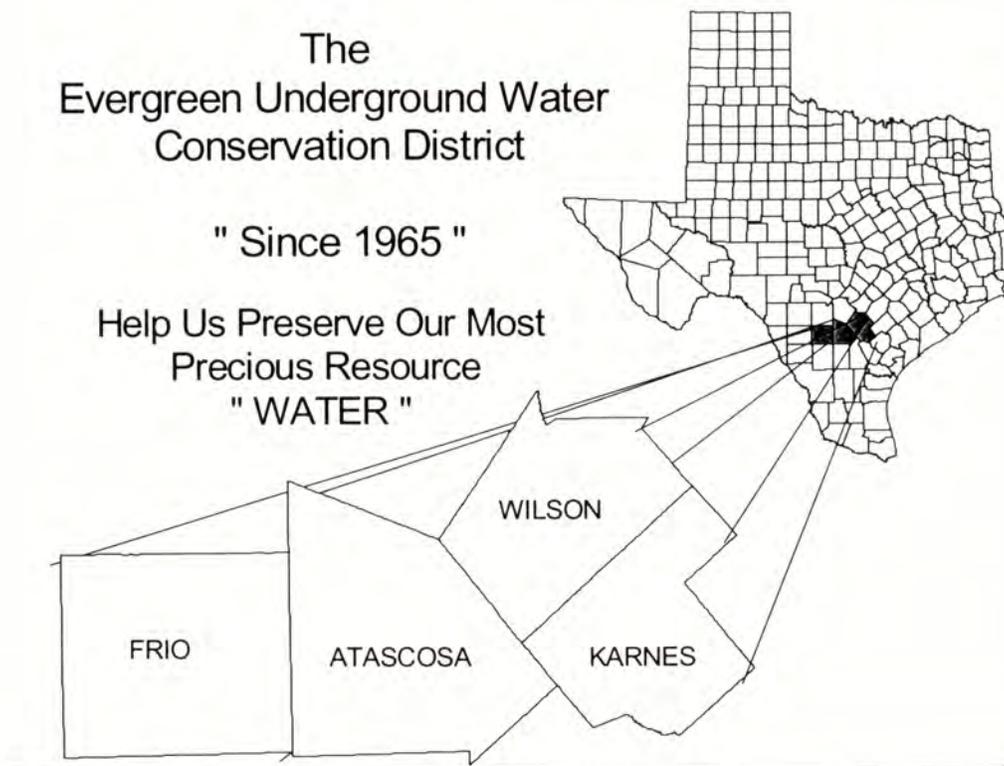


Evergreen Underground Water Conservation District



Groundwater Management Plan

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PURPOSE AND INTENT

It is the purpose and intent of this plan to establish policy in the areas of technical research and studies, water conservation, public information, regulation, permits and enforcement, equity and discretion, and cooperation and coordination. The goal of this plan is to establish a Regulatory Action Plan that will conserve, preserve, protect, and prevent the waste of the groundwater within the District. Due to the present mining of groundwater in the Carrizo aquifer in some areas of the District, the Regulatory Action Plan will also address reducing the mining of groundwater. The regulations and policies in this plan have been established so that the goals, needs and obligations of the District may be accomplished as set forth by the 59th Legislature, Regular Session, 1965, Article 8280-297, and Chapter 36 of the Texas Water Code.

TIME PERIOD OF THIS PLAN

This plan was adopted by resolution of the District Board of Directors after notice and hearing in a public meeting on December 19, 2003. The plan shall be in effect for a time period of 10 years from the date the plan is certified as administratively complete by the Texas Water Development Board.

BACKGROUND

The Evergreen Underground Water Conservation District was created in 1965 in accordance with Section 59, Article 16 of the Constitution of the State of Texas, and in accordance with Acts of the 59th Legislature (1965), page 398, Chapter 197, H.B. 116, as amended by Acts of the 60th Legislature (1967), page 1676, Chapter 647, H.B. 1272, Acts of the 68th Legislature (1983), page 2852, Chapter 484, S.B. 194, and Acts of the 69th Legislature (1985), page 2984, Chapter 438, S.B. 1253, hereforth to be referred to as the act. The organizational meeting of the Board of Directors was held on September 3, 1965. The Board held two elections in 1967 seeking ratification of a tax rate from which operational funds could be generated. The tax referendum did not pass, and the Board operated on support from counties, cities, organizations, and individuals until 1973, when the Board was forced to discontinue their quarterly meetings as they had no funds to conduct their Directors' election as required by law.

On September 3, 1984, members of the Board, alarmed by groundwater level declines, met to discuss reactivation of the District. At this time representatives of Frio County expressed an interest in adding Frio County to the District. On April 6, 1985, an election was held to ratify the incorporation of Frio County, elect representatives to the Board of Directors, and set a tax rate for the District. The

election was successful and a tax rate of \$0.005 per \$100 valuation was set. In September of 1997, the Karnes County Commissioners Court petitioned the District with a request to be annexed into the District. On January 17, 1998 the District held an election in Karnes County to ratify the petition, and the election passed by an eighty-nine percent margin.

The District encompasses all of Atascosa, Frio, Wilson, and Karnes Counties. This includes 2,461,000 acres or 3,845 square miles. The District's economy is heavily dependent upon agriculture and agriculture related business. Rainfall in the District averages from 24 inches per year in Frio County, to 32 inches per year in Wilson County. Rainfall usually peaks in the late spring, with a secondary peak in early fall. Due to this trend and high summer temperatures, irrigation is required for consistent crop production and yield. Approximately 80% of the total groundwater pumpage in the District is used in Agriculture. Since 1985 the District has engaged in extensive data collection on water well locations, well conditions, static water levels, chemical analysis, and pumpage and use. This data has been instrumental in understanding the dynamics of the underground water resources within the District. The District has worked extensively to promote water conservation through education, and technical assistance in all sectors of the District.

POLICY

It is the Policy of the District to continue technical research and studies, promote water conservation, provide public information, maintain and sustain regulation, permits, enforcement, equity and discretion, cooperation and coordination. These policies are designed to support the regulation of groundwater withdrawals to reduce the mining of groundwater resources within the District. The implementation of this plan can only be achieved through a concerted effort by all parties that use groundwater within the District. The District shall maintain an office with regular office hours.

TECHNICAL RESEARCH AND STUDIES

The District conducts technical studies in cooperation with other entities including the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ) in order to identify methods to conserve and protect groundwater resources. Results from the studies have aided in the implementation of more efficient irrigation practices, education, and well head protection. Grants from the TWDB have provided funds for the District to purchase lab equipment for water analysis, and well mapping equipment. The District collects data on water levels, groundwater production, and water quality on a monthly and annual basis from wells throughout the District. The District will continue to gather data and improve the data gathering methods to ensure all future District Plans are based on the best information available.

WATER CONSERVATION

Water conservation has become a strong initiative throughout the State of Texas. New buildings are required to use certain water conserving plumbing fixtures as a result of legislation passed by the Texas Legislature in 1991. It has been recognized that fresh water is a vital commodity that can only last through preservation. The District may require a conservation plan for certain well permits in order to be sure that the groundwater produced is put to a beneficial use, and not wasted. The District continues to work with water utilities, industry and agriculture users to promote the most efficient use of water so that we may preserve one of our most valuable natural resources. The District will continue to explore other conservation methods and options and will adopt new requirements as they become necessary.

PUBLIC INFORMATION

The District will take the necessary steps to ensure the public is informed and will cooperate with the media and all interested parties. The dissemination of information to the public is vital to create awareness, and the public support that is needed to control and reduce the mining of the groundwater.

The District will also continue to pursue water conservation through a public information and educational program. If used properly, voluntary conservation measures can significantly extend the life of the groundwater, thereby preventing the need for mandatory programs by this District or the State. Voluntary programs are entirely a function of providing the necessary education on conservation methods and habits along with the means to implement those methods. The District will continue to provide information to school districts and the general public in an effort to create voluntary conservation.

REGULATION

The primary objective of this Plan is to control groundwater withdrawals to reduce aquifer mining within the District. Groundwater withdrawals can be reduced through conservation of groundwater. In regulating groundwater withdrawals, the District shall take into account several factors, including:

- 1) Economic impact of conservation measures;
- 2) The degree and effect of aquifer mining in the area; and
- 3) Differing hydrological characteristics of the aquifer(s) within the District.

The District will utilize the data and information obtained to evaluate the effectiveness of its regulatory policies and to determine what future action may be needed to achieve the mandate of the act, the District Rules, and the objectives and requirements of this plan.

MANAGEMENT OF GROUNDWATER SUPPLIES

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The District will manage the supply of 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 promote best management practices of all groundwater resources within the District. An observation network has been 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 upon adoption by the Board.

The District has adopted rules to regulate groundwater withdrawals by means of spacing and production limits. The District may deny a well construction permit or limit groundwater withdrawals in accordance with the guidelines stated in the rules of the District. In making a determination to deny a permit or limit groundwater withdrawals, the District will consider the public benefit against individual hardship after considering all appropriate testimony.

The relevant factors to be considered in making a determination to deny a permit or limit groundwater withdrawals will include:

- 1) The purposes of the Act;
- 2) The District Rules;
- 3) The objectives and requirements of this Plan;
- 4) The economic impact on the applicant from grant or denial of the permit or terms prescribed by the permit; and
- 5) An equitable distribution of available groundwater.

In pursuit of the District's mission of protecting the resource, the District may require reduction of groundwater withdrawals to amounts, which will not cause harm to the aquifer. To achieve this purpose, the District may, at the Board's discretion, amend or revoke any permits after notice and hearing. The determination to seek the amendment or revocation of a permit by the Board will be based on aquifer conditions observed by the Board. The Board will enforce the terms and conditions of permits and the rules of the District by enjoining the permit holder in a court of competent jurisdiction as provided for in Section 36.102 of the Texas Water Code (TWC).

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.

EQUITY AND DISCRETION

The District recognizes that the burden of reducing the mining of an aquifer should be borne by all users of groundwater. Although a single entity's groundwater withdrawal may not be capable of causing severe problems, the total actions by all users can cause significant mining of groundwater. Therefore, every entity must be regulated.

To achieve the objective, the District must have discretion in permitting groundwater withdrawals. Therefore, temporary exceptions to the general rule for a specific area may be necessary if an economic hardship will be created that is significantly greater for one person than for others in the District, or if required due to hydrological, physical, or geophysical characteristics.

This Plan prescribes a production ratio of groundwater withdrawal based upon the number of acres of land owned by a property owner. Nothing in this Plan, however, should be interpreted to mean that a person is entitled to use groundwater in any amount merely because the Plan prescribes a ratio for production. The number of acres of land that are within the Certificate of Convenience and Need (CCN) of a public or private water utility may be taken into consideration to meet a production ratio, if the well is or will be located within the boundaries of the water utilities CCN, the utility's number of connections within the CCN justifies the amount of water requested, and the well meets the District's well spacing requirements.

COOPERATION AND COORDINATION

The District will continue to work with the public, the regulated community, and state local governments to achieve the District's goals. The District will work with all water suppliers, industrial, and agricultural users to help them to preserve groundwater. The Texas Commission on Environmental Quality is the agency charged with protecting the state's water resources, and the Texas Water Development Board is the agency responsible for water resources planning and promotion of water conservation practices. The District will continue to work with both of these agencies throughout the life of this plan.

ACTIONS, PROCEDURES, PERFORMANCE AND AVOIDANCE FOR PLAN IMPLEMENTATION

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 the provisions of this plan.

The District will adopt rules relating to the permitting of wells and the production of groundwater. The rules adopted by the District shall be pursuant to the District Act, to TWC 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 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 the cooperation in the implementation of this plan and the management of groundwater supplies within the District. All activities of the District will be undertaken in cooperation and coordinated with the appropriate state, regional or local water management entity.

PLANNING ESTIMATES AND PROJECTIONS

TOTAL USEABLE AMOUNT OF GROUNDWATER IN THE DISTRICT

The District estimates that the total useable amount of groundwater in the District is 248,694 ac-ft per year. This estimate is based on a water budget developed by the District for the Carrizo-Wilcox aquifer of 212,074 acre-feet per year. The Carrizo-Wilcox aquifer water budget is combined with estimates of annual recharge for the Gulf Coast, Queen City and Sparta aquifers totaling 36,620 acre-feet per year to compile the total amount of useable groundwater in the District. The Carrizo-Wilcox aquifer water budget used the annual recharge estimates and the estimates of water in storage in the Carrizo Sands from the Carrizo-Wilcox aquifer Groundwater Availability Model (GAM), the amount of groundwater used in the District, the water management strategies that will require the development of new groundwater supplies in the District and the amount of groundwater may be acceptably be used from aquifer storage each

ANNUAL AMOUNT OF NATURAL OR ARTIFICIAL RECHARGE TO GROUNDWATER RESOURCES IN THE DISTRICT

The District estimates that the annual amount of natural or artificial recharge to the groundwater resources of the District is 89,611 acre-feet per year. The recharge values presented in this plan are consistent with the definition of recharge given in the TWDB groundwater management plan rules. The estimates represent recharge by infiltration from the land surface or leakage from another formation and do not include the down-gradient movement of water in the aquifer.

The recharge estimates for the Carrizo-Wilcox aquifer in all counties of the District are based on the TWDB Southern Carrizo-Wilcox aquifer Groundwater Availability Model (GAM). The GAM run data compiled by TWDB on request of the District indicate that the Carrizo-Wilcox aquifer receives a net gain through leakage from overlying aquifers. The TWDB GAM data also indicate that the Carrizo Sand receives a net gain of approximately 3,400 acre-feet per year in leakage from the underlying Wilcox Formation. This net movement of water was not considered in the estimate of recharge in the District because it represents movement within subdivisions of the same aquifer.

The estimates for the Sparta and Gulf Coast aquifers are based on a GIS calculation of the area of the aquifer outcrop in each county based on the TWDB major and minor aquifer maps and an assumed rate of infiltration of deep recharge of approximately 1.75 percent of annual rainfall.

Aquifer	Atascosa	Frio	Karnes	Wilson	Total
Gulf Coast	0	0	15,200	0	15,200
Sparta	1,150	1,260	0	980	3,390
Queen City	4,380	8,000	0	5,650	18,030
Carrizo-Wilcox	13,864	5,411	0	10,867	30,142
County Total	19,394	14,671	15,200	17,497	66,762

Table 1, Estimates of Annual Groundwater Recharge by Surface Infiltration in acre-feet per year

Aquifer	Atascosa	Frio	Karnes	Wilson	Total
Carrizo-Wilcox	-2,651	12,715	-3,414	16,199	22,849

Table 2, Estimates of Annual Recharge to the Carrizo-Wilcox Aquifer by Leakage from Other Formations in acre-feet per year

Details on the calculation of annual recharge values are presented in Appendix D.

DETAILS ON HOW NATURAL OR ARTIFICIAL RECHARGE IN THE DISTRICT MIGHT BE INCREASED

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The natural or artificial recharge in the District might be feasibly increased by airborne seeding of cumuliform clouds with either glaciogenic, or hygroscopic material. Based on data from the North Dakota Atmospheric Resource Board the District estimates that airborne cloud seeding may increase the rainfall in the District by approximately 10-15 percent.

ANNUAL AMOUNT OF GROUNDWATER USED IN THE DISTRICT

The District estimates that the amount of groundwater being used within the District on an annual basis in the Year 2000 was 192,032 ac-ft per year. This estimate is taken from the TWDB Annual Water Use Survey data. The data for the Year 2000 is the most recent year for which survey data has been released.

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Ac-ft/Yr	2000	Ac-ft/Yr	1999	Ac-ft/Yr	1998	Ac-ft/Yr	1997	Ac-ft/Yr	1996
	Atascosa								
45,330	Cz-Wx	48,889	Cz-Wx	59,633	Cz-Wx	48,157	Cz-Wx	59,111	Cz-Wx
829	QnCt	862	QnCt	1,064	QnCt	764	QnCt	1,075	QnCt
66	Sparta	60	Sparta	60	Sparta	64	Sparta	73	Sparta
	Frio								
120,035	Cz-Wx	83,325	Cz-Wx	87,111	Cz-Wx	61,760	Cz-Wx	95,932	Cz-Wx
83	QnCt	69	QnCt	80	QnCt	80	QnCt	68	QnCt
9	Sparta	6	Sparta	8	Sparta	8	Sparta	7	Sparta
	Karnes								
398	Cz-Wx	419	Cz-Wx	359	Cz-Wx	348	Cz-Wx	411	Cz-Wx
3,640	Gulf Coast	3,779	Gulf Coast	3,750	Gulf Coast	3,296	Gulf Coast	4,195	Gulf Coast
	Wilson								
21,642	Cz-Wx	16,640	Cz-Wx	14,385	Cz-Wx	16,595	Cz-Wx	18,666	Cz-Wx
	EUWCD								
187,405	Cz-Wx	149,273	Cz-Wx	161,488	Cz-Wx	126,860	Cz-Wx	174,120	Cz-Wx
912	QnCt	931	QnCt	1,144	QnCt	844	QnCt	1,143	QnCt
75	Sparta	66	Sparta	68	Sparta	72	Sparta	80	Sparta
3,640	Gulf Coast	3,779	Gulf Coast	3,750	Gulf Coast	3,296	Gulf Coast	4,195	Gulf Coast
192,032	Total Use	154,049	Total Use	166,450	Total Use	131,072	Total Use	179,538	Total Use

Cz-Wx = Carrizo-Wilcox aquifer, QnCt = Queen City aquifer, Sparta = Sparta aquifer, Gulf Coast = Gulf Coast aquifer

Table 3, Annual Amount of Groundwater Used in the District from TWDB Annual Water Use Survey

The TWDB Annual Water Use Survey data is available for the Years 1980, 1984 – 2000. The TWDB estimates groundwater use in the District for the entire period of record are presented as supporting documentation. (Appendix E)

ESTIMATE OF PROJECTED WATER SUPPLIES IN THE DISTRICT

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The estimate of total projected water supplies in the District for the year 2010 is 121,224 ac-ft per year. This estimate represents both ground and surface water supplies. The estimate is taken from the data in Table 5 of the 2001 South Central Texas Regional Water Plan.

County	2000	2010	2020	2030	2040	2050
Atascosa	51,486	51,486	51,486	31,937	31,936	31,936
Frio	32,216	32,215	32,214	16,947	16,946	16,947
Karnes	7,553	7,284	7,083	6,928	6,789	6,665
Wilson	31,758	30,239	28,934	27,796	26,806	25,933
Total	123,013	121,224	119,717	83,608	82,477	81,481

Table 4, County Totals for Estimates of Projected Water Supplies in ac-ft/year

The complete set of projected water supply estimates are presented in Appendix F of this plan.

ESTIMATE OF PROJECTED WATER DEMAND IN THE DISTRICT

5

The estimate of total projected water demand in the District for the year 2010 is 197,806 ac-ft per year. This estimate represents water demands that may be met by either ground or surface water and is taken from the data in Table 2 of the 2001 South Central Texas Regional Water Plan.

County	2000	2010	2020	2030	2040	2050
Atascosa	74,174	73,056	72,220	71,858	74,436	80,766
Frio	99,940	96,564	93,339	90,354	87,487	84,722
Karnes	6,227	5,797	5,642	5,624	5,619	5,616
Wilson	22,656	22,389	21,674	22,117	22,730	23,459
Total	202,997	197,806	192,875	189,953	190,272	194,563

Table 5, County Totals for Estimates of Projected Water Demand in ac-ft per year

The complete set of projected water demand estimates are presented in Appendix G of the plan document.

COMPARISON OF WATER SUPPLY AND DEMAND PROJECTIONS

A comparison of the estimates of the total projected water supplies and projected water demand in the District indicates a water need of 76,582 ac-ft per year for the year 2010.

	2000	2010	2020	2030	2040	2050
Supplies (ac-ft per year)	123,013	121,224	119,717	83,608	82,477	81,481
Demands (ac-ft per year)	202,997	197,806	192,875	189,953	190,272	194,563
Needs (ac-ft per year)	-79,984	-76,582	-73,158	-106,345	-107,795	-113,082

Table 6, Estimates of Identified Water Needs in ac-ft per year

WATER MANAGEMENT STRATEGIES TO MEET NEEDS OF WATER USER GROUPS

The SCTRWPG has recommended 21 water management strategies that are intended to meet the identified needs of water user groups in the District. A majority of these strategies are conservation based measures intended to serve a larger amount of people with the same or similar amount of water. The amount of water that will be produced by all of the water management strategies included by the SCTRWPG in Table 12 of the Regional Water Plan is 21,309 acre-feet per year in 2010.

County	2000	2010	2020	2030	2040	2050
Atascosa	4,168	4,245	4,217	5,242	7,411	14,407
Frio	5,972	5,992	5,993	5,994	5,985	5,968
Karnes	10	21	17	18	13	7
Wilson	21	11,051	11,043	11,039	11,240	11,233
EUWCD Total (ac-ft per year)	10,171	21,309	21,270	22,293	24,649	31,615

Table 7, County and District Totals by Decade of Amounts of Water Generated by SCTRWP Recommended Water Management Strategies

HOW THE DISTRICT HAS ADDRESSED WATER SUPPLY NEEDS IN THE MANAGEMENT PLAN IN A MANNER THAT IS NOT IN CONFLICT WITH THE TWDB APPROVED SOUTH CENTRAL TEXAS REGIONAL WATER PLAN

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(a)

The water management strategies recommended in the South Central Texas Regional Water Plan are expected to produce a total of 21,309 acre-feet per year in 2010. None of the strategies recommended for the area of the District is related to surface water. The total of projected groundwater supplies estimated by the SCTRWPG to be utilized in 2010 is 119,984 acre-feet per year. The total amount of groundwater required by the South Central Texas Regional Water Plan is 119,293 acre-feet per year in 2010. The South Central Texas Regional Water Plan would not be affected by the District adoption of a value of 248,694 acre-feet per year for the total useable amount of groundwater or an availability of groundwater from the Carrizo-Wilcox aquifer of 21,309 acre-feet per year. These values also compare favorably to the sum of the 2010 total of projected water demand in the District of 197,806 acre-feet per year and the total amount of water required for water management strategies in 2010 of 21,309 acre-feet per year.

County	2000	2010	2020	2030	2040	2050
Atascosa	47,134	47,134	47,134	27,585	27,584	27,584
Frio	30,914	30,913	30,912	15,645	15,644	15,645
Karnes	5,276	5,007	4,806	4,651	4,512	4,388
Wilson	27,449	25,930	24,625	23,487	22,497	21,624
EUWCD GW Supplies (ac-ft/year) =	110,773	108,984	107,477	71,368	70,237	69,241

Table 8, Projected Groundwater Supplies in the District by Decade in acre-feet per year

MANAGEMENT GOALS, OBJECTIVES AND PERFORMANCE STANDARDS

Goal 1.0 – Addressing the Efficient use of Groundwater

Management Objective

1.1 - Each month the District will monitor the volume of water produced from nine irrigation wells and make note of the crops irrigated by the wells to promote water conservation in irrigation practices.

Performance Standard

1.1 - A table of the monthly meter readings from the nine irrigation wells and a discussion of the irrigation application rates for each type of crop irrigated by the nine wells monitored by the District will be included in the Annual Report on District Activities made to the Board of Directors each year.

Management Objective

1.2 - Each month the District will monitor the volume of water produced by 30 Municipal and Rural water suppliers in the District.

Performance Standard

1.2 - A table showing the monthly production volumes reported to the District by the Municipal and Rural water suppliers in the District will be included in the Annual Report on District Activities made to the Board of Directors each year.

Management Objective

1.3 - Each year the District will request production reports from the operators of 200 agricultural irrigation wells in the District.

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Performance Standard

1.3a - A copy of the request for production reports sent to the operators of agricultural irrigation wells will be included in the Annual Report on District Activities made to the Board of Directors each year.

1.3b – A table showing the production volumes reported to the District from the agricultural irrigation well operators in the District will be included in the Annual Report on District Activities made to the Board of Directors each year.

Management Objective

1.4 - Each month the District will measure the water levels in 35 water wells and will measure the water level of an additional 126 wells on an annual basis each year.

Performance Standard

1.4 - A table showing the monthly and a table showing the annual water level measurements made by the District will be included in the Annual Report on District Activities made to the Board of Directors each year.

Goal 2.0 Addressing the Control and Prevention of the Waste of Groundwater

Management Objective

2.1 - Each year the District will conduct an on-site investigation of any reports of waste of groundwater within two working days of the time of the receipt of the report to the District.

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Performance Standard

2.1 – A discussion of the waste of groundwater observed by the District each year, including the number of reports of the waste of groundwater received by the District and the District response to the report will be included in the Annual Report on District Activities made to the Board of Directors each year.

Goal 3.0 Address the Conjunctive use of Surface and Groundwater

Management Objective

3.1 – Each year the District will use the Southern Carrizo-Wilcox Groundwater Availability Model to predict the potential effects of different groundwater pumping scenarios on both groundwater and surface water.

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Performance Standard

3.1 – A discussion of the groundwater pumping scenario simulated in the Southern Carrizo-Wilcox Groundwater Availability Model run made by or for the District and a summary of the simulation results will be included in the Annual Report on District Activities made to the Board of Directors each year.

Goal 4.0 Addressing Natural Resource Issues which Impact the use and Availability of Groundwater, and which are Impacted by the use of Groundwater.

Management Objective

4.1 – Each year the District will sample at least 40 water wells in the District for chemical analysis of water quality.

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Performance Standard

4.1a - A table giving the results of the chemical analyses of the water quality samples taken by the District each year will be included in the Annual Report on District Activities made to the Board of Directors.

4.2a – A discussion of whether any instances of groundwater contamination or issues of concern were noted in the water quality sample analyses will be included in the Annual Report on District Activities made to the Board of Directors.

Goal 5.0 Addressing Conservation

Management Objective

5.1 – Each year, the District will submit an article for publication regarding water conservation to one newspaper of general circulation in the District.

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Performance Standard

5.1 - A copy of the article regarding water conservation submitted by the District for publication to a newspaper of general circulation in the District will be included in the Annual Report to the Board of Directors.

Management Objective

5.2 – Each year, the District will include an informative flier on water conservation with at least one mail-out distributed in the normal course of business to groundwater use permit holders in the District.

Performance Standard

5.2 - The Annual Report to the Board of Directors will include a copy of the informative flier regarding water conservation that was distributed to groundwater use permit holders in the District and the number of fliers distributed.

Goal 6.0 Addressing Drought Conditions

Management Objective

6.1 – Each month, the District will download the updated Palmer Drought Severity Index (PDSI) map and check for the periodic updates to the Drought Preparedness Council Situation Report (Situation Report) posted on the Texas Water Information Network website www.txwin.net.

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Performance Standard

6.1 - Quarterly, the District will make an assessment of the status of drought in the District and prepare a quarterly briefing to the Board of Directors. The downloaded PDSI maps and Situation Reports will be included with copies of the quarterly briefing in the District Annual Report to the Board of Directors.

dd

Management Goals of 31 TAC 356.5 (a)(1) Determined "Not Applicable"

Controlling and Preventing Subsidence

This management goal is not applicable to the District.

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 last monthly Board meeting each fiscal year. 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 fiscal year. Each activity will be referenced to the estimated expenditure of staff time and budget in accomplishment of the activity. The notations of activity frequency, staff time and budget will be referenced to the appropriate performance standard for each management objective describing the activity, so that the effectiveness and efficiency of the District's operations may be evaluated. The Board will maintain the report on file for public inspection at the District's office upon adoption. This methodology will apply to all management goals contained within this plan.

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REGULATORY ACTION PLAN

The objective of the District Rules are to translate the legislative mandate of the District and Chapter 36 of the Texas Water Code into policy and specific objectives and requirements that are needed to effectively manage and preserve the groundwater resources within the District. The Rules set forth the requirements necessary to receive a water well drilling and production permit, and the associated responsibilities of conservation and preservation of the resource. The requirements are written as general guidelines, and each permit will be evaluated based upon the best scientific data available. The current demand on the aquifer and trend of the water levels in the area may be determining factors in the evaluation of a permit application.

Groundwater Protection

Groundwater contamination may result from many sources, including current and past oil and gas production, agricultural activities, industrial and manufacturing processes, commercial and business endeavors, domestic activities, and natural sources that may be influenced or may result from human activities.

The District shall take appropriate measures to discontinue activities that are either causing, or are a potential threat to cause groundwater contamination. Due to permeability of aquifer outcrops and recharge zones, there is a greater threat for groundwater contamination from surface pollution in recharge and outcrop regions, and the District will impose more stringent restrictions on those areas.

ADDRESS AND OFFICE HOURS

The Evergreen Underground Water Conservation District Office is located at:
110 Wyoming Blvd.
Pleasanton, TX 78064
Office Hours: Monday - Friday 8:00 a.m.-12:00 p.m. - 1:00 p.m.-5:00 p.m.

Telephone: (830) 569-4186
Fax: (830) 569-4238
E-mail: mmahoney@karnesec.net

FEES

Copies of the District Rules and Management Plan are \$5.00.

Water Well Drilling Permit fee is \$175.00, of which \$75.00 is refundable to the applicant upon receipt of the driller's log and well registration to the District.

Water Well Production Permit fee is \$25.00.

Well Registration fee for exempt wells is \$10.00.

Transportation Permit fee is \$2,000.00

Photocopies of District Documents are \$0.10 each.

Sending or receiving Facsimiles is \$2.00 for first page and \$1.00 there after, including cover sheet.

Document research by a District Employee is \$15.00 /hr.

The cost of postage will be added when applicable.

DEFINITIONS

“Act” means the legislative Act that created the District and governs its operations.

(Act of 1965, 59th Legislature, Ch. 197, H.B. 116, Pg. 398 (amended 1967, 1983, 1985)).

“Area” means a geographical area designated by the Board in which regulatory policy will be applied.

“Beneficial Use” means agricultural, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational or pleasure purposes, or any other use that is beneficial and not considered waste.

“Board” means the Board of Directors of the Evergreen Underground Water Conservation District.

“Certificate Of Convenience And Need (CCN)” means the designation of geographical boundaries of the service area of a water utility.

“Groundwater” means water located beneath the earth’s surface but does not include water produced with oil in the production of oil and gas.

“Mining of an Aquifer or Aquifer Mining” means to extract groundwater from an aquifer at an annual rate which exceeds the normal annual recharge to the aquifer.

“Outcrop” means an area where an underground stratum or geologic formation is found at the surface of the ground.

“Person” includes corporation, individual, organization, political subdivision or agency, business trust, estate trust, partnership, association, or any other legal entity.

“Plan” means this District Plan.

“Transportation Facility” means any facility constructed for the purpose of transporting groundwater out of the District.

“Water Utility” means any corporation, company, entity, political subdivision, public or private, that sells water to any person within its service area.

“Well” means any excavation, facility, device, or method that could be used to withdraw groundwater.

“Withdraw” means the act of extracting groundwater by any method.

Appendix A

Evidence of the Administrative Processes
Required For the Certification of the
Groundwater Management Plan as
Administratively Complete

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**RESOLUTION ADOPTING MANAGEMENT PLAN OF THE
EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT**

WHEREAS, The Management Plan of the Evergreen Underground Water Conservation District, attached hereto as Attachment A, has been developed for the purpose of conserving, preserving, protecting and recharging the underground water in the District, and this action is taken under the District's statutory authority to prevent waste and protect rights of owners of interest in groundwater;

WHEREAS, The Management Plan meets the requirements of Senate Bill 1;

WHEREAS, Under no circumstances, and in no particular case will this Management Plan, or any part of it, be construed as a limitation or restriction upon the exercise of any discretion, where such exists; nor will it in any event be construed to deprive the Board of an exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount and character of data or information which may be required for the proper administration of the law.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT THAT:

- 1) The "Management Plan of the Evergreen Underground Water Conservation District" contained in attachment A is hereby adopted.
- 2) This Management Plan will take effect upon certification by the Texas Water Development Board, and shall be in effect for a period of ten (10) years from said date.

AND IT IS SO ORDERED

PASSED AND ADOPTED ON THIS 27TH DAY OF FEBRUARY 2004.

SIGNED *Kenneth Stephens*
Kenneth Stephens – President

ATTEST *Paul Bordovsky* VP
William H. Ruple-Secretary/Treasurer

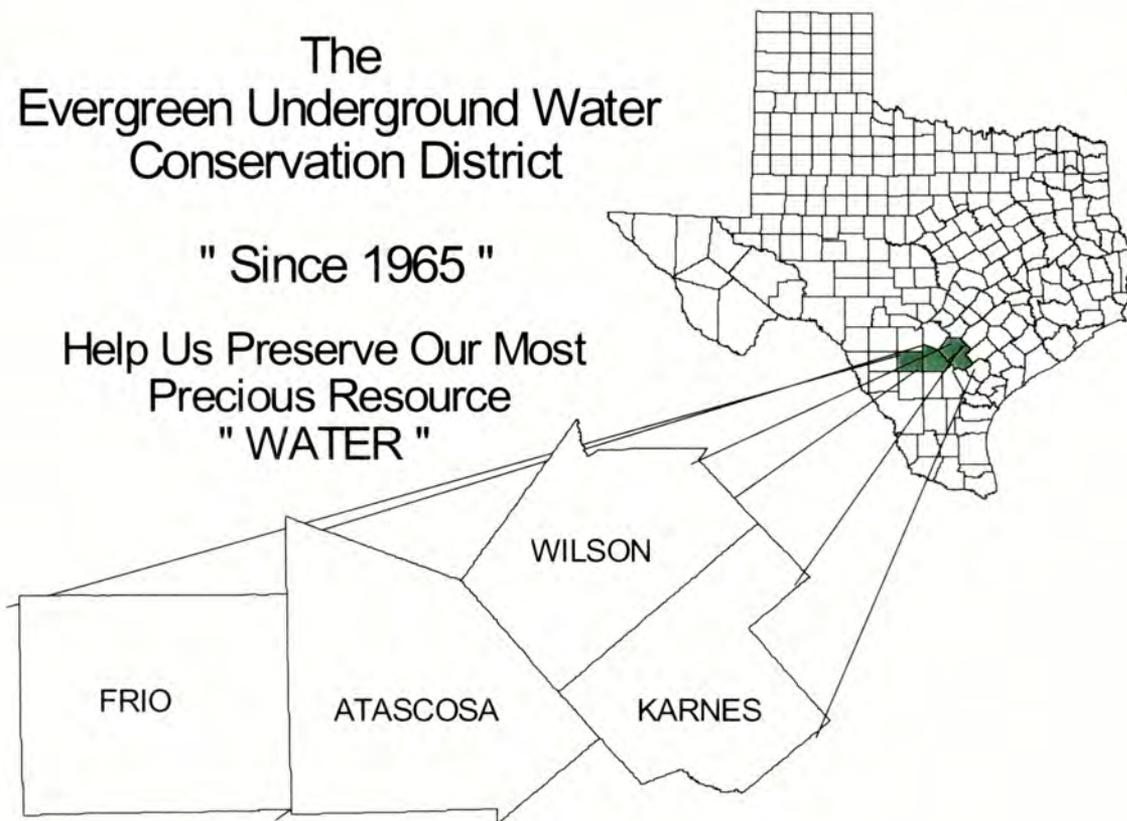
Appendix B
Rules of the
Evergreen Underground Water
Conservation District

RULES OF THE EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT

The
Evergreen Underground Water
Conservation District

" Since 1965 "

Help Us Preserve Our Most
Precious Resource
" WATER "



110 Wyoming Blvd., Pleasanton, TX 78064

Phone: (830) 569-4186

Fax: (830) 569-4238

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EVERGREEN UNDERGROUND WATER
CONSERVATION DISTRICT
DISTRICT RULES

SECTION 1. DEFINITIONS AND CONCEPTS

RULE 1.1 DEFINITIONS OF TERMS: In the administration of its duties, the Evergreen Underground Water Conservation District follows the definitions of terms set forth in Chapter 36, Water Code, and other definitions as follows:

- a. **"Aquifer"** shall mean a geologic formation, group of formation that is capable of yielding a significant amount of water to a well or spring.
- b. **"ASR"** shall mean Aquifer Storage and Retrieval Project, which is a project with two phases that anticipates the use of a class V aquifer storage well for injection into a geologic formation, group of formations, or part of a formation that is capable of underground storage of appropriated surface water or groundwater for subsequent retrieval and beneficial use.
- c. **"Aquifer Storage Well"** shall mean a class V injection well designed and used expressly for the injection of water into a geologic formation, group of formations, or part of a formation that is capable of underground storage of water for later retrieval and beneficial use.
- d. **"Artesian Well"** shall mean a water well completed in the confined portion of an aquifer such that, when properly cased, water will rise in the well, by natural pressure, above an overlying impermeable stratum.
- e. **"Beneficial Use" or "Beneficial Purpose"** shall mean use for:
 - 1. agricultural, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational or pleasure purposes;
 - 2. exploring for, producing, handling, or treating oil, gas, sulfur, or other minerals; or
 - 3. any other purpose that is useful and beneficial to the users that does not commit waste as defined in section (af) of this rule.
- f. **"Board"** means the Board of Directors of the District.
- g. **"Casing"** means a tubular watertight structure installed in the excavated or drilled hole to maintain the well opening and, along with cementing, to confine the groundwaters to their zones of origin and prevent the entrance of surface pollutants.
- h. **"Cement"** means a neat Portland or construction cement mixture of not more than seven gallons of water per ninety-four (94) pound sack of dry cement, or a cement slurry, which contains cement along with bentonite, gypsum, or other additives. All manufacturers recommendations regarding water content for the mix must be strictly adhered to.
- i. **"Deteriorated Well"** means a well, the condition of which will cause, or is likely to cause, pollution of any water in the District.
- j. **"District"** means the Evergreen Underground Water Conservation District.
- k. **"District Act"** means the Evergreen Underground Water Conservation District Act 59th Leg. R.S., ch. 197, 1965 Tex. Gen. Laws 398 (Vernon) as amended by Act of May 25, 1967, 60th Leg., R.S. ch. 1272, 1967 Tex. Gen. Laws 1676 (Vernon); Act of May 30, 1983, 68th Leg., R.S., ch. 484, 1983 Tex. Gen. Laws 2852 (Vernon); and Act of May 17, 1985, 69th Leg., R.S., ch 438, 1985 Tex. Gen. Laws 2984 (Vernon).

1. **"District Office"** means the office of the District. The District office may be changed from time to time by resolution of the Board.
- m. **"District Water Purveyor"** means any person, corporation, water supply Corporation, municipality, political subdivision or agency with no less than 95% of its total monthly water volumes supplied within the boundaries of the District.
- n. **"Emergency Multiple System Interconnects"** means a District Water Purveyor with lines that are interconnected with a system or systems outside of the District for the sole purpose of temporary water service outside the District during an emergency situation. Emergency assistance to any entity outside of the District that this is supplied more than 5% of its total monthly water volume from within the District is subject to District Transportation Permitting Requirements and Fees.
- o. **"Groundwater"** means water located beneath the earth's surface within the District but does not include water produced with oil in the production of oil and gas.
- p. **"Hearing Body"** means the Board, any committee of the Board, or a Hearings Examiner at any hearing held by the District.
- q. **"Hearing Examiner"** means a person appointed to conduct a hearing or other proceeding.
- r. **"High Production Well"** means a well, or combination of wells on common property and under common ownership, that is capable of producing more than 1500 gallons per minute.
- s. **"Drilling Permit"** means a permit issued or to be issued by the District for the drilling of a water well.
- t. **"New Well Application"** means an application for a permit for a well that has not been drilled.
- u. **"Open Meeting Law"** means Chapter 551, Government Code.
- v. **"Open Records Law"** means Chapter 552, Government Code.
- w. **"Production Permit"** means a permit for a water well issued or to be issued by the District allowing the withdrawal of a specified amount of groundwater for a designated period.
- x. **"Person"** includes corporation, individual, organization, government or governmental subdivision or agency, business trust, estate, trust, partnership, association, or any other legal entity.
- y. **"Pollution"** means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the District, that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or public enjoyment of the water for any lawful or reasonable purpose
- z. **"Presiding Officer"** means the Chair, Vice-Chair, Secretary, or other Board member presiding at any hearing or other proceeding, or a Hearings Examiner conducting any hearing or other proceeding.
- aa. **"Rules"** means the rules of the District compiled in this document as it may be supplemented or amended from time to time.
- ab. **"Mud"** means a relatively homogeneous, relatively viscous fluid produced by the suspension of clay-size particles in water. Specifically, it must be a nine and two-tenths pound per gallon mud or heavier, with a marsh funnel viscosity of fifty seconds or equivalent.
- ac. **"Texas Rules of Civil Procedure" and "Texas Rules of Civil Evidence"** means the civil procedure and evidence rules as amended and in effect at the time of the action or proceeding. Except as modified by the Rules of the District, the rights, duties, and responsibilities of the presiding officer acting under the Texas Rules of Civil Procedure or the Texas Rules of Evidence are the same as a court acting under those rules.

RULE 1.3 USE AND EFFECT OF RULES: These Rules are used by the District as a guide in the exercise of the powers conferred by law and in the accomplishment of the purposes of the District Act. They may not be construed as a limitation or restriction on the exercise of any discretion nor may they be construed to deprive the District or Board of the exercise of any powers, duties or jurisdiction conferred by law, nor may they be construed to limit or restrict the amount and character of data or information that may be required to be collected for the proper administration of the District Act.

RULE 1.4 AMENDING OF RULES: The Board may, following notice and hearing, amend these Rules or adopt new Rules from time to time.

RULE 1.5 HEADINGS AND CAPTIONS: The 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.

RULE 1.6 CONSTRUCTION: A reference to a title, chapter or section without further identification is a reference to a title, chapter or section of the Water Code. Construction of words and phrases are governed by the Code Construction Act, Subchapter B, Chapter 311, Government Code.

RULE 1.7 METHODS OF SERVICE UNDER THE RULES: Except as otherwise expressly provided in these Rules, any notice or document required by these Rules to be served or delivered may be delivered to the recipient, or the recipient's authorized representative, in person, by agent, by courier receipted delivery, by certified mail sent to the recipient's last known address, or by telephonic document transfer to the recipient's current telecopier number. Service by mail is complete upon deposit in a post office or other official depository of the United States Postal Service. Service by telephonic document transfer is complete upon transfer, except that any transfer occurring after 5:00 p.m. shall be deemed complete the following business day. If service or delivery is by mail, and the recipient has the right, or is required, to do some act within a prescribed period of time after service, three days will be added to the prescribed period. Where service by other methods has proved impossible, the service may be complete upon publication of the notice in a newspaper with general circulation in the District.

RULES 1.8 SEVERABILITY: If any one or more of the provisions contained in these Rules is for any reason held to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability may not affect any other Rules or provisions of these Rules and these Rules will be construed as if such invalid, illegal or unenforceable rule or provision had never been contained in these Rules.

SECTION 2. BOARD

RULE 2.1 PURPOSE OF BOARD: The Board was created to determine policy and regulate the withdrawal of groundwater within the boundaries of the District, and to exercise its rights, powers, and duties in a manner that will effectively and expeditiously accomplish the purposes of the District Act. The Board's responsibilities include, but are not limited to, the adoption and enforcement of reasonable rules, policy and orders.

RULE 2.2 BOARD STRUCTURE, OFFICERS: The Board consists of the members elected, or appointed, and qualified as required by the District Act. Each year at its regular February meeting, and if there is no February meeting, at its next regular meeting, the Board will select one of its members to serve as President to preside over Board meetings and proceedings, one to serve as Vice-President to preside in the absence of the Chair, and one to serve as Secretary to keep a true and complete account of all meetings and proceedings of the Board. Members and officers serve until their successors are elected or appointed and sworn in accordance with the District Act and these rules.

RULES 2.3 MEETINGS: The Board will hold a regular meeting each month on a day the Board may establish from time to time. At the request of the Chair, or by written request of at least two members, the Board may hold special meetings. All Board meetings will be held in accordance with the Texas Open Meetings Law.

RULE 2.4 COMMITTEES: The President may establish committees for formulation of policy recommendations to the Board, and appoint the chair and membership of the committees.

SECTION 3. GENERAL MANAGER

RULE 3.1 GENERAL MANAGER: The person employed by the Board as General Manager is the chief administrative officer of the District, pursuant to the District Act, and shall have full authority to manage and operate the affairs of the District, subject only to Board orders. After consultation and authorization of the Board, the General Manager is responsible for employing all persons necessary for the proper handling of the business and operation of the District and determining their compensation.

RULE 3.2 DELEGATION OF AUTHORITY: The General Manager may delegate duties as may be necessary to effectively and expeditiously accomplish those duties, provided that no such delegation may ever relieve the General Manager from responsibilities under the District Act or Board orders.

SECTION 4. DISTRICT

RULE 4.1 MINUTES AND RECORDS OF THE DISTRICT: All documents, reports, records, and minutes of the District will be available for public inspection and copying in accordance with the Texas Open Records Act. Upon written application of any person, the District will furnish copies of its public records. Persons who are furnished copies may be assessed a copying charge, pursuant to policies established by the Board. A list of the charges for copies will be furnished by the District.

RULE 4.2 CERTIFIED COPIES: Requests for certified copies must be in writing. Certified copies will be made under the direction of the General Manager and will be affixed with the seal of the District. Persons furnished certified copies may be assessed a certification charge, in addition to the copying charge, pursuant to policies established by the board.

RULE 4.3 OFFICE HOURS: The District will maintain regular business hours.

SECTION 5. PERMITS

RULE 5.1 STANDARD PERMIT PROVISIONS: All permits are granted subject to the District Act, these Rules, the District 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, Water Code, and the Rules, 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, 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. In the event that groundwater is to be transported a distance greater than one-half (1/2) mile from the well, it must be transported by a pipeline to prevent waste caused by evaporation and percolation.
- d. The permittee must keep records of the amount of groundwater produced and the purpose of the production, and such records shall be available for inspection by District representatives. Immediate written notice must be given to the District in the event production exceeds the quantity authorized by this permit, or 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 are 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. Suspension or revocation of a permit may require immediate cessation of all activities granted by permit.

- h. Violation of this permit's terms, conditions, requirements, or special provisions, is punishable by civil penalties as provided by the District Rules.
- i. Wherever special provisions are inconsistent with other provisions or District Rules, the special provisions prevails.

RULES 5.2 GENERAL PERMITTING POLICIES AND PROCEDURES:

- a. **Notice of Permit Hearing:** Once the District receives a completed original application for a water well permit, or application for a permit renewal or amendment, the General Manager will issue written notice indicating a date and time for a hearing on the application in accordance with these Rules, except that no notice or hearing is required for permit amendments granted by the General Manager in accordance with Rule 5.8, or temporary or emergency permits granted in accordance with Rule 5.9. The General Manager may schedule as many applications at on one hearing as the General Manager deems necessary. Any person that wishes to be heard as a potential party to a hearing must, at least 5 business days prior to the hearing date, provide the General Manager with written notice of that person's intent to appear at the hearing. If the General Manager decides to contest the application, the General Manager must, at least 5 business days prior to the hearing date, provide the applicant with written notice of the General Manager's intent to contest the application. Hearings will be held in accordance with Section 7.
- b. **Decision and Issuance of Permit:** In deciding whether or not to issue a permit, and in setting the terms of the permit, the Board will consider the purpose of the District Act and all other relevant factors, including, but not limited to, (1) the District Management Plan; (2) the proposed use of the water is dedicated to beneficial use, (3) the sustainable yield of the aquifer; (4) the impact on other landowners rights in groundwater from grant or denial of the permit, or the terms prescribed by the permit, and (5) whether the applicant has agreed to avoid waste, and take reasonable diligence to protect groundwater quality, and to follow well plugging guidelines at the time of well closure. If no person notifies the General Manager of their intent to contest the application and if the General Manager does not contest the application, the application will be presented directly to the Board for a final decision. The Board may grant the application or refer the application to the Hearings Examiner for a complete hearing.

RULE 5.3 WELL PERMIT EXEMPTION: A well drilling and operating permit is not required for wells that are used to produce water to be used by an individual, a family, or household for:

- a. Drinking water and cooking;
- b. washing;
- c. Irrigating a garden or orchard, if the produce of the garden or orchard is to be consumed by the individual, family, or household;
- d. Watering animals used in operating a farm or animals being raised as food for the individual, household or family;
- e. Wells drilled, completed, equipped and used in accordance with TWC-'36.117 shall also be exempt from these spacing and production requirements.

RULE 5.4 WELL DRILLING AND PRODUCTION PERMIT:

a. Permits Required:

1. Every person, unless exempted by Rule 5.3, must obtain a permit from the District for the drilling of a water well and production of up to 652,000 gallons of water per acre of water rights per calendar year. The term "contiguous", as used in this subsection, shall be construed to mean water rights owned or leased by a permittee within a continuous perimeter boundary situated within the District. Contiguous may also apply to properties that are divided by a road or highway if the properties border one another.
2. The requirement for a production permit under this Rule shall also apply to any non-exempt un-permitted well currently in operation located within the District prior to the effective date of this rule, before the well may be altered or re-equipped to increase production. The requirement for a production permit shall also apply to all non-exempt un-permitted wells upon change in ownership of the property where the well is located, and/or prior to a change in the intended use of the water that is to be produced from the well.
3. Production permit applications for new wells shall be accompanied by well registration application(s) for any unregistered exempt well(s), and/or production permit application(s) for any non-exempt, un-permitted well(s) that currently exist on the same tract of land or adjoining tracts of land owned by the applicant for the new permit(s).

b. Permit Application:

1. The permit application provided for herein must be filed with the District in the form or forms promulgated by the District and such permit must be obtained from the District prior to the drilling of a water well and proposed production of water, all in accordance with the provisions of this rule.
2. The depth of the water-bearing formation which the applicant proposes to drill, complete, and produce the well.
3. An application for the production of water for which a permit is required under this rule shall:
 - a) be in writing and sworn to;
 - b) contain the name, post-office address and place of residence or principal office of the applicant;
 - c) identify the actual or anticipated location, pump size, and production capacity of the well from which the water is to be produced;
 - d) the total number to acres of land contiguous in ownership with the land where the well is to be located.
 - e) State the nature and purpose of the proposed use and the anticipated amount of water to be used.
 - f) State the anticipated time within which the proposed construction or alteration is to begin;

- g) State the presently anticipated duration required for the proposed use of the water;
 - h) Provide information showing the anticipated effect of the proposed production on the quantity and quality of water available for future use both inside and outside the District,
 - i) Provide information showing what water conservation measures permittee has adopted, what water conservation goals permittee has established, and what measures and time frames are necessary to achieve the permitte's established water conservation goals;
 - j) If the water is to be resold to others, provide a description of the permittee's service area, permittee's metering and leak detection and repair program for its water storage, delivery and distribution system, permitte's drought or emergency water management plan, and information on each customer's water demands, including population and customer data, water use data, water supply system data, wastewater data, water conservation measures and goals, and the means for implementation and enforcement;
 - k) Identify well(s) producing from the same formation within one-half (1/2) mile of the proposed well and the owner(s) of said well(s) and;
 - l) a description of existing water wells, their location on the property and the use of the existing wells.
4. The application must be accompanied by a map or plat drawn on a scale that adequately details the proposed project, showing;
- (a) the location of the existing or proposed well(s);
 - (b) the location of the existing or proposed production monitoring device(s) for compliance to section (j) of this Rule;
 - (c) the location of the existing or proposed water use facilities; and
 - (d) the location of the proposed or increased use or uses.
5. The Rule 5.4 permit application must be accompanied by an application fee which shall be used to cover the cost of considering and processing the application.
6. The District shall determine whether the application, maps, and other materials comply with the requirements of this rule. The district may require amendment of the application, maps, or other materials to achieve necessary compliance.
7. Before construction of any wells associated with a Production project may be commenced, a rule 5.4 applicant or permittee must apply for and obtain a drilling permit for each proposed well as required by Rules 5.1 and 5.2. An application for drilling permit(s) must be submitted concurrently with a Rule 5.4 application for production. Applications submitted concurrently will be considered together by the Board according to the standards and rules applicable to each.

c. Permit Hearing:

- 1. If there is an existing well, producing from the same formation, within one-half (1/2) mile of the proposed well site, or an application requires an exception to the spacing or production rule, the District shall mail notices not less than ten (10) days before the date set for the hearing of an application by first-class mail, postage prepaid, to:

- (a) the applicant, the record of whose application has been filed with the District; and
- (b) the owners of the adjacent properties within one-half (1/2) mile.

2. The notice shall contain the following:

- (a) the identifying number given the application by the District;
- (b) the name and address of the applicant;
- (c) the date on which the application was submitted;
- (d) the time and place of the hearing;
- (e) the proposed location of the well to be drilled; and
- (f) a brief summary of the information included in this application.

d. **Permit Evaluation:**

In evaluating the application, the District shall consider the quantity of water proposed to be produced; the term for which production is requested; the safety of the proposed production with respect to the contamination of the aquifer; the actual or anticipated number, location, pump size and production capacity of the wells from which water is to be produced; the nature of the proposed use; the effect of the proposed use of the water on municipal, agricultural, industrial, recreational and other categories of use, and such other factors as are consistent with the purpose of the District and the District's Management Plan. Except for temporary permits for temporary withdrawals, the Board will limit groundwater withdrawals, based upon the factors described above, to levels that do not exceed the sustainable yield of the aquifer.

e. **Permit Limitations:**

On approval of an application, the District shall issue a Production Permit to the applicant. The permittee's right to produce shall be limited to the extent and purposes stated in the permit. The permit shall be valid for a period not to exceed five (5) years, at which time the permit may be renewed. A permit shall be considered for renewal if; the permittee has been in compliance with the conditions of the permit, the District's Rules and Regulations, has timely submitted a groundwater production renewal application with the appropriate fee, agrees to comply with the District's current groundwater production allowance, and District Rules and Regulations. A permit that has not been submitted for renewal within six (6) months after the expiration date of the permit shall be revoked. Production permits are site specific and a permitted groundwater production allowance is restricted to production from the well that it is permitted for. A permit shall not be transferable except as provided in Rule 5.8.

f. **Permit Information:**

The permit shall be in writing and attested by the seal of the District and it shall contain substantially the following information:

- (1) the name of the person to whom the permit is issued;
- (2) the date the permit is issued;
- (3) the term for which the permit is issued;

- (4) the date the original application was filed;
- (5) the actual or anticipated number, location, pump size and production capacity of the wells from which water is to be produced;
- (6) the total number of acres of land contiguous in ownership with the land where the well is to be located.
- (7) The destination and use or purpose for which the water is to be produced;
- (8) The maximum quantity of water to be produced annually, which is unusual or emergency conditions may be expressed in a three-year rolling average. For the purposes of this subsection, "unusual or emergency conditions" shall be drought, forces of nature, acts of God, the temporary failure of equipment or machinery, or the failure or reduction of water sources;
- (9) The permit is issued subject to the rules of the District and to the continuing right of the District to manage the aquifer within the District's boundaries as authorized by Chapter 36, Texas Water Code, as amended; and
- (10) Any other information the District prescribes.

g. Reporting:

A permittee authorized to produce water for an agricultural or livestock use shall file with the District annual reports describing the amount of water produced and used for the permitted purpose. Such report shall be filed on the appropriate form or forms provided by the district within fifteen (15) days of December 31, next following commencement of production and annually thereafter. Permittee's authorized to produce water for other purposes of use shall file with the District monthly reports describing the amount of water produced and used for the permitted purpose. Such report shall be filed on the appropriate form(s) provided by the District within fifteen (15) days of the first of each month.

h. Monitoring Devices:

All production facilities or wells subject to the requirements of this Subsection shall be equipped with production monitoring devices approved by the District and available for District inspection at any time during normal business hours. An hour meter may be considered as a production monitoring device on the well, if the well output (gpm) can be accurately determined.

RULE 5.5 SPACING AND PRODUCTION REQUIREMENTS:

- a. No well shall be drilled such that said well shall be located closer than one hundred (100) feet to the property line. Spacing of the new wells from an existing well shall be one foot per one gallon per minute of production from the new well up to maximum of one thousand (1000) gallons per minute. In addition to this maximum, a well producing over one thousand (1000) gallons per minute will be spaced one-half (1/2) foot per one gallon per minute of production in excess of one thousand gallons per minute from an existing well.

EXAMPLES

500 gpm = 500 feet
 750 gpm = 750 feet
 1000 gpm = 1000 feet

1250 gpm = 1125 feet
1500 gpm = 1250 feet
1750 gpm = 1375 feet

The board 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.

- b. For the purpose of preventing waste or 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 requirement.
- c. In applying this requirement, no subdivision of property made subsequent to the adoption of the original spacing requirement will be considered in determining whether or not any property is being confiscated within the terms of such spacing requirement.
- d. Subject to limitations imposed upon withdrawals as specified under these rules, a person may be permitted to produce wells on their property, or property for which person can show possession of groundwater rights, up to a maximum production of 652,000 gallons per acre per year. The cumulative annual production allowance shall be computed by District personnel and may be assessed according to historical use, acreage to be irrigated, or service connections, however the allowance shall not exceed the annual production capability of the well, or the annual production allowance based upon the acres of groundwater rights owned or leased by the applicant, at the time the application is filed. Entities that supply water to the public may use part of the acreage within their CCN, or service area if the well is located or to be located within their CCN or service area, and the well meets the District's spacing rules.

RULE 5.6 EXCEPTION TO SPACING AND PRODUCTION RULE

- a. In order to protect property rights, to prevent waste, or confiscation of property, the Board may grant exception to the above spacing and production rules. 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 the spacing or production rule is desired, the application shall be submitted by the applicant in writing to the 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 two thousand (2000) feet. The plat or sketch shall show thereon the property lines in the immediate area and shall show accurately to scale the location of the wells producing from the same water bearing formation within one-half (1/2) mile of the proposed well location. The application shall also contain the names and addresses of all property owners adjoining the tract on which the well is to be located, within one-half (1/2) mile, and the owners of the wells producing from the same water bearing formation within one-half (1/2) mile of the proposed well location. Such application and plat shall be certified by some person actually acquainted with the facts who

shall state that all facts therein are true and correct. Provided, however, that is the owners of the wells producing from the same water bearing formation within one-half (1/2) mile, indicate to the District in writing that they have no objection to the proposed well, then the District may proceed to decide such matter without necessity of a hearing.

- c. Hearing notices shall state that the application does not meet the spacing requirements of the District, and an exception is requested by the applicant.

RULE 5.7 REWORKING OR REPLACING EXISTING WELLS:

- a. **Reworked, Re-drilled, Re-equipped Wells or Change the Intended Use of a Well:** No person shall rework, re-drill, or re-equip a well in a manner that would increase the maximum rate of production of water from such well beyond any previous rate of production of such well, or change the intended use of a well, if the production from the well will be greater than 25,000 gallons per day or 17.5 gallons per minute, without first having made an application to the District and having been granted a permit by the District to do so. If the well is sufficiently spaced to comply with existing spacing and production rules for new wells of desired capacity, the District may proceed to grant such application without notice or hearing. If the well is not sufficiently spaced to comply with existing spacing and production rules for new wells of the desired capacity, such permit may be granted only after written notice to the owners of the adjacent properties within one-half (1/2) mile, and a public hearing, as provided in Rule 5.1 herein. Provided, however, that if the owners of the wells producing from the same water bearing formation within one-half (1/2) mile, indicate to the District in writing that they have no objection to the proposed change, then the District may proceed to decide such matter without the necessity of a hearing. A new registration form indicating the new production capacity of the well must be completed and submitted to the District within sixty (60) days of issuance of the permit.

- b. **Replacement Wells:** No person shall replace a well without a permit unless the well is exempted as provided for in Rule 5.3. A replacement well, in order to be considered as such, must be used for the same purpose, watering the same acreage as the well it is replacing. A replacement well must be completed in the same aquifer as the well it replaces, and shall not be drilled, completed, or equipped so as to increase the rate of production of water from the well it replaces. A replacement well must not be located toward any other well or authorized well site unless the new location complies with the minimum spacing and production rules set out in Rule 5.5 herein; otherwise the replacement well shall be considered to be a new well for which an application must be made under Rule 5.4 herein. The District may grant a permit for a replacement well without notice or hearing if the well meets the spacing and production requirements of Rule 5.5, and the applicant agrees to the terms of Rule 5.4

- c. **The location of the well being replaced shall be protected in accordance with the spacing and production rules of the District until the replacement well is drilled and tested.** The owner must, within sixty (60) days of the issuance of the permit, indicate in writing to the District which one of these two wells he/she desires to produce and must submit a completed registration form and driller's log, and any mechanical log which may have been made, on the replacement well. Immediately after determining which well will be retained for production, the other well shall be:
- (1) plugged according to Rule 6.4 herein;
 - (2) If the well is not deteriorated, as defined in Rule 1.1 herein, the well may be capped according to rule 6.4 herein; or
 - (3) properly equipped in such a manner that it cannot produce more than 25,000 gallons per day, or 17.5 gallons per minute.

RULE 5.8 PERMIT AMMENDMENTS:

Transfer Ownership of a Permit: An application to amend any permit to change the name of the permittee must be made within 90 calendar days of the change in ownership of the permitted well. The General Manager may grant such an amendment without notice, hearing, or further action by the Board.

RULE 5.9 TEMPORARY OR EMERGENCY PERMITS:

a. **Basis for Temporary or Emergency Permits:**

Upon application, the General Manager may grant a Temporary or Emergency Permit that authorizes the withdrawal of water from a well not currently drilled or permitted.

1. An application for a Temporary Permit must present sufficient evidence that:
 - (a) no suitable alternative water supply is immediately available to the applicant; and
 - (b) the well usage will not impair the rights of any other owner of interest in the groundwater.
2. An applicant for Emergency Permit must present sufficient evidence that:
 - (a) no suitable alternative water supply is immediately available to the applicant; and
 - (b) an emergency need for the groundwater exists.

- b. **Action on Requests:** The General Manager may grant any application for a Temporary or Emergency Permit without notice, hearing, or further action by the Board. The General Manager may deny an application for a Temporary or Emergency Permit on any reasonable ground including, but not limited to, a determination that the applicant is currently in violation of the District Act or these rules, or that the applicant has a previous unresolved violation on record with the District. Notice of the General Manager's action will be served upon the applicant. Any affected party may appeal the General Manager's action by filing, within twenty business days of that action, 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 must inform the Board of any Temporary or Emergency Permits granted. On the motion of any Board member, and a majority concurrence in the motion, the Board may overrule the action of the General Manager.

- c. **Term of Temporary or Emergency Permit:** No Temporary or Emergency Permit may be issued unless an application for a permit issued under Rule 5.1 has been filed with the District. The term of any Temporary or Emergency Permit granted by the General Manager under this Rule extends only until the Board makes a final decision on the application for the permit under Rule 5.2. Emergency permits for replacement wells may not require a hearing if there is substantial proof that the replacement well will have a reduced impact upon the aquifer than the well it is to replace.

SECTION 6. OTHER DISTRICT ACTIONS AND DUTIES

RULE 6.0 ANNUAL REPORTING FOR UN-PERMITTED, NON-EXEMPT WELLS:

- a. **Reporting:** Within 15 days of December 31, 2003, and annually thereafter, the owners or operators of all non-exempt wells shall file a report to the District the volume of groundwater produced for the previous calendar year, the use of the groundwater, and the aquifer from which the water was produced. The report shall be filed on the appropriate form(s) provided by the District.
- b. **Monitoring Devices:** All production facilities or wells subject to the requirements of this Subsection shall be equipped with production monitoring devices approved by the District and available for District inspection at any time during normal business hours. An hour meter may be considered as a production monitoring device on the well, if the well output (gpm) can be accurately determined.
- c. **Non-compliance of Reporting:** Well owners and operators failing to meet the requirements of this section, as determined by the District, may, at the discretion of the Board, be required to file a production permit application(s) for the well(s) as defined in subsection 5.4 of these rules.

RULE 6.1 DISTRICT MANAGEMENT PLAN: The District Plan specifies the acts, procedures, and performance necessary to prevent waste and protect rights of owners or interest in groundwater, and forms the basis of permitting decisions and permit requirements imposed by the Board. The Board will review the plan as necessary, and when the Board considers a new plan necessary or desirable, a new plan will be adopted. A plan, once adopted, remains in effect until the adoption of a new plan.

RULE 6.2 REGISTRATION OF NEW WELLS:

- a. All new wells must be registered by the well owner, well operator, or water well driller prior to being drilled. Registration may be by mail or telephonic document transfer, using a form provided by the District. The District staff will review the registration and make a preliminary determination on whether the well meets drilling and production permit exclusions or exemptions provided in Rule 5.3, and must inform the registrant of their determination within five business days. If the preliminary determination is that the well is excluded or exempt from requiring a drilling and operating permit, the registrant may begin drilling immediately upon receiving the approved registration.
- b. It is a violation of these rules for a well owner, well operator, or water well driller to drill any well without approved registration form filed with the District.

RULE 6.3 LOCATIONS OF WELLS:

- a. After an application for a well permit has been granted, the well, if drilled must be drilled within thirty (30) feet of the location specified in the permit.
- b. A well shall be located a minimum horizontal distance of fifty (50) feet from any water-tight sewage or liquid-waste collection facility.
- c. A well shall be located a minimum horizontal distance of one hundred and fifty (150) feet from any concentrated sources of contamination, such as existing or proposed livestock or poultry yards, privies, underground storage tanks, and septic system absorption fields. If, however, this distance can not be accommodated within the limits of a person's property, this distance may be decreased provided the total depth of cement slurry is increased by twice the horizontal reduction. In no case shall a well be located less than fifty (50) feet from any concentrated sources of contamination.
- d. 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 twenty-four (24) inches above flood level.
- e. No well shall be located within five-hundred (500) feet of a sewage treatment plant, solid waste disposal site or land irrigated by sewage plant effluent, or within three-hundred (300) feet of a sewage wet well , sewage pumping station or drainage ditch which contains industrial waste discharges or wastes from sewage treatment systems.

RULE 6.4 MINIMUM STANDARDS OF WELL COMPLETION:

- a. The annular space between the borehole and the casing shall be filled from ground level to a minimum depth of twenty (20) feet with cement.
- b. A concrete slab or sealing block shall be placed above the cement around the casing at the ground surface.
 1. The slab or block shall extend at least two (2) feet from the well in all directions, have a minimum thickness of four (4) inches, and should be separated from the well casing by a plastic or mastic coating or sleeve to prevent bonding of the slab to the casing.
 2. The surface of the slab shall be sloped to drain away from the well.
- c. The top of the casing shall extend a minimum of one (1) foot above the ground surface.
- d. If a well is to be completed with polyvinyl chloride (PVC) casing, in lieu of placing A concrete slab around the casing at the ground surface as provided for in section (2) of this rule, a steel sleeve may be used to protect the casing from breakage. The steel sleeve shall be a minimum of three-sixteenths (3/16) inches in thickness and eighteen (18) inches in length, shall extend six (six) inches

- into cement, and shall be two (2) inches larger in diameter than the polyvinyl chloride (PVC) casing being used.
- e. All wells that are to be completed in the artesian or confined portion of an aquifer shall be completed so that waters from other strata or zones are not allowed to commingle through the borehole-casing annulus. Therefore, one of the following shall apply:
 - 1. If the well is to be completed with steel casing, the annular space between the borehole and the casing shall be filled with cement from the top of the water-bearing formation to be produced from to the land surface.
 - 2. If the well is to be completed with polyvinyl chloride (PVC) casing, the Borehole-casing annulus shall be filled with cement, palletized bentonite, or mud, as that term is defined in Rule 1 herein, or other suitable material if specifically approved by the Board, from the top of the water-bearing formation to be produced from to the land surface, provided that if cement is not used, a cement plug will be installed as required in section (a) of this rule.
 - f. If A well is to be gravel packed the full length of the casing, it shall be completed with double string of casing. The outside string of casing must be set to the top of the desired aquifer formation so as to seal off all water bearing strata above the formation, and extend one foot above land surface. The annulus between the outside casing and the borehole shall be completed according to subsection (e.1). The second string of casing may then be set at the desired depth in the aquifer, and the annulus between the two casings shall contain gravel.
 - g. If a gravel packed well is to be drilled in the unconfined portion of an aquifer, it shall be completed with a double string of casing. The outside string of casing shall be set at depth of 20 feet below land surface, extend one foot above land surface, and shall be completed according to subsection (a). The second string of casing may then be set inside of the first string of casing at the desired depth in the aquifer, and the annulus between the two casings shall contain gravel.
 - h. If a well penetrates any undesirable water zones, or zones containing waters that differ significantly in chemical quality, the undesirable water zone shall be sealed off and confined to its zone of origin.
 - 1. When undesirable water is encountered in a zone overlying fresh water, the well shall be cased from the top of the fresh water zone to the land surface and the annular space between the casing and the wall of the borehole shall be cemented to the land surface.
 - 2. When undesirable water is encountered in a zone underlying a fresh water zone, the portion of the well bore opposite the undesirable water zone shall be filled with cement to a height that will prevent the entrance of the undesirable water into the well.
 - i. The well casing shall be capped or completed in a manner that will prevent Pollutants from entering the well as provided for in Rule 6.7 herein.

RULE 6.5 PERSONS AUTHORIZED TO DRILL: Only persons who are licensed water well drillers, in good standing with the Texas Water Well Drillers Board, may drill water wells within the District. The only exceptions allowed will be:

- a. Any person who drills, bores, cores, or constructs a water well on his or her own property for his or her own use provided minimum standards for well completion, as stated in Rule 6.4 herein, are met.
- b. A person who assists in the construction of a well under direct supervision of a licensed well driller and is not primarily responsible for the drilling operation.

RULE 6.6 AQUIFER STORAGE AND RECOVERY (ASR): ASR projects shall be limited to the injection and storage of compatible groundwater as provided in this rule herein.

a. Permits are required on all new, and existing ASR projects:

1. ASR projects are required to be permitted prior to the injection and retrieval of water.
2. Well(s) to be used for injection and retrieval in an ASR project shall have class V injection well approval by the Texas Natural Resources commission prior to application submission.
3. An ASR permit application must be accompanied by applications for production permits for each well to be used for injection or retrieval of water.

b. Permit Application:

1. The permit application provided for herein must be filed with the District in the form or forms promulgated by the District and such permit must be obtained from the District prior to the injection and retrieval of water.
2. An application for the production of water for which a permit is required under this Rule shall:
 - (a) be in writing and sworn to;
 - (b) contain the name, post-office address and place of residence or principal office of the applicant;
 - (c) proposed injection rates and volumes;
 - (d) proposed frequency of injection periods;
 - (e) proposed retrieval rates and volumes;
 - (f) proposed frequency of retrieval periods;
 - (g) estimated radial distances of travel from the injection wells on an annual basis;
 - (h) estimated maximum extent of travel for the life of the project;
 - (i) location of all injection, retrieval and monitoring wells
 - (j) identify the actual or anticipated location, pump size, and production and injection capacity of the well from which the water is to be injected into and retrieved from;
 - (k) the total number of acres of land contiguous in ownership with the land where the well is to be located.
 - (l) state the source of the water to be injected, the quality of the water and a chemical analysis of the water;

- (m) state the anticipated time within which the proposed construction is to begin;
- (n) state the presently anticipated duration required for the proposed use of the project.
- (o) Provide information showing the anticipated effect of the ASR project on groundwater quality;

- (p) A report identifying any potential impacts to artificial penetrations within one-half mile of the perimeter of the buffer zone, and identify well(s) producing from the same formation within one-half (1/2) mile of the proposed well and the owner(s) of said well(s).
- (q) A proposed monitoring plan which would address the quality of water injected and retrieved and the water levels of the receiving body of underground water within the perimeter of the buffer zone and within one half (1/2) mile of the perimeter of the buffer zone. In addition, the proposed monitoring plan shall describe how waters injected and retrieved will be measured and reported;
- (r) Other information as determined by the District as necessary for the protection of underground sources of drinking water.

c. Map Requirements.

1. An overall plan of the project area showing the locations and extent of the proposed works and the locations of all pertinent features, including structures, pipelines, roads, natural springs, artesian wells, and property lines. Also, such plan shall include all proposed or existing injection and retrieval wells associated with the aquifer storage and retrieval project by latitude and longitude;
2. Name(s) and location(s) of the underground formation(s) in which water will be stored for later retrieval and the general direction of flow indicated;
3. Cross sections and profiles of the underground formation(s) into which water will be injected and stored, any underground formation which confines the injection interval, any underground formation(s) located between the storage area and the land surface and the actual and/or proposed operating depths of all planned injection and retrieval facilities;
4. The location of a buffer zone surrounding the land surface area under which the underground storage of water will occur and beyond which pumpage by other wells will not interfere or significantly affect the movement or storage of the water;
5. The location and ownership of all existing domestic, public water supply, Irrigation, or commercial wells within one-half (1/2) mile of the perimeter of the buffer zone described in this subsection, indicated by appropriate symbols to differentiate these works from the proposed works;
6. All elevations shall be referred to mean sea level datum; and
7. Any additional information the District may require to determine the feasibility of the project.

d. Well Construction:

1. All ASR wells shall be constructed to meet the standards as set forth in Title 30, Part 1, Chapter 331 Subchapter H, Rule §331.132, and Subchapter K, Rule §331.183 of the Texas Administrative Code.
 2. Upon completion of the aquifer storage well, the following information shall be obtained and submitted to the District;
 - (a) as-built drilling and completion data on the well(s);
 - (b) all logging and testing data on the well(s);
 - (c) formation fluid analysis;
 - (d) injection fluid analysis;
 - (e) injectivity and pumping tests determining well capacity and reservoir characteristics;
 - (f) hydrogeologic modeling, with supporting data, predicting mixing zone characteristics and injection fluid movement and quality; and
 - (g) other information as determined by the District as necessary for the protection of underground sources of drinking water.
- e. Operating and Reporting:**
1. All Class V aquifer storage wells shall be operated in such a manner that they do not present a hazard to or cause pollution of an underground source of drinking water.
 2. Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure the pressure in the injection zone does not cause movement of fluid out of the injection zone.
 3. The owner or operator of an aquifer storage well that has ceased operations for more than two years shall notify the District 30 days prior to resuming operation of the well.
 4. The owner or operator shall maintain the mechanical integrity of all wells operated under this section.
 5. The quality of water to be injected must meet the quality criteria prescribed by the commission's drinking water standards. The following must be monitored at the required frequency, and reported to the District on a monthly basis:
 - (a) monthly average injection rates;
 - (b) monthly injection and retrieval volumes;
 - (c) monthly average injection pressures;
 - (d) monthly water quality analyses of injected water; and
 - (e) other information as determined by the District as necessary for the protection of underground sources of drinking water.
- f. Permit Requirements and Limitations:**
1. District employees shall have access to the ASR facility for inspection and Data collection at any time during regular District business hours.
 2. Any of the following conditions shall require a permit amendment prior to implementation:
 - (a) changes or additions to injection or retrieval sites;
 - (b) changes in source water or changes in the chemical constituents of the source water.
 - (c) Changes in the annual injection and retrieval rate.

- (d) Retrieval of stored water shall never exceed 90% of the total amount of injected water.
- 3. In the even that water quality is being effected outside of the ASR buffer zone, a suspension in the operation of the project shall be required until a determination is made upon the impact of the ASR project on the degradation of water quality.

RULE 6.7 SEALING, CAPPING AND PLUGGING OF WELLS:

- a. **Sealing Wells.** The District may seal wells that are prohibited from withdrawing groundwater within the District by the District Act, these Rules and Board orders, or when the General Manager determines that sealing a well is reasonably necessary to ensure that the well is not operated in violation of the District Act, these rules Board orders. A well may be sealed when: (1) the well has not been properly permitted; or (2) continued operation of the well will result in waste or pollution. 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. 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 sealed well constitutes a violation of these Rules and will subject 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 Act and these Rules.
- b. **Capping Wells.** 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 commingling of water strata, in which case the well must be plugged.
- c. **Plugging Wells.** It is the responsibility of the landowner to plug a well that is deteriorated or abandoned. A deteriorated or abandoned well must be capped immediately in accordance with Rule 6.4 if the well casing deteriorates to a point where commingling of water strata is either possible or occurring, within 30 calendar days the well must either be equipped or plugged to prevent the commingling.
 - 1. For a deteriorated or abandoned well that does not penetrate any undesirable water zone, all removable casing must be removed from the well plugged as follows:
 - (a) filled with cement to the land surface; or
 - (b) filled with mud followed by a cement plug not less than ten feet long extending downward from a point four feet below land surface; or
 - (c) The well must be filled with mud followed by a cement plug not less than ten feet long extending downward from a point four feet below land surface.
 - 2. For a deteriorated or abandoned well that penetrates any undesirable water zone, all removable casing must be removed from the well and the well plugged as follows;

- (a) filled with cement to the land surface; or
 - (b) either the zone(s) contributing undesirable water or the fresh water zone(s) must be isolated with cement plugs and the remainder of the well bore filled with mud to form a base for a cement plug not less than ten feet long extending down from the land surface; or
 - (c) the well must be filled as provided in subsection (2) above, except the cement plug may extend downward from a point-four feet below the land surface.
3. Any person that plugs a well in the District must, within sixty(60) days after plugging is complete, submit a copy of the plugging report to the District. A copy of the plugging report furnished to the Texas Natural Resource Conservation Commission will suffice as proper notice to the District.

RULE 6.8 DRILLER'S LOG, CASING AND PUMP DATA: Complete records must be kept and reports thereof made to the District concerning the drilling, maximum production potential, equipping and completion of all wells drilled in the District. Such records must include an accurate Driller's log, any mechanical log that may have been made and a registration of the well correctly furnishing all available information required on the forms furnished by the District or on forms furnished by the Texas Natural Resource Conservation Commission. Such reports must be filed within 60 calendar days after completion of the well.

RULE 6.9 TRANSPORTAION OF WATER FROM THE DISTRICT:

- a. For the purpose of conserving groundwater in this District and to thereby insure the continuing health, welfare and safety of the citizens of this District, applications shall be made and permits must be obtained from the Board before installing and/or operating a transportation facility as defined in Rule 1 herein. Such applications shall be on forms provided by the District and shall be in Accordance with and contain the information called for in the application form or in these rules. Otherwise, the application will not be considered. Water wells used or to be used for the transportation of water out of the District shall be subject to permitting requirements as described in section 5 herein.

The Board reserves the right to approve a transportation permit application at reduced rate based upon consideration of:

- 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 transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users in the District; and
- 3. The approved regional water plan and certified District Management plan.
- 4. The District may not deny a permit based on the fact that the applicant seeks to transfer groundwater outside of the District but may limit a permit issued under this section.
- 5. A permit application to transport groundwater out of the District shall be accompanied with a production permit application or production permit amendment for each well that is used to produce groundwater that is proposed to be transported out of the District.

b. IN EVALUATING AN APPLICATION TO TRANSPORT WATER, THE DISTRICT WILL:

1. Evaluate the projected total supply and demand of usable groundwater within the District, including projected groundwater in storage and projected groundwater recharge during:
 1. the amount of water that may be transferred out of the District; and
 2. the period proposed for transport.

c. EXCEPTIONS:

1. A transportation facility permit, as provided for herein, shall not be Required if the transportation of water began prior to September 1, 1997.
2. If a transportation facility is granted an exception, as provided herein above, a registration of such a transportation facility shall be required.
3. District Water Purveyor meeting the following requirements may be Exempt from the requirement for a Transportation Permit and Fee:
 - (a) 95% of the total monthly water volume of the District Water Purveyor must be supplied within the District's Boundaries.
 - (b) The monthly volume of water transported out of the District shall not exceed 5% of the Purveyors corresponding monthly demand.

d. INFORMATION TO BE PROVIDED IN APPLICATION:

The following information shall be provided in or be submitted with an application:

1. The name and address of the applicant.
2. The legal description of the exact location of the well(s) from which water to be transported is to be produced.
3. The name and address of the fee owner(s) of the land upon which is located the well(s) which is to produce water to be transported.
4. The names and addresses of the property owners within one-half (1/2) mile of the location of the well(s) from which water to be transported is to be produced, and the location of any wells on these properties.
5. The time schedule for construction and/or operation of the facility.
6. A complete construction and operations plan that will include, but is not limited to, information as to:
 - (a) A technical description of the proposed well(s) and production facility, including depth of the well, the

- casing diameter, type and setting, the perforated interval, and the size of the pump;
- (b) A technical description of the facilities to be used for transportation of water.
7. The use of water to be transported.
 8. The volume of water to be transported annually.
 9. Scientific evidence showing that the proposed operation will not:
 - (a) Cause pollution, as defined in Rule 1 herein; and
 - (b) Cause waste, as defined in Rule 1 herein.
 10. Provide information showing the effect of the proposed transportation on the quantity and quality of water available within the District.
 11. Provide information showing the effect of the proposed transportation on existing wells in the District.
 12. A water conservation plan and a drought management plan.
 13. Additional information that may be required by the Board.
 14. Any mitigation plan developed by the applicant to offset adverse social economic or hydrologic impacts within the District.

e. NOTICE OF HEARING:

1. The District shall mail notice not less than thirty (30) days before the date set for District consideration of a transportation permit application by first class mail.
 - (a) The applicant, the records of whose application has been filed with the District; and
 - (b) The property owners within one-half (1/2) mile of the location of the well(s) from which water to be transported is to be produced.
2. Because of the potential to impact areas outside of one-half (1/2) mile radius, notice of the application shall be published by the District in a newspaper of general circulation in each of the counties of the District.
3. The notice shall contain the following:
 - (a) the name and address of the applicant;
 - (b) the date the application was filed;
 - (c) the time and place of the hearing;
 - (d) the location of the proposed well(s) from which water to be transported is to be produced;
 - (e) a description of the transportation facility; and
 - (f) a brief summary of the information in the application.

f. HEARING:

A hearing on an application shall be heard without the necessity of issuing further notice other than the time and place where the Board meeting is to take place after the expiration of the time limits set forth herein above. Hearings shall be conducted in accordance with provisions stipulated in these rules. Applications shall not be approved for amounts in excess of the sustainable yield unless the Board of Directors finds and determines that the transporting of water for use outside the District applied for will not substantially affect the quantity and quality of water available to any person or property within the District; or any part of the proposed use will not

constitute waste, as defined by Rule 1 herein. In evaluating the application, the Board shall consider the quantity of water proposed to be transported; whether the ultimate destination of the water is within the recharge zone of the aquifer, thus promoting recharge of the aquifer; the term for which the transporting is requested; the safety of the proposed transportation facilities with respect to the contamination of the aquifer; whether the withdrawal of the groundwater requested is reasonable; whether such withdrawal is contrary to the conservation and use of groundwater; whether the applicant has paid fees required under paragraph j.; and the application is not otherwise detrimental to the public welfare.

g. MONITORING AND REPORTING:

1. All transportation facilities subject to registration or permitting shall be equipped with flow monitoring devices approved by the District and shall be available at all reasonable times for inspection by District personnel.
2. The operator of a transportation facility shall be required to keep records and make reports to the District as to the operation of the transportation facility.
3. Registered transportation facilities shall submit reports to the District on a monthly basis, beginning at the time of registration. Such reports shall include, but is not limited to, the volume of water transported during the preceding month.
4. Permitted transportation facilities shall submit reports to the District on a monthly basis, beginning at the time a permit is issued to operate. Such reports shall include, but is not limited to, the volume of water transported during the preceding month.

h. RESPONSIBILITY: The owner of a transportation facility shall be charged with district liability for the prevention of pollution and waste, as these terms are defined in Rule 1 herein, by reason of the operations of said facility.

i. TRANSPORTATION FEES:

The District shall assess a fee for water transported out of the District using one of the Following methods:

1. a fee negotiated between the District and the transporter; or
2. a rate of \$0.025 (2.5 cents) per one thousand (1000) gallons.

j. EMERGENCY MULTIPLE SYSTEMS INTERCONNECTS: In addition to the above requirements relating to transportation of water from District, the following shall apply to Emergency Multiple Systems Interconnects:

1. All interconnects shall be valved and metered at the District Boundary Lines.
2. The District shall be provided written notice immediately as to the nature of the emergency requiring the emergency interconnect, the estimated time of assistance required, and the current meter reading.
3. Upon application, the General Manager may grant a Temporary Emergency Permit for Emergency Multiple Systems Interconnects, if required, using the general procedures for issuing Emergency Permits under Rule 5.9.

SECTION 7. HEARINGS

RULE 7.1 TYPES OF HEARINGS: The District conducts two general types of hearings: hearings involving permit matters, in which the rights, duties, or privileges of a party are determined after an opportunity for an adjudicative hearing, and 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. Any matter designated for hearing before the Board may be referred by the Board for hearing before a Hearings Examiner.

Permit Hearings: Permit Applications, Amendments and Revocations:

The District may hold hearings on original permit applications, applications for permit renewals or amendments and permit revocations or suspensions. Notice of permit hearings will be given in accordance with Rule 5.4 c. Hearings involving permit matters must be scheduled before a Hearings Examiner.

RULE 7.2 NOTICE AND SCHEDULING OF RULE MAKING HEARINGS:

The General Manager is responsible for giving notice of all hearings in the following manner:

- a. Written notice of a hearing will be given to each county, rural water supply corporation, and municipal government within the District. Notice must also be given to each person who has previously requested copies of hearing notices pursuant to the procedures set forth in subsection (b), and any other person the General Manager deems appropriate. The date of delivery or mailing of notice may not be less than 10 business days before the date set for the hearing.

Notice of hearing must be published at least one time a week for two weeks in a newspaper of general circulation within the District. A rule or amendment to a rule may be adopted by the Board on the fourteenth (14th) day after the second publication. A copy of the notice must be posted at the county courthouse of each county within the District in the place where notices are usually posted as prescribed by law.

RULE 7.3 GENERAL PROCEDURES:

- a. **Authority of Presiding Officer:** The presiding officer may conduct the hearing or other proceeding in the manner the presiding officer deems most appropriate for that particular proceeding. The presiding officer has the authority to:
 - 1. set hearing dates, other than the initial hearing date for permit matters set by the General Manager in accordance with Rule 7.1;
 - 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 the order for 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;
 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; and
 14. exercise any other appropriate powers necessary or convenient to effectively carry out the responsibilities of presiding officer.
- b. Registration Forms:** Each individual attending a hearing or other proceeding of the District must submit a form providing the person's name and address, whether the person plans to testify; and any other information relevant to the hearing or other proceeding.
- c. Appearance; Representative Capacity:** Any interested person may appear in person or may be represented by counsel, engineer, or other representative, provided the representative is fully authorized to speak and act for the principal. Such person or representative may present evidence, exhibits, or testimony, or make an oral presentation in accordance with the procedures applicable to the particular proceeding. Any partner may appear on behalf of the partnership. A duly authorized officer or agent of a public or private corporation, political subdivision, governmental agency, municipality, association, firm, or other entity may appear for the entity. A fiduciary may appear for a ward, trust, or estate. A person appearing in a representative capacity may be required to prove proper authority.
- d. Alignment of Parties; Number of Representatives Heard:** Participants in a proceeding may be aligned according to the nature of the proceeding and their relationship to it. The presiding officer may require the participants of an aligned class to select one or more persons to represent them in the proceeding or on any particular matter or ruling and may limit the number of representatives heard, but must allow at least one representative of an aligned class to be heard in the proceeding or any particular matter or ruling.
- e. Appearance by Applicant or Movant:** The applicant, movant or party requesting the hearing or other proceeding or a representative should be present at the hearing or other proceeding. Failure to appear may be grounds for withholding consideration of a matter and dismissal without prejudice or may require the rescheduling or continuance of the hearing or other proceeding if the presiding officer deems it necessary in order to fully develop the record.
- f. 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 at 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 in accordance with Rule 7.5 (b). 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 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.

- g. Continuance:** The presiding officer may continue hearings or other proceedings from time to time and from place to place without the necessity of publishing, serving, mailing or otherwise issuing a new notice. If a hearing or other proceeding is continued and a time and place (other than the District Office) for the hearing or other proceeding to reconvene are not publicly announced at the hearing or other proceeding and by the presiding officer before it is recessed, a notice of any further setting of the hearing or other proceeding must be delivered at a reasonable time to all parties, persons who have requested notice of the hearing pursuant to Rule 7.1, and any other person the presiding officer deems appropriate, but it is not necessary to post at the county courthouses or publish a newspaper notice of the new setting.
- h. Filing of Documents; Time Limit:** Applications, motions, exceptions, communications, requests, briefs or other papers and documents required to be filed under these Rules or by law must be received in hand at the District's office within the time limit, if any, set by these Rules or by the presiding officer for filing. Mailing within the time period is insufficient if the submissions are not actually received by the District within the time limit.
- i. Computing Time:** In computing any period of time specified by these Rules, by a presiding officer, by Board orders, or by law, the day of the act, event, or default after which the designated period of time begins to run is not included, but the last day of the period computed is included, unless the last day is a Saturday, Sunday or legal holiday, in which case the period runs until the end of the next business day.
- j. Affidavit:** Whenever the making of an affidavit by a party to a hearing or other proceeding is necessary, it may be made by the party or the party's representative or counsel. This Rule does not dispense with the necessity of an affidavit being made by a party when expressly required by statute.
- k. Broadening the Issues:** No person will be allowed to appear in any hearing or other proceeding that in the opinion of the presiding officer is for the sole purpose of unduly broadening the issues to be considered in the hearing or other proceeding.
- l. Conduct and Decorum:** Every person, party, representative, witness, and other participant in a proceeding must conform to ethical standards of conduct and will exhibit courtesy and respect for all other participants. No person may engage in any activity during a proceeding that interferes with the orderly conduct of District business. If in the judgment of the presiding officer, a person is acting in violation of this provision, the presiding officer will first warn the person to refrain from engaging in such conduct. Upon further violation by the same person, the presiding officer may exclude that person from the proceeding for such time and under such conditions as the presiding officer deems necessary.

RULE 7.4 UNCONTESTED PERMIT HEARINGS PROCEDURES:

- a. **Informal Hearings:** Permit hearings may be conducted informally when, in the judgment of the Hearings Examiner, 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.
- b. **Agreement of Parties:** 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.
- c. **Decision to Proceed as Uncontested or Contested Case:** If the parties do not reach a negotiated or agreed settlement of the facts and issues in controversy or if any party contest a staff recommendations, and the Hearings Examiner determines these issues will require extensive discovery proceedings, the Hearing Examiner may declare the case to be contested and convene a prehearing conference as set forth in Rule 7.5. The Hearings Examiner may also recommend issuance of a temporary permit for a period not to exceed 4 months, with any special provisions the Hearings Examiner deems necessary, for the purpose of completing the contested case process. Any case not declared a contested case under this provision will be an uncontested case.

RULE 7.5 CONTESTED PERMIT HEARING PROCEDURES:

- a. **Prehearing Conference:** A prehearing conference may be held to consider any matter that may expedite the hearing or otherwise facilitate the hearing process.
 1. **Matters Considered:** Matters that may be considered at a prehearing conference include, but are not limited to, (1) designation of parties; (2) formulation and simplification of issues; (3) necessity or desirability of amending applications or other pleadings; (4) possibility of making admissions or stipulations; (5) scheduling discovery; (6) identification of and specification of the number of witnesses; (7) filing and exchange of prepared testimony and exhibits; and (8) procedure at the hearing.
 2. **Notice:** A prehearing conference may be held at a date, time, and place stated in a separate notice given in accordance with Rule 7.1, or at the date, time, and place for hearing stated in the notice of public hearing, and may be continued from time to time and place to place, at the discretion of the Hearings Examiner.
 3. **Conference Action:** Action taken at a prehearing conference may be reduced to writing and made a part of the record or may be stated on the record at the close of the conference.
- b. **Assessing Reporting and Transcription Costs:** Upon the timely request of any party, or at the discretion of the Hearings Examiner, the Hearings Examiner may assess reporting and transcription costs to one or more of the parties. The Hearings Examiners will consider the following factors in assessing reporting and transcription costs:

1. the party who requested the transcript;
2. the financial ability of the party to pay the costs;
3. the extent to which the party participated in the hearing;
4. the relative benefits to the various parties of having a transcript;
5. the budgetary constraints of a governmental entity participating in the proceeding;
6. any other factor that is relevant to a just and reasonable assessment of costs.

In any proceeding where the assessment of reporting or transcription costs is an issue, the Hearings Examiner will provide the parties an opportunity to present evidence and argument on the issue. A recommendation regarding the assessment of costs will be included in the Hearings Examiner's report to the Board.

- c. **Designation of Parties:** Parties to a hearing may be designated on the first day of hearing or at such other time as the Hearings Examiner determines. The General Manager and any person specifically named in a matter are automatically designated parties. Persons other than the General Manager or a person specifically named must, in order to be admitted as a party, appear at the proceeding in person or by representative and seek to be designated. After parties are designated, no other person may be admitted as a party unless, in the judgment of the Hearings Examiner, there exists good cause and the hearing will not be unreasonably delayed.
- d. **Rights of Designated Parties:** Subject to the direction and orders of the Hearings Examiner, parties have the right to conduct discovery, present a direct case, cross-examine witnesses, make oral and written arguments, obtain copies of all documents filed in the proceeding, receive copies of all notice issued by the District concerning the proceeding, and otherwise fully participate in the proceeding.
- e. **Persons Not Designated Parties:** At the discretion of the Hearings Examiner, persons not designated as parties to a proceeding may submit comments or statements, orally or in writing. Comments or statements submitted by non-parties may be included in the record, but may not be considered by the Hearings Examiner as evidence.
- f. **Furnishing Copies of Pleadings:** After parties have been designated, a copy of every pleading, request, motion, or reply filed in the proceeding must be provided by the author to every other party or the party's representative. A certification of this fact must accompany the original instrument when filed with the District. Failure to provide copies may be grounds for withholding consideration of the pleading or the matters set forth therein.
- g. **Interpreters for Deaf Parties and Witnesses:** If a party of subpoenaed witness in a contested case is deaf, the District will provide an interpreter whose qualifications are approved by the State Commission for the Deaf and Hearing Impaired to interpret the proceedings for that person. "Deaf person" means a person who has a hearing impairment, whether or not the person also has a speech impairment, that inhibits the person's comprehension of the proceeding or communication with others.
- h. **Agreements to be in Writing:** No agreement between parties or their representatives affecting any pending matter will be considered by the Hearings Examiner unless it is in writing, signed, and filed as

part of the record, or unless it is announced at the hearing and entered of record.

- i. Discovery:** Discovery will be conducted upon such terms and conditions, and at such times and places, as directed by the Hearings Examiner. Unless specifically modified by these Rules or by order of the Hearings Examiner, discovery will be governed by, and subject to the limitations set forth in, the Texas Rules of Civil Procedure. In addition to the forms discovery authorized under the Texas Rules of Civil Procedures, the parties may exchange informal requests for information, either by agreement or by order of the Hearings Examiner.
- j. Discovery Sanctions:** If the Hearings Examiner finds a party is abusing the discovery process in seeking, responding to, or resisting discovery, the Hearings Examiner may:

 - 1. suspend processing of the application for a permit if the applicant is the offending party.
 - 2. disallow any further discovery of any kind or a particular kind by the offending party;
 - 3. rule that particular facts be regarded as established against the offending party for the purposes of the proceeding, in accordance with the claim of the party obtaining the discovery ruling;
 - 4. limit the offending party's participation in the proceeding;
 - 5. disallow the offending party's presentation of evidence on issues that were subject of the discovery request; and
 - 6. recommend to the Board that the hearing be dismissed with or without prejudice.
- k. Ex Parte Communications:** The Hearings Examiner may not communicate, directly or indirectly, in connection with any issue of fact or law with any agency, person, party, or their representatives, except on notice and opportunity for all parties to participate. This provision does not prevent communications with staff not directly involved in the hearing in order to utilize the special skills and knowledge of the District in evaluating the evidence.
- l. Compelling Testimony; and Swearing Witnesses:** The Hearings Examiner may compel any person to testify who is necessary, helpful, or appropriate to the hearing. The Hearings Examiner shall administer the oath in a manner calculated to impress the witness with the importance and solemnity of the promise to adhere to the truth.
- m. Evidence:** Except as modified by these Rules, the Texas Rules of Civil Evidence govern the admissibility and introduction of evidence; however, evidence not admissible under the Texas Rules of Civil 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.
- n. Written Testimony:** 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.

- o. **Requirements for Exhibits:** Exhibits of a documentary character must be of a size that will not unduly encumber the files and records of the District. All exhibits must be numbered and, except for maps and drawings, may not exceed 8 ½ by 11 inches in size.
- p. **Abstracts of Documents:** When documents are numerous, the Hearings Examiner may receive in evidence only those that are representative and may require the abstracting of relevant data from the documents and the presentation of the abstracts in the form of an exhibit. Parties have the right to examine the documents from which the abstracts are made.
- q. **Introduction and Copies of Exhibits:** Each exhibit offered shall be tendered for identification and placed in the record. Copies must be furnished to the Hearings Examiner and to each of the parties, unless the Hearings Examiner rules otherwise.
- r. **Excluding Exhibits:** In the event an exhibit has been identified, objected to, and Excluded, it may be withdrawn by the offering party. If withdrawn, the exhibit will be returned and the offering party waives all objections to the exclusion of the exhibit. If not withdrawn, the exhibit shall be included in the record for the purpose of preserving the objection to excluding the exhibit.
- s. **Official Notice:** The Hearings Examiner may take official notice of all facts judicially cognizable. In addition, official notice may be taken of generally recognized facts within the area of the District's specialized knowledge.
- t. **Documents in District Files:** Extrinsic evidence of authenticity is not required as a condition precedent to admissibility of documents maintained in the files and records of the District.
- u. **Oral Agreement:** At the discretion of the Hearing Examiner, oral arguments may be heard at the conclusion of the presentation of evidence. Reasonable time limits may be prescribed. The Hearings Examiner may require or accept written briefs in lieu of, or in addition to, oral arguments. When the matter is presented to the Board for final decision, further oral arguments may be heard by the Board.

RULE 7.6 CONCLUSION OF THE HEARING; REPORT:

- a. **Closing the Record; Final Report:** At the conclusion of the presentation of evidence and any oral argument, the Hearings Examiner may either close the record or keep it open and allow 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. After the record is closed, the Hearings Examiner shall prepare a report to the Board. The report will include a summary of the evidence, together with the Hearings Examiner's findings and conclusions and recommendations for action. Upon completion and issuance of the Hearings Examiner's report, 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.
- b. **Exceptions to the Hearings Examiner's Report; Reopening the Record:** Prior to Board action any party in a contested case may file written exceptions to Hearings Examiner's report, 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 report and exceptions, the Hearings Examiner may reopen the record for the purpose of developing additional evidence, or may deny the

evidence, or may deny the exceptions and submit the report and exceptions to the Board. The Board may, at any time and in any case, remand the matter to the Hearings Examiner for further proceedings.

- c. **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 report should be submitted, and the Board should act, within 60 calendar days after the close of the hearing record.

RULE 7.7 RULEMAKING HEARING PROCEDURES

- a. **General Procedures:** 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.
- b. **Submission of Documents:** 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, as stated in the notice of hearing given in accordance with Rule 7.2; provided, however, that the presiding officer may grant additional time for the submission of documents.
- c. **Oral Presentations:** 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.
- d. **Conclusion of the Hearing; Closing the Record;** Hearings Examiner's report: At the conclusion of the testimony, and after the receipt of all documents, the presiding officer may either close the record, or keep it open to allow the submission of additional information. If the presiding officer is a Hearings Examiner, the Hearings Examiner will, after the record is closed, prepare a report to the Board. The report will include a summary of the subject of the Hearing and the public comments received, together with the Hearings Examiner's recommendations for action. Upon Completion and issuance of the Hearings Examiner's report, a copy will be submitted to the Board. Any interested person who so requests in writing will be notified when the report is completed, and furnished a copy of the report.
- e. **Exceptions to the Hearings Examiner's Report;** Reopening the Record: Any interested person may make exceptions to the Hearings Examiner's report, and the Board may reopen the record, in the manner prescribed in Rule 7.6 (b).

RULE 7.8 FINAL DECISION; APPEAL:

- a. **Board Action:** After the record is closed and the matter is submitted to the Board, the Board may then take the matter under advisement, continue it from day to day, reopen or rest the matter, refuse the action sought or grant the same in whole or part, or take any other appropriate action. The Board action takes effect at the conclusion of the meeting and is not affected by a motion for rehearing.

- b. **Requests for Rehearing:** Any decision of the Board on a matter may be appealed by requesting a rehearing before the Board within 20 calendar days of the Board's decision. Such a rehearing request must be filed at the District Office in writing and must state clear and concise grounds for the request. Such a rehearing request is mandatory with the respect to any decision or action of the Board before any appeal to State District Court. The Board's decision is final if no request for rehearing, or upon rendering a decision after rehearing. If the rehearing request is granted by the Board, the date of the rehearing will be within 45 calendar days thereafter, unless otherwise agreed to by the parties to the proceeding. The failure of the Board to grant or deny the request for rehearing within 90 calendar days of submission will be deemed to be a denial of the request.

SECTION 8. GROUNDWATER QUALITY

RULE 8.1 SOLID, HAZARDOUS OR RADIOACTIVE WASTE: All persons generating, transporting, disposing, applying, or otherwise managing substances defined under state or federal law as solid, hazardous, or radioactive waste, or as sludge, must follow any and all applicable federal, state, and local environmental statutes, requirements, and regulations, including, but not limited to those imposed under the Solid Waste Disposal Act (RCRA), The Public Health Service Act (the Safe Drinking Water Act), the Federal Water Pollution Control Act (the Clean Water Act), the National Environment Policy Act, the Atomic Energy Act and the Low-Level Radioactive Waste Policy Act, as those statutes, requirements or regulations are administered by the appropriate agency, including but not limited to the Texas Railroad Commission, the Texas Natural Resource Conservation Commission, The Texas Department of Health, or their successors, and the Environmental Protection Agency in the event that applicable statutes, requirements, or regulations require that the person generating, transporting, applying, disposing or otherwise managing a waste or a sludge obtain a permit from an agency, and where those activities occur within the boundaries of the District, notice of the application must be provided to the District by the applicant within ten days of the date of application. In no event may waste or sludge be permitted to be applied in any manner in any outcrop area of any aquifer within the Evergreen Underground Water Conservation Water District.

RULE 8.2 RECHARGE FACILITIES: A permit must be obtained before installing or operating a recharge facility. The following information must be provided on, or submitted with the application:

- (1) The name and address of the applicant.
- (2) The name and address of the fee owner(s) of the land upon which the recharge facility will be located.
- (3) The legal description of the exact proposed location of the recharge facility.
- (4) The time schedule for construction and/or operation of the facility.
- (5) The names and addresses of the property owners within one-half (1/2) mile of the proposed recharge facility location, and the location of any wells on those properties.
- (6) A complete construction and operations plan that will include, but is not limited to, information as to:
 - (a) a technical description of the facility to be used for recharge.
 - (b) The source of the water to be recharged
 - (c) The quality of the water to be recharged.
 - (d) The volume of water to be recharged.

- (e) The rate at which the water will be recharged.
- (f) The formation into which waters will be recharged.
- (7) Scientific evidence showing that the proposed operations will not:
 - (a) endanger the structural characteristics of the formation receiving the recharged water.
 - (b) Cause pollution, as defined in Rule 1, of underground water.
 - (c) Cause waste, as defined in Rule 1.
- (8) Any additional information that may be required by the Board.

SECTION 9.1 INVESTIGATIONS AND ENFORCEMENT

RULE 9.1 NOTICE AND ACCESS TO PROPERTY: Board Members, the General Manager, and District agents and employees are entitled to access to all property within the District to carry out technical and other investigations necessary to the implementation of the District Act and these Rules. Prior to entering upon property for the purpose of conducting an investigation, the person seeking access shall 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 in file with the District. Notice is not required if prior permission has been granted to enter without notice. Inhibiting or prohibiting access to any Board Member, the General Manager, or District agents or employees who are attempting to conduct an investigation under the District Act or these Rules shall constitute a violation and shall subject the person who is inhibiting or prohibiting access, as well as any other person who authorized or allows such action, to the penalties set forth in the District Act.

RULE 9.2 LIMITATIONS OF DISTRICT EMPLOYEE ACTIVITIES: District employees may not gather information not specifically related to the purposes of the District, the District Act, these Rules, or District Policy.

RULE 9.3 CONDUCT OF INVESTIGATION: Where investigations or inspections require entrance upon property, such investigations and such inspections will be conducted at reasonable times, and will be consistent with the establishment's rules and regulations concerning safety, internal security, and fire protection. The persons conducting such investigations must identify themselves and present credentials upon request of the owner, lessee, operator, or person in charge of the well.

RULE 9.4 REQUEST FOR INJUNCTIVE RELIEF AND ASSESSMENT OF PENALTIES: If it appears that a person has violated, is violating, or is threatening to violate any provision of the District Act or any Board order, rule or permit, the Board may authorize the General Manager to institute and conduct a suit in the name of the District for injunctive relief, or to recover a civil penalty of up to ten thousand dollars (\$10,000.00) per day per violation, and each day of a continuing violation constitutes a separate violation, or for both injunctive relief and civil penalties. A penalty under this section is in addition to any other penalty provided by the law of this state and may be enforced by complaints filed in the appropriate court of jurisdiction in the county in which the District's principal office or meeting place is located. If the District prevails in any suit to enforce its rules, the District may seek and the court shall grant, in the same action, recovery for attorney's fees, cost for expert witnesses, and other costs incurred by the District before the court. The amount of the attorney's fees shall be fixed by the court.

SECTION 10. FEES

RULE 10.1 APPLICATION, REGISTRATION, AND OTHER FEES: The Board shall establish a schedule of fees. The Board will attempt to set fees that do not unreasonably exceed the costs incurred by the District of performing the administrative function which the fee is charged. District Monitor Wells are exempt from application, registration, and well log deposits. The General Manager shall exempt District Monitor Wells from any other fee if he determines that the assessment of the fee would result in the District charging itself a fee.

RULE 10.2 APPLICATION PROCESSING FEE: The Board may adopt a processing fee for drilling and production permits and transportation permits to cover all reasonable and necessary costs to the District of processing and application. The fee shall be sufficient to cover actual costs incurred by the District for activities associated with processing the application including, as appropriate: hydrogeological studies and modeling, field inspections, cost benefit analysis and economic modeling, professional fees, and cost of a contested case hearing including costs incurred by the District for a hearings examiner, expert witnesses, attorneys and transcript costs. In any case in which a contested hearing is anticipated, the Board may require the applicant to post a deposit, in an amount established by the District's schedule of fees, to cover anticipated processing costs. As costs are incurred by the District in processing the application, those costs may be reimbursed from funds deposited by the applicant. The applicant shall be provided an accounting of billings against the application processing deposit. Any funds remaining on deposit after the conclusion of application processing shall be returned to the applicant. If initially deposited funds are determined to be insufficient to cover costs incurred by the District in processing the application, an additional deposit may be required. If the applicant fails to deposit funds as required by the District, the application may be dismissed.

**RESOLUTION ADOPTING RULES OF THE
EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT**

WHEREAS, The Rule of the Evergreen Underground Water Conservation District, attached hereto as Attachment A, have been developed for the purpose of conserving, preserving, protecting and recharging the underground water in the District, and this action is taken under the District's statutory authority to prevent waste and protect rights of owners of interest in groundwater;

WHEREAS, In accordance with Section 59, Article 16 of the Constitution of the State of Texas, and in accordance with the Evergreen Underground Water Conservation District Act, 59th Leg., R.S., ch. 197, 1965 Tex. Gen. Laws 398 (Vernon); as amended by Act of May 25, 1967, 60th Leg., R.S., ch. 1272, 1967 Tex. Gen. Laws 1676 (Vernon); Act of May 30, 1983, 68th Leg., R.S., ch. 484, 1983 Tex. Gen. Laws 2852 (Vernon); and Act of May 17, 1985, 69th Leg., R.S., ch 438, 1985 Tex. Gen. Laws 2984 (Vernon); the following rules are hereby ratified and adopted as the rules of the Evergreen Underground Water Conservation District by its Board of Directors;

WHEREAS, The rules, regulations and modes or procedure contained are adopted for the purpose of simplifying procedure, avoiding delays, saving expense and facilitating the administration of this District and these rules shall be so construed; and

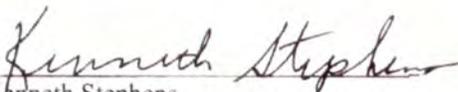
WHEREAS, Under no circumstances, and in no particular case will these Rules, or any part of them, be construed as a limitation or restriction upon the exercise of any discretion, where such exists; nor may they in any event be construed to deprive the Board of an exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount and character of data or information which may be required for the proper administration of the law.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE
EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT THAT:**

1. The "Rules of the Evergreen Underground Water Conservation District" contained in attachment A are hereby adopted.
2. All prior rules are hereby repealed.
3. The General Manager is hereby authorized to take any and all action necessary to implement this resolution.
4. These rules take effect November 21, 2002.

AND IT IS SO ORDERED.

PASSED AND ADOPTED ON THIS 21ST DAY OF NOVEMBER, 2002.

SIGNED 
Kenneth Stephens
President

ATTEST 
William H. Ruple
Secretary/Treasurer

Appendix C

Details on the Calculation Of the Estimate of the Total Useable Amount of Groundwater in the District

Groundwater Availability of the Carrizo-Wilcox Aquifer

It is the Districts' mission to conserve the groundwater in storage in the District to maintain the current aquifer conditions without stifling the economic viability and potential growth of the District. The Southern Carrizo-Wilcox aquifer GAM indicates that there is a large amount of groundwater in storage in the District. The Carrizo Sand sub-division of the Carrizo-Wilcox aquifer alone contains 305,000,000 acre-feet of groundwater in storage. For this reason the District has used a water budget method of determining the groundwater availability in the Carrizo-Wilcox aquifer. The methodology for determining the availability of groundwater from the Carrizo-Wilcox aquifer considers the amount of recharge to the aquifer in each county, the net down gradient movement of groundwater, the amount of water needed from storage to sustain current use, anticipated regional water management strategies that require development of additional supplies from the aquifer and an additional degree of unanticipated new growth or expansion of current aquifer use in the District. While an aggregate total availability of groundwater from the Carrizo-Wilcox aquifer is presented. The Carrizo-Wilcox groundwater availability sub-totals for each county will be considered as limiting the amount of useable groundwater from the aquifer within the county on an annual basis.

County	Infiltration Recharge from Precipitation (ac-ft/year)	Inter-aquifer Leakage (Net Recharge or Loss in ac-ft/year)	Net Down-Gradient Movement in the Aquifer (ac-ft/year)	TWDB Reported Use in Year 2000 (ac-ft/year)	Interim Balance (annual amount taken from storage in ac-ft/year)	Region L WMS 2010 needs for Additional Groundwater (ac-ft/year)	Volume of Water Stored in Carrizo Sand (ac-ft)	Carrizo-Wilcox aquifer Availability in EUWCD
Atascosa	13,864	-2,651	9,362	45,330	-24,755	0	126,000,000	47,806
Frio	5,411	12,715	-5,386	120,035	-107,295	0	81,000,000	130,765
Karnes	0	-3,414	803	398	-3,009	0	14,000,000	699
Wilson	10,867	16,199	-7,039	21,642	-1,615	11,000	84,000,000	32,804

1- The amount of water required to supply water management strategies recommended by the SCTRWPG which require additional development of the aquifer and are not conservation demand reduction strategies

2- The District has allowed for an additional amount of water to be removed from storage on an annual basis that is equal to twenty five percent increase in the amount of water currently used from the aquifer in each county

Table 9, Groundwater Availability from the Carrizo-Wilcox aquifer

Groundwater Availability of the Gulf Coast, Queen City and Sparta Aquifers

The area in the District in which useable quality of groundwater is accessible from the Gulf Coast, Queen City and Sparta aquifers is limited. The current amount of groundwater estimated being used from these aquifers is relatively low as compared to the estimates of groundwater recharge for each aquifer. For the purpose of managing the Gulf coast, Queen City and Sparta aquifer s the amount of groundwater estimated to be recharged on an annual basis shall be

considered the amount of groundwater available for use on an annual basis within the District.

Appendix D

Details on the Calculation Of Recharge Values For the Carrizo-Wilcox, Gulf Coast, Sparta and Queen City aquifers

Selected Data from the TWDB GAM-run of the Southern Carrizo-Wilcox GAM
Done at the Request of the District

County	Lyr	upper		lower		Wells	Recharge
		Z-flow in	Z-flow out	Z-flow in	Z-flow out		
Atascosa	1	0	0	4,985	-1,777	-208	*5,866
	2	1,777	-4,985	4,639	-1,988	-362	1,809
	3	1,988	-4,639	1,955	-945	-16,129	9,762
	4	945	-1,955	1,263	-79	-11	403
	5	79	-1,263	691	-777	-288	3,570
	6	777	-691	0	0	-111	129
	All	5,566	-13,533	13,533	-5,566	-17,110	21,539
Frio	1	0	0	63	-12,930	-327	*42,633
	2	12,930	-63	741	-13,456	-99	7,607
	3	13,456	-741	2,848	-1,314	-5,161	5,411
	4	1,314	-2,848	2,648	-591	-108	0
	5	591	-2,648	2,063	-75	-89	0
	6	75	-2,063	0	0	-1	0
	All	28,365	-8,362	8,362	-28,365	-5,786	55,651
Karnes	1	0	0	3,313	0	-819	0
	2	0	-3,313	3,414	0	-1	0
	3	0	-3,414	267	-87	-246	0
	4	87	-267	248	0	0	0
	5	0	-248	375	0	0	0
	6	0	-375	0	0	0	0
	All	87	-7,617	7,617	-87	-1,066	0
Wilson	1	0	0	-1,918	-13,263	-1,484	*35,486
	2	13,263	-1,918	1,817	-18,016	-835	4,593
	3	18,016	-1,817	954	-231	-18,323	7,575
	4	231	-954	1,023	-5	-337	184
	5	5	-1,023	929	-407	-2,214	3,108
	6	407	-929	0	0	-376	0
	All	31,922	-6,640	6,640	-31,922	-23,570	50,946

Layer 1 = Queen City aquifer
 Layer 2 = Reklaw Formation
 Layer 3 = Carrizo Sand
 Layer 4 = Upper Portion of Wilcox Formation
 Layer 5 = Middle Portion of Wilcox Formation
 Layer 6 = Lower Portion of Wilcox Formation

* TWDB notes that the Queen City was included in the Southern Carrizo-Wilcox GAM as a boundary layer and the recharge estimates should not be considered reliable

The estimate of the Carrizo-Wilcox aquifer recharge by surface infiltration in each county was made by summing the values in the recharge column of the data table for GAM layers 3 through 6. The estimate of the Carrizo-Wilcox aquifer recharge by leakage from overlying formations was made by summing the values in the Z –flow in and Z-flow out for GAM layer 3 in each county.

The Central Gulf Coast GAM was not available at the time of development of this plan and could not be used to determine the recharge to the Gulf Coast aquifer in Karnes County. Texas Board of Water Engineers (TBWE) Bulletin 6007, "The Ground-Water Geology of Karnes County, Texas" does not contain an estimate of recharge to the Gulf Coast aquifer in Karnes County but indicated that the amount of recharge in Karnes County was probably low. A preliminary average rate of recharge for the Gulf Coast aquifer of approximately 1.1 inches per year has been published for the Northern Gulf Coast aquifer GAM by the United States Geologic Survey. This value was presented by USGS during the Stakeholder Advisory Forum meeting for the Northern Gulf Coast aquifer GAM of January 29th, 2003.

A recharge rate of approximately 1.1 inches per year represents approximately 2.75 percent of an annual rainfall of 40 inches. The recharge potential in Karnes County is considered low and the average annual rainfall amount is 28.9 inches. (Anders, 1960) Given these considerations a conservative rate of recharge 1.75 percent of annual rainfall was assumed for the calculation of a recharge amount for the Gulf Coast aquifer in Karnes County. The methodology used to calculate the annual amount of recharge is as follows:

1.75% of 28.9 inches of annual rainfall = 0.50575 inches per year

0.50575 inches per year rounded to 0.5 inches per year
(To avoid implication of undue accuracy)

0.5 inches per year / 12 inches (1 foot) = 0.04166 feet per year

0.04166 feet per year rounded to 0.042 feet per year
(To avoid implication of undue accuracy)

Area of the Gulf Coast aquifer outcrop in Karnes County = 361,800 acres
(GIS calculation from TWDB major aquifer map)

0.042 feet per year x 361,800 acres = 15,195.6 (**15,200**) acre-feet per year

TBWE Bulletin 5710, "Ground-Water Geology of Wilson County, Texas", TWDB Report 32 "Groundwater Resources of Atascosa and Frio Counties" and TWDB Report 210 "Ground-Water Resources of the Carrizo Aquifer in the Winter Garden Area of Texas" were referenced but do not include an estimate of the recharge amount or rates of recharge for the Queen City and Sparta aquifers in the District. The assumptive rate of recharge of 1.75 percent of average annual rainfall used to calculate the Gulf Coast aquifer recharge in Karnes County was applied to the recharge calculations for the Queen City and Sparta aquifers in Atascosa, Frio and Wilson Counties. Average annual rainfall values of 25.4 inches per year for Atascosa and 22.6 inches per year were found in TWDB

Report 32. An average annual rainfall value of 26.8 inches per year for Wilson County was found in TBWE Bulletin 5710.

The methodologies used to calculate the amount of recharge to the Queen City and Sparta aquifers in Atascosa, Frio and Wilson Counties is as follows:

Atascosa County

Average annual rainfall = 25.4 inches per year (TWDB Report 32)

25.4 inches per year x 1.75% = 0.4445 inches per year

0.4445 inches per year rounded to 0.44 inches per year

(To avoid implication of undue accuracy)

0.44 inches per year / 12 inches (1 foot) = 0.0366 feet per year

0.0366 feet per year rounded to 0.037 feet per year

((To avoid implication of undue accuracy)

Area of the **Queen City** aquifer outcrop in Atascosa County = 118,289 acres

(GIS calculation from TWDB major aquifer map)

0.037 feet per year x 118,289 acres = 4,376.6 (**4,380**) acre-feet per year

Area of the **Sparta** aquifer outcrop in Atascosa County = 31,027 acres

(GIS calculation from TWDB major aquifer map)

0.037 feet per year x 31,027 acres = 1,147.9 (**1,150**) acre-feet per year

Frio County

Average annual rainfall = 22.6 inches per year (TWDB Report 32)

22.6 inches per year x 1.75% = 0.3955 inches per year

0.3955 inches per year rounded to 0.4 inches per year

(To avoid implication of undue accuracy)

0.4 inches per year / 12 inches (1 foot) = 0.0333 feet per year

0.0333 feet per year rounded to 0.033 feet per year

((To avoid implication of undue accuracy)

Area of the **Queen City** aquifer outcrop in Frio County = 243,228 acres

(GIS calculation from TWDB major aquifer map)

0.033 feet per year x 243,228 acres = 8,026.5 (**8,000**) acre-feet per year

Area of the **Sparta** aquifer outcrop in Frio County = 38,050 acres

(GIS calculation from TWDB major aquifer map)

0.033 feet per year x 38,050 acres = 1,255.65 (**1,260**) acre-feet per year

Wilson County

Average annual rainfall = 26.8 inches per year (TBWE Bulletin 5710)

26.8 inches per year x 1.75% = 0.469 inches per year

0.469 inches per year rounded to 0.47 inches per year

(To avoid implication of undue accuracy)

0.47 inches per year / 12 inches (1 foot) = 0.039166 feet per year

0.039166 feet per year rounded to 0.039 feet per year

((To avoid implication of undue accuracy)

Area of the **Queen City** aquifer outcrop in Wilson County = 144,917 acres

(GIS calculation from TWDB major aquifer map)

0.039 feet per year x 144,917 acres = 5,651.7 (**5,650**) acre-feet per year

Area of the **Sparta** aquifer outcrop in Wilson County = 25,037 acres

(GIS calculation from TWDB major aquifer map)

0.039 feet per year x 25,037 acres = 976.4 (**980**) acre-feet per year

Appendix E
TWDB Annual Water Use Survey
Groundwater Use Estimates
For
Atascosa, Frio, Karnes and Wilson Counties
1980, 1984 – 2000

Atascosa County Estimated Groundwater use in ac-ft per year

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1980	3596	0	0	1171	68496	142	73405
Edwards-BFZ	1980	433	0	0	0	0	0	433
Queen City	1980	113	0	0	0	4382	49	4544
Sparta	1980	26	0	0	0	730	20	776
Carrizo-Wilcox	1984	6262	3	5792	949	34344	149	47499
Edwards-BFZ	1984	693	0	0	0	0	0	693
Queen City	1984	197	0	0	0	695	38	930
Sparta	1984	72	0	0	0	0	4	76
Carrizo-Wilcox	1985	2394	3	3950	1752	30947	157	39203
Edwards-BFZ	1985	510	0	0	0	0	0	510
Queen City	1985	3326	0	0	0	624	40	3990
Sparta	1985	32	0	0	0	0	4	36
Carrizo-Wilcox	1986	4604	3	5550	1002	42738	137	54034
Edwards-BFZ	1986	495	0	0	0	0	0	495
Queen City	1986	26	0	0	0	862	35	923
Sparta	1986	0	0	0	0	0	4	4
Carrizo-Wilcox	1987	4635	0	5626	1373	26254	118	38006
Edwards-BFZ	1987	471	0	0	0	0	0	471
Queen City	1987	27	0	0	0	529	30	586
Sparta	1987	39	0	0	0	0	3	42
Carrizo-Wilcox	1988	5683	0	6352	1313	34749	122	48219
Edwards-BFZ	1988	582	0	0	0	0	0	582
Queen City	1988	28	0	0	0	701	31	760
Sparta	1988	46	0	0	0	0	3	49
Carrizo-Wilcox	1989	5980	0	5532	597	49894	120	62123
Edwards-BFZ	1989	670	0	0	0	0	0	670
Queen City	1989	34	0	0	0	1020	31	1085
Sparta	1989	51	0	0	0	0	3	54
Carrizo-Wilcox	1990	4982	0	6036	664	46275	125	58082
Edwards-BFZ	1990	552	0	0	0	0	0	552
Queen City	1990	157	0	0	0	933	32	1122
Sparta	1990	56	0	0	0	0	3	59
Carrizo-Wilcox	1991	2917	0	6637	1428	48684	128	59794
Edwards-BFZ	1991	497	0	0	0	0	0	497
Queen City	1991	166	0	0	0	982	33	1181
Sparta	1991	57	0	0	0	0	3	60
Carrizo-Wilcox	1992	4232	0	5987	1412	36339	141	48111
Edwards-BFZ	1992	483	0	0	0	0	0	483
Queen City	1992	165	0	0	0	733	36	934

Atascosa County Estimated Groundwater use in ac-ft per year, Continued

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1993	4,625	0	6,474	1,344	42,847	150	55,440
Edwards-BFZ	1993	515	0	0	0	0	0	515
Queen City	1993	160	0	0	0	882	38	1,080
Sparta	1993	57	0	0	0	0	3	60
Carrizo-Wilcox	1994	4,698	0	6,146	1,264	42,518	168	54,794
Edwards-BFZ	1994	494	0	0	0	1,464	0	1,958
Queen City	1994	158	0	0	0	809	43	1,010
Sparta	1994	53	0	0	0	0	3	56
Carrizo-Wilcox	1995	4,785	0	5,980	1,377	45,182	154	57,478
Edwards-BFZ	1995	536	0	0	0	1,372	0	1,908
Queen City	1995	155	0	0	0	860	39	1,054
Sparta	1995	52	0	0	0	0	3	55
Carrizo-Wilcox	1996	5,213	0	5,848	1,377	46,529	144	59,111
Edwards-BFZ	1996	605	0	0	0	1,413	0	2,018
Queen City	1996	153	0	0	0	886	36	1,075
Sparta	1996	70	0	0	0	0	3	73
Carrizo-Wilcox	1997	4,759	0	6,839	1,256	35,172	131	48,157
Edwards-BFZ	1997	493	0	0	0	1,068	0	1,561
Queen City	1997	61	0	0	0	670	33	764
Sparta	1997	61	0	0	0	0	3	64
Carrizo-Wilcox	1998	4,921	0	7,209	1,125	46,254	124	59,633
Edwards-BFZ	1998	555	0	0	0	1,404	0	1,959
Queen City	1998	155	0	0	0	881	28	1,064
Sparta	1998	57	0	0	0	0	3	60
Carrizo-Wilcox	1999	5,025	0	7,209	1,125	35,398	132	48,889
Edwards-BFZ	1999	550	0	0	0	1,075	0	1,625
Queen City	1999	155	0	0	0	674	33	862
Sparta	1999	57	0	0	0	0	3	60
Carrizo-Wilcox	2000	4,855	0	5,814	1,125	33,403	133	45,330
Edwards-BFZ	2000	543	0	0	0	1,014	0	1,557
Queen City	2000	155	0	0	0	636	38	829
Sparta	2000	63	0	0	0	0	3	66

Frio County Estimated Groundwater use in ac-ft per year

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1980	2,878	12	682	341	74,015	177	78,105
Queen City	1980	60	0	0	0	748	34	842
Sparta	1980	8	0	0	0	0	4	12
Carrizo-Wilcox	1984	2,858	12	348	323	88,390	110	92,041
Queen City	1984	41	0	0	0	893	21	955
Sparta	1984	5	0	0	0	0	3	8
Carrizo-Wilcox	1985	2,673	12	289	438	47,975	98	51,485
Queen City	1985	36	0	0	0	485	19	540
Sparta	1985	5	0	0	0	0	2	7
Carrizo-Wilcox	1986	2,636	12	73	7	66,545	88	69,361
Queen City	1986	48	0	0	0	672	17	737
Sparta	1986	6	0	0	0	0	2	8
Carrizo-Wilcox	1987	2,436	0	92	388	65,310	91	68,317
Queen City	1987	48	0	0	0	660	18	726
Sparta	1987	6	0	0	0	0	2	8
Carrizo-Wilcox	1988	2,969	0	794	339	85,207	89	89,398
Queen City	1988	51	0	0	0	861	18	930
Sparta	1988	6	0	0	0	0	2	8
Carrizo-Wilcox	1989	3,280	0	7	313	95,405	88	99,093
Queen City	1989	51	0	0	0	964	17	1,032
Sparta	1989	6	0	0	0	0	2	8
Carrizo-Wilcox	1990	2,992	0	1	313	80,752	89	84,147
Queen City	1990	47	0	0	0	816	18	881
Sparta	1990	6	0	0	0	0	2	8
Carrizo-Wilcox	1991	3,001	0	51	222	88,548	92	91,914
Queen City	1991	52	0	0	0	804	18	874
Sparta	1991	6	0	0	0	0	2	8
Carrizo-Wilcox	1992	2,552	0	50	222	85,424	98	88,346
Queen City	1992	41	0	0	0	776	19	836

Frio County Estimated Groundwater use in ac-ft per year, Continued

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1993	2,991	0	111	215	96,683	108	100,108
Queen City	1993	38	0	0	0	878	21	937
Sparta	1993	4	0	0	0	0	2	6
Carrizo-Wilcox	1994	2,904	0	185	214	106,657	122	110,082
Queen City	1994	42	0	0	0	0	24	66
Sparta	1994	5	0	0	0	0	2	7
Carrizo-Wilcox	1995	2,486	0	192	139	101,885	123	104,825
Queen City	1995	50	0	0	0	0	24	74
Sparta	1995	6	0	0	0	0	2	8
Carrizo-Wilcox	1996	3,004	0	227	139	92,487	75	95,932
Queen City	1996	53	0	0	0	0	15	68
Sparta	1996	6	0	0	0	0	1	7
Carrizo-Wilcox	1997	2,545	0	125	139	58,877	74	61,760
Queen City	1997	65	0	0	0	0	15	80
Sparta	1997	7	0	0	0	0	1	8
Carrizo-Wilcox	1998	2,520	0	134	139	84,215	103	87,111
Queen City	1998	60	0	0	0	0	20	80
Sparta	1998	6	0	0	0	0	2	8
Carrizo-Wilcox	1999	2,904	0	134	139	80,040	108	83,325
Queen City	1999	47	0	0	0	0	22	69
Sparta	1999	5	0	0	0	0	1	6
Carrizo-Wilcox	2000	3,129	0	129	139	116,538	100	120,035
Queen City	2000	64	0	0	0	0	19	83
Sparta	2000	7	0	0	0	0	2	9

Karnes County Estimated Groundwater use in ac-ft per year

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1980	192	0	0	1,102	0	57	1,351
Gulf Coast	1980	2,074	8	0	44	500	105	2,731
Carrizo-Wilcox	1984	228	297	0	233	0	57	815
Gulf Coast	1984	2,728	4	0	43	1,668	105	4,548
Carrizo-Wilcox	1985	194	96	0	255	0	46	591
Gulf Coast	1985	2,375	5	0	23	1,270	87	3,760
Carrizo-Wilcox	1986	213	90	0	257	0	45	605
Gulf Coast	1986	2,222	2	0	8	1,800	82	4,114
Carrizo-Wilcox	1987	211	122	0	266	0	46	645
Gulf Coast	1987	2,319	0	0	72	1,922	85	4,398
Carrizo-Wilcox	1988	209	105	0	334	0	46	694
Gulf Coast	1988	2,017	0	0	79	2,030	87	4,213
Carrizo-Wilcox	1989	225	211	0	149	0	45	630
Gulf Coast	1989	2,431	0	0	38	282	86	2,837
Carrizo-Wilcox	1990	326	176	0	162	0	46	710
Gulf Coast	1990	2,337	0	0	25	1,831	89	4,282
Carrizo-Wilcox	1991	197	213	0	102	0	25	537
Gulf Coast	1991	2,110	0	0	10	1,440	115	3,675
Carrizo-Wilcox	1992	207	107	0	132	0	24	470
Gulf Coast	1992	2,183	0	0	4	1,185	110	3,482
Carrizo-Wilcox	1993	216	85	0	132	0	23	456
Gulf Coast	1993	2,199	0	0	4	966	108	3,277
Carrizo-Wilcox	1994	212	190	0	132	0	21	555
Gulf Coast	1994	2,181	0	0	4	956	101	3,242
Carrizo-Wilcox	1995	231	127	0	133	0	22	513
Gulf Coast	1995	2,375	0	0	4	1,054	102	3,535
Carrizo-Wilcox	1996	237	10	0	133	0	31	411
Gulf Coast	1996	2,561	0	0	4	1,488	142	4,195
Carrizo-Wilcox	1997	198	1	0	128	0	21	348
Gulf Coast	1997	2,556	0	0	4	642	94	3,296
Carrizo-Wilcox	1998	223	0	0	115	0	21	359
Gulf Coast	1998	3,134	0	0	4	518	94	3,750
Carrizo-Wilcox	1999	283	0	0	115	0	21	419
Gulf Coast	1999	3,140	0	0	4	538	97	3,779
Carrizo-Wilcox	2000	262	0	0	115	0	21	398
Gulf Coast	2000	3,183	0	0	4	356	97	3,640

Wilson County Estimated Groundwater use in ac-ft per year

Aquifer	Year	Municipal	Mfg	Power	Mining	Irrigation	Livestock	Total
Carrizo-Wilcox	1980	2,504	175	0	228	6,499	255	9,661
Carrizo-Wilcox	1984	3,276	131	0	237	7,211	170	11,025
Carrizo-Wilcox	1985	2,944	167	0	309	6,174	162	9,756
Carrizo-Wilcox	1986	2,958	140	0	0	6,257	181	9,536
Carrizo-Wilcox	1987	3,389	93	0	277	6,734	167	10,660
Carrizo-Wilcox	1988	3,558	76	0	300	8,245	167	12,346
Carrizo-Wilcox	1989	3,971	43	0	281	9,139	165	13,599
Carrizo-Wilcox	1990	3,775	47	0	281	11,642	180	15,925
Carrizo-Wilcox	1991	3,384	0	0	285	10,818	183	14,670
Carrizo-Wilcox	1992	3,343	0	0	285	13,031	190	16,849
Carrizo-Wilcox	1993	3,601	0	0	277	8,677	218	12,773
Carrizo-Wilcox	1994	3,886	0	0	277	10,274	217	14,654
Carrizo-Wilcox	1995	4,084	0	0	277	9,300	207	13,868
Carrizo-Wilcox	1996	4,529	1	0	277	13,656	203	18,666
Carrizo-Wilcox	1997	4,205	0	0	277	11,919	194	16,595
Carrizo-Wilcox	1998	4,508	0	0	277	9,432	168	14,385
Carrizo-Wilcox	1999	4,748	1	0	277	11,424	190	16,640
Carrizo-Wilcox	2000	4,837	1	0	277	16,346	181	21,642

Carrizo-Wilcox = Carrizo-Wilcox aquifer, Edwards-BFZ = Edwards BFZ aquifer, Gulf Coast = Gulf Coast aquifer, Queen City = Queen City aquifer, Sparta = Sparta aquifer

Appendix H
Estimates of Projected Groundwater
Supplies
Managed by Evergreen UWCD
In
Atascosa, Frio, Karnes and Wilson Counties
By Decade
2000 - 2050

(Excludes Surface Water and Edwards-BFZ aquifer Supplies)

Atascosa County Projected Groundwater Supplies in ac-ft per year

WUG	River Basin	Source	2000	2010	2020	2030	2040	2050
Charlotte	Nueces	Carrizo-Wilcox	1,468	1,468	1,468	1,468	1,468	1,468
Jourdanton	Nueces	Carrizo-Wilcox	2,057	2,057	2,057	2,057	2,057	2,057
Pleasanton	Nueces	Carrizo-Wilcox	3,524	3,524	3,524	3,524	3,524	3,524
Poteet	Nueces	Carrizo-Wilcox	2,008	2,008	2,008	2,008	2,008	2,008
Co.-Other	Nueces	Carrizo-Wilcox	2,671	2,671	2,671	1,665	1,665	1,665
Co.-Other	San Antonio	Carrizo-Wilcox	132	132	132	122	122	122
Co.-Other	Nueces	Queen City	343	343	343	584	584	584
Co.-Other	Nueces	Sparta	1,086	1,086	1,086	1,851	1,851	1,851
Irrigation	Nueces	Carrizo-Wilcox	3,414	3,398	3,326	0	0	0
Irrigation	Nueces	Queen City	1,599	1,597	1,588	0	0	0
Irrigation	Nueces	Sparta	5,072	5,065	5,036	0	0	0
Irrigation	San Antonio	Carrizo-Wilcox	202	202	202	0	0	0
Mining	Nueces	Carrizo-Wilcox	1,015	1,031	1,103	0	0	0
Mining	Nueces	Queen City	130	132	141	194	194	194
Mining	Nueces	Sparta	413	420	449	616	615	615
Power	Nueces	Carrizo-Wilcox	14,333	14,333	14,333	430	430	430
Power	Nueces	Queen City	1,838	1,838	1,838	3,132	3,132	3,132
Power	Nueces	Sparta	5,829	5,829	5,829	9,934	9,934	9,934
Groundwater Supplies (ac-ft/year) =			47,134	47,134	47,134	27,585	27,584	27,584

Frio County Projected Groundwater Supplies in ac-ft per year

WUG	River Basin	Source	2000	2010	2020	2030	2040	2050
Dilley	Nueces	Carrizo-Wilcox	2,742	2,742	2,742	2,742	2,742	2,742
Pearsall	Nueces	Carrizo-Wilcox	3,371	3,371	3,371	3,371	3,371	3,371
Co.-Other	Nueces	Carrizo-Wilcox	618	618	618	444	444	444
Co.-Other	Nueces	Queen City	66	66	65	130	130	130
Co.-Other	Nueces	Sparta	114	114	114	225	225	225
Irrigation	Nueces	Carrizo-Wilcox	16,806	16,873	16,897	1,908	1,912	1,915
Irrigation	Nueces	Queen City	2,439	2,446	2,449	2,351	2,352	2,353
Irrigation	Nueces	Sparta	4,208	4,220	4,224	4,058	4,061	4,062
Mining	Nueces	Carrizo-Wilcox	116	49	25	9	4	2
Mining	Nueces	Queen City	13	5	2	3	1	0
Mining	Nueces	Sparta	21	9	5	4	2	1
Power	Nueces	Carrizo-Wilcox	310	310	310	222	222	222
Power	Nueces	Queen City	33	33	33	66	66	66
Power	Nueces	Sparta	57	57	57	112	112	112
Groundwater Supplies (ac-ft/year) =			30,914	30,913	30,912	15,645	15,644	15,645

Karnes County Projected Groundwater Supplies in ac-ft per year

WUG	River Basin	Source	2000	2010	2020	2030	2040	2050
Karnes City	San Antonio	Carrizo-Wilcox	1024	1024	1024	1024	1024	1024
Kenedy	San Antonio	Carrizo-Wilcox	1,216	1,216	1,216	1,216	1,216	1,216
Runge	San Antonio	Gulf Coast	468	468	468	468	468	468
Co.-Other	San Antonio	Carrizo-Wilcox	714	714	714	607	607	607
Co.-Other	Guadalupe	Carrizo-Wilcox	25	25	25	24	24	24
Co.-Other	Nueces	Carrizo-Wilcox	44	44	44	34	34	34
Co.-Other	Guadalupe	Gulf Coast	3	3	3	4	4	4
Co.-Other	Nueces	Gulf Coast	32	32	32	42	42	42
Co.-Other	San Antonio	Gulf Coast	244	244	244	351	351	351
Co.-Other	SA-Nueces	Gulf Coast	55	55	55	55	55	55
Irrigation	San Antonio	Carrizo-Wilcox	902	726	567	424	294	176
Manufac'g	San Antonio	Gulf Coast	98	98	98	141	141	141
Manufac'g	San Antonio	Carrizo-Wilcox	285	285	285	242	242	242
Mining	Guadalupe	Carrizo-Wilcox	10	7	4	1	0	0
Mining	Guadalupe	Gulf Coast	1	1	0	0	0	0
Mining	San Antonio	Carrizo-Wilcox	110	44	17	9	5	3
Mining	San Antonio	Gulf Coast	37	15	6	6	3	1
Mining	SA-Nueces	Gulf Coast	8	6	4	3	2	0
Groundwater Supplies (ac-ft/year) =			5,276	5,007	4,806	4,651	4,512	4,388

Wilson County Projected Groundwater Supplies in ac-ft per year

WUG	River Basin	Source	2000	2010	2020	2030	2040	2050
Floresville	San Antonio	Carrizo-Wilcox	1,468	1,468	1,468	1,468	1,468	1,468
La Vernia	San Antonio	Carrizo-Wilcox	395	395	395	395	395	395
Poth	San Antonio	Carrizo-Wilcox	2,017	2,017	2,017	2,017	2,017	2,017
Stockdale	San Antonio	Carrizo-Wilcox	1,372	1,372	1,372	1,372	1,372	1,372
Co.-Other	Guadalupe	Carrizo-Wilcox	91	91	91	73	73	73
Co.-Other	San Antonio	Carrizo-Wilcox	6,887	6,887	6,887	5,953	5,953	5,953
Co.-Other	Nueces	Carrizo-Wilcox	134	134	134	106	106	106
Co.-Other	San Antonio	Queen City	560	560	560	788	788	788
Co.-Other	Guadalupe	Queen City	19	19	19	24	24	24
Co.-Other	Nueces	Queen City	33	33	33	42	42	42
Co.-Other	Guadalupe	Sparta	40	40	40	53	53	53
Co.-Other	San Antonio	Sparta	1,730	1,730	1,730	2,435	2,435	2,435
Co.-Other	Nueces	Sparta	63	63	63	81	81	81
Irrigation	Guadalupe	Carrizo-Wilcox	61	55	49	34	30	27
Irrigation	San Antonio	Carrizo-Wilcox	6,419	5,675	4,253	3,162	2,848	2,600
Irrigation	Nueces	Carrizo-Wilcox	2,134	1,884	1,664	1,165	1,029	910
Irrigation	Guadalupe	Queen City	13	11	10	11	10	9
Irrigation	San Antonio	Queen City	522	461	831	729	730	696
Irrigation	Nueces	Queen City	521	460	406	463	409	362
Irrigation	Guadalupe	Sparta	27	24	21	25	22	19
Irrigation	San Antonio	Sparta	1,612	1,425	1,603	2,025	1,659	1,343
Irrigation	Nueces	Sparta	1,004	887	783	893	789	697
Manufac'g	Guadalupe	Carrizo-Wilcox	78	78	78	62	62	62
Manufac'g	Guadalupe	Queen City	16	16	16	21	21	21
Manufac'g	Guadalupe	Sparta	34	34	34	45	45	45
Manufac'g	San Antonio	Carrizo-Wilcox	5	5	5	4	4	4
Manufac'g	San Antonio	Queen City	0	0	0	1	1	1
Manufac'g	San Antonio	Sparta	1	1	1	1	1	1
Mining	Guadalupe	Carrizo-Wilcox	7	5	2	1	0	0
Mining	Guadalupe	Queen City	1	1	0	0	0	0
Mining	Guadalupe	Sparta	3	2	2	0	0	0
Mining	San Antonio	Carrizo-Wilcox	137	73	44	25	19	13
Mining	San Antonio	Queen City	11	6	4	3	3	2
Mining	San Antonio	Sparta	34	18	10	10	8	5
Groundwater Supplies (ac-ft/year) =			27,449	25,930	24,625	23,487	22,497	21,624

Co.-Other = County Other, Manufac'g = Manufacturing, Power = Steam Electric Power
 SA-Nueces = San Antonio-Nueces
 Carrizo-Wilcox = Carrizo-Wilcox aquifer, Gulf Coast = Gulf Coast aquifer, Queen City = Queen City aquifer
 Sparta = Sparta aquifer

Appendix I
Water Management Strategies
Recommended in
South Central Texas Regional Water Plan
(SCTRWP)
For
Atascosa, Frio, Karnes and Wilson Counties
By Decade
2000 - 2050

SCTRWP Water Management Strategies for Atascosa County

WUG	WMS Name	Source (County)	Basin	2000	2010	2020	2030	2040	2050
Charlotte	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	Nueces	2	7	8	6	6	7
Jourdanton	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	Nueces	4	20	11	18	13	14
Lytle	Demand Reduction-Conservation	Edwards BFZ (Medina)	Nueces	5	9	10	8	8	5
Lytle	Edwards Irrigation Transfer	Edwards BFZ (Bexar)	San Antonio	450	450	450	450	644	644
Pleasanton	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	Nueces	11	52	30	50	36	38
Poteet	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	Nueces	4	15	16	18	12	7
Co.-Other	Carrizo Aquifer Local Supply	Carrizo-Wilcox (Atascosa)	San Antonio	0	0	0	5	10	10
Power	Carrizo Aquifer Local Supply	Carrizo-Wilcox (Atascosa)	Nueces	0	0	0	0	1,600	8,600
Mining	Carrizo Aquifer Local Supply	Carrizo-Wilcox (Atascosa)	Nueces	0	0	0	995	1,390	1,390
Irrigation	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	San Antonio	75	75	75	75	75	75
Irrigation	Demand Reduction-Conservation	Carrizo-Wilcox (Atascosa)	Nueces	3,617	3,617	3,617	3,617	3,617	3,617

SCTRWP Water Management Strategies for Frio County

WUG	WMS Name	Source (County)	Basin	2000	2010	2020	2030	2040	2050
Dilley	Demand Reduction-Conservation	Carrizo-Wilcox (Frio)	Nueces	7	15	13	13	14	9
Pearsall	Demand Reduction-Conservation	Carrizo-Wilcox (Frio)	Nueces	18	30	33	34	24	12
Irrigation	Demand Reduction-Conservation	Carrizo-Wilcox (Frio)	Nueces	5,947	5,947	5,947	5,947	5,947	5,947

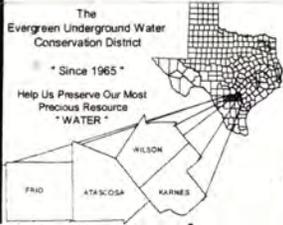
SCTRWP Water Management Strategies for Karnes County

WUG	WMS Name	Source (County)	Basin	2000	2010	2020	2030	2040	2050
Kenedy	Demand Reduction-Conservation	Carrizo-Wilcox (Karnes)	San Antonio	10	21	17	18	13	7
Irrigation	Demand Reduction-Conservation	Strategy not ID'd (N/A)	n/a	0	0	0	0	0	0

SCTRWP Water Management Strategies for Wilson County

WUG	WMS Name	Source (County)	Basin	2000	2010	2020	2030	2040	2050
Floresville	Demand Reduction-Conservation	Carrizo-Wilcox (Wilson)	San Antonio	13	31	26	18	19	20
Floresville	Carrizo Aquifer Local Supply	Carrizo-Wilcox (Wilson)	San Antonio	0	0	0	0	200	200
La Vernia	Demand Reduction-Conservation	Carrizo-Wilcox (Wilson)	San Antonio	3	5	5	5	4	3
Poth	Demand Reduction-Conservation	Carrizo-Wilcox (Wilson)	San Antonio	2	7	8	9	10	7
Stockdale	Demand Reduction-Conservation	Carrizo-Wilcox (Wilson)	San Antonio	3	8	4	7	7	3
Bexar County	Carrizo Aquifer Supply	Carrizo-Wilcox (Wilson)	San Antonio	0	11,000	11,000	11,000	11,000	11,000

Co.-Other = County Other, Power = Steam Electric Power
 Carrizo-Wilcox = Carrizo-Wilcox aquifer, Edwards BFZ = Edwards-BFZ aquifer



EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT

110 Wyoming Blvd.
Pleasanton, Texas 78064

Phone: 830-569-4186

Fax: 830-569-4238

Kenneth Stephens
President
Atascosa County

February 27, 2004

Paul Bordovsky
Vice-President
Karnes County

Kevin Ward
Executive Director
Texas Water Development Board
PO Box 13231
Austin, TX 78711

William H. Ruple
Secretary/Treasurer
Atascosa County

Clifton L. Stacy
Director
Frio County

Blaine L. Schorp
Director
Frio County

Darrell Brownlow
Appointed Director
Wilson County

Steve Snider
Director
Wilson County

Edward Jarzombek
Director
Wilson County

Fabian Jendrusch
Director
Karnes County

Mike Mahoney
General Manager

Candi Gonzales
District Secretary
Bookkeeper

Larry Akers
Assistant Manager

John West
Field Technician

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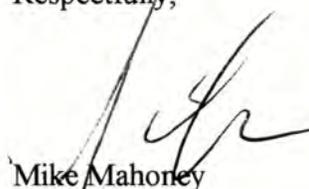
ROUTE TO: _____
CCTO: KW, SM, RP, JG

Dear Mr. Ward,

Please find enclosed a copy of the Evergreen Underground Water Conservation District's amended District Management plan.

If you have any questions, please feel free to contact me at 830.569.4186.

Respectfully,


Mike Mahoney
General Manager

Enclosure

**EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT
NOTICE OF MEETING AND PUBLIC HEARING**

Notice is hereby given that a Regular Meeting of the Board of Directors for the Evergreen Underground Water Conservation District, which includes a Public Hearing on the Amendment to the Management Plan, will be held on Friday, February 27, 2004, 9:00 a.m. at the District Office, 110 Wyoming Blvd., Pleasanton, Atascosa County, Texas.


Mike Mahoney, General Manager

AGENDA

1. Declaration of Quorum and Call to Order.

Recess to Public Hearing

PUBLIC HEARING-AMENDMENT TO THE MANAGEMENT PLAN

- a. Call to order
- b. Receive Public Comments on the Amendment to the Management Plan.
- c. Adjourn.

Reconvene to Meeting.

CONSIDER AND/OR ACTION ON:

2. Resolution #R04001 to Adopt the Amended Management Plan.
3. South Texas Weather Modification Association 2003 Annual Report presented by Todd Flanagan.
4. Pooling Funds to Hire Groundwater Lobbyist.
5. Authorization to Make Final Payment on Office Building.
6. Minutes of the January 30, 2004 Board of Directors' Meeting.
7. Report of Bills Paid for January 2004.
8. Budget and Bookkeeping Reports for January 2004.
9. Employee Health Insurance.
10. Water Well Drilling and Production Permits.
11. Staff Reports/Directors' Discussion.
12. Set Date and Time for Next Board Meeting.
13. Public Comments.
14. Adjourn.

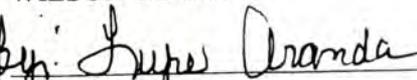
The Board of Directors for the Evergreen Underground Water Conservation District reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by Texas Government Code Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices) and 551.087 (Deliberations Regarding Economic Development Negotiations).

THE STATE OF TEXAS
COUNTY OF WILSON

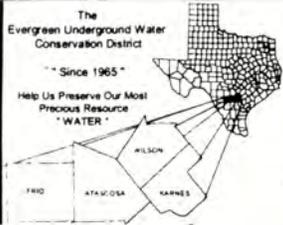
Received in duplicate originals, this the 19th day of February 2004, and posted according to laws by posting a duplicate original hereof on a bulletin board convenient to the public 72 hours prior to the scheduled meeting.



EVA S. MARTINEZ, COUNTY CLERK
COUNTY CLERK'S OFFICE
WILSON COUNTY


Authorized Signature

EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT



110 Wyoming Blvd.
Pleasanton, Texas 78064

Phone: 830-569-4186

Fax: 830-569-4238

Kenneth Stephens
President
Atascosa County

February 27, 2004

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Vice-President
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General Manager
San Antonio River Authority
PO Box 839980
San Antonio, TX 78283

William H. Ruple
Secretary/Treasurer
Atascosa County

Clifton L. Stacy
Director
Frio County

Blaine L. Schorp
Director
Frio County

Darrell Brownlow
Appointed Director
Wilson County

Steve Snider
Director
Wilson County

Diane Savage
Director
Wilson County

Fabian Jendrusch
Director
Karnes County

Mike Mahoney
General Manager

Candi Gonzales
District Secretary
Bookkeeper

Larry Akers
Assistant Manager

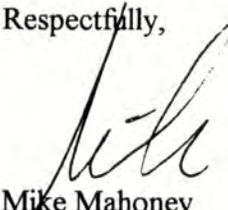
John West
Field Technician

Dear Mr. Rothe,

Please find enclosed a copy of the Evergreen Underground Water Conservation District's amended District Management plan.

If you have any questions, please feel free to contact me at 830.569.4186.

Respectfully,


Mike Mahoney
General Manager

Enclosure



EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT

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Kenneth Stephens
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Atascosa County

February 27, 2004

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Vice-President
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Con Mims
General Manager
Nueces River Authority
PO Box 349
Uvalde, TX 78802

William H. Ruple
Secretary/Treasurer
Atascosa County

Clifton L. Stacy
Director
Frio County

Dear Mr. Mims,

Blaine L. Schorp
Director
Frio County

Please find enclosed a copy of the Evergreen Underground Water Conservation District's amended District Management plan.

Darrell Brownlow
Appointed Director
Wilson County

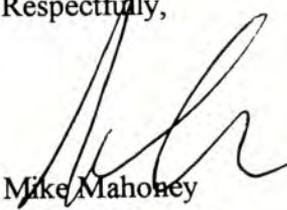
If you have any questions, please feel free to contact me at 830.569.4186.

Steve Snider
Director
Wilson County

Respectfully,

Diane Savage
Director
Wilson County

Fabian Jendrusch
Director
Karnes County


Mike Mahoney
General Manager

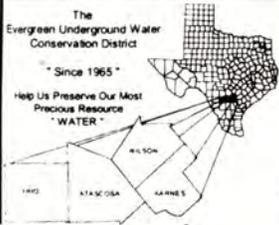
Mike Mahoney
General Manager

Enclosure

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Evelyn Bonavita

Chair

William H. Ruple
Secretary/Treasurer
Atascosa County

South Central Regional Water Planning Group

PO Box 839880

San Antonio, TX 78283

Clifton L. Stacy
Director
Frio County

Dear Mrs. Bonavita,

Blaine L. Schorp
Director
Frio County

Please find enclosed a copy of the Evergreen Underground Water Conservation District's amended District Management plan.

Darrell Brownlow
Appointed Director
Wilson County

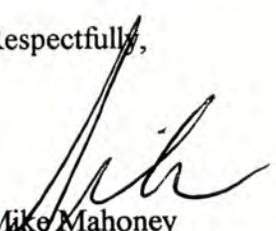
If you have any questions, please feel free to contact me at 830.569.4186.

Steve Snider
Director
Wilson County

Respectfully,

Diane Savage
Director
Wilson County

Fabian Jendrusch
Director
Karnes County


Mike Mahoney
General Manager

Mike Mahoney
General Manager

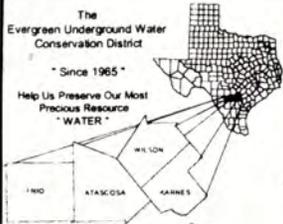
Enclosure

Candi Gonzales
District Secretary
Bookkeeper

Larry Akers
Assistant Manager

John West
Field Technician

13
(a)



EVERGREEN UNDERGROUND WATER CONSERVATION DISTRICT

110 Wyoming Blvd.
Pleasanton, Texas 78064

Phone: 830-569-4186

Fax: 830-569-4238

Kenneth Stephens
President
Atascosa County

February 27, 2004

Paul Bordovsky
Vice-President
Karnes County

Bill West
General Manager
Guadalupe-Blanco River Authority
933 East Court Street
Seguin, TX 78802

William H. Ruple
Secretary Treasurer
Atascosa County

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Director
Frio County

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Director
Frio County

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Appointed Director
Wilson County

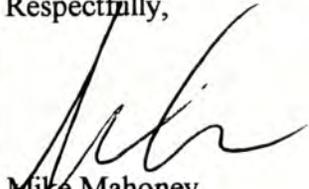
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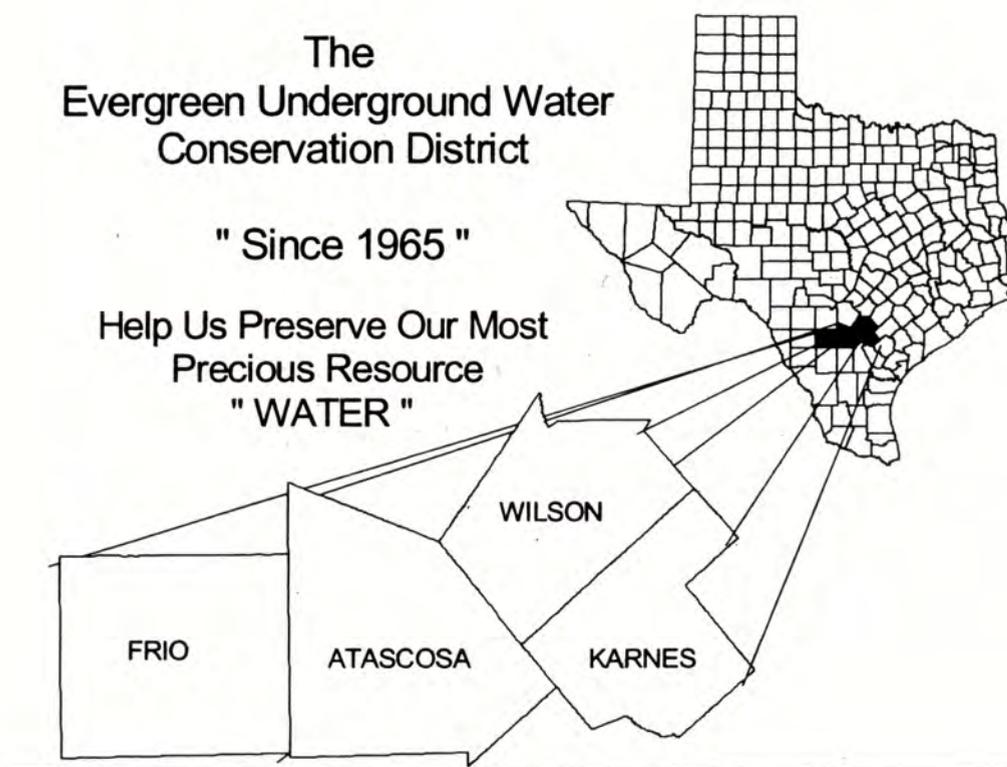
Enclosure

Candi Gonzales
District Secretary
Bookkeeper

Larry Akers
Assistant Manager

John West
Field Technician

Evergreen Underground Water Conservation District



Groundwater Management Plan



STREET ADDRESS:
100 E. Guenther
San Antonio, TX 78204

MAILING ADDRESS:
P.O. Box 839980
San Antonio, TX 78283-9980

FAX Transmittal Form

Date: 4-17-04
Time: 4:30 p.m.

Reply Required: Yes No
 Originals to Follow: Yes No
 No. of Pages: 2
(including this sheet)

Message To: Texas Water Development Board

Attention: Rima Petrossian

Phone: _____

FAX No.: _____
(FAX phone number sent to:)

Message From: Ronnie Hernandez

Dept: Planning & Development

Telephone No: (210) 227-1373

Extension: _____

Attached please find the letter indicating that Region 4 received the Evergreen Management Plan.

KA

If you do not receive all of the transmission, please contact the sender at the above extension.

If you have a return transmission, our Facsimile Number is **210-302-3692**

SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

c/o San Antonio River Authority, P.O. Box 839980, San Antonio, Texas 78283-9980
(210) 227-1373 Office, (210) 227-4323 Fax

13
(a)

EXECUTIVE COMMITTEE

Evelyn Bonavita
Chair
Public

1.11-3.9 GC

April 16, 2004

Richard Eppright
Vice-Chair
Agriculture

Ms. Rima Petrossian
Texas Water Development Board
1700 N. Congress Ave.
P.O. Box 13231
Austin, Texas 78711-3231

Gregory E. Rothe
Secretary
River Authorities

Mike Mahoney
Water Districts
Doug Miller
Small Business

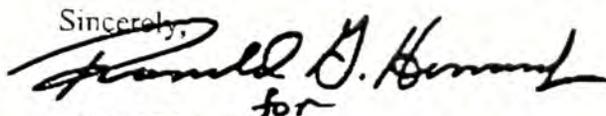
Dear Ms. Petrossian:

MEMBERS

The San Antonio River Authority (SARA), administrative agency to the South Central Texas Regional Water Planning Group (SCTRWPG), received the Evergreen Underground Water Conservation District (EUWCD) Management Plan on December 22, 2003 for review of potential conflicts in terms of projects or water management strategies specified in Region L's Regional Water Plan.

- Comm. Jay Millikin*
Counties
- Comm. John Kight*
Counties
- Eugene Habiger*
Municipalities
- Pedro G. Nieto*
Municipalities
- Gary Middleton*
Municipalities
- James M. Miller*
Industry
- Milton Stolte*
Agriculture
- Bill Jones*
Agriculture
- Susan Hughes*
Environmental
- Darrell Brownlow*
Small Business
- Gloria Rivera*
Small Business
- Mike Fields*
Electric Generating
Utilities
- Bill West*
River Authorities
- Con Mims*
River Authorities
- Greg Ellis*
Water Districts
- Ron Naumann*
Water Utilities

Sincerely,



Administrator
for SCTRWPG

EVELYN BONAVIDA, Chair
South Central Texas Regional Water Planning Group

Cc: Ms. Candi Gonzales, EUWCD
Mr. Ralph Boeker, TWDB