supplies

District will manage groundwater within the District in order to conserve the resource while seeking to maintain the economic viability of all resource user groups, public and private. In consideration of the economic and cultural activities occurring within the District, the District will identify and engage in such activities and practices, that if

implemented would result in a reduction of groundwater use. An observation network shall be established and maintained in order to monitor changing storage conditions of groundwater supplies within the District. The District will make a regular assessment of water supply and groundwater storage conditions and will report those conditions to the Board and to the public. The District will undertake, as necessary and cooperate with investigations of the groundwater resources within the District and will make the results of investigations available to the public.

The relevant factors to be considered in making a determination to deny a permit will include:

- (1) The purpose of the rules of the District
- (2) The equitable distribution of the resource
- (3) The economic hardship resulting from grant or denial of a permit or the terms prescribed by the permit

The District will employ all technical resources at its disposal to evaluate the resources available within the District and to determine the effectiveness of regulatory or conservation measures. A public or private user may appeal to the Board for discretion in enforcement of the provisions of the water supply deficit contingency plan on grounds of adverse economic hardship or unique local conditions. The exercise of said discretion by the Board, shall not be construed as limiting the power of the Board.

Actions, Procedures, Performance and Avoidance for Plan Implementation

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The District will implement the provisions of this plan and will utilize the provisions of this plan as a guidepost for determining the direction or priority for all District activities. All operations of the District, all agreements entered into by the District and any additional planning efforts in which the District may participate will be consistent with provisions of this plan.

The District will adopt rules relating to the permitting of wells. The rules adopted by the District shall be pursuant to Texas Water Code Chapter 36 and 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 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 will seek cooperation in the implementation of this plan and the management of groundwater within the District.

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Methodology for Tracking District Progress in Achieving Management Goals

The District manager will prepare and present an annual report to the Board of Directors on District performance in regards to achieving management goals and objectives. The presentation of the report will occur during the first monthly Board meeting each fiscal year, beginning October 1, 2007. The report will include the number of instances in which each of the activities specified in the District's management objectives was engaged in during the previous fiscal year. The Board will maintain the report on file, for public inspection at the District's offices upon adoption. This methodology will apply to all management goals contained within this plan.

GOALS, MANAGEMENT OBJECTIVES and PERFORMANCE STANDARDS

Goal

1.0 Develop a groundwater monitoring system to improve the understanding of the aquifers and their hydrogeologic properties, as well as a quantification of resources necessary for prudent planning. This will help to provide the most efficient use of groundwater (356.5(a)(1)(A)).

Management Objective

1.1 Establish a water quality and water level monitoring network of 15 wells in the District as of December 2007.

Performance Standard

- 1.1a- Each year determine the overall rate of deterioration of the water quality within the District through sampling 15 of the wells in the water quality monitoring network.
- 1.1b Each year measure 15 wells in the water level monitoring network within the District during the Winter months.
- 1.1c- An Annual report to Board of Directors on number of wells measured and sampled.

Goal

2.0 Gather information necessary to assist in the achievement of the District's goal. This will help in controlling and preventing waste of groundwater (356.5(a)(1)(B))

Management Objective

2.1 Each year register all new water wells in the District.

Performance Standard

2.1a- Annual report to Board of Directors on the number of wells registered during the year.

Management Objective

2.2 Each year maintain a database of all well information.

Performance Standards

2.2a- Annual report to Board of Directors on the total number of wells in the database.

Management Objective

2.3 Each year update maps showing existing wells and all new wells drilled during the year.

Performance Standards

2.3a- Annually present all maps developed to Board of Directors for review.

Management Objective

2.4 Each year routinely plot on topographic maps any new or existing wells that have been inventoried and registered.

Performance Standards

2.4a- An annual review of topographic maps by Board of Directors indicating all wells that have been inventoried and registered.

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Goal

3.0 Drought Conditions (356.5(a)(1)(F))

Management Objective

3.1 The District will monitor the Palmer Drought Severity Index (PDSI) by Texas Climatic Divisions. If PDSI indicates that the District will experience severe drought conditions, the District will notify all public water suppliers within the District.

Performance Standard

3.1a- The District staff will monitor the PDSI and report findings and actions to the District Board on a quarterly basis.

Goal

4.0 Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, and Brush Control

Management Objective: Conservation

4.1 Provide information to area residents about water conservation.

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Performance Standard

4.1a- The District staff will publish an article concerning water conservation in a local newsletter or newspaper at least one time a year.

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Management Objective: Recharge Enhancement

4.2 Provide information to area residents about recharge enhancement.

Performance Standard

4.2a- The District staff will publish an article concerning recharge enhancement in a local newsletter or newspaper at least one time a year.

Management Objective: Rainwater Harvesting

4.3 Provide information to area residents about rainwater harvesting.

Performance Standard

4.3a- The District staff will publish an article concerning rainwater harvesting on in a local newsletter or newspaper at least one time a year.

Management Objective: Precipitation Enhancement

4.4 Provide information to area residents about precipitation enhancement.

Performance Standard

4.4a- The District staff will publish an article concerning precipitation enhancement in a local newsletter or newspaper at least one time a year.

Management Objective: Brush Control

4.5 Provide information to area residents about brush control.

Performance Standard

4.5a- The District staff will publish an article concerning brush control in a local newsletter or newspaper at least one time a year.

Goal

5.0 Minimize the potential for contamination of the groundwater by new or existing wells.

Management Objective

5.1- Each year enforce rules for the drilling, completing, and equipping of water wells to insure that all new wells are completed properly to protect the groundwater.

Performance Standard

5.1a- Each year the District will have 100% of new wells drilled annually constructed to standards set forth in District rules.

Performance Effectiveness Standard:

5.1b- Each year determine the percent of wells drilled annually constructed to standards set forth in District rules.

Performance Standard

5.1c- Submit an Annual Report to Board of Directors on percentage of wells drilled annually constructed to standards set forth in District rules.

Management Objectives

5.2- Each year continue to properly plug abandoned or unusable water wells.

Performance standard

- 5.2a- Submit an Annual Report to Board of Directors on the number of wells plugged annually.
- 5.2b- Submit an Annual Report to Board of Directors on the number of wells capped annually.

SB1 Management Goals Determined Not-Applicable

Goal

1.0 Control and Prevention of Subsidence (356.5(a)(1)(C))

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The rigid geologic framework of the region precludes significant subsidence from occurring.

Goal

2.0 Conjunctive Surface Water Management Issues (356.5(a)(1)(D))

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There is no surface water in the Santa Rita Underground Water District.

Goal

3.0 Addressing Natural Resource Issues Which Impact the Use and Availability of Groundwater and Which Are Impacted By the Use of Groundwater In The District (356.5(a)(1)(E))

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The District has no documented occurrences of endangered or threatened species dependent upon groundwater. Other issues related to resources-air, water, soil, etc. supplied by nature that are useful to life are likewise not documented. The natural

resources of the oil and gas industry are regulated by the Railroad Commission of Texas, and are exempt by Chapter 36.117(e), unless the spacing requirements of the District can be met when space is available. Therefore, this management goal is not applicable to the operations of the District.

Information Not Available:

Goal

4.0 Addressing in a Quantitative Manner the Desired Future Conditions of the Groundwater Resources in the District (356.5(a)(1)(H))

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This information is not currently available.

Summary definitions.

"Abandoned Wells" - shall mean:

- 1) a well or borehole the condition of which is causing or is likely to cause pollution of groundwater. A well is considered to be in use in the following cases:
 - (A) a water well which contains the casing, pump, and pump column in good condition;
 - (B) a well in good condition which has been capped.
- 2) a water well or borehole which is not in compliance with Texas law, the Rules and Regulations of the SRUWCD District, the Texas Water Well Drillers' Act, Texas Natural Resource Conservation Commission, or any other state or federal agency or political subdivision having jurisdiction, if the water well is abandoned or deteriorated.
- "Board" elected Board of Directors of the Santa Rita Underground Water Conservation District.
- "District"- that area of Reagan County, Texas not annexed into another District, is the Santa Rita Underground Water Conservation District.
- "TCEQ" Texas Commission on Environmental Quality
- "TWDB" -Texas Water Development Board.
- "Waste" as defined by Chapter 36 of the Texas Water Code means any one or more of the following:
 - (1) withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threaten to cause intrusion into the reservoir of water unsuitable for agricultural, domestic, or stock raising purposes;
 - (2) the flowing or producing of wells from a groundwater reservoir if the water produced is not used for a beneficial purpose;
 - (3) escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater;
 - (4) 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;
 - (5) willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain,

SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT

George Tucker-President Dale Calley-Vice President Rusty Owens-Director Bobby Shelton-Director Jerry Floyd - Director

P.O. Box 849 Big Lake, TX 76932

MANAGEMENT PLAN

WHEREAS, the Santa Rita Underground Water Conservation District was created by Acts of the 67th Legislature (1981), p. 2104, Ch. 489, H.B. 2381, in accordance with Article 16, Section 59 of the Constitution of Texas and Chapters 51 and 52 of the Texas Water Code, as amended; and

WHEREAS, H.B.2381 was amended by Acts of the 77th Legislature (2001), H.B. 561, in accordance with Chapters 36 of the Texas Water Code, as amended; and

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

WHEREAS, the District is required by Chapter 36.1072 of the Texas Water Code to review and readopt the plan with or without revisions at least once every five years and to submit the adopted Management Plan to the Executive Administrator of the Texas Water Development Board for review and certification; and

WHEREAS, the District's adopted Management Plan shall be certified 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 replaced with an amended Management Plan; and

WHEREAS, the District Board of Directors has determined that the Amended Management Plan addresses the requirements of Chapter 36.1071.

NOW, THEREFORE, be it resolved, that the Board of Directors of the Santa Rita Underground Conservation District, following notice and hearing, hereby adopts this amended Management Plan; and

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

Ample Justine Presiding Officer

Adopted June 19, 2007 by the Board of Directors of the Santa Rita Underground Water Conservation District.

Attest:

Board Secretary

GAM Run 07-22

by Richard M. Smith, P.G.

Texas Water Development Board Groundwater Availability Modeling Section (512) 936-0877 June 5, 2007

EXECUTIVE SUMMARY:

The Santa Rita Underground Water Conservation District requested water budget values to be used in their groundwater management plan. We ran the Edwards-Trinity (Plateau) Aquifer groundwater availability model for the 1980 to 1999 period, extracted the water budgets for each year, averaged the yearly values, and generated tables to show the results.

REQUESTOR:

Ms. Cindy Weatherby of the Santa Rita Underground Water Conservation District

DESCRIPTION OF REQUEST:

Ms. Weatherby requested that we run the Edwards-Trinity (Plateau) Aquifer groundwater availability model to provide her with water budgets for her district's groundwater management plan. The run is a standard transient calibration-verification model run, which includes the years 1980 to 1999. The management plan requires estimated budgets for recharge from precipitation, surface-water inflow, surface-water outflow, inflow into the district, outflow from the district, net inter-aquifer flow (upper), and net inter-aquifer flow (lower).

METHODS:

To address the request, we ran the transient groundwater availability model for the Edwards-Trinity (Plateau) Aquifer and extracted water budgets for each year of the 1980 through 1999 period and averaged the budgets from the twenty-year period for recharge, surface water inflow, surface water outflow, inflow to the district, outflow from the district, net inter-aquifer flow (upper) and net inter-aquifer flow (lower) for the portions of the Edwards and Trinity aquifers located within the district. We did not include the Dockum Aquifer in this analysis since it is not part of the model.

PARAMETERS AND ASSUMPTIONS:

- We used Version 1.0 of the groundwater availability model for the Edwards-Trinity (Plateau) Aquifer.
- In the analysis, the pumpage distribution is the same for the transient calibrated model as described in Anaya and Jones (2004).
- The root mean squared error (a measure of the difference between simulated and actual water levels during model calibration) in the entire Edwards-Trinity (Plateau) groundwater availability model for the period of 1990 to 2000 is 143 feet, or six percent of the range of measured water levels (Anaya and Jones, 2004).
- The Edwards-Trinity (Plateau) Aquifer model in Reagan County includes two layers representing the Edwards and associated limestones (Layer 1) and the undifferentiated Trinity units (Layer 2) in the district.

RESULTS:

A groundwater budget summarizes how the model estimates water entering and leaving the aquifer. The modified groundwater budget for the average values from the transient model (1980 to 1999) is shown in Table 1. The components of the modified budgets shown in Table 1 include:

- Surface water inflow and outflow—This is the total surface water entering the
 aquifer (inflow) through streams or reservoirs, or total surface water exiting the
 aquifer (outflow) to streams, reservoirs, drains (springs), or through
 evapotranspiration (return of moisture to the air through both evaporation from
 the soil and transpiration or loss of water vapor by plants).
- Lateral flow into and out of district—This component describes lateral flow within the aquifer between the district and adjacent counties.
- Net inter-aquifer flow—This describes the vertical flow, or leakage, between
 aquifers or confining units. This flow is controlled by the relative water levels in
 each aquifer and aquifer properties of each aquifer that define the amount of
 leakage that can occur. "Inflow" to an aquifer from an overlying or underlying
 aquifer will always equal the "Outflow" from the other aquifer.
- Precipitation recharge is the areally distributed recharge due to precipitation
 falling on the outcrop areas of the aquifers (where the aquifer is exposed at land
 surface) within the district. The information needed for the district's management
 plan is summarized in Table 2.

It is important to note that sub-regional water budgets for individual counties, such as Reagan are not exact. This is due to the one-mile spacing of the model grid and because we assumed each model cell is assigned to a single county. The water budgets for an individual cell containing a county boundary are assigned to either one county or the other and therefore very minor variations in the county-wide budgets may be observed.

REFERENCES:

Anaya, R., and Jones, I., 2004, Groundwater availability model for the Edwards-Trinity (Plateau) and Cenozoic Pecos Alluvium aquifer systems, Texas: Texas Water Development Board, GAM Report, 208 p.

Table 1: Selected flow terms for each aquifer layer, into and out of the Santa Rita Underground Water Conservation District, averaged for the years 1980 to 1999 from the groundwater availability model of the Edwards-Trinity (Plateau) Aquifer. Flows are in acre-feet per year. Note: a negative sign refers to flow out of the aquifer in the district. A positive sign refers to flow into the aquifer in the district. All numbers are rounded to the nearest 1 acre-foot. Flow into and out of the confining layers are negligible compared to the aquifers and are not included.

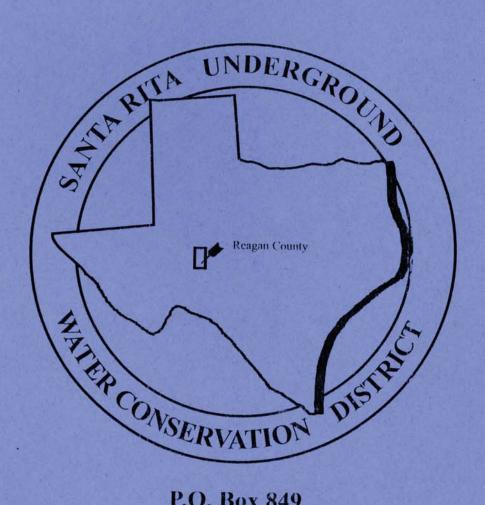
Aquifer	Surface water inflow	Surface water outflow	Lateral inflow into district	Lateral outflow from district	Net interaquifer flow (upper)	Net inter- aquifer flow (lower)
Edwards aquifer (Layer 1)	0	-814	5,910	-6,259	0	-16,995
Trinity aquifer (Layer 2)	0	0	24,722	-35,823	16,995	0

Table 2: Summarized information needed for the Santa Rita Underground Water Conservation District's management plan. All values reported in acre-feet per year. All numbers are rounded to the nearest 1 acre-foot. This analysis does not include estimates related to the Dockum Aquifer.

Management Plan requirement	Aquifer	Results
Estimated annual amount of recharge from precipitation to the district	All aquifers exposed at land surface in the district:	18,228
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers	Edwards (Plateau) Aquifer, Trinity (Plateau)	-814
Estimated annual volume of flow into	Edwards (Plateau)	
the district within each aquifer in the	Aquifer	5,910
district	Trinity (Plateau) Aquifer	24,722
Estimated annual volume of flow out of the district within each aquifer in	Edwards (Plateau) Aquifer	-6,259
the district	Trinity (Plateau) Aquifer	-35,823
Estimated annual volume of flow between each aquifer in the district	Edwards (Plateau) Aquifer to the Trinity (Plateau) Aquifer	-16,995
	Base of Trinity (Plateau) Aquifer	0



The seal appearing on this document was authorized by Richard M. Smith, P.G. on June 5, 2007.



P.O. Box 849 Big Lake, TX 76932 915-884-2893

Rules and By Laws of Santa Rita Underground Water Conservation District

Rules of Santa Rita Underground Water Conservation District and as amended are hereby published as of

In Accordance with Section 59 of Article 16 of the Texas Constitution and Acts of the 71st Legislature (1989), P.2153,CH. 653 S.B. 1634 and Chapters 36 of the Texas Water Code, the following rules are hereby ratified and adopted as the rules of the District by its Board. All rules or parts of 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.

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 constructed as a limitation or restriction upon the exercise of any discretion, where such exist; nor shall they in any jurisdiction conferred by law, not to limit or restrict the amount and character of data or information which may be required for the proper administration of the law.

RULE 1-DEFINITIONS

Unless the context hereof indicates a contrary meaning, the words hereinafter defined shall have the following meaning in these rules:

- (1) The "Board" shall mean the Board of Directors of the Santa Rita Underground Water Conservation District, consisting of five(5) elected or appointed members.
- (2)"District" shall mean Santa Rita Underground Water Conservation District maintaining its principal office in Santa Rita Underground Water Conservation District OfficeBuilding, 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.
- (3) The term "Well" or "Water Well" shall mean and include any artificial excavation constructed for the purpose of producing groundwater for human consumption, agricultural use, industrial, or municipal use; which has been completed according to state well completion standards.
- (4) "Water" shall mean underground water.

- (5)"Owner" shall mean and include any person, firm, partnership or corporation that has the right to produce water from the land either by ownership, contract, lease, easement, or any other estate in the land.
- (6) "Person" shall mean any individual, partnership, firm or corporation.
- (7) The word "Waste" as used herein shall have the same meaning as defined by the Legislature, as follows:
 - (a) The withdrawal of underground water from an underground water reservoir at such rate and in such amount so as to cause the intrusion therein of water not suitable for agricultural, gardening, domestic, or stock raising purposes.
 - (b) The flowing or producing of wells from an underground water reservoir to any other reservoir containing underground water.
 - (c) The escape of underground water from one underground water reservoir to any other reservoir not containing underground water.
 - (d)The pollution or harmful alteration of the character of the undergound water within the underground water reservoir of the District by means of salt water or other deleterious matter admitted from some other stratum or strata or from the surface of the ground.
 - (e) Willfully or negligently causing, suffering, or permitting underground water to escape into any river, creek, watercourse, depression, or lake, reservoir, drain, sewer, highway, road, or road ditch, or onto any land of any other person than the owner of such well.
 - (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.
- (8) An "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.)
- (9) <u>Abandoned Well</u>- a well that has not been used for six consecutive months. A well is to be considered to be in use in the following cases:
 - (a) A nondeteriorated well which contains the casing, pump and pump column in good condition.
 - (b) A nondeteriorated well which has been capped with a covering capable of preventing surface pollutants from entering the well and sustain weight of at least 400 pounds.
- (10) <u>Deteriorated Well</u>- a well, the condition of which will cause, or is likely to cause pollution of any ground water in this District.
- (11) <u>Pollution</u>- the alteration of the physical, thermal, chemical, or biological quality of water in a way that makes the water harmful to humans, animals, vegetation, property, or that impairs the usefulness or the public enjoyment of the water for a reasonable purpose.
- (12) Plugging- an absolute sealing of the entire well bore with cement or approved bentonite grout.

RULE 2 - WASTE

- (1) Underground water shall not be produced within, or used within or without the District, in such a manner or under such conditions as to constitute waste as defined in Rule 1 hereof.
- (2) Any person producing or using underground water shall use every possible precaution, in accordance with the most approved methods, to stop and prevent waste of such water.
- (3) No person shall pollute or harmfully alter the character of the underground water 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.
- (4) No person shall commit waste as that term is defined by Section (g), Rule 1 of the Rules of the Santa Rita Underground Water Conservation District.

RULE 3 - PERMIT REQUIRED

- (1) 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 the 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. (S.B. 52-172)
- (2) No permit shall be required for the drilling of temporary wells exempt by (Subsection 118 of Chapter 52), Texas Water Code (being generally wells used for the production of oil, gas or other minerals and water wells used in conjunction therewith).
- (3) A person may construct and/or operate an exempt well in the District without permit, provided such wells are properly registered with the District Manager or at the District Office.
- (4) When to Apply- The owner of a well to be drilled after the effective date of this rule shall file the permit application at least five workingdays prior to the date planned for drilling the well at the Districts principal office in the Reagan County Road Department Building, Highway 67 West, Big Lake, Texas.

- (5) Automatic Permit-The District shall automatically grant a permit for each well in the District that was in existence before August 19, 1989 and is capable of producing more than 25,000 gallons per day but not more than 100,000 gallons per day.
- (6) Permit Deposit- Each application for a well drilling permit must be accompanied by a \$50.00 deposit which shall be accepted by the District. 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; (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.

RULE -4- ISSUANCE OF PERMITS

(1) The Board shall issue or cause to be issued a drilling permit for a well properly spaced upon proper application executed and filed by the owner with the District and containing the matters specified below. An application shall be considered filed when properly madeout, completed, and signed and tendered to the District or a person duly designated by such District to receive the same. Such application shall be 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.

(2) Rules for the filing of applications:

- (a) 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.
- (b) If the application is by a partnership, the applicant shall be designated by the firm name followed by the words"a Partnership" and the application shall be signed by at least one of the general partners who isduly authorized to bind all of the partners.
- (c) 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.
- (d) In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate.

- (3) Such applications shall set forth the following:
 - (a) 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 nonparalleled property lines (legal survey line); or other adequate legal description.
 - (b) The Proposed use of the well to be drilled, whether municipal, industrial, or irrigation, livestock, or domestic.
 - (c) The size the pump to be installed upon completion of permitted well.
 - (d) The approximate date drilling operations are to begin.
 - (e) 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.
 - (f) 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 therefrom (except for such production as may be necessary to drilling and testing of such well).
 - (g) Such additional data as may be required by the Board.
 - (h) The name and address of the fee owner of the land upon which the well location is to be made.

RULE 5 - REQUIREMENT OF DRILLER'S LOG, CASING AND PUMP DATE

- (1) No person shall produce water from any well hereafter drilled and equipped within the District, unless or until the District has been furnished and 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.
- (2) 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 10 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.

RULE 6- MINIMUM SPACING OF WATER WELLS

Distance Requirements:

- (1) 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 six hundred sixty(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 distances than above described when the Board shall determine that such exceptions are necessary either to prevent waste or to prevent confiscation of property.
 - (a) Minimum of fifty (50) feet from any watertight sewage and liquid waste facility.
 - (b) 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.

- (c) 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.
- (2) 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.
 - (i) 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.
 - (ii) 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,(a) segregated from a larger tract in contemplation of water resource development, or (b) segregated by fee title conveyance from a larger tract after the spacing rule became effective and the voluntary subdivision rule attached.
 - (iii) 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.
 - (iv) 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.
 - (b) Well Density. Subject to paragraph (1) et seq. above, no more than a cumulative total of 16 wells, whether drilled prior to or subsequent to enactment of this rule, shall be permitted per section (hereinafter referred to as "drilled to density". In the event the applicant owns less than a full section, then the number of wells permitted for said tract shall be proportionately reduced so that the total number of wells permitted shall be stablished by multiplying sixteen (16) times the quotient of the number of acres owned by the applicant divided by the number of acres in the section.

RULE 7- EXCEPTION TO SPACING RULE

- (1) In order to protect vested property rights, to prevent waste, to prevent confiscation of property, or to protect correlative rights, the Board may grant exception to the above spacing 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.
- (2) If an exception to such spacing regulations is desired, application therefore shall be submitted by the applicant in writing to the Board at its District office on forms furnished by the District. The application shall be accompanied by a plat or sketch, drawn to scale of one (1) inch equaling 2640 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 all 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.

(3) Such exception may be granted ten (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 applicant. The applicant may also waive notice or hearing or both.

RULE-8 - PLACE OF DRILLING OF WELL

After an application for a well permit has been granted, the well, if drilled, must be drilled within ten yards of the location specified in the permit, and not elsewhere. If the well should be commenced or drilled at a different location, the drilling or operation of such well may be enjoined by the Board pursuant to Chapter 36, Texas Water Code.

RULE-9-STANDARDS OF WELL COMPLETION

- (1) The space between the borehole and the casing shall be filled from ground level to a depth of not less than ten (10) feet below the land surface or wellhead with cement slurry.
 - (a) 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.
 - (b) 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.
 - (c) The surface of the slab should be sloped to drain away from the well.
 - (d) The top of the casing shall extend a minimum of one (1) foot above the top of the ground surface.
 - (e) The well casing shall be capped or completed in a manner that will prevent pollutants from entering the well.

RULE - 10 - REWORKING OR REPLACING OF WELL

(1) No person shall rework, 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 6 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 one hundred fifty (150) feet of the old well and not elsewhere. It must not be located toward any other well or authorized well 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 7 above. Provided, however, that the Board may grant an exception without notice or

hearing in any instance where the replacement well is placed farther away from any existing wells or authorized well sites. 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 produce. If the landowner does not notify the District of his choice within this 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:

- (a) Filled and abandoned; or
- (b) Properly equipped in such a manner that it cannot produce more than 25,000 gallons of water a day; or
 - (c) Closed in accordance with Article 9202, Vernon's Annotated Civil Statutes. Violation of such Article is made punishable thereby a fine of not less than \$100.00 nor more than \$500.00. An application to rework, re-equip, or replace an existing well may be granted by the Board without notice or hearing.
- (2) 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 change, 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.
- (3) In the event the application meets all spacing requirements and no contest is filed, the Board may grant such application without further action.

RULE- 11 - TIME DURING WHICH A PERMIT SHALL REMAIN VALID

Any 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 hereafter be void. Provided, however, that the Board, for good cause, may extend the life of such permit for an additional four (4) months if an application for such extension shall have been made during the first four(4) months period. Provided, further, that when it is made known to the Board that a proposed project will take more time to complete, the Board, upon receiving written application may grant such time as is reasonably necessary to complete such a project.

RULE-12- CHANGED CONDITIONS

The decision of the Board on any matter contained herein 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 persons who were proper parties to the original action, and

such persons shall be entitled to a hearing thereon if they file a request therefore within fifteen days from the date of the mailing of such notice.

RULE-13-RIGHT TO INSPECT AND TEST WELLS

Any authorized officer, employee, agent, or representative of the District shall have the right at all reasonable times to enter upon lands upon which a well or wells may be located within the boundaries of the District, to inspect such well or wells and to read, or interpret any meter, wire box or other instrument for the purpose of measuring production of water from said well or wells; and any authorized officer, employee, agent, or representative of the District shall have the right at all reasonable times to enter upon any lands upon which a well or wells may be located within the boundaries of the District for the purposes of testing the pump and the power unit of the well or wells and of making any other reasonable and necessary inspections and tests that may be required or necessary for the information or the enforcement of the rules and regulations of the District. The operation of any well may be rejoined by the Board immediately upon the refusal to permit the gathering of information as above provided from such well.

RULE 14-OPEN WELLS TO BE 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 permanently with a covering capable of sustaining weight of not less than four hundred (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. Officers, agents and employees of the District are authorized to serve or cause to be served written notice upon any owner or operator of a well in violation of this rule, thereby requesting such owner and/or operator to close or cap such well permanently with a covering in compliance herewith. In the event any owner or operator fails to comply with such request within ten(10) days after such written notice, any officer, agent, or employee of the District may go upon said land and close or cap said well in a manner complying with this rule and all expenditures thereby incurred shall constitute a lien upon the land where such well is located, provided, however, no such lien shall exceed the sum of One Hundred Dollars (\$100.00) for any single closing. Any officer, agent, or employee of the District is authorized to perfect said lien by the filing of the affidavit authorized by Section 52.119 of the Texas Water Code. All of the powers and authority granted in such section are hereby bestowed with all of such powers and authority.

RULE 15 - FINAL ORDERS OF THE BOARD

The orders of the Board in any non-contested application or proceeding shall become the final order of the Board on the day it is entered by the Board. All orders 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 fifteen (15) days from the entry thereof and be binding on the parties thereto unless a motion for rehearing is filed under Rule 18 hereof.

RULE 16 - REHEARING

- (1) Any person whose application is denied, whose contest is
- overruled, or who is not granted the relief desired, may file with the Board a motion for rehearing within fifteen (15) days from the announcement by the Board of its decision or action. The Board shall act thereon within a reasonable time. If such a motion for rehearing is filed and is overruled, the order of the Board shall be final on the date the motion is overruled.
- (2) 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 no motion for rehearing will be considered thereon.
- (3) If an application or a contest is denied by the Board, and if the applicant or contestant shall not have had and shall not have been afforded an opportunity for a hearing before the Board, as elsewhere provided by these rules, the applicant or contestant may request to the Board for such a hearing, stating such facts, must be filed with the Board within the above fifteen (15) day period. If such motion is in order and duly filed, the Board shall give notice to the applicant and all proper and necessary parties, of the time and place of such hearing, and shall proceed to conduct such a hearing.

RULE 17 - RULES GOVERNING PROTEST

- (1) 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 working days before the hearing date.
- (2) PROTEST REQUIREMENTS: Protest shall be submitted in writing with a duplicate copy to the opposite party or parties and shall comply in substance with 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) There shall be an allegation of injury to Protestant which will result from the proposed action or matter to be considered by the Board.
 - (3) If the protest is based upon the claim of interference with some present right of Protestant, it shall include a statement of the basis of Protestant's claim of right.
 - (4) Protestant should call attention to any amendment of the application of adjustment which, if made, would result in withdrawal of the protest.

(3) CONTESTED APPLICATIONS OR PROCEEDINGS DEFINED:

An application, appeal, motion or proceedings pending before the Board is considered contested when either protestants or intervenors, 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 non-contested.

(4) 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 by him with the Board.

RULE 18 - GENERAL RULES OF PROCEDURE FOR HEARING

- (1) Hearings will be conducted in such manner as the Board deems most suitable to the particular case, and technical rule of legal and court procedure need not be applied. 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.
- (2) WHO MAY APPEAR: Any party at interest in a small proceeding, may appear either in person or by attorney or both in such proceedings. A party at interest is any person owning a water right within the bounds of the District who is or may be affected by such proceeding. At the discretion of the Board anyone not a party at interest in a proceeding may appear.
- (3) ADMISSIBILITY: Evidence will be admitted if it is of that quality upon which reasonable persons are accustomed to rely in the conduct of serious affairs. 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.

RULE 19 - GENERAL RULES

- (1) 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 act, event or default from which the 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 Sunday or legal holiday, in which event the period runs until the end of the next day which is neither a Sunday or a legal holiday.
- (2) TIME LIMIT: Applications, request, 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 the Reagan County Road Department Building, Highway 67 West, Big Lake, Texas, or, in a proper case, at the office of the proper county committee, within the time limit, if any, for such filing. The date of receipt and not the date of posting is determinative.
- (3) SHOW CAUSE ORDERS AND COMPLAINTS: The Board, either on its own motion or upon receipt of sufficient written protest or complaint, may at any time, after due notice to all interested parties, cite any person operating within the district to appear before it in a public hearing and require him to show cause why his operation, authority, or permit should not be suspended, cancelled, or otherwise restricted and limited, for failure to comply with the orders or rules of the Board or the relevant statutes of the State, or for failure to abide by the terms and provisions of the permit or operating authority itself. The matter of evidence and all other matters of procedure at any such hearing will be conducted in accordance with these rules of procedures and practice.

RULE -20-WELL REGISTRATION

(1) REGISTRATION REQUIRED- The owner of an exempt well located in the District must register the exempt well with the District.

- (2) REGISTRATION INFORMATION- To register a well, the owner of a well must file the following information:
 - (a) The exact location of the well, including city lot and block; or the section, block; or the section, block, survey (or labor and league), and abstract number; and the distance to the two nearest intersecting property lines or survey lines, or another adequate legal description.
 - (b) The proposed uses of the underground water to be produced such as domestic, irrigation, industrial or municipal.
 - (c) The location of the use of the water if the water is to be used on land other than the land upon which the well is located or to be located.
 - (d) The amount of water to be produced annually for each proposed use of water.
 - (e) The size of the well.
 - (f) A description of the well construction, including depth and size of wellbore and depth and size of casing.
 - (g) The depth of the water level in the well if the well is already drilled.
 - (h) The name and address of the driller and the approximate date the well was drilled or is to be drilled.
 - (i) The name and address of the surface owner of the land upon which the well is located. If there are multiple surface owners, only the name and address of the surface owner shown on the current county tax rolls is required.
 - (j) The name and address of the owner of the underground water if different than the surface owner of the land upon which the well is located or to be located.
 - (k) The name and address of the owner of the well.
 - When a District prescribed registration form exists, a person shall register a well on the prescribed form according to the instructions on such form.
- (3) WHEN TO REGISTER- The owner of an exempt well to be drilled after the effective date of this rule 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 the effective date of this rule. 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.
- (4) WHERE TO REGISTER- An owner must file the required registration information at the District's principal office at Big Lake, Texas.
- (5) 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 reregister the well.

REPEAL OF PRIOR REGULATIONS

All of the previous rules and regulations of the District have been revised and amended; and except as they are published repealed. Any previous rule or regulation which conflicts with or is contrary to these rules is hereby repealed.

SAVINGS CLAUSE

If any section, sentence, paragraph, clause, or part of these rules and regulations should be held or declared invalid 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.

BY-LAWS AND RULES OF THE SANTA RITA UNDERGROUND WATER CONSERVATION DISTRICT

Adopted in accordance with the Legislative Act, S.B. 1634, Article XVI, Section 59 of the Texas Constitution and Chapters 50 and 52 of the Texas Water Code, Vernon's Civil Statutes of Texas, the following, on the 14th of June of 1989 ratified and adopted. These are guides to be used with discretion and were so adopted for the purpose of simplifying procedures and facilitating the administration of the district.

ESTABLISHMENT OF THE DISTRICT

Definitions:

The Board shall mean the Board of Directors of the Santa Rita Underground Water Conservation District consisting of five (5) duly elected members from the four county precincts and one at large.

The District shall mean the Santa Rita Underground Water Conservation District maintaining its office in the Reagan County Road Department Building, Highway 67 West, Big Lake, Texas; where registrations, reports, and other papers are required to be filed with or sent to the District. The area includes all of Reagan except those properties which were legally annexxed into Glasscock County Underground Water Conservation District and legally excluded from the Santa Rita Underground Water Conservation District. Water shall mean underground water.

Owner, shall mean and include any person, firm partnership or corporation that has the right to produce water from the land either by ownership, contract, lease, easement, or any other estate in the land.

Person shall mean any individual, partnership, firm or corporation.

The word Waste as used shall have the same meaning as defined by the Legislature.

REQUIREMENTS FOR THE BOARD AND PROCEDURES FOR MEETINGS

Election:It shall be held on the 1st Saturday of May. Directors will be elected as follows: Precincts 2 and 4 will be elected in

1991,1995,1999 etc. and Precincts 1, Precinct 3 and the "At Large" positions will be elected in 1993,1997, 2001, etc.

Candidates:

A person is qualified to serve on the board who has filed an application with the Secretary of the Board. It must be signed by the applicant or at least 10 qualified electors of the District, and filed 30 days prior

to the election. They must be at least 18 years of age and be a registered voter in the Precinct which he/she will represent. All procedures for holding the election shall be in accordance with the Texas Election Code Art. 6.02 and the act creating the District.

Meetings:

The board shall hold monthly meetings on the 3rd Tuesday of the month or it may hold other meetings at call of the chairman or at the request of least two (2) of the directors.

- -a quorum is the majority of the directors
- the board may elect its own officers yearly
- -meetings will be held in the district's office
- -the board will follow the Robert's Rules of

Parliamentary Procedures

- the board may also act as a hearing board concerning any disputes concerning the rules and operations of the district.

POWERS AND DUTIES OF THE DISTRICT

The District may exercise the powers, rights, privileges, and functions permitted by Chapter 50 and 52 of the Water Code, as amended, into chapter 36; including authority to:

- 1. make and enforce rules to provide for conserving, preserving, protecting, recharging, and preventing waste of the water from the underground water reservoirs that maybe enforced by injunction, mandatory injunction, or other appropriate remedies in a court of competent jurisdiction: or;
- 2. require permits for the drilling, equipping and completion of wells in the underground water reservoirs and issue permits subject to terms and provisions with reference to the drilling, equipping, and completion of the wells as may be necessary to prevent waste, or conserve, preserve and protect underground water;
- 3. provide for the spacing of wells producing from the underground water reservoirs and regulate the production from those wells to minimize as far as practicable the draw down of the water table or the reduction of the artesian pressure, provided, the owner of the land, his heirs, assigns, and lessees are not denied a permit to drill a well on their land and the right to produce underground water from the well subject to rules adopted under this act.
- 4. require records to be kept and reports to be made of the drilling, equipping, and completion of wells into any underground water from those reservoirs and require accurate driller's logs to be kept of those wells and a copy of those logs and of any electric logs that may be made of the wells to be filed with the district;
- 5. acquire land for the erection of dams and for the purpose of draining lakes, draws and depressions, and construct dams, drain lake depressions, draws, and creeks and install pumps and other equipment necessary to recharge any underground water reservoirs.
- 6. have made by registered professional engineers surveys of the underground water of any underground water reservoir and facilities for the development, production and use of the underground water; determine the quantity of the underground water available for production and use; and the improvements, developments and recharges needed for those underground water reservoirs.
- 7. develop comprehensive plans for the most efficient use of the underground water of any underground water reservoir and for the control and prevention of waste of that underground water,

with the plans to specify in the amount of detail that may be practicable the acts, procedures, performance, and avoidance that are or may be necessary to effect those plans, including specifications;

- 8. carry out research projects, develop information, and determine limitations, if any, that should be made on the withdrawal of underground water from any underground water reservoir;
- 9. collect and preserve information regarding the use of the underground water and the practicability of recharge of any underground water reservoir;
- 10. publish plans and information, bring them to the notice and attention of the users of the underground water within the district, and encourage their adoption and execution;
- 11. contract for, sell, and distribute water from a water import authority, or other agency.

ADMINISTRATIVE PROCEDURES

Administrator and Employees

The board may employ a manager and set his salary. The board may delegate any of its powers and duties (except those of adopting rules, a dissolution resolution, a dissolution order, and those relating to hearings, taxation and bonds) to the manager who may carry out the powers and duties delegated to him by the board. Employment of personnel is subject to the general law on nepotism. The manager, with the approval of the board may employ employees of the board and set their salaries, and hire legal counsel for the board.

The manager shall with the approval of the board develope a plan of work for the district, act as official liaison for the board between the public and governmental gencies, and prepare budgets.

TAXATION AND BONDS

The tax and bond provisions of Chapter 50 and 52 of the Water Code as amended by Chapter 36 apply to the District.

The board may levy and collect property taxes levied on the property in the district that are necessary to enable the board to perform the powers and functions given it in the Act.

The board may levy annual taxes not to exceed five (5) cents on the 100 dollar valuation on all taxable property within the district. The board has adopted the county appraisal as the base for valuations necessary to provide net funds.

ANNEXATION

Additional territory may be added to the district under Chapter 36 of the Water Code as amended. The directors shall determine to which precinct the annexed land shall be added for purposes of election of directors.

AMENDMENT TO BY-LAWS

These by-laws may be altered or amended or the same may be repealed by new By-Laws adopted at any regular or special meeting of the Board of Directors of the District, provided that no such action shall be taken at a regular or special meeting unless ten (10) days notice of the proposed alteration, amendment or repeal and a copy of proposed new by-laws is submitted in writing to each of the Directors of the District.

DISSOLUTION OF THE DISTRICT

Chapter 36 of the Water Code, as amended, applies to dissolution of the District.