TurnerCollieරිBraden Inc.

Groundwater Management Plar

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Prepared for:

Coastal Bend Groundwater Conservation District

July 2004

TurnerCollie@BradenInc.

Groundwater Management Plan

Prepared for:

Coastal Bend Groundwater Conservation District

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Associate Hydrogeologist



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July 2004

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Coastal Bend Groundwater Conservation District

Groundwater Management Plan

July 2004

I. District Mission

The Coastal Bend Groundwater Conservation District (the District) is committed to manage and protect the groundwater resources of the District. The District is committed to maintaining a sustainable, adequate, reliable, cost effective and high quality source of groundwater to promote the vitality, economy and environment of the District. The District will work with and for the citizens of the District and cooperate with other local, regional and state agencies involved in the study and management of groundwater resources. The District shall take no action without a full consideration of the groundwater needs of the citizens of the District.

II. Purpose of Management Plan

In 1997 the 75th Texas Legislature established a statewide comprehensive regional water planning initiative with the enactment of Senate Bill 1 (SB1). Among the provisions of SB1 were amendments to Chapter 36 of the Texas Water Code requiring groundwater conservation districts to develop a groundwater management plan that shall be submitted to the Texas Water Development Board for certification as administratively complete. The groundwater management plan is specified to contain estimates on the availability of groundwater in the District, details of how the District would manage groundwater and management goals for the District. In 2001 the 77th Texas Legislature further clarified the water planning and management provisions of SB1 with the enactment of Senate Bill 2 (SB2).

The administrative requirements of the Chapter 36 Texas Water Code provisions for groundwater management plan development are specified in 31 Texas Administrative Code Chapter 356 of the Texas Water Development Board Rules. This plan fulfills all requirements for groundwater management plans in SB1, SB2, Chapter 36 Texas Water Code and administrative rules of the Texas Water Development Board.

III. Time Period of Management Plan

This plan shall be in effect for a period of ten years from the date of certification by TWDB, unless a new or amended management plan is adopted by the District Board of Directors and certified by TWDB.

IV. Coastal Bend Groundwater Conservation District

The District was created in 2001 by the 77th Texas Legislature enacting HB 1038. This act is recorded in Chapter 1294 of the Acts of the 77th Texas Legislature. The District was confirmed by local election held in Wharton County on November 6, 2001 with 57.6 percent of the voters in favor of the District.

The District is located in Wharton County, Texas. The District boundaries are the same as the area and extent of Wharton County, Texas. The District is bounded by Jackson, Lavaca, Colorado, Austin, Grimes, Fort Bend, Brazoria and Matagorda Counties. As of the plan date, confirmed groundwater conservation districts (GCDs) exist in Austin, Fort Bend, Matagorda and Jackson Counties. The GCDs neighboring the District are: Bluebonnet GCD (Austin), Fort Bend Subsidence District (Fort Bend), Coastal Plains GCD (Matagorda) and Texana GCD (Jackson). Fig.1



Figure1, Neighboring Districts to Coastal Bend Groundwater Conservation District

The District is located in Groundwater Management Area (GMA) 15. Chapter 36 Texas Water Code authorizes the District to co-ordinate its management of groundwater with other GCDs in GMA 15. The other confirmed GCDs that are located in GMA 15 are: Fayette

County GCD (Fayette), Pecan Valley GCD (DeWitt), Texana GCD (Jackson) and Coastal Plains GCD (Matagorda). Fig. 2



Figure 2, Groundwater Management Areas in Texas

The District Board of Directors is composed of five members elected to staggered four-year terms. Four directors are elected from county precincts and one director is elected at-large. The Board of Directors holds regular meetings at the District offices at 109 E. Milam in Wharton, Texas on the second Tuesday of each month unless otherwise posted. All meetings of the Board of Directors are public meetings noticed and held in accordance with all public meeting requirements. The Board of Directors meetings are announced on the District website www.cbgcd.com along with other items of interest posted by the District.

V. Authority of the District

The District derives its authority to manage groundwater within the District by virtue of the powers granted and authorized in the District's enabling act, HB 1038 of the 77th Texas Legislature. (Appendix A). The District, acting under authority of the enabling legislation, assumes all the rights and responsibilities of a groundwater conservation district specified in Chapter 36 of the Texas Water Code. Upon adoption of the District rules by the Board of Directors in a public meeting, the authority to manage the use of groundwater in the District will be governed at all times by the due process specified in the District rules. (Appendix B).

VI. Geology and Hydrologic Units of the District

Except for the Quaternary alluvium, the geologic formations crop out in belts nearly parallel to the Gulf of Mexico. Younger formations crop out nearer the Gulf and older formations crop out inland. The formations dip toward the coast and thicken causing the older formations to dip more steeply. Faults are common and some of them have displacements of up to several hundred feet. The displacements tend to decrease upward and may not appear at the surface. Faulting generally does not disrupt regional hydraulic continuity. (Loskot et. al, 1982)

Jasper Aquifer

The Jasper aquifer is a minor source of water that may be slightly or moderately saline. It consists mainly of the Oakville Sandstone, but may include the upper part of the Catahoula Sandstone. The Oakville Sandstone contains laterally discontinuous sand and gravel lenses interbedded with shale and clay. Massive sandstone beds at the base of the formation thin upward with greater amounts of shale and clay. The Jasper aquifer ranges in thickness from about 200 to 800 feet where fresh to slightly saline water is present, but may reach 2,500 feet of thickness downdip in Wharton County. (Loskot et. al, 1982)

Burkeville Confining Layer

The Burkeville confining layer is mostly clay but contains some sand layers. The Burkeville clay sequences are identified in the subsurface by electric logs and act as a regional impediment to the vertical flow of water. The Burkeville ranges from 300 to 500 feet in thickness. (Loskot et. al, 1982)

Evangeline Aquifer

The Evangeline aquifer consists of sand and clay of the Goliad Sand and the upper part of the Fleming Formation. The Evangeline aquifer generally contains more sand than clay. Some of the sands and clays are continuous throughout much of the area. Individual sands may reach 100 feet in thickness in the area containing fresh to slightly saline water. The maximum thickness of the Evangeline aquifer is 1,380 feet and may have up to 470 feet of sand in aggregate thickness. Fresh water may occur as deep as 2,000 feet in east-central Wharton County. (Loskot et. al, 1982)

Chicot Aquifer

The Chicot aquifer is the main source of groundwater in Wharton County and consists of discontinuous layers of sand and clay of about equal thickness. It is composed of water bearing units of the Willis Sand, Lissie Formation, Beaumont Clay and Quaternary alluvium, which include all deposits from land surface to the top of the Evangeline aquifer. The Chicot aquifer contains all fresh water in Wharton County. Individual sands may reach 500 feet in thickness. It is in hydrologic continuity with the Evangeline aquifer and the two units can be difficult to distinguish. The Chicot is delineated from the Evangeline in the subsurface mainly on higher sand to clay ratios that give the Chicot higher hydraulic conductivity. (Loskot et. al, 1982)

System	Series	Geologic Unit		Hydrologic Unit
	Holocene	Alluvium		
Quaternary		Beaumont Clay		
	Pleistocene	Montgomery Formation	Lissie	Chicot aquifer
		Bentley Formation	Formation	
		Willis Sand		
	Pliocene	Goliad Sand		Evangeline aquifer
Tertiary		Fleming Format	ion	Burkeville Confining Zone
Tertiary	Miocene	Oakville Sandsto	one	Jasper aquifer
		Catahoula Sands	stone (Tuff)	

Figure 3, Geologic and Hydrologic Units of the Gulf Coast aquifer in Wharton County, Modified from (Loskot et. al, 1982).

VII. Geography of the District

The District is located within the Gulf Coastal Plains region of Texas. The topography of the District ranges from gently rolling terrain in the northern part of the District to very gently rolling in the south. There are three major drainages in the District; Tres Palacios Creek in the western part, the Colorado River in the central part and the San Bernard River in the eastern part. The principal cross-roads of the District are State Highway 71 and U.S. Highway 59.

The major population centers in the district are the Cities of Wharton and El Campo. Other population centers of the District are Boling-Iago, Danevang, East Bernard, Egypt, Glen Flora, Hungerford, Lane City, Lissie, Louise and Pierce. (Texas Almanac, 2000)

Agriculture is one of the principal economic activities in the District. The District incorporates the leading rice producing region in Texas. However, the production of cotton, corn, grain sorghum, soybeans, turf grass, eggs and beef cattle production are also significant agricultural activities. Other principal economic activities in the District include production of oil and gas, mining of sulfur and gravels, waterfowl and big-game hunting and varied type of manufacturing. (Texas Almanac, 2000)

VIII. Estimate of the Amount of Groundwater Annually Used in the District

The District estimates its annual groundwater use at 189,828 acre-feet per year. This estimate is derived from the Region K and Region P water demand values adopted for use in the 2007 Regional Water Plan. Texas Water Development Board data on estimated groundwater use is shown in Table 1 for the years 1980 and 1984 to 2000, with one exception - The year 2000 irrigation use value shown is supplied by the District in place of the TWDB value due to the availability of a more accurate estimation methodology used in the current regional planning process for irrigation demands in Regions K and P.

Aquifer	Year	Municipal	Manu.	Power	Mining	Irrigation	Livestock	Total
Gulf Coast	1980	5,904	291	0	4,216	164,996	734	176,141
Gulf Coast	1984	6,499	150	0	3,237	158,689	672	169,247
Gulf Coast	1985	6,409	212	0	1,151	174,049	793	182,614
Gulf Coast	1986	6,030	151	0	1,345	168,741	874	177,141
Gulf Coast	1987	6,119	111	0	1,008	136,575	661	144,474
Gulf Coast	1988	6,238	105	0	757	203,525	708	211,333
Gulf Coast	1989	6,642	126	0	4	135,283	738	142,793
Gulf Coast	1990	6,491	123	0	5	155,474	728	162,821
Gulf Coast	1991	6,014	132	0	336	126,284	744	133,510
Gulf Coast	1992	6,206	77	0	268	169,205	671	176,427
Gulf Coast	1993	6,489	103	0	268	164,669	589	172,118
Gulf Coast	1994	6,306	153	0	252	144,257	601	151,569
Gulf Coast	1995	6,416	151	0	246	175,156	571	182,540
Gulf Coast	1996	6,389	125	0	246	192,417	541	199,718
Gulf Coast	1997	6,230	138	0	268	171,058	542	178,236
Gulf Coast	1998	6,420	120	0	72	216,362	723	223,697
Gulf Coast	1999	6,278	159	0	72	204,721	762	211,992
Gulf Coast	2000	6,252	161	0	72	(* 182,593	750	7,235

Manu. = Manufacturing

Table 1, Amount of Groundwater Used in Each Category of Use in the 2000 TWDB Water Use Survey

* Estimate developed by the District and Regions K and P based on the number of acres in agricultural production in the District registered with the United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) and the estimated rates of groundwater use for each crop applied to the estimated portion of the acres of each crop irrigated by groundwater. (Appendix C)

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IX. Estimate of the Total Useable Amount of Groundwater in the District

The estimate of the annual groundwater availability in the District is 174,250 acre-feet per year. This estimate is based on groundwater availability data from Exhibit B, Data Table 4 of the Lower Colorado (Region K) and Lavaca (Region P) Regional Water Plans. This estimate is being used as a placeholder until the District can develop science-based values with more reliability. The District recognizes that there was little science utilized in developing the groundwater availability values used in the 2002 adopted plans for Regions K and P, therefore great caution should be exercised in utilizing this value to reach conclusions regarding future groundwater availability in the District.

RWPG	Source Name	River Basin	2000	2010	2020	2030	2040	2050
К	Gulf Coast Aquifer	Brazos-Colorado	42,295	42,295	42,295	42,295	42,295	42,295
к	Gulf Coast Aquifer	Colorado	41,812	41,812	41,812	41,812	41,812	41,812
К	Gulf Coast Aquifer	Colorado-Lavaca	8,543	8,543	8,543	8,543	8,543	8,543
Р	Gulf Coast Aquifer	Colorado	202	202	202	202	202	202
Р	Gulf Coast Aquifer	Colorado-Lavaca	13,406	13,406	13,406	13,406	13,406	13,406
Р	Gulf Coast Aquifer Lavaca		67,992	67,992	67,992	67,992	67,992	67,992
Total Pr	ojected Water Availabil	174,250	174,250	174,250	174,250	174,250	174,250	

Table 2, Regions K and P - Estimates of Groundwater Availability for Wharton County

X. Down-Gradient Movement (Lateral Underflow) in the Aquifer

The District recognizes that the annual groundwater availability in the portion of the Gulf Coast Aquifer underlying the District is the sum of:

- 1. Recharge(the amount of water annually entering the aquifer through the infiltration of rainfall in the District);
- 2. Net lateral underflow (the amount of water annually entering the District through the underground migration of water moving down-gradient within the aquifer after being recharged in aquifer outcrops lying beyond District boundaries less the amount of water which may migrate in a similar fashion outside of the District boundaries); and
- 3. The amount of water (if any) annually taken from storage in the aquifer within the District boundaries.

The net annual amount of lateral underflow received by the aquifer underlying the District and the annual amount of water taken from storage in the aquifer within the District have yet to be determined. It is anticipated that these figures will be determined over the next biennium through the employment by the District of a private consulting firm to develop sound, defensible methodologies related to this determination.

XI. Estimate of the Annual Amount of Natural or Artificial Recharge to the Groundwater Resources within the District

The amount of recharge to the Gulf Coast aquifer in the District is estimated to be 40,400 acre-feet per year. This estimate is based on the estimated rate of annual deep recharge to the Gulf Coast aquifer of 1.09 inches per year used in the development of the Northern Gulf Coast aquifer Groundwater Availability Model (GAM) by the United States Geological Survey (USGS). This value was presented by USGS during the Stakeholder Advisory Forum meeting for the Northern Gulf Coast aquifer GAM of January 29th, 2003.

The District recognizes that this is a preliminary rate used in the development of the GAM and subject to adjustment. However, as of the date of this plan neither the Northern nor Central Gulf Coast aquifer GAMs have been released. Other researchers have estimated the rate of recharge for the area of the Gulf Coast aquifer that is proximate to or including the District, Ryder (1988) estimated that the rate of recharge was less than 2 inches per year and Dutton and Richter (1990) estimated a range of 0.1 to 0.4 inches per year. The District used the USGS preliminary rate of recharge because it is taken from a more recent work, is within the bounds defined by the other researchers and is presented as a specific rate which may be applied to an area for estimate recharge.

Recharge in the Gulf Coast aquifer occurs through the infiltration of rainfall. (Loskot et. al, 1982) The majority of the rain that falls on the land surface runs-off and is not available for recharge to the aquifer. A significant portion of the water that infiltrates the soil is lost through evapotranspiration. Another significant portion of the water that infiltrates the soil recharges the aquifer but is not held in storage because it is discharged through springs or bank seepage in creeks and rivers. (Scanlon et al, 2002) Vertical recharge to the aquifer is the fraction of the rainfall that originally infiltrated the soil and reached the aquifer to augment the amount of water in storage or available for use.

To estimate the annual recharge to the groundwater resources of the District, the USGS preliminary annual recharge rate in inches was expressed as a fraction of a foot and applied to the area of the District (in acres) to estimate recharge in acre-feet per year. The area of the District (in acres) occupied by Beaumont Formation outcrop was excluded from the recharge calculation because this area is reported as an area of little or no recharge. (Gabrysch 1977) The remaining area of the District is occupied by the outcrops of the Montgomery Formation, the Bentley Formation and alluvial deposits where the river valleys have incised the Beaumont Formation. These areas are recognized by Gabrysch (1977) as recharge areas of the Chicot aquifer. The deep recharge rate (in feet per year) was multiplied by the net area of the District (in acres), where the Gulf Coast aquifer crops out, to determine the annual amount of recharge to the groundwater resources of the District.

The methodology used to estimate the volume of annual recharge to the groundwater resources of the District can be expressed as follows:

USGS preliminary Northern Gulf Coast aquifer recharge rate estimate = 1.09 inches/year

1.09 inches per year / 12 inches (1 foot) = 0.0908333 feet per year

0.0908333 feet rounded to 0.091 feet (to avoid undue implication of accuracy)

Area of the District = 1,090 miles² (United States Census Bureau)

 $(1,090 \text{ miles}^2 * 640 \text{ acres per mile}^2) = 697,600 \text{ acres}$

697,600 acres – 253,440 acres (estimated Beaumont Formation outcrop area) = 444,160 acres

(0.091 feet per year * 444,160 acres) = 40,418.56 (40,400) acre-feet per year

XII. Details on How the District Might Increase the Natural or Artificial Recharge in the District

The natural or artificial recharge in the District could theoretically be increased by building small retention structures on ephemeral streams to impound storm-water run-off.

XIII. Estimate of the Total Projected (Surface and/or Ground) Water Demand within the District

Estimates of projected water demand are based on anticipated patterns of population growth and migration that are applied to standardized estimated water use rates for the recognized categories of water use. Estimates of projected annual water demand represent a need for water that may ultimately be met by a supply of surface water or groundwater. The estimation of projected water demand is the first step in determining the adequacy of a regional system of water supply. The estimate of projected water demand for both surface water and groundwater within the District in the year 2010 is 305,696 acre-feet. This estimate is based on the projected demand data adopted by the Lower Colorado (Region K) and the Lavaca (Region P) Regional Water Planning Groups for the 2007 Water Plans.

RWPG	Category	2000	2010	2020	2030	2040	2050	2060
К	Municipal	3,680	3,776	3,879	3,910	3,880	3,847	3,806
К	Irrigation	191,241	182,985	176,441	170,127	164,044	158,177	135,911
К	Livestock	728	728	728	728	728	728	728
К	Manufacturing	256	313	343	366	390	410	442
К	Mining	633	731	773	798	822	844	864
к	Steam-Electric	10	245	351	411	483	572	679
Р	Municipal	2294	2359	2438	2466	2457	2438	2413
Р	Irrigation	119,047	113,908	109,834	105,904	102,116	98,464	84,603
Р	Livestock	588	588	588	588	588	588	588
Р	Manufacturing	49	60	65	70	74	78	84
Р	Mining	4	3	2	1	0	0	0
Total P	rojected Demands (acre-feet/year) =	318,530	305,696	295,442	285,370	275,582	266,146	230,118

Table 3, Regions K and P Estimates of Projected Surface Water and Groundwater Demand for Wharton County.

XIV. Estimate of the Projected Surface Water and Groundwater Supplies of the District

Estimates of projected water supplies represent the estimated capacity of water supply systems to deliver water to meet user needs on an annual basis. Estimates of projected water supplies are compared with estimates of projected demand to determine if the existing infrastructure is capable of meeting the expected needs of a water user group. The annual water delivery capacity of different water systems in different areas may not be estimated by the same methods. Estimates of projected groundwater supplies typically represent the pumping capacity of the wells or well fields that supply a water user group. The method used to estimate projected groundwater supplies may or may not reduce projections based on expected water-level drawdown or other conditions. The estimate of projected surface water and groundwater supplies within the District in the year 2010 is 188,999 acre-feet based on the Exhibit B, Data Table 5 data contained in the Lower Colorado (Region K) and the Lavaca (Region P) 2002 Regional Water Plans. The District was not operational during the development of the 2002 plans and therefore utilizes this value as a placeholder until a value based on sound science can be derived. The projected surface water and groundwater supplies in the District for years 2000 through 2050 are presented in the plan as Table 4 (Region K) and Table 5 (Region P).

RW PG	WUG	River Basin	Source Name	2000	2010	2020	2030	2040	2050
к	Boling-lago	Brazos-Colorado	Gulf Coast aquifer	1,235	1,235	1,235	1,235	1,235	1,235
К	East Bernard	Brazos-Colorado	Gulf Coast aquifer	1,563	1,563	1,563	1,563	1,563	1,563
к	Wharton	Brazos-Colorado	Gulf Coast aquifer	5,636	5,636	5,636	5,636	5,636	5,636
К	Wharton	Colorado	Gulf Coast aquifer	540	540	540	540	540	540
к	County-Other	Brazos-Colorado	Gulf Coast aquifer	3,071	3,071	3,071	3,071	3,071	3,071
к	County-Other	Colorado	Gulf Coast aquifer	1,106	1,106	1,106	1,106	1,106	1,106
к	County-Other	Colorado-Lavaca	Gulf Coast aquifer	299	299	299	299	299	299
к	Irrigation	Brazos-Colorado	Colorado RoR	0	0	0	0	0	0
к	Irrigation	Brazos-Colorado	Highland Lakes	9,656	9,656	9,656	9,656	9,656	9,656
к	Irrigation	Brazos-Colorado	Local Supply	2,000	2,000	2,000	2,000	2,000	2,000
к	Irrigation	Brazos-Colorado	Gulf Coast aquifer	25,816	25,816	25,816	25,816	25,816	25,816
к	Irrigation	Colorado	Highland Lakes	5,344	5,344	5,344	5,344	5,344	5,344
к	Irrigation	Colorado	Local Supply	7,650	7,650	7,650	7,650	7,650	7,650
к	Irrigation	Colorado	Gulf Coast aquifer	29,567	29,567	29,567	29,567	29,567	29,567
к	Irrigation	Colorado-Lavaca	Gulf Coast aquifer	7,060	7,060	7,060	7,060	7,060	7,060
к	Livestock	Brazos-Colorado	Local Supply	149	149	149	149	149	149
к	Livestock	Brazos-Colorado	Gulf Coast aquifer	222	222	222	222	222	222
к	Livestock	Colorado	Local Supply	115	115	115	115	115	115
к	Livestock	Colorado	Gulf Coast aquifer	171	171	171	171	171	171
к	Livestock	Colorado-Lavaca	Local Supply	74	74	74	74	74	74
к	Livestock	Colorado-Lavaca	Gulf Coast aquifer	113	113	113	113	113	113
к	Manufac.	Brazos-Colorado	Gulf Coast aquifer	90	90	90	90	90	90
к	Manufac.	Colorado	Gulf Coast aquifer	335	335	335	335	335	335
к	Manufac.	Colorado-Lavaca	Gulf Coast aquifer	165	165	165	165	165	165
к	Mining	Brazos-Colorado	Local Supply	1,655	1,696	1,746	1,793	1,844	1,900
к	Mining	Brazos-Colorado	Gulf Coast aquifer	850	850	850	850	850	850
К	Mining	Colorado	Gulf Coast aquifer	1,005	1,005	1,005	1,005	1,005	1,005
К	Mining	Colorado-Lavaca	Gulf Coast aquifer	23	23	23	23	23	23
	Total Projected	Water Supplies in a	acre-feet per year =	105,510	105,551	105,601	105,648	105,699	105,755

Table 4, Region K Estimates of Projected Water Supplies for Wharton County (includes both groundwater and surface water).

RWPG	WUG	River Basin	Source Name	2000	2010	2020	2030	2040	2050
Р	El Campo	Colorado	Gulf Coast aquifer	188	187	186	189	194	202
P	El Campo	Colorado-Lavaca	Gulf Coast aquifer	1,696	1,683	1,676	1,699	1,743	1,815
Р	County-Other	Lavaca	Gulf Coast aquifer	450	462	475	498	522	559
Р	Irrigation	Colorado-Lavaca	Gulf Coast aquifer	11,710	11,723	11,730	11,707	11,663	11,591
Р	Irrigation	Lavaca	E. Mustang Creek RoR	0	0	0	0	0	0
Р	Irrigation	Lavaca	Navidad River RoR	0	0	0	0	0	0
Р	Irrigation	Lavaca	Pinoak Creek RoR	70	70	70	70	70	70
Р	Irrigation	Lavaca	Pinoak Creek RoR	93	93	93	93	93	93
Р	Irrigation	Lavaca	Pinoak Creek RoR	185	185	185	185	185	185
Р	Irrigation	Lavaca	Pinoak Creek RoR	861	861	861	861	861	861
Р	Irrigation	Lavaca	Pinoak Creek RoR	0	0	0	0	0	0
Р	Irrigation	Lavaca	Sandy Creek RoR	629	629	629	629	629	629
Р	Irrigation	Lavaca	Stage Stand Creek RoR	0	0	0	0	0	0
Р	Irrigation	Lavaca	W. Mustang Creek RoR	0	0	0	0	0	0
Р	Irrigation	Lavaca	W. Mustang Creek RoR	85	85	85	85	85	85
Р	Irrigation	Lavaca	W. Mustang Creek RoR	278	278	278	278	278	278
Р	Irrigation	Lavaca	W. Mustang Creek RoR	279	279	279	279	279	279
Р	Irrigation	Lavaca	W. Mustang Creek RoR	429	429	429	429	429	429
Р	Irrigation	Lavaca	Gulf Coast aquifer	66,017	66,003	65,987	65,963	65,932	65,889
Р	Livestock	Lavaca	Gulf Coast aquifer	400	400	400	400	400	400
Р	Manufac.	Lavaca	Gulf Coast aquifer	73	78	82	85	93	100
Р	Mining	Lavaca	Gulf Coast aquifer	4	3	2	1	0	0
	Total Pro	pjected Water Suppl	ies in acre-feet per year =	83,447	83,448	83,447	83,451	83,456	83,465

Table 5, Region P Estimates of Projected Water Supplies for Wharton County (includes both groundwater and surface water).

XV. Water Management Strategies to Meet Needs of Water User Groups

The projected water supplies and demand totals for the District given in Tables 3, 4 and 5 indicate projected demands exceed existing supplies. To meet the needs identified in the District, Regions K and P adopted additional water management strategies.

WUG	Water Mgt. Strategy	Source County	Source	2000	2010	2020	2030	2040	2050
Irrigation	Develop Water Conserving Rice	Wharton	Colorado RoR	6,818	6,871	6,887	6,905	6,922	6,941
Irrigation	Off-Channel Reservoirs	Wharton	Colorado RoR	27,660	27,877	27,943	28,013	28,085	28,162
Irrigation	LCRA Water Mgt. Plan	N/A	Highland Lakes	57,113	42,281	34,021	22,848	19,814	19,015
Irrigation	Delivery System Conservation	Wharton	Colorado RoR	8,892	8,962	8,983	9,006	9,029	9,053
Irrigation	Groundwater	Wharton	Gulf Coast aquifer	13,246	13,350	13,381	13,415	13,449	13,486
Irrigation	On-Farm Water Conservation	Wharton	Colorado RoR	7,275	7,332	7,349	7,368	7,387	7,407
Irrigation	Cont'd Return Flow Utilization	Wharton	Colorado RoR	10,287	14,241	16,357	16,420	12,170	4,138
Irrigation	LCRA Water Mgt. Plan	N/A	Highland Lakes	29,559	21,883	17,607	11,825	10,255	9,841
Irrigation	Develop Water Conserving Rice	Wharton	Colorado RoR	3,544	3,565	3,568	3,570	3,573	3,577
Irrigation	Off-Channel Reservoirs	Wharton	Colorado RoR	14,377	14,465	14,475	14,486	14,497	14,511
Irrigation	Cont'd Return Flow Utilization	Wharton	Colorado RoR	5,324	7,370	8,466	8,498	6,298	2,142
Irrigation	Groundwater	Wharton	Gulf Coast aquifer	6,885	6,927	6,932	6,937	6,942	6,949
Irrigation	On-Farm Water Conservation	Wharton	Colorado RoR	3,781	3,805	3,807	3,810	3,813	3,817
Irrigation	Delivery System Conservation	Wharton	Colorado RoR	4,622	4,650	4,653	4,657	4,661	4,665
Irrigation	LCRA Water Mgt. Plan	N/A	Highland Lakes	18,136	13,426	10,803	7,255	6,292	6,038
Irrigation	Develop Water Conserving Rice	Wharton	Colorado RoR	2,162	2,180	2,186	2,193	2,200	2,208
Irrigation	Cont'd Return Flow Utilization	Wharton	Colorado RoR	3,267	4,522	5,194	5,214	3,864	1,314
Irrigation	Groundwater	Wharton	Gulf Coast aquifer	4,199	4,235	4,248	4,261	4,275	4,289
Irrigation	Delivery System Conservation	Wharton	Colorado RoR	2,819	2,843	2,852	2,861	2,870	2,879
Irrigation	On-Farm Water Conservation	Wharton	Colorado RoR	2,307	2,326	2,333	2,340	2,348	2,356
Irrigation	Off-Channel Reservoirs	Wharton	Colorado RoR	8,770	8,844	8,871	8,898	8,927	8,956
I otal A	mount of Water Deve	oped by Strat	egies in Acre- eet per Year =	241,043	221,955	210,916	190,780	177,671	161,744

Table 6, Water Management Strategies in the LCRWP (K) for or from Wharton Co.

WUG	Water Mgt. Strategy	Source County	Source	2000	2010	2020	2030	2040	2050
Irrigation	Temporary overdraft of the aquifer	Wharton	Gulf Coast aquifer	3,172	3,248	3,332	3,422	3,519	3,625
Irrigation	Temporary overdraft of the aquifer	Wharton	Gulf Coast aquifer	18,668	19,093	19,568	20,130	20,773	21,514
Total Amount of Water Developed by Strategies in Acre-feet/Year =				21,840	22,341	22,900	23,552	24,292	25,139

Table 7, Water Management Strategies Recommended in the Region P Water Plan for or Supplied by Wharton County.

WUG	Water Management Strategy	RWPG	Source	2000	2010	2020	2030	2040	2050
Irrigation	Groundwater	к	Gulf Coast aquifer	13,246	13,350	13,381	13,415	13,449	13,486
Irrigation	Groundwater	к	Gulf Coast aquifer	6,885	6,927	6,932	6,937	6,942	6,949
Irrigation	Groundwater	к	Gulf Coast aquifer	4,199	4,235	4,248	4,261	4,275	4,289
Irrigation	Temporary overdraft of the aquifer	Р	Gulf Coast aquifer	3,172	3,248	3,332	3,422	3,519	3,625
Irrigation	Temporary overdraft of the aquifer	Р	Gulf Coast aquifer	18,668	19,093	19,568	20,130	20,773	21,514
Total Amount of Water Developed by Strategies in Acre-feet per Year =					46,853	47,461	48,165	48,958	49,863

Table 8, Totals of Groundwater Strategies Recommended for the District in Regions K and P Water plan that are for or Supplied by Wharton County.

The water management strategies adopted by Regions K and P include five strategies to supply groundwater to a water user group in the District. These strategies are to develop additional supplies of groundwater from the Gulf Coast aquifer for irrigation user groups. The total of the additional supplies that would be developed by these strategies in 2010 would be 46,853 acre-feet per year.

XVI. How the District Has Addressed Water Supply Needs in a Manner Not in Conflict with the Approved Regional Water Plans

In order to address water supply needs in a manner not in conflict with the TWDB approved regional water plan from the Lower Colorado Regional Water Planning Group (Region K) or the Lavaca Regional Water Planning Group (Region P), the District has adopted a groundwater availability value of 174,250 ac-ft per year taken from Exhibit B, Data Table 4 of the approved Regions K and P Regional Water Plans.

XVII. Details on How the District Will Manage Groundwater within the District

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 engage in such activities and practices, that if implemented would result in more efficient use of groundwater. An observation network shall be established and maintained in order to monitor changing storage conditions of groundwater supplies within the District. The District will make a regular assessment of water supply and groundwater storage conditions and will report those conditions to the Board and to the public. The District will undertake, as necessary and co-operate 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. Notwithstanding, all actions and rules of the District will adhere to the Texas Water Code.

The District may adopt 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 purpose of the rules of the District
- 2) The distribution of groundwater resources

3) The economic hardship resulting from grant or denial of a permit or the terms prescribed by the permit

The District is committed to maintaining a sustainable, adequate, reliable, cost effective and high quality source of groundwater to promote the vitality, economy and environment of the District. 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 District will be based on aquifer conditions observed by the District.

The District 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 Texas Water Code Chapter 36.102.

The District will employ 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.

XVIII. Actions, Procedures, Performance and Avoidance Necessary to Effectuate the Plan

The District will implement the provisions of this management plan and will utilize the objectives of the plan as a guide for District actions, operations and decision-making. The District will ensure that its planning efforts, activities and operations are consistent with the provisions of this plan.

The District will adopt rules in accordance with Chapter 36 of the Texas Water Code and all rules will be followed and enforced. The development of rules will be based on the best scientific information and technical evidence available to the District.

The District will encourage cooperation and coordination in the implementation of this plan. All operations and activities will be performed in a manner that encourages the cooperation of the citizens of the District and with the appropriate water management entities at the state, regional and local level.

XIX. Methodology for Tracking the District's Progress in Achieving Management Goals

The general manager of the District will prepare and submit an annual report (Annual Report) to the District Board of Directors. The Annual Report will include an update on the District's performance in achieving the management goals contained in this plan. The general manager will present the Annual Report to the Board of Directors Within ninety (90) days following the completion of the District's Fiscal Year, beginning in the fiscal year starting on October 1, 2004. A copy of the annual audit of District financial records will be included in the Annual Report. The District will maintain a copy of the Annual Report on file for public inspection at the District offices, upon adoption by the Board of Directors.

XX. Management Goals

1) Providing for the Most Efficient Use of Groundwater in the District.

1.1 <u>**Objective**</u> – Each year, the District will require all new exempt or permitted wells that are constructed within the boundaries of the District to be registered with the District in accordance with the District rules.

1.1 <u>Performance Standard</u> – The number of exempt and permitted wells registered by the District for the year will be incorporated into the Annual Report submitted to the Board of Directors of the District.

1.2 <u>**Objective**</u> – Each year, the District will regulate the production of groundwater by maintaining a system of permitting the use of groundwater within the boundaries of the District in accordance with the District Rules.

1.2 <u>Performance Standard</u> – Each year the District will accept and process applications for the permitted use of groundwater in the District in accordance with the permitting process established by District rules. The number and type of applications made for the permitted use of groundwater in the District and, the number and type of permits issued by the District will be included in the Annual Report given to the Board of Directors.

1.3 <u>**Objective**</u> – The District will conduct an investigation to evaluate the aquifers of the district and the production of groundwater within the district in preparation of establishing a monitor well network within the boundaries of the District.

1.3.1 <u>Performance Standard</u> – A study will be conducted on the hydro-geologic and geographic characteristics of the District and may include, but not necessarily be limited to, amount of aquifer structure and extent, water use, water quality, and water-levels. This study will be completed by December 1, 2005.

1.3.2 <u>Performance Standard</u> – Each year the District will utilize the monitor well network to take samples of water quality and to conduct regular measurements of the changing water-levels in the aquifers of the District. A progress report on the work of the District regarding monitoring the water quality and water-levels of aquifers within the District will be included in the Annual Report of the District each year beginning in the first annual report following January 1, 2006.

2) Controlling and Preventing the Waste of Groundwater in the District.
2.1 Objective – Each year, the District will make an evaluation of the District Rules to

2.1 <u>Objective</u> – Each year, the District will make an evaluation of the District Rules to determine whether any amendments are recommended to decrease the amount of waste of groundwater within the District.

2.1 <u>**Performance Standard**</u> – The District will include a discussion of the annual evaluation of the District Rules and the determination of whether any amendments to the rules are recommended to prevent the waste of groundwater in the Annual Report of the District provided to the Board of Directors.

2.2 <u>Objective</u> – Each year, the District will provide information to the public on eliminating and reducing wasteful practices in the use of groundwater.

2.2 <u>Performance Standard</u> – Each year, a copy of the information provided on the District's website regarding groundwater waste reduction will be included in the District's Annual Report to be given to the District Board of Directors.

3) Controlling and Preventing Subsidence.

3.1 <u>**Objective**</u> – Each year, the District will hold a joint meeting with neighboring Groundwater Conservation Districts focused on sharing information regarding subsidence and the control and prevention of subsidence through the regulation of groundwater use.

3.1 <u>Performance Standard</u> – Each year, a summary of the joint meeting on subsidence issues will be included in the Annual Report submitted to the Board of Directors of the District.

3.2 <u>**Objective**</u> – Each year, the District will provide one article annually on the District's website to educate the public on the subject of subsidence.

3.2 <u>**Performance Standard**</u> – The Annual Report submitted to the Board of Directors will include a copy of the article posted on the District's website.

4) Natural Resource Issues That Affect the Use and Availability of Groundwater or are affected by the Use of Groundwater.

4.1 <u>Objective</u> – The District will inquire to the Texas Railroad Commission asking for the location of existing salt water or waste disposal injection wells permitted by the Texas Railroad Commission within the District by the end of fiscal year 2004.

4.1 <u>Performance Standard</u> – A copy of the letter to the Texas Railroad Commission asking for the location of existing salt water or waste disposal wells permitted to operate within the District will be included in the Annual Report submitted to the Board of Directors of the District for fiscal year 2004.

4.2 <u>Objective</u> – Each year the District will inquire to the Texas Railroad Commission asking whether any new salt water or waste disposal injection wells have been permitted by the Texas Railroad Commission to operate within the District.

4.2 <u>Performance Standard</u> – Each year a copy of the letter to the Texas Railroad Commission asking for the location of any new salt water or waste disposal wells permitted to operate within the District will be included in the Annual Report submitted to the Board of Directors of the District.

4.3 <u>Objective</u> – Each year the District will request the Texas Railroad Commission to provide a copy of the results of integrity tests performed on salt water or waste disposal injection wells permitted by the Texas Railroad Commission to operate within the District.

4.3 <u>Performance Standard</u> – Each year a copy of the letter to the Texas Railroad Commission requesting the results of the integrity testing performed on salt water or waste disposal injection wells permitted by the Texas Railroad Commission to operate within the District will be included in the Annual Report submitted to the Board of Directors of the District.

5) Conjunctive Surface Water Management Issues.

5.1 <u>Objective</u> – Each year, the District will participate in the regional planning process by attending the Region K and Region P Regional Water Planning Group meetings to encourage the development of surface water supplies to meet the needs of water user groups in the District.

5.1 <u>Performance Standard</u> – The attendance of a District representative at 50 percent of the Region K and Region P Regional Water Planning Group meetings will be noted in the Annual Report presented to the District Board of Directors.

6) Addressing Conservation.

6.1 <u>**Objective**</u> – The District will annually submit an article regarding water conservation for publication to at least one newspaper of general circulation in the District.

6.1 <u>**Performance Standard**</u> – A copy of the article submitted by the District for publication to a newspaper of general circulation in the District regarding water conservation will be included in the Annual Report to the Board of Directors.

6.2 <u>Objective</u> – The District will develop or implement a pre-existing educational program for use in public or private schools located in the District to educate students on the importance of water conservation by January 1, 2005.

6.2 <u>Performance Standard</u> – A summary of the educational program developed or implemented by the District for use in public or private schools located in the District will be included in the Annual Report to the Board of Directors for the year 2005.

6.3 <u>Objective</u> – Each year, the District will include an informative flier on water conservation with at least one mail out to groundwater use permit holders distributed in the normal course of business for the District.

6.3 <u>**Performance Standard**</u> – The District's Annual Report will include a copy of the informative flier distributed to groundwater use permit holders regarding water conservation and the number of fliers distributed.

7) Addressing Drought Conditions.

7.1 <u>Objective</u> – 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 <u>www.txwin.net</u>.

7.1 <u>Performance Standard</u> – 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.

Appendix A

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

NOTICE OF PUBLIC HEARING

Coastal Bend Groundwater Conservation District Thursday, October 30, 2003 7:00 p.m. Wharton County Extension 210 S. Rusk, Wharton, Texas 77488 (979) 532-3310

AGENDA

- I. Open public hearing for comments on Groundwater Management Plan
- II. Public Comments / Announcements
- III. Adjournment.

NOTICE OF MEETING

Notice is hereby given that the Governing Body of the Coastal Bend Groundwater Conservation District, will meet at 7:00 p.m. on the 30th day of October, 2003 at the Wherton County Extension office, 210 S. Rusk in the City of Wharton Texas 77488 for the purpose of:

See attached and above Agenda

CERTIFICATE

I certify that the above notice of this meeting was posted in compliance with the Texas Open Meetings Act on the bulletin beard of the Wharton County Courthouse in the City of Wharton and at the entrance of El Campo City Hall of the City of El Campo and the front entrance of Wharton City Hall of the City of Wharton, on the 27th day of October, 2003 by 5:00 p.m.

Haren A. Ganza

Karen L. Garza, Recording Secretary

RESOLUTION ADOPTING MANAGEMENT PLAN OF THE

COASTAL BEND GROUNDWATER CONSERVATION DISTRICT

WHEREAS, The Management Plan of the Coastal Bend Groundwater 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 Bill1;

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 COASTAL BEND GROUNDWATER CONSERVATION DISTRICT THAT:

1) The "Management Plan of the Coastal Bend Groundwater 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 13th DAY OF JULY, 2004.

SIGNED

Ronald Gertson President

ATTEST

Edmund Weinheimer Secretary



Ronald Gertson President

Board of Directors L.G. Raun Vice-President Leonard Wittig

r<u>s</u> Edmund Weinheimer Secretary Arthur Priesmeyer

Director <u>District Employees</u> Neil Hudgins

General Manager

Mandy Bain Administrative Assistant

Director

August 9, 2004

Mr. J. Kevin Ward Executive Administrator, Texas Water Development Board Stephen F. Austin Bldg. P.O. Box 13231 1700 N. Congress Avenue Austin, TX 78711-3231

Re: Groundwater Management Plan

Dear Mr. Ward:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is submitting the plan to the Texas Water Development Board for your review. It is our desire that our groundwater management plan is certified as being administratively complete.

If you have any questions, please feel free to contact me at any time. Thank you in advance for your assistance in this matter.

On Behalf of the District,

eal Hudg

Neil Hudgins General Manager Coastal Plains GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure .

cc: TWDB District File

> P.O. Box 341 / 109 E. Milam / Wharton, Texas 77488 / (979) 531-1412 Facsimile (979) 531-1002 www.cbgcd.com

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July 28, 2004

The Honorable Harrison Stafford II Lavaca Regional Water Planning Group 115 W. Main Edna, Texas 77957

Re: Groundwater Management Plan

Dear Mr. Stafford:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan. Please review the groundwater management plan and specify any areas of conflict with the Texas Water Development Board approved regional water plan.

Thank you in advance for your assistance in this matter.

On Behalf of the District,

Theil Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

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July 28, 2004

Mr. Joseph J. Beal, P.E. General Manager Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767

Re: Groundwater Management Plan

Dear Mr. Beal:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan with surface water management entities.

On Behalf of the District,

Til Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

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July 28, 2004

Mr. Patrick Brzozowski General Manager Lavaca Navidad River Authority P.O. Box 429 Edna, Texas 77957

Re: Groundwater Management Plan

Dear Mr. Brzozowski:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan with surface water management entities.

On Behalf of the District,

Thil Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

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July 28, 2004

Mr. John Burke, P.E. Lower Colorado Regional Water Planning Group P.O. Drawer P Bastrop, Texas 78602

Re: Groundwater Management Plan

Dear Mr. Burke:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan. Please review the groundwater management plan and specify any areas of conflict with the Texas Water Development Board approved regional water plan.

Thank you in advance for your assistance in this matter.

On Behalf of the District,

This Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

C \Coastal Bend - Misc\Correspondence\Region K Mgmt Plan Ltr 03-03-04 doc

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY				
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: The Honorable. Hurrison Stufferd II Huraca Regional Water Planning USA MAID 	A. Signature X. Agent A. Agent A. Addressee B. Received by (<i>Printed Name</i>) D. Is delivery address different from item 1? If YES, enter delivery address below:				
IS W MARK	3. Service Type				
Eana, 1x 1/1951	Registered Return Receipt for Merchandise Insured Mail C.O.D.				
	4. Restricted Delivery? (Extra Fee)				
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PS Form 3811, February 2004 Domestic Re	turn Receipt 102595-02-M-1540				
SENDED COURTER					
SENDER COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY				

Complete items 1, 2, and 3. Also complete A. Signature item 4 if Restricted Delivery is desired. Х Print your name and address on the reverse so that we can return the card to you. 8. Attach this card to the back of the mailpiece. eived by (Printed Name) -rank or on the front if space permits. FACTRED 1. Article Addressed to: D. Is delivery address different from item 1? If YES, enter delivery address below: Mr. John Burke, P.E. Lower Colorado Reginanal Water Planning Group P.C. Drawer P 3. Service Type Certified Mail

Bastrop, TX 78602 Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) 🛛 Yes 2. Article Number 1760 0002 1:720 8156 (Transfer from service label) IUM

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Edna, TX 77957	3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D.
	4. Restricted Delivery? (Extra Fee) Yes
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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X Agent B. Received by (Printed Name) C. Date of Delivery C. Date of Delivery
1. Article Addressed to: Mr. John Burke, P.E. Lower Colorado Reginanal Water Planning Group D.O. Dire M.C. P	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
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July 28, 2004

The Honorable Harrison Stafford II Lavaca Regional Water Planning Group 115 W. Main Edna, Texas 77957

Re: Groundwater Management Plan

Dear Mr. Stafford:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan. Please review the groundwater management plan and specify any areas of conflict with the Texas Water Development Board approved regional water plan.

Thank you in advance for your assistance in this matter.

On Behalf of the District,

This Hudg)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

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July 28, 2004

Mr. Joseph J. Beal, P.E. General Manager Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767

Re: Groundwater Management Plan

Dear Mr. Beal:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan with surface water management entities.

On Behalf of the District,

This Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

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July 28, 2004

Mr. Patrick Brzozowski General Manager Lavaca Navidad River Authority P.O. Box 429 Edna, Texas 77957

Re: Groundwater Management Plan

Dear Mr. Brzozowski:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan with surface water management entities.

On Behalf of the District,

This Hudg)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

C/Coastal Bend - Misc/Correspondence/LNRA Mgmt Plan Ltr 03-03-04 doc

P.O. Box 341 / 109 E. Milam / Wharton, Texas 77488 / (979) 531-1412 Facsimile (979) 531-1002 www.cbgcd.com / thedistrict@cbgcd.com

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July 28, 2004

Mr. John Burke, P.E. Lower Colorado Regional Water Planning Group P.O. Drawer P Bastrop, Texas 78602

Re: Groundwater Management Plan

Dear Mr. Burke:

Enclosed you will find a copy of the groundwater management plan for the Coastal Bend Groundwater Conservation District. Following notice and hearing, the District is transmitting the plan to coordinate in the development of its management plan. Please review the groundwater management plan and specify any areas of conflict with the Texas Water Development Board approved regional water plan.

Thank you in advance for your assistance in this matter.

On Behalf of the District,

This Hudy)

Neil Hudgins General Manager Coastal Bend GCD (979) 531-1412 nhudgins@cbgcd.com

Enclosure

cc: TWDB District File

C \Coastal Bend - Misc\Correspondence\Region K Mgmt Plan Ltr 03-03+04 doc

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Regional Water Planning Area Project Manager Review of Groundwater Conservation District Management Plan for Conflicts With a TWDB Approved Regional Water Plan

Review of the Groundwater Conservation District Management Plan for Conflict With TWDB Approved Regional Water Plan(s)	Yes	No
13(a). Did the District provide a letter by certified mail, return receipt requested to all Regional Water Planning Groups formed under authority of TWC §16.053 (c)) in which any part of the District is located, asking the Regional Water Planning Group to review the groundwater management plan and specify any areas of conflict with the Texas Water Development Board approved regional water plan? 31TAC §356.6 (a)(5)	yes	
 13(b). Did any Regional Water Planning Group formed under authority of TWC §16.053 (c)) indicate any potential conflict between the groundwater conservation district management plan and a Texas Water Development Board approved regional water plan? 31TAC §356.6 (a)(5) 		No
13(c). Did reviewer identify any potential conflicts between the management plan and the Texas Water Development Board approved regional water plan? TWC §36.1071 (e)(4), 31TAC §356.6 (a)(5) [If answering Yes, please provide a written explanation]		No
Signify an affirmative response with YES Signify a negative response with NO Signify that a checklist item is not applicable with (N/A)		

AFFIRMATION OF COMPLETION OF THE GROUNDWATER CONSERVATION DISTRICT MANAGEMENT PLAN REVIEW PROCESS BY TEXAS WATER DEVELOPMENT BOARD

The undersigned does affirm and attest that the management plan submitted by:

Coastal Bend Groundwater Conservation District

has been reviewed and the contents of which have been found to fulfill the requirements of TWC §36.1071 (e)(4) and 31TAC Ch. 356.6 (a)5, as defined by the TWDB groundwater management plan review checklist.

David Meesey

(Please Print Project Manager's Name)

(Project Manager's Signature)

Date _____9/1/04



K and P ___, Project Manager for Regions_

Appendix B

Rules Adopted on April 13, 2004 Coastal Bend Groundwater Conservation District **RULES OF THE**

COASTAL BEND GROUNDWATER CONSERVATION DISTRICT

PROPOSED ON: JANUARY 16, 2004

> ADOPTED ON: APRIL 13, 2004

EFFECTIVE DATE: MAY 15, 2004 This Page Intentionally Left Blank

COASTAL BEND GROUNDWATER CONSERVATION DISTRICT

Board of Directors

Ronald Gertson - President Precinct 2

L.G. Raun - Vice President Precinct 3

E.A Weinheimer – Secretary At Large

> Arthur A. Priesmeyer Precinct 4

> > Leonard Wittig Precinct 1

General Manager

Neil Hudgins

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CHAPTER 1. GENERAL PROVISIONS SUBCHAPTER A: GENERAL

§1.1 PURPOSE OF RULES.

(a) The purpose of these Rules of the Coastal Bend Groundwater Conservation District is to implement the powers and duties of the District under its enabling Act, Texas Water Code Chapter 36, and other applicable laws and to establish the general policies and procedures of the District.

(b) The District's Rules are promulgated under the District's statutory authority to achieve the following objectives: to provide for conserving, preserving, protecting, and recharging of the groundwater or of a groundwater reservoir or its subdivisions in order to control subsidence, or prevent waste of groundwater. The District's orders, rules, regulations, requirements, resolutions, policies, guidelines, or similar measures have been implemented to fulfill these objectives.

(c) The Rules of the Coastal Bend Groundwater Conservation District will guide, define, and achieve the District goals of water conservation and pollution prevention in an effort to preserve, protect, and enhance the groundwater within the District's jurisdictional boundaries.

§1.2 USE AND EFFECT OF RULES.

(a) The District uses these Rules as guides in the exercise of the powers conferred to it by law and in the accomplishment of the purposes of the Act. They shall not be construed as a limitation or restriction on the exercise of any discretion, where it exists; nor shall they be construed to deprive the District or Board of the exercise of any powers, duties or jurisdiction conferred by law; nor shall 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 Act.

(b) Except as otherwise specified, these rules are effective **on the date of adoption by the Board of Directors**. References to Texas Water Code Chapter 36 include subsequent revisions and are effective upon the effective date of these Rules or upon the effective date of subsequent amendments to Texas Water Code Chapter 36.

§1.3 AMENDING RULES.

The Board may, following notice and hearing, amend these Rules or adopt new rules from time to time.

§1.4 HEADINGS AND CAPTIONS.

The section and other headings and captions contained in these Rules are for reference purposes only and shall not affect in any way the meaning or interpretation of these Rules.

§1.5 CONSTRUCTION OF RULES.

(a) Unless otherwise expressly provided for in these Rules, the past, present and future tense shall each include the other; the masculine, feminine and neuter gender shall each include the other; and the singular and plural number shall each include the other.

(b) The verbs "may," "can," "might," "should," or "could" are used when an action is optional or may not apply in every case. The verbs "will," "shall," or "must" are used when an action is required. The verb "cannot" is used when an action is not allowed or is unachievable.

§1.6 SEVERABILITY.

In case any one or more of the provisions contained in these Rules shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other Rules, or provisions hereof, and these Rules shall be construed as if such invalid, illegal, or unenforceable rule or provision had never been contained herein.

§1.7 SAVINGS CLAUSE.

If any section, sentence, paragraph, clause, or part of these Rules should be held or declared invalid for any reason by a final judgment of the courts of this state or of the United States, such decision or holding shall not affect the validity of the remaining portions of these Rules; and the Board does hereby declare that it would have adopted and promulgated such remaining portions irrespective of the fact that any other sentence, section, paragraph, clause, or part thereof may be declared invalid.

§1.8 COMPUTING TIME.

In computing any period of time prescribed or allowed by these Rules, by order of the Board, or by any applicable statute, the day of the act, event, or default from which the designated period of time begins to run, is not to be included, but the last day of the period so computed is to be included, unless it be a Saturday, Sunday, or legal holiday on which the District is closed, in which event the period runs until the end of the next day that is neither a Saturday, Sunday, or a legal holiday on which the District is closed.

§1.9 TIME LIMITS.

Applications, requests, or other papers or documents required or permitted to be filed under these Rules must be received for filing at the District, within the time limit, if any, for such filing. The date of receipt and not the date of posting is determinative.

§1.10 REGULATORY COMPLIANCE.

All well owners, water well drillers, and other persons subject to these Rules shall comply with all applicable rules and regulations of other governmental entities. Where District Rules and regulations are more stringent than those of other governmental entities, the District Rules and regulations shall control.

SUBCHAPTER B: GENERAL OPERATIONS

§1.20 MEETINGS OF THE BOARD.

The Board of Directors will hold regular meetings at least quarterly. In addition, the Board may hold special meetings at the request of the President or three Directors. All Board meetings will be held in accordance with Chapter 551 of Texas Government Code.

SUBCHAPTER C: RULEMAKING PROCEDURES

§1.40 APPLICABILITY.

This subchapter applies to rulemaking by the District but does not apply to internal personnel rules or practices, bylaws, statements regarding internal management or organization, or other statements not of general applicability.

§1.41 PUBLIC HEARINGS ON PROPOSED RULES.

(a) The Board shall hold at least one public hearing on proposed rules prior to adoption of the proposed rules as final rules.

(b) The Board may direct the General Manager or another person to serve as the presiding office and to conduct the public hearings on the proposed rules.

(c) Public hearings will be conducted in the manner the Board or General Manager deems most suitable to conveniently, inexpensively, and expeditiously provide a reasonable opportunity for interested persons to submit relevant data, views, or arguments, in writing or orally, on proposed rules.

§1.42 NOTICE OF PUBLIC HEARINGS ON PROPOSED RULES.

(a) The Board will set a time and place for any public hearing on proposed rules of the District.

(b) The General Manager shall give prior notice of the public hearing at least thirty (30) days before the public hearing by posting the notice in the location where notices of the District's Board meetings are posted and by publishing the notice in one or more newspapers of general circulation within the District, unless the Board determines an emergency to public health or safety exists. Notice for a hearing on proposed rules of the District for emergency situations shall be given at least five (5) days prior to the public hearing.

(c) The notice shall advise the public of the following:

(1) the proposed agenda;

(2) the date, place, and time the public hearing is to be convened;

(3) the date and time by which written comments must be filed with the District;

and

(4) the place at which written comments must be filed with the District.

§1.43 ADOPTION OF RULES.

(a) The Board may adopt proposed rules as final rules at any time after the completion of the public hearing(s) and after the close of the written comment period.

(b) The Board will compile its rules and make them available for public use and inspection at the District's principal office.

CHAPTER 2. DEFINITIONS

§2.1 APPLICABILITY.

(a) The District employs two types of definitions. General definitions apply to all Rules

of the

District. Specific definitions apply only to the chapter in which they are located. Specific definitions applying only to a particular chapter are set out in that chapter.

(b) The District follows the definitions of terms set forth in Texas Water Code Chapter 36 and other definitions as set forth herein.

§2.2 DEFINITIONS.

Unless the context clearly indicates a contrary meaning, the following words and terms shall have the following meanings in these Rules:

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

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

- (B) a non-deteriorated well which has been capped.
- (2) "Acre Foot" the volume of water necessary to cover one acre of land one foot deep or 325,851 gallons.
- (3) "Act" the District's enabling legislation H.B. No. 1038 of the 77th Texas Legislature, in conjunction with Texas Water Code Chapter 36, as amended.
- (4) "Aggregate Withdrawal" the amount of water withdrawn from two or more wells which are permitted for a total pumpage volume of all wells in the aggregate.
- (5) "Agriculture or Agricultural Use" any use or activity involving agriculture as defined in Texas Water Code Section 36.001, including but not limited to aquaculture; irrigation to cultivate the soil to produce crops; the practice of floriculture, viticulture, silviculture, and horticulture, including nursery grower operations; raising, feeding, or keeping animals for breeding or production of food or fiber or other products with a tangible commercial value; planting cover crops, wildlife management; or raising or keeping equine animals.
- (6) **"Annular Space**" the space between two cylindrical objects, one of which surrounds the other, such as the space between the walls of a drilled hole and the installed casing.
- (7) "**Aquifer**" a geologic formation with water sufficient quantities to make the production of water from this formation feasible for beneficial use.

- (8) "Aquifer Emergency Warning" a groundwater condition that may be declared by the District when water quality or water quantity becomes detrimental to public health or the beneficial use of water from the aquifer.
- (9) "Artesian Zone" a zone where water is confined in an aquifer under pressure so that the water will rise in the well casing or drilled hole above the bottom of the confining bed overlying the aquifer.
- (10) "AWWA" American Water Works Association
- (11) "Beneficial Use" the use of water in an efficient, nonwasteful manner for one or more beneficial purposes as defined in Texas Water Code Section 36.001, including but not limited to agricultural use, domestic use, stock-raising, municipal use, mining, industrial use including manufacturing, commercial use, non-agricultural irrigation, recreational use including pleasure uses, oil and gas operations, or other uses including extraction for the purposes of remediation, injection operations, or leachate operations.
- (12) **"Board**" the Board of Directors of the Coastal Bend Groundwater Conservation District.
- (13) "**Capped Well**" a well that is closed or capped with a covering capable of preventing surface pollutants from entering the well and sustaining weight of at least 400 pounds and constructed in such a way that the covering cannot be easily removed by hand.
- (14) "Casing" a watertight pipe which is installed in an excavated or drilled hole, temporarily or permanently, to maintain the hole sidewalls against caving, advance the borehole, and in conjunction with cementing and/or bentonite grouting, to confine the groundwaters to their respective zones or origin, or to prevent surface contaminant infiltration.
- (15) "Cement Grout" a mixture of water and cement, which may also include a bentonite clay component.
- (16) "Commercial Use" a well used to supply water to properties or establishments which are in business to provide goods or services or repairs and which use water in those processes or incidental to the maintenance of the property or establishment including landscape irrigation; or a well used to supply water to a business establishment primarily for employee and customer sanitary purposes.
- (17) **"Commission" -** means the Texas Commission on Environmental Quality or its successor agency.
- (18) "**Conservation**" those water saving practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that more water is made available for future or alternative uses.
- (19) "**Director**" an elected or appointed member of the Board of Directors of the Coastal Bend Groundwater Conservation District.

- (20) "De-watering Well" an artificial excavation that is constructed to produce groundwater for the purpose of lowering the water table or potentiemetric surface and that is not primarily used for the purpose of utilizing the groundwater that is produced.
- (21) **"Discharge**" the volume of water that passes a given point within a given period of time.
- (22) "District" the Coastal Bend Groundwater Conservation District.
- (23) "**Domestic Use**" the use of water by an individual or a household to support domestic activity. Such use may include water for drinking, washing, or culinary purposes; for irrigation of lawns, or of a family garden and/or orchard; for water of domestic animals; and for water recreation including aquatic and wildlife enjoyment. If the water is diverted, it must be diverted solely through the efforts of the user. Domestic use does not include water used to support activities for which consideration is given or received or for which the product of the activity is sold.
- (24) "**Drill**" drilling, equipping, completing wells, or modifying the size of wells or well pumps/motors (resulting in an increase in pumpage volume) whereby a drilling or service rig must be on location to perform the activity.
- (25) "**Exempt Well**" a well that is exempt from the requirement to obtain a permit under Section 3.5 of these Rules.
- (26) **"Existing Well"** any well in the District that was drilled and completed prior to the original effective date of these rules.
- (27) "Export" the transfer of water out of the District
- (28) "**Export Fee**" a fee assessed by the District for water that is exported out of the District. The fee may be assessed against pumpage from permitted and unpermitted wells.
- (29) **"Extraction well" -** a well used to extract contaminated fluids from the subsurface for the purpose of conducting an environmental remediation.
- (30) "Fees" charges imposed by the District pursuant to Rule, Order, or the Act.
- (31) "**Fiscal Year**" the business year of the District beginning September 1 of each year and ending on August 31 of the following year.
- (32) **"Groundwater or Underground Water" -** water located beneath the earth's surface but does not include water produced with oil and gas production.
- (33) "Groundwater Reservoir" a specific subsurface water-bearing reservoir having ascertainable boundaries and containing groundwater.
- (34) **"Gulf Coast Aquifer"** groundwater located in the Chicot, Evangeline or Jasper formations and related water bearing units.

- (35) **"Hazardous Conditions**" any groundwater quality condition that may be detrimental to public health or affect the beneficial use of water from the aquifer.
- (36) **"Hydrogeological Report**" a report that identifies the availability of groundwater in a particular area and formation, and which also addresses the issues of quantity and quality of that water and the impacts of pumping that water on the surrounding environment including impacts to nearby or adjacent wells.
- (37) "Incidental Use" a beneficial use of water which is of a minor nature. Transport of water outside the District by a permittee which totals 5% or less, but in no case more than 5,000,000 gallons, of the permittee's annual permitted pumpage is considered incidental use (15.34 acre foot).
- (38) **"Industrial Use"** the use of water integral to the production of primary goods and/or services provided by industrial, manufacturing or commercial facilities and used primarily in the building, production, manufacturing, or alteration of a product or goods, or a well used to wash, cleanse, cool, or heat such goods or products; does not include agricultural use.
- (39) **"Injection well"** an artificial excavation or opening in the ground made by digging, boring, drilling, jetting, driving, or some other method, and used to inject, transmit, or dispose of industrial and municipal waste or oil and gas waste into a subsurface stratum; or a well initially drilled to produce oil and gas which is used to transmit, inject, or dispose of industrial and municipal waste or oil and gas waste into a subsurface stratum; or a well used for the injection of any other fluid; but the term does not include any surface pit, surface excavation, or natural depression used to dispose of industrial and municipal waste or oil and gas waste.
- (40) "Leachate well" a well used to remove leachate from soil or groundwater. For the purposes of this definition, "leachate" means a liquid that has percolated through or drained from solid waste or hazardous waste and contains soluble, suspended, or miscible materials removed from such waste.
- (41) "Licensed Water Well Driller" any person who holds a license issued by the State of Texas pursuant to the provisions of the Texas Water Well Drillers Act and the substantive rules of the Texas Department of Licensing and Regulation's Water Well Drillers and Pump Installers Program.
- (42) "Licensed Water Well Pump Installer" any person who holds a license issued by the State of Texas pursuant to the provisions of the Texas Water Well Pump Installers Act and the substantive rules of the Texas Department of Licensing and Regulation's Water Well Drillers and Pump Installers Program.
- (43) "**Meter**" a water flow measurement device which meets AWWA standards for the applicable line size, pressures, and flows, and which is properly installed according to the manufacturer's specifications.
- (44) "**Modify**" to alter the physical or mechanical characteristics of a well, its equipment, or production capabilities. This does not include repair of equipment, well houses or enclosures, or replacement with comparable equipment.

- (45) **"Monitor or Observation Well" -** a well used for collecting water-quality and/or water-level data.
- (46) "Mean Sea Level (MSL)" an average sea level reference datum determined by the National Oceanic and Atmospheric Administration. Used as a reference in the measurement of elevations.
- (47) **"Municipal use" -** the use of water for a public water system for residential, commercial, or public and institutional uses, including the application of potable water for irrigation of golf courses, parks and recreational uses; it does not include water for industrial uses even when industrial users are receiving potable water.
- (48) "New Well" any well that is not an existing well as defined in these rules.
- (49) **"Nonexempt Well"** a well required to obtain a permit for the production of groundwater from within the District and required to report groundwater use.
- (50) **"Open or Uncovered Well"** an artificial excavation at least 10 feet deep and not more than six feet in diameter, that is dug or drilled for the purpose of producing the groundwater, or for injection, monitoring, or de-watering purposes, and is not capped or covered as required by the District.
- (51) **"Operate or Operations**" to produce or cause to produce water from a well or to use a well for injection or closed loop heat exchange purposes.
- (52) "**Overpumpage**" to produce water from a well in excess of the amount authorized to be withdrawn in accordance with the permitted pumpage volume issued by the District.
- (53) "**Per Capita**" one individual or person, a unit of population; may be phrased as a standard value such as: one active residential account or meter equals 3.0 per capita.
- (54) "**Person**" includes a corporation, individual, organization, cooperative, government or governmental subdivision or agency, business trust, estate, trust, partnership, association, or any other legal entity.
- (55) **"Plug"** to close a well permanently in accordance with approved District standards.
- (56) "Potable Water" water which is safe for human consumption in that it is free from impurities in amounts sufficient to cause disease or harmful physiological effects.
- (57) **"Potentiometric Surface**" the elevation to which water from a specific aquifer will rise in a well.
- (58) **"Public Water System**" a system that provides water for human consumption as defined by the rules of the Texas Commission on Environmental Quality.

- (59) **"Pumpage or Groundwater Production**" all water withdrawn from the ground, measured at the wellhead.
- (60) "**Permit**" an authorization issued by the District allowing the withdrawal of a specific amount of groundwater from a nonexempt well for a designated period of time, generally in the form of millions of gallons or acre-feet per year.
- (61) "Permit Amendment" a minor or major change in the permit.
- (62) "**Recharge Zone**" the area of the aquifer in which water infiltrates the surface and enters aquifer.
- (63) **"Recreational Use**" the use of water for fishing, swimming, water skiing, boating, hunting, and other forms of water recreation, including aquatic and wildlife enjoyment, and aesthetic land enhancement of a subdivision, golf course or similar development.
- (64) "**Red Tag**" an official seal, tag, or label placed on a well or its equipment, or the act of placing the tag or label, to indicate that further pumping of groundwater, or operation of the well, or continuing with other District regulated activities is not permitted by the District, will be in violation of District Rules, and may subject the well owner and operator to civil suit and/or penalties.
- (65) "Rules" standards and regulations promulgated by the District.
- (66) **"Salt dome"** geologic structure resulting from the upward movement of a salt mass caused by gravitational instability of a low density salt layer overlain by high density layer.
- (67) "Seal" the impermeable material, such as cement grout, bentonite, or puddling clay, placed in the annular space between the borehole wall and the casing to prevent the downhole movement of surface water or the vertical mixing of groundwater.
- (68) "Shrinkage" the loss of water between the producing well(s) meter and the customers meter in a water system. [Note: when the amount of shrinkage becomes excessive (greater than 15% of pumpage volume) the loss of water may become waste. May also be termed "line loss".]
- (69) "**Special Provisions**" conditions or requirements added to a permit which may be more or less restrictive than the Rules as a result of circumstances unique to a particular situation.
- (70) "Spring" a point(s) of natural discharge from an aquifer.
- (71) "Stratum" a layer of rock having a similar composition throughout.
- (72) "Surface Completion" sealing off access of undesirable water, surface material, or other potential sources of contamination to the well bore by proper casing and/or cementing procedures.

- (73) "Subsidence" sinking of a portion of the land surface resulting from removal of fluids from subsurface reservoirs such as oil and gas deposits, groundwater, or salt domes.
- (74) **"Total Dissolved Solids (TDS)"** a measurement of the quantity of minerals, chemicals, elements, or other matter contained in a state of solution by water.
- (75) **"Unconsolidated Formations"** naturally-occurring earth formations that are not lithified. Alluvium, soil, gravel, clay, and overburden are some of the terms used to describe this type of formation.
- (76) "User" a person who produces, distributes, or uses water from the aquifer(s).
 - "Void" a general term for pore space or other opening in rock. The openings can be very small to cave size, and are filled with water below the water table.
- (77) **"Water Level Elevation or Altitude**" the measure or estimate of a water surface in a well or aquifer as measured in feet relative to mean sea level.
- (78) **"Water Meter Seal"** a physical seal that is installed in or on the water meter to prevent tampering with meter readings.
- (79) "Water-Quality Report" a report prepared by the Texas Department of Health, the U.S.G.S. or any other governmentally or District-approved laboratory that is the product of testing the water for bacteria, solids, elements, chemicals, or contaminants.
- (80) **"Water Table**" the upper boundary of the saturated zone in an unconfined aquifer.
- (81) **"Water Tight Seal"** a seal, which prohibits the entrance of liquids or solutions, including water, which may enter through the wellhead and potentially, contaminate the well.
- (82) **"Water Table Zone**" that part of the aquifer confined only by atmospheric pressure (water levels will not rise in the well above the water table).
- (83) **"Well"** any artificial excavation or borehole constructed for the purposes of exploring for or producing groundwater, or for injection, monitoring, or dewatering purposes.
- (84) "Well Elevation" the ground surface elevation of the well bore.
- (85) "Well Log" an accurately kept record made during the process of drilling on forms prescribed by the Texas Department of Licensing and Registration (TDLR), showing the depth of the well bore, thickness of the formations, character of casing installed, together with any other data or information required by the Water Well Drillers Team; or any other special purpose well log that may be available for a given well, such as a gamma ray log, a temperature log, an

electric log, or a caliper log.

- (86) **"Well Pumps and Equipment"** devices and materials used to obtain water from a well, including the seals and safeguards necessary to protect the water from contamination.
- (87) **"Well Registration**" the creation of a record of the well by use and a well identification number for purposes of registering the well as to its geographic location and for notification to the well owner in cases of spills or accidents, data collection, record keeping and for future planning purposes.
- (88) **"Withdraw or Withdrawal"** the act of extracting groundwater by pumping or any other method, other than the discharge of natural springs.

CHAPTER 3. REGISTRATION, PERMITS, FEES, AND OTHER REQUIREMENTS

SUBCHAPTER A: SCOPE AND APPLICABILITY

§3.1 REGISTRATION REQUIRED.

(a) All wells within the District whether exempt or non-exempt from permitting are required to be registered with the District on forms approved by the General Manager.

(b) Registration of an existing, exempt well will provide the owner or operator of the well with evidence that the well existed before the effective date of these Rules for purposes of determining historical user status. Registration of an existing, exempt well will also include the well in the spacing protections provided by Chapter 6.

§3.2 REGISTRATION OF EXISTING WELLS.

(a) The owner or operator of an existing well located in the District shall register the well by completing an application form provided by the District and submitting the completed form to the District by December 31, 2004.

(b) District staff will review the application and make a preliminary determination of whether the well meets the exemptions from permitting provided in Section 3.5. If the preliminary determination is that the well is not exempt, the District staff will inform the registrant of any further application information or fees required to process the application as a permit application.

(c) The owner or operator of an existing well must be fully compliant with all registration requirements and other applicable provisions of these Rules by December 31, 2004. Failure to register an existing well by December 31, 2004 will make the well ineligible for historical user status under Section 3.6.

§3.3 REGISTRATION OF NEW WELLS.

(a) All new wells, except leachate wells, extraction wells, injection wells, and dewatering wells, must be registered by the well owner, well operator, or water well driller prior to being drilled, equipped or completed.

(b) The owner, operator, or water well driller shall register the new well by completing an application form provided by the District and submitting the application to the District for review and approval. District staff will review the application and make a preliminary determination of whether the well meets the exemptions from permitting provided in Section 3.5 and will inform the registrant of their determination within five business days of receipt of the completed application.

(c) If the staff's preliminary determination is that the well is exempt, the registrant may begin drilling or other activity immediately upon receiving the approved registration.

(d) If the preliminary determination is that the well is not exempt, the District staff will inform the registrant of any further application information or fees required to process the application as a permit application.

(e) If the preliminary determination is that the well is not exempt, no person may drill, equip, complete, or substantially alter the well without first obtaining the appropriate permit or amendment thereto from the District.

(f) A violation of this Rule occurs on the first day the drilling, equipping, completion, or alteration without the appropriate registration or permit begins and continues each day thereafter until the appropriate registration or permit is issued.

§3.4 PERMIT REQUIREMENTS.

(a) A permit from the District is required prior to drilling, equipping, completing, operating, or producing groundwater from any non-exempt well within the District. It is a violation of these Rules for a well owner, well operator, water well driller, or any other person acting on behalf of the well owner, to drill, equip, complete, operate, or produce groundwater from a non-exempt well within the District without first obtaining the proper permit or permit amendment.

(b) A well must remain properly permitted unless and until the power source is disconnected or the well casing or discharge pipe is capped or plugged.

(c) An application for a permit, permit amendment, or permit renewal shall be submitted in accordance with Subchapter B of this Chapter.

(d) The owner or operator of an existing well or an applicant for a new well must be fully compliant with the permitting requirements of this section by March 1, 2005.

§3.5. EXEMPTIONS FROM PERMITTING.

(a) The following wells are not required to have a permit from the District:

(1) a well used solely for domestic use or for providing water for livestock or poultry that is either drilled, completed, or equipped so that it is incapable of producing more than 25,000 gallons of groundwater per day (17.36 gpm);

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

(3) a water well authorized under a permit issued by the Railroad Commission of Texas under Natural Resources Code Chapter 134, provided the withdrawals are no greater than the amount necessary for mining activities specified in the Railroad Commission permit, regardless of any subsequent use of the water; and (4) a well used for domestic use or agricultural use that produces five million gallons of water per year or less.

(b) A well exempt under Subsection (a) will lose its exempt status and must be permitted if the well is subsequently used for a purpose or in a manner that is not exempt under Subsection (a).

(c) An owner or operator of a well exempt under Subsection (a)(3) shall equip the well with a meter meeting the specifications provided in Chapter 4 of these Rules and shall report monthly to the District:

- (1) the total amount of water withdrawn during the month;
- (2) the quantity of water necessary for mining activities; and
- (3) the quantity of water withdrawn for other purposes.

(d) In order to determine if a well is exempt under Subsection (a)(4), the Board may require the well owner or operator to submit information verifying the amount of annual production from the well. If the Board determines that there is no reasonable basis for determining the amount of production, the Board may require that a water meter be installed within a specified time period.

- (e) A water well exempt under Subsection (a) shall be:
 - (1) registered in accordance with these Rules; and

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

(f) The driller of a well exempted under Subsection (a) shall file the drilling log with the District.

(g) Groundwater withdrawn from a well exempt from permitting under this section and subsequently exported outside the boundaries of the District requires notice to the District and is subject to any applicable production and export fees.

§3.6. HISTORICAL USER STATUS.

(a) An owner or operator of an existing, non-exempt well that was completed and operational prior to the original effective date of these Rules may request historical user status by indicating the request on the permit application for the well and including the information listed in Subsection (b) of this section along with any applicable fee.

(b) A request for historical user status must include the following information to the extent the information exists and is available to the applicant through the exercise of reasonably diligent efforts:

(1) the year in which the well was drilled;

(2) the purpose for which the well was drilled and the types of subsequent use of the water; and

(3) any other information deemed necessary by the Board.

(c) Well owners or operators who meet the requirements of this section and submit the appropriate information with their permit application will be granted historical user status and classified as historical users.

(d) If the District adopts rules limiting groundwater production, the District may preserve groundwater use by historical users to the maximum extent practicable.

- (e) Historical user status is granted conditionally and is dependent on the specific owner and type of use. Historical user status is not a vested right of the permittee and may not be transferred by the permittee. The Board will transfer a historical user status designation to a replacement well or to a person who purchases or otherwise receives ownership of a well owned by a historical user provided that the new owner or operator maintains the same type of use of the well and fulfills any applicable requirements of the District. Historical user status may be revoked by the Board for violation of any terms or conditions of the permit, obtaining the permit by misrepresentation or failure to disclose relevant facts, or failure to comply with any applicable rules, regulations, fee schedule, special provisions, requirements, or orders of the District.
- (f) The District reserves the right to amend this section to expand the historical user classification to include additional permittees based on the hydrogeological conditions of the aquifer and other data and information collected by the District.

SUBCHAPTER B: APPLICATION REQUIREMENTS AND PROCESSING

§3.10 PREPARATION OF AN APPLICATION.

(a) <u>Form of Application</u>. Application for a well registration, permit, permit amendment, or permit renewal shall be made on forms provided by the District. Applications shall be in writing and sworn to.

(b) <u>Proper Registrant, Applicant, or Declarant.</u> The application must be submitted and signed by the well owner, well operator, or an authorized agent of the owner or operator. The agent may be required to provide the District with a notarized authorization from the landowner.

(c) <u>Completeness of an Application</u>. An application shall be considered administratively complete if it complies with all the requirements set forth in this subchapter; includes all information required to be included in the application; is properly completed, signed, and notarized; is accompanied by payment of all applicable fees, including any penalties or past due fees; and includes any maps, documents, or supplementary information requested by the Board or staff. A determination of administrative completeness will be made by the General Manager.

(d) <u>Action on Incomplete Applications</u>. The District will not take action on an application which is not administratively complete or which has not proceeded in a manner consistent with District Rules. An application may be rejected as not administratively complete if the District finds that substantive information required by the application or District staff is missing, false, or incorrect. Applicants submitting incomplete applications will be notified by the District in writing.

§3.11 REQUIREMENTS FOR APPLICATIONS.

(a) A separate application is required for each well.

(b) <u>Content Requirements.</u> An application must contain the following information in sufficient detail to be acceptable to the District:

(1) Minimum Requirements. All applications shall include the following:

(A) the name, mailing address, and phone number of the applicant and the owner of the property on which the well is or will be located;

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

(C) a detailed statement of the nature and purpose of the various proposed uses and the amount of groundwater to be used for each purpose, including a projected monthly demand distribution indicating the anticipated pumpage volumes for the first three years of pumpage; estimated or calculated per capita and/or household consumption, if applicable; the number of cultivated acres being irrigated and estimated crop type, if applicable; an explanation of any anticipated growth in total water demand and associated pumpage needs; and any alternative water sources being used by the applicant;

(D) the location of the well and the estimated rate at which water will be withdrawn from the well;

(E) the proposed location(s) of use of the water from the well;

(F) the proposed casing size and pump capacity;

(G) a statement by the applicant that the water withdrawn under the permit will be put to a beneficial, non-wasteful use at all times and that the applicant will comply with all District Rules, orders, and permit provisions;

(H) a water well closure plan or a declaration that the applicant will comply with well plugging and capping guidelines set forth in these Rules and will report well closures to the District;

(I) a water conservation plan, if the applicant is required by law to have a water conservation plan;

(J) a drought contingency plan, if the applicant is required by law to have a drought contingency plan; and

(K) any other information deemed necessary for the evaluation of the application by the General Manager or the Board.

(2) <u>Additional Requirements</u>. An application for a permit that involves the export of groundwater from the District shall include the following additional information:

(A) the location of the proposed receiving area for the water to be exported;

(B) a detailed statement of the nature and purpose of the various proposed uses in the proposed receiving area and the amount of groundwater to be used for each purpose;

(C) information describing the projected effect of the proposed exportation of water on aquifer conditions, depletion, subsidence, and existing permit holders or other groundwater users within the District;

(D) a copy of a proposed plan, if any, to mitigate any adverse impacts of the proposed export on groundwater users within the District;

(E) a description of how the proposed export is addressed in any approved regional water plan(s), if applicable; and

(F) a technical description of the facilities to be used for transportation of the groundwater and a time schedule for construction thereof.

(c) Hydrogeological Report. An applicant for a new well, or an applicant for permit renewal for a well that has not previously been the subject of a hydrogeological report, that involves the export of groundwater out of the District or the production of more than 1200 acre-feet of groundwater annually, shall submit to the District a current hydrogeological report addressing the area of influence, drawdown, recovery time, and other pertinent information required by the District. The well must be equipped to test for its ultimate planned use and the hydrogeological report must address the impacts of that use. The hydrogeological report shall be prepared by a qualified person who is properly licensed by the State of Texas to prepare such report. The report shall include hydrogeologic information addressing and specifically related to the proposed water pumpage levels at the proposed pumpage site. Applicants may not rely solely on reports previously filed with or prepared by the District. The report must be submitted within 120 days of the date the permit is granted, and failure to submit a hydrogeological report as required by the District is a violation of these Rules and shall be grounds for cancellation of the permit. The Board shall make the final determination of whether a hydrogeological report meets the requirements of this subsection.

(d) <u>Fees Included with Application</u>. The application must be accompanied by the application processing fee, inspection fee, or other fees as appropriate. Such fees must be paid before an application may be declared administratively complete. Application processing fees are non-refundable.

(e) <u>Processing Fee Deposits</u>. 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 for a permit may be dismissed.

(f) <u>Activities Not Considered Export</u>. For purposes of this section, the following activities are not considered to be an export of groundwater:

(1) the export of groundwater from the District for incidental use as defined in Chapter 2 of these Rules;

(2) the export of groundwater for an agricultural operation that overlaps or is adjacent to the District boundary; or

(3) the export of groundwater that occurs as a result of the distribution of water within a single, aggregate system of a retail public water system that overlaps the District boundary.

§3.12 SCHEDULING AND NOTICE OF HEARING ON AN APPLICATION.

(a) <u>Staff Recommendation</u>. Once an application has been declared administratively complete by the General Manager, District staff will perform a technical review of the application and prepare a staff recommendation to the Board. The staff recommendation shall include a summary of the facts related to the application and staff's recommendations for Board action on the application.

(b) <u>Scheduling of Hearing</u>. Unless these Rules specifically provide that a hearing is not required for an application, the General Manager or Board will schedule the application for a hearing at a regular or special meeting of the Board. The Board may schedule hearings for additional dates, times, and places if the hearing is to be presided over by a hearings examiner. The General Manager or Board may schedule more than one application for consideration at a hearing. Well registrations do not require a hearing or Board action.

(c) <u>Notice of Hearings</u>. The General Manager shall give notice of all hearings involving permit applications in the following manner:

(1) Notice of the date, time, and location of the hearing shall be sent to the applicant in writing at least ten calendar days before the date of the hearing by certified mail, return receipt requested. The notice to the applicant shall include the staff recommendation on the application.

(2) Notice of the hearing shall be published at least once in a newspaper of general circulation within the District. The date of publication may not be less than ten calendar days before the date of the hearing.

(3) A copy of the notice shall be posted at the District office and at the county courthouse in the place where notices are usually posted. The date of posting may not be less than ten calendar days before the date of the hearing.

(d) <u>Contents of Notice</u>. The notice shall include:

- (1) the name of the applicant;
- (2) the date, time, and location of the hearing; and

(3) any other information the General Manager or Board deems relevant or appropriate.

§3.13 HEARING PROCEDURES.

(a) <u>General Provisions</u>. Hearings on permit matters will be conducted by a quorum of the Board or an individual to whom the board has delegated the responsibility to preside as a hearings examiner. The board president, or another board member designated by the president, or the hearings examiner shall serve as the presiding officer for the hearing.

(b) <u>Hearing Registration</u>. The District may require each person who attends a hearing to submit a hearing registration form stating the person's name, address, whom the person represents, and whether the person wishes to testify.

(c) <u>Conduct of Hearings</u>. Hearings will be conducted in the manner the presiding officer deems most suitable to conveniently, inexpensively, and expeditiously provide a reasonable opportunity for interested persons to submit relevant data, views, or arguments, in writing or orally. In addition, the presiding officer may:

- (1) convene the hearing at the time and place specified in the notice;
- (2) set any necessary additional hearing dates;
- (3) establish the order for presentation of evidence;
- (4) administer oaths to all persons presenting testimony;
- (5) examine persons presenting testimony;

(6) limit testimony or the presentation of evidence to persons who, in the presiding officer's determination, are affected by the subject matter of the hearing;

(7) allow testimony to be submitted in writing and may require that written testimony be sworn to;

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

(9) prescribe reasonable time limits for testimony and the presentation of evidence.

(d) <u>Continuance</u>. The presiding officer may continue a hearing from time to time and from place to place without providing notice under Section 3.12 by announcing at the hearing the time, date, and location of the continued hearing.

(e) <u>Recording.</u> The District shall prepare and keep a record of each hearing in the form of either minutes, or audio or video recording, or court reporter transcription, or the report described by Subsection (f) of this section. If a hearing is transcribed at the request of a party to the hearing, the presiding officer may assess the costs associated with producing the transcript to one or more parties. If a hearing involved a contested application, then the District shall keep a record of the hearing in the form of audio or video recording or a court reporter transcription.

(f) <u>Report.</u> The presiding officer shall submit a report to the board not later than the 30th day after the date a hearing is concluded, unless the hearing was conducted by a quorum of the board. If the hearing was conducted by a quorum of the board, the presiding officer shall determine at the presiding officer's discretion whether to prepare and submit a report to the board under this section. The report must include:

(1) a summary of the subject matter of the hearing;

(2) a summary of the evidence or public comments received; and

(3) the presiding officer's recommendations for board action on the subject matter of the hearing.

§3.14 ACTION ON APPLICATIONS.

(a) Before granting or denying a permit, in whole or in part, the District shall consider whether the application conforms to the requirements prescribed by these Rules and Texas Water Code Chapter 36 and is accompanied by the prescribed fees and whether the applicant is in compliance with the District's rules.

(b) In determining whether to issue a permit, and in setting the terms and provisions of the permit including the maximum authorized withdrawal, the District shall consider the purposes of the District and all other relevant factors, including, but not limited to:

(1) the amount and purposes of use for which water is needed;

(2) whether the proposed use of water is dedicated to a beneficial, non-wasteful use;

(3) whether the proposed use of water is consistent with the District's certified groundwater management plan and any applicable spacing requirements, production limits, and drought restrictions;

(4) the projected effect of the proposed use on aquifer conditions, including depletion, subsidence, spring flow, impacts on groundwater quality, or effects on existing permit holders or other groundwater users within the District;

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

(6) whether the applicant is in compliance with all applicable District rules.

(c) The District shall make a written determination granting or denying in whole or in part the application.

§3.15 TERM OF PERMITS.

(a) All permits are effective for the calendar year (permit year) of issuance, unless otherwise stated on the permit. (Example: A permit issued on February 1, 2003 would

be valid as of February 1, 2003 and expire on December 31, 2003.) The Board may issue a permit with a term longer than one year, but not to exceed five years, when doing so aids the District in the performance of its duties and accomplishing the goals of the Act.

(b) The permit term will be shown on the permit.

§3.16 PERMIT ISSUANCE AND FORMAT

(a) <u>Permit Contents</u>. The permit shall include the following information in a format approved by the General Manager:

- (1) the name and address of the person to whom the permit is issued;
- (2) the state well number or District-assigned well number for the well;
- (3) the date the permit is issued;
- (4) the date the permit is to expire;
- (5) the location of the well(s);
- (6) the maximum withdrawal authorized;
- (7) the type or purpose(s) of use of the groundwater;
- (8) the place of use of the groundwater;
- (9) the historical user status of the permittee, if applicable;

(10) a requirement that the water withdrawn under the permit be put to a beneficial use at all times;

- (11) any other conditions, provisions, or restrictions the District prescribes; and
- (12) any other information the District deems necessary.

(b) <u>Corrections or Administrative Modifications.</u> The General Manager, on his own motion or at the request of the permittee, may make non-substantive corrections or administrative modifications to any permit either by reissuing the permit or by issuing an endorsement to the permit, without observing formal amendment or public notice procedures. The General Manager must notify the permittee and file a copy of the endorsement or corrected permit in the District's official records.

§3.17 PERMIT TERMS AND CONDITIONS

All permits are granted subject to these Rules, 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 be subject to the following terms and conditions:

(1) The permit is granted in accordance with the provisions of **H.B. No. 1038 of the 77th Texas Legislature** in conjunction with Texas Water Code Chapter 36, and the Rules and orders of the District, and acceptance of the permit constitutes an acknowledgment and agreement that the permittee will comply with all the terms, provisions, conditions, requirements, limitations, and restrictions embodied in the permit and with the Rules and orders of the District.

(2) The permit confers no vested rights in the holder and the permit is non-transferable. The permit may be revoked or suspended or its terms may be modified or amended pursuant to the requirements of the Act and any applicable Rules and orders of the District. Upon the sale of the well covered by the permit, written notice must be given by the permittee to the District within 90 days.

(3) The drilling and operation of the well for the authorized use shall be conducted in such a manner as to avoid waste, pollution, or harm to the aquifer.

(4) The permittee shall maintain records estimating the amount of groundwater withdrawn each month, the purpose of the withdrawal, and the total amount of water exported, if any, and the identity and location of the recipients. The permittee shall describe the method or technique used to estimate water withdrawn. Such records shall be available for inspection at the permittee's principal place of business by District representatives. Monthly use shall be reported to the District in the annual pumpage report on the form provided by the District. Immediate written notice shall be given to the District in the event a withdrawal exceeds the quantity authorized by the permit.

(5) The well site shall be reasonably accessible to District representatives for inspection. The permittee agrees to cooperate fully in any reasonable inspection of the well site and related monitoring or sampling by District representatives.

(6) The application pursuant to which a permit has been issued is incorporated in the permit, and the permit is granted on the basis of and contingent upon the accuracy of the information supplied in that application and in any amendments thereof. A finding that false information has been supplied shall be grounds for immediate revocation of the permit. In the event of conflict between the provisions of the permit and the contents of the application, the provisions of the permit shall control.

(7) Driller's logs must be submitted to the District within sixty (60) days of the drilling of a well. Failure to submit a driller's log will be grounds for revocation of a permit.

(8) Violation of the permit's terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawal, is a violation of these Rules and shall be punishable by civil penalties as provided by the Act and these Rules.

(9) If special provisions on a permit are inconsistent with other provisions or regulations of the District, the special provisions shall prevail.

(10) Permittees with annual permitted pumpage volumes greater than 12,000,000 gallons requesting multiple minor amendment pumpage increases that total more than 20% of the permitted pumpage volume of the calendar year three years prior to the most recent amendment may be required to submit a current hydrogeological report to the District office. (Example: Permittee A is permitted for 50,000,000 gallons in FY 2001. He files

three minor amendments between 2002 and 2003, one for 5,000,000 gallons, another for 3,000,000 gallons, and another for 4,000,000 gallons, a total of 12,000,000 gallons increase since 2001. The District may require a hydrogeological test as a special condition of the new amendment application.) A current hydrogeological report is one that has been completed within the three years preceding the date of the applications. Reports may be required at the General Manager's discretion based on aquifer condition, type of modification, status of adjacent wells, local water use trends, and other aquifer management considerations.

(11) Public water system permittees should maintain at least 85 percent accountability. If losses or unaccounted for water exceeds 15 percent, the District may require the public water system permittee to submit a report to the District outlining the steps the permittee will take to improve system accountability. The District may classify losses in excess of 15% as waste.

§3.18 PERMIT RENEWAL.

(a) Well owners or operators shall make application to renew permits required under these Rules prior to the expiration of the permit term on an abbreviated form provided by the District. The well owner or operator shall indicate on the renewal application form whether any changes to the well, well operations, purpose of use, or other well variables have occurred.

(b) Renewals shall be accomplished by the General Manager without notice or hearing if the terms and conditions of operation listed in the permit have not changed.

(c) If the well owner or operator seeks to change any of the permit terms or conditions in the renewal application, the application will be scheduled for a hearing and consideration by the Board under Section 3.12.

§3.19 PERMIT AMENDMENTS.

(a) It is a violation of these Rules for a permittee to violate any term, provision, or restriction contained in a permit issued by the District. A permittee must apply for and receive an amendment to their permit prior to changing any term, provision, or restriction in the permit.

(b) Amendment Types:

(1) Minor amendments include a request to:

(A) change the name or address of the well owner without any change in use;

(B) decrease the maximum authorized withdrawal;

(C) increase the maximum authorized withdrawal by ten percent or less of the total permitted pumpage for users permitted for more than 12,000,000 gallons annually;

(D) increase the maximum authorized withdrawal by up to 2,000,000 gallons annually for users permitted for 12,000,000 gallons or less; and

(E) convert two or more wells individually permitted by the same permittee into an aggregate system under one permit.

(2) All other amendments, including all amendments to permits involving the export of groundwater, are major amendments.

(c) Minor amendments may be granted by the General Manager without notice, hearing, or further action by the Board. If two or more minor amendments are requested during any calendar year for an increase in maximum authorized withdrawal, and the combined increase in volume requested in the amendments exceeds the limits described in Subsection (b) for minor amendments, then the amendment which results in an increase in maximum authorized withdrawal in excess of the limits specified in Subsection (b) above for minor amendments will be considered a major amendment.

(d) Major amendments shall be subject to all the requirements and procedures applicable to issuance of a new permit for a new well.

- (e) An application for permit amendment shall be made on forms supplied by the District and must be accompanied by any applicable application processing fee established by the Board. No application processing fee will be required from permittees requesting a decrease in maximum authorized withdrawal.
- (f) An amendment to change the name of a well owner must be submitted within 90 days of the transfer of ownership.

§3.20 PERMIT REVOCATION, CANCELLATION, OR MODIFICATION.

(a) A permit is not a vested right of the holder.

(b) After notice and an opportunity for hearing, a permit may be revoked, suspended, terminated, canceled, modified, or amended in whole or in part for cause, including, but not limited to (i) violation of any terms or conditions of the permit, (ii) obtaining the permit by misrepresentation or failure to disclose relevant facts, or (iii) failure to comply with any applicable Rules, regulations, fee schedule, special provisions, requirements, or orders of the District. The permittee shall furnish to the District upon request, and within a reasonable time, any information to determine whether cause exists for revoking, suspending, terminating, canceling, modifying, or amending a permit.

§3.21 AGGREGATION.

(a) In issuing a permit, the authorized withdrawal for a given well may be aggregated, at the discretion of the District, with the authorized withdrawal from other permitted wells designated by the District. The geographic location of each well and integrated distribution systems will be considered in determining whether or not to allow aggregation of withdrawal of groundwater.

(b) For the purpose of categorizing wells by the amount of groundwater production, when wells are permitted with an aggregate withdrawal, the aggregate value shall be assigned to the group, rather than allocating to each well its prorated share or estimated production. Water withdrawn from each well shall be independently measured or metered.

§3.22 TEMPORARY EMERGENCY APPROVALS.

(a) <u>Basis for Temporary Emergency Permit</u>. Upon application to the District, the General Manager may issue a temporary emergency permit that authorizes the withdrawal of water from a well not currently drilled or permitted. An application for a temporary emergency permit must present sufficient evidence that:

(1) no suitable alternative supply of water is immediately available to the applicant; and

(2) an emergency need for the groundwater exists such that issuance of the permit is necessary in order to prevent an immediate and serious threat to human life or health or to prevent extensive and severe property damage or economic loss to the applicant or intended recipient of the water.

(b) <u>Action on Request.</u> The General Manager may rule on any application for a temporary emergency permit without notice, hearing, or further action by the Board, or with such notice and hearing as the General Manager deems practical and necessary under the circumstances. The General Manager may deny an application for a temporary emergency permit on any reasonable ground, including, but not limited to, a determination that the applicant is currently in violation of these Rules or Texas Water Code Chapter 36, that the applicant has a previously unresolved violation on record with the District, or that the application does not meet the requirements of this Rule. Written notice of the ruling shall be given to the applicant. Any applicant may appeal the General Manager's ruling by filing, within ten business days of the General Manager's ruling, a written request for a hearing before the Board. The Board will hear the applicant's appeal at the next available regular Board meeting.

(c) <u>Board notification</u>. The General Manager shall inform the Board of any temporary 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.

(d) <u>Permit Fee</u>. The permit fee to be assessed for a temporary emergency permit under this Rule shall be the same as a permit issued under Section 3.14.

(e) <u>Term of Temporary Emergency Permit.</u> No temporary emergency permit may be issued unless an application for a permit issued under Section 3.14 has been filed with the District addressing the same well. The term of any temporary emergency permit issued by the General Manager under this rule shall extend only until the Board makes a final decision on the application for the permit under Section 3.14.

§3.23 FINAL DECISION; APPEAL.

(a) <u>Board Action</u>. After the record is closed and a permitting matter is submitted to the Board, the Board may take the matter under advisement, continue it from day to day, reopen or rest the matter, refuse the action sought, grant the action sought in whole or part, or take any other appropriate action. Board action takes effect at the conclusion of the meeting in which the Board took the action and is not affected by a request for rehearing.

(b) <u>Requests for Rehearing</u>. A decision of the Board made under this Rule 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 respect to any decision or action of the Board before an appeal may be brought. The Board's decision is final if no request for rehearing, or upon the Board's rendering of 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 a request for rehearing within 90 calendar days of the date of submission will be deemed to be a denial of the request.
SUBCHAPTER C: REQUIREMENTS OF WELL OWNERS AND OPERATORS

§3.40 REPORTS.

(a) Pumpage and Export Reports.

(1) Each permit holder shall maintain records of monthly production from each permitted well, including all information required by Section 3.17(4).

(2) Each permit holder shall submit an "Annual Well Production Report" by the 31^{st} day of December to the District on forms approved by the District. Reports received after the 31^{st} day of December will be considered late. If it has not already been provided to the District, the report shall include the driller's log, a description of the casing and pumping equipment, and the capacity of the well.

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

- (A) the total amount of water withdrawn each month;
- (B) the quantity of water necessary for mining activities;
- (C) the quantity of water withdrawn for other purposes; and

(D) The Report shall include, if it has not already been provided to the District, the driller's log, a description of the casing and pumping equipment, and the capacity of the well.

(b) <u>Water Quality Reports</u>.

(1) All permittees required by statute or regulation to conduct water quality analyses (including public water systems) shall, at the time of obtaining results of the analyses, submit a duplicate copy to the District.

(2) If a public water system is required by the TCEQ to notify its customers that water fails to meet TCEQ standards, the permittee shall immediately notify the District by submitting a copy of the TCEQ's report.

§3.41 FEES AND PAYMENT OF FEES.

(a) <u>Application, Registration, and other Administrative Fees.</u> The Board shall establish a schedule of administrative fees by resolution. The Board will attempt to set fees at an amount that does not unreasonably exceed the cost to the District of performing the function for which the fees are charged. Such costs may include maintenance of a fund balance for contingencies. Wells used by the District solely for monitoring purposes are exempt from application fees, registration fees, and well log deposits.

(b) <u>Export fees.</u> The District may establish an export fee in accordance with Texas Water Code Chapter 36. The export fee rate will be established by Board resolution and the fee rate will be included in the District's fee schedule. Export fees will not be applied to:

(1) the export of groundwater from the District for incidental use as defined in Chapter 2 of these Rules;

(2) the export of groundwater for an agricultural operation that overlaps or is adjacent to the District boundary; or

(3) the export of groundwater that occurs as a result of the distribution of water within a single, aggregate system of a retail public water system that overlaps the District boundary.

(c) <u>Production Fees.</u> The District may establish a production fee in accordance with the Act and Texas Water Code Chapter 36. The Production Fee Rate will be established by Board resolution.

(d) <u>Payment of Fees.</u> All administrative fees are due at the time of application or registration unless otherwise specified by the Board. Export fees and production fees shall be paid upon receipt of a fee statement from the District. The validity of any permit is contingent upon payment of any applicable export or production fee, and if the fee is not paid within 45 days of the date of the fee statement, the permit may be cancelled by the Board. The Board by resolution may establish procedures for the payment of export or production fees in installments.

(e) <u>Alternate Fees</u>. The Board may, by resolution, establish fee rates for pumpage of water from different aquifers at variable fee rates in order to provide an incentive to make greater use of one aquifer over another aquifer.

(f) Minimum Fees. The Board may, by resolution, establish a minimum fee.

(g) <u>Historical User Application Fee.</u> The Board may, by resolution, establish a fee for review of applications for historical user status that are received more than one year after the initial effective date of these Rules.

(h) <u>Inspection and Plan Review Fees.</u> The Board may, by resolution, establish fees for: the inspection of wells, meters, or other inspection activities; development plans, or other plan reviews; special inspection services requested by other entities; or other similar services that require significant involvement of District personnel or its agents. Fees may be based on the amount of the District's time and involvement, number of wells, well production, wellbore casing size, size of transporting facilities, or amounts of water exported.

(i) <u>Exceptions.</u> If a regulated water utility is unable to pass through pumpage fees due to delays in obtaining regulatory approval, or in other unusual instances of hardship, the Board may establish a payment schedule.

(j) <u>Excess Pumpage Fees.</u> The Board may, by resolution, establish additional fees for any pumpage exceeding the permitted volume by more than 500,000 gallons.

(k) <u>Returned Check Fee.</u> The Board may, by resolution, establish a fee for checks returned to the District for insufficient funds, account closed, signature missing, or any other problem causing a check to be returned by the District's depository.

(1) <u>Well Log Deposit</u>. The Board may, by resolution, establish a Well Log Deposit to be held by the District for return to the depositor if well logs are submitted to the District within sixty (60) days following surface completion of the well.

CHAPTER 4. MEASURING METHODS

§4.1 MEASUREMENT OF WATER USE BY PERMITTED WELLS.

(a) Except as provided in Subsection (b) of this section, each permitted well shall be equipped with a functioning water meter, meeting AWWA standards for line size, pressures, and flows.

(b) Wells permitted for agricultural use may use an alternative measuring method or device as authorized and approved by the District.

(c) An owner or operator of a well exempt from permitting under Section 3.5(a)(3) shall equip the well with a meter meeting the specifications of this chapter and shall record monthly water use and report annually to the District:

- (1) the total amount of water withdrawn during a month;
- (2) the quantity of water necessary for mining activities; and
- (3) the quantity of water withdrawn for other purposes.

§4.2 METERING AGGREGATE WITHDRAWAL.

Each well that is a member of an aggregate system is to be measured, <u>h</u>owever, where wells are permitted in the aggregate, one water meter may be used for the aggregate well system, if the water meter is installed so as to measure the groundwater production from all wells covered by the aggregate system and approval of aggregate metering installation is obtained from the District.

§4.3 VERIFICATION OF WATER MEASUREMENT.

(a) The General Manager may require the well owner or operator to test and calibrate, at the well owner's or operator's expense, the water meter or alternative measuring method or device for each permitted well and provide the District with a certification in affidavit form of the test results and accuracy calibrations on a form provided by, or in a format approved by, the General Manager, but not more often than once every three (3) years.

(b) At the District's expense and at any time, the District may also undertake random investigations for the purposes of verifying water measurement methods or devices and readings, acquiring data for alternate calculations of groundwater withdrawal, estimating the capability of a well, determining water levels, and acquiring such other information as may be helpful to the District in carrying out its goals under the Act.

(c) If the District's verification reveals that a water measuring method is not within an accuracy of plus or minus five percent ($\pm 5\%$), the District may require a permittee to reimburse the District for its cost of verification and undertake immediate repair, replacement, or correction of the water measurement method or device.

§4.4 VIOLATION OF METERING AND REPORTING REQUIREMENTS.

False reporting or logging of water measurements or meter readings, intentionally tampering with or disabling a meter, or similar actions to avoid accurate reporting of groundwater use and pumpage shall constitute a violation of these Rules and shall subject the person performing the action, as well as the well owner, and/or the operator who authorizes or allows that action, to such penalties as provided in the Act and these Rules.

§4.5 WATER METER SEALS.

If the General Manager finds it necessary, the District may, at its expense, seal by physical means those water meters required to be installed by these Rules and may red tag such water meters to indicate they have been sealed. The well owner or primary operator shall report any alteration, damage, or removal of the water meter seal at once to the District and request repair of the seal. Tampering with, altering, damaging, or removing the water meter seal or red tag, or in any way violating the integrity of the seal or red tag shall constitute a violation of these Rules and shall subject the person performing the action, as well as any well owner and/or primary operator who authorizes or allows that action, to such penalties as provided in the Act and these Rules.

CHAPTER 5. GENERAL PROVISIONS AND PROHIBITIONS

§5.1 GENERAL PROHIBITION.

Groundwater produced from within the District shall not be used in such a manner or under such conditions as to constitute waste. No person shall intentionally or negligently commit waste.

§5.2 SUBSURFACE POLLUTION.

No person shall pollute or harmfully alter the character of the groundwater reservoirs of the District by causing or allowing the introduction of salt water pollutants or other deleterious matter from another stratum, from the surface of the ground, or from the operation of a well.

§5.3 SURFACE POLLUTION.

No person shall pollute or harmfully alter the character of the groundwater reservoirs of the District by activities on the surface of the ground, which cause or allow pollutants to enter the reservoirs through recharge features, whether natural or manmade.

§5.4 ORDERS TO PREVENT WASTE/POLLUTION.

After providing notice to affected parties and opportunity for a hearing, the Board may adopt orders to prohibit or prevent waste or pollution. If the factual basis for the order is disputed, the Board shall direct that an evidentiary hearing be conducted prior to entry of the order. If the Board determines that an emergency exists, requiring the immediate entry of an order to prohibit waste or pollution and protect the public health, safety, and welfare, it may enter a temporary order without notice and hearing provided, however, the temporary order shall continue in effect for the lesser of fifteen (15) days or until a hearing can be conducted.

CHAPTER 6. REGULATION OF WELL SPACING AND PRODUCTION

SUBCHAPTER A: GENERAL PROVISIONS

§6.1 PURPOSE.

The purpose of this chapter is to achieve the District's statutory goals of conserving, preserving, protecting, and recharging the groundwater resources within the District by establishing aquifer management requirements consistent with Texas Water Code Chapter 36, and appropriate to the aquifer system.

§6.2 APPLICABILITY.

All permitted wells are required to meet the well spacing and production regulations set forth in this chapter.

§6.3 BASIS FOR LIMITATION OF WELL SPACING AND PRODUCTION.

The requirements of this chapter are based on the District's statutory authority to regulate the spacing of water wells and the production of groundwater in order to minimize the drawdown of the water table or the reduction of artesian pressure, to control subsidence, to prevent interference between wells, to prevent degradation of water quality, or to prevent waste.

SUBCHAPTER B: SPACING REQUIREMENTS

§6.10 DRILLING WELLS AT UNAPPROVED LOCATIONS PROHIBITED.

It is a violation of these Rules for a well owner, well operator, or water well driller to drill a new well that does not comply with the spacing and location requirements of this subchapter.

§6.11 MINIMUM SPACING APPLICABLE TO ALL NEW WELLS.

All new wells must comply with the spacing and location requirements promulgated by the Texas Department of Licensing and Regulation and set forth under Title 16, Texas Administrative Code Chapter 76, Water Well Drillers and Pump Installers Rules.

§6.12 SPACING AND SCREENING OF CERTAIN HIGH PRODUCTION WELLS.

(a) New wells with an inside casing diameter of eight inches or greater must be spaced a minimum of 1,500 feet from any other permitted or registered well, other than a well owned by the same person, must be set back at least 100 feet from the applicant's property line, and may not be screened within the first 175 feet from the land surface.

(b) The spacing and screening requirements of Subsection (a) do not apply to a well in existence on the effective date of these Rules or a water well authorized under a permit issued by the Railroad Commission of Texas under Natural Resources Code Chapter 134 if the well is exempt under Section 3.5(a)(3).

(c) The spacing requirements of Subsection (a) may be waived by the Board if the applicant obtains written permission from each affected well owner stating that the owner is agreeable to the applicant's proposed well location.

§6.13 ENFORCEMENT OF SPACING AND SCREENING REQUIREMENTS.

After authorization to drill a well has been granted under a registration or permit, the well, if drilled, must be drilled within 50 feet of the location specified in the registration or permit. If the well should be commenced or drilled at a different location, or if any new well is drilled in violation of the spacing requirements or screening requirements of these Rules, the drilling or operation of such well may be enjoined by the Board pursuant to these Rules and Texas Water Code Chapter 36 and the District may seek civil penalties against the well driller and well owner or operator.

SUBCHAPTER C: PRODUCTION LIMITS

§6.20 PERMIT ALLOCATION.

The maximum annual quantity of water that may be withdrawn from a permitted well within the District shall be the amount authorized in the permit. The permit allocation shall be based on the amount of groundwater the Board determines can be reasonably put to a beneficial, non-wasteful use by the permittee and is subject to any production limits or other requirements imposed by the Board.

§6.21 PRODUCTION LIMITS.

Pending collection of additional hydrogeologic and other scientific data, production is not limited, except to the extent necessary to ensure that the groundwater is put to a beneficial, non-wasteful use. However, in order to accomplish the purposes of Texas Water Code Chapter 36, and achieve the stated purposes and goals of the District, including managing the sustainability of the aquifers and preventing significant, sustained water-level declines within the aquifers, the Board reserves the right to amend this section in the future to establish any production limits necessary on new or existing permits. All permits are issued subject to any future production limits adopted by the District.

CHAPTER 7. DRILLING, EQUIPPING AND CONSTRUCTION

§7.1 APPLICABILITY.

The requirements of this chapter are applicable to all wells drilled in the District, including exempt wells.

§7.2 RECORDS.

(a) Complete records shall be kept and reports thereof made to the District concerning the drilling, equipping, and completion of all wells drilled in the District. Such records shall include an accurate driller's log, depth to water, any electric log that shall have been made, and such additional data concerning the description of the well, its discharge, and its equipment as may be required by the Board. Such records shall be filed with the District within sixty (60) days after drilling of the well.

(b) No person shall operate any well drilled and equipped within the District, except operations necessary to the drilling and testing of such well and equipment, unless or until the District has been furnished an accurate driller's log, any special purpose log or data which have been generated during well development, and a registration of the well correctly furnishing all available information required on the forms furnished by the District.

§7.3 DRILLING AND COMPLETION OF WELLS.

(a) Drilling and completion of wells must satisfy all applicable requirements of the Texas Commission on Environmental Quality and the Texas Department of Licensing and Regulation, and any additional well construction standards adopted by the District.

(b) All wells must be completed in accordance with the well completion standards set forth under the requirements promulgated by the Texas Department of Licensing and Regulation and set forth under Title 16, Texas Administrative Code Chapter 76, Water Well Drillers and Pump Installers Rules.

(c) The Board of Directors may adopt additional well construction standards for wells drilled within the District. Approved well construction standards will be made available to the public at the District office.

§7.4 INSTALLATION OF WELL PUMPS AND EQUIPMENT.

Well pumps and equipment shall only be installed or serviced in wells registered with the District.

§7.5 SUSPENSION

The General Manager or Board of Directors may suspend an authorization for a well registration or permit for failure to comply with the requirements of this chapter.

CHAPTER 8. ABANDONED, OPEN AND UNCOVERED WELLS

§8.1 REGISTRATION AND SEALING.

(a) Any owner or lessee of land on which an open or uncovered well or an abandoned well is located must register the well with the District.

(b) Any well not registered with the District shall be classified as abandoned.

§8.2 MINIMUM STANDARDS.

(a) Capping of Open or Uncovered Wells.

(1) At a minimum, open or uncovered wells must be capped in accordance with these Rules and in accordance with the standards set forth in the Texas Water Well Drillers and Pump Installers Administrative Rules, Title 16, Chapter 76, Texas Administrative Code.

(2) The owner or lessee shall keep the well capped with a water tight covering capable of sustaining weight of at least 400 pounds except when the well is in actual use. The covering for a capped well must be constructed with a water tight seal to prevent entrance of surface pollutants into the well itself, either through the wellbore or well casing.

(3) If an owner or a lessee fails or refuses to close or cap a well in compliance with this section or a Board order, District staff, or any person employed by the District, may go onto the land and close or cap the well safely and securely.

(b) Plugging of Abandoned Wells.

(1) All abandoned wells must be plugged in accordance with standards set forth in the Texas Water Well Drillers and Pump Installers Administrative Rules, Title 16, Chapter 76, Texas Administrative Code. If an owner or a lessee fails or refuses to plug an abandoned well in compliance with this section or a Board order, District staff, or any person employed by the District, may go onto the land and plug the well safely and securely.

(2) Prior to plugging a well, the owner or operator shall notify the General Manager in writing of their plans to plug the well. It is a violation of these Rules for any water well driller or pump installer to plug an abandoned well for which the District has not received prior written notice. The General Manager may require the well owner to take a water sample and have a water quality analysis conducted as part of, or prior to, the plugging operation at the well owner's expense.

(3) A copy of any plugging report required by Texas Department of Licensing and Regulation shall be submitted to the District.

§8.3 ENFORCEMENT.

If the owner or lessee or operator of a well fails or refuses to cap or plug the well in compliance with this rule and District standards after being requested to do so in writing by an officer, agent, or employee of the District, then, upon Board approval, any person, firm or corporation employed by the District may go onto the land (pursuant to Texas Water Code Section 36.118) and plug or cap the well safely and securely.

§8.4 LIEN FOR RECOVERY OF EXPENSES INCURRED BY DISTRICT.

(a) Reasonable expenses incurred by the District in plugging or capping a well will be assessed to the landowner and shall constitute a lien on the land on which the well is located.

(b) The District shall perfect the lien by filing in the deed records of the county where the well is located an affidavit, executed by any person conversant with the facts, stating the following:

- (1) the existence of the well;
- (2) the legal description of the property on which the well is located;
- (3) the approximate location of the well on the property;

(4) the failure or refusal of the owner or lessee, after notification, to close the well after the notification;

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

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

§8.5 PENALTIES.

Pursuant to Chapter 11 of these Rules, penalties shall be applicable in cases of failure or refusal to plug abandoned wells or cap wells not currently in use.

CHAPTER 9. WATER CONSERVATION

§9.1 CONSERVATION POLICY.

The District may implement conservation policies through various programs initiatives and incentives including public education, technical assistance, special programs, through grants and loans, from support by various local, state, and federal programs, industries, foundations, non profits, public and private individuals, corporations, partnerships, and other interest groups that will further the District's goals of cost-effective water conservation, pollution prevention, and waste prevention of the District's water resources.

§9.2 WATER CONSERVATION PLANS.

Each permittee who is required to prepare, adopt, and implement a water conservation plan by another agency of the State of Texas or by any water wholesale provider shall submit a copy of that plan to the District for the District's files in order to assist the District in monitoring the success of water conservation efforts within the District.

CHAPTER 10. DROUGHT

§10.1 PURPOSE.

The purpose of this chapter is to provide guidelines to well owners and operators and water users in the District's area regarding groundwater availability and use in response to drought or other uncontrollable circumstances that have disrupted the normal availability of groundwater supplies, causing localized and/or regional water availability and water quality emergencies. This chapter establishes procedures intended to preserve the availability and quality of water during such conditions.

§10.2 APPLICABILITY.

This chapter applies to all permittees within the District. In addition, the District shall utilize public education and assistance programs to encourage compliance with this chapter by owners of wells exempt from permitting and all other water users located within the District's jurisdictional area.

This chapter is directly applicable to water users of the Gulf Coast Aquifer. The District may apply these Rules to all groundwater aquifers and water-bearing formations located within its jurisdictional boundaries.

§10.3 DROUGHT CONDITION.

The District shall define and declare drought and its specific stages according to the Palmer Drought Severity Index as published by the Texas Water Development Board or similar agency. The index ranges from 4 (Extremely Wet) to -4 (Extreme Drought) --- see Table 10.1 -- and takes into account hydrologic factors such as recent precipitation, evaporation, and soil moisture. Upon declaration of a drought stage of "Moderate drought" or worse, water well owners, operators or users shall implement the corresponding drought measures stipulated in any drought plan of the owner, operator, or user.

Table 10.1 Palmer Drought Index Classifications					
4.0 or more	extremely wet				
3.0 to 3.99	very wet				
2.0 to 2.99	moderately wet				
1.0 to 1.99	slightly wet				
0.5 to 0.99	incipient wet spell				
0.49 to -0.49	near normal				
-0.5 to -0.99	incipient dry spell				
-1.0 to -1.99	Mild drought				
-2.0 to -2.99	moderate drought				
-3.0 to -3.99	severe drought				
-4.0 or less	extreme drought				

§10.4 WATER QUALITY.

The District may monitor groundwater quality of water supply wells along or near the saline water line or elsewhere in the District as it determines necessary.

§10.5 AQUIFER EMERGENCY WARNINGS.

(a) When the concentration of Total Dissolved Solids (TDS) increases above Safe Drinking Water Standards in any water well(s) and/or other contamination or hazardous conditions affecting water quality or water quantity exist, an Aquifer Emergency Warning may be declared by the Board of Directors.

(b) During an Aquifer Emergency Warning the District may:

(1) initiate further detailed analysis to determine whether significant changes have occurred in the water quality;

(2) identify additional recommended measures that may include a maximum per capita or per acre allotment for permitted water suppliers and reduction or cessation of industrial output or agricultural use; or

(3) encourage the interconnection of public and private water systems to prevent health hazards and localized water shortages or depletions.

§10.6 DROUGHT MANAGEMENT PLANS

Each permittee who is required to maintain a drought management plan prepared in accordance with 31 Texas Administrative Code Chapter 363, rules of the Texas Water Development Board, or 30 Texas Administrative Code Chapter 288, rules of the TCEQ, and approved by the respective agency, or a drought plan and drought response strategies consistent with the water management and drought plans of the Lower Colorado River Authority, is required to submit a copy of the plan to the District.

§10.7 PERMITTEE'S RESPONSIBILITIES.

In order to serve the public interest and to assist all groundwater users in the District's area, upon declaration of a drought stage of a "Moderate drought" or worse, the District shall make recommendations regarding water reduction goals. Each permit holder shall consider strategies, if practicable, for meeting the stated water reduction goals.

§10.8 DISTRICT ACTION.

The District will take action to inform the public as to the status of drought for each stage of an "incipient dry spell" or worse.

CHAPTER 11. ENFORCEMENT

§11.1 NOTICE AND ACCESS.

Pursuant to Texas Water Code Section 36.123, any authorized officer, agent, employee, or representative of the District, when carrying out technical and other investigations necessary to the implementation of the Rules or the Act, and after reasonable notice to the owner or operator, may enter upon private property for the purpose of inspecting and investigating conditions relating to the withdrawal, waste, water quality, pollution, or contamination of groundwater or other acts covered by the these Rules or the Texas Water Code.

§11.2 SHOW CAUSE ORDERS AND COMPLAINTS.

The Board, either on its own motion or upon receipt of sufficient written protest or complaint, may at any time, after due notice to all interested parties, cite any person owning or operating a well within the District, or any person in the District violating the Act, these Rules, or an Order of the Board. Under the citation, that person is ordered to appear before the Board in a public hearing and require him to show cause why an enforcement action should not be initiated or why his operating authority or permit should not be suspended, cancelled, or otherwise restricted and limited, for failure to abide by the terms and provisions of the permit, these Rules, or the Act.

§11.3 CONDUCT OF INVESTIGATION.

When investigations or inspections require entrance upon private property, such investigations and such inspections shall be conducted at reasonable times, and shall be consistent with all applicable rules and regulations concerning safety, internal security, and fire protection. The persons conducting such investigations shall identify themselves and present District identification upon request by the owner, operator, lessee, management in residence, or person in charge.

§11.4 SEALING OF WELLS.

(a) The District may seal wells that are prohibited by the Act, Rules, or Board orders from withdrawing groundwater within the District when the General Manager, or his designated District employee, determines that such action is reasonably necessary to assure that a well is not operated in violation of the Act, Rules, or Board orders. This authorization to seal a well or to take other appropriate action to prohibit the withdrawal of groundwater extends to, but is not limited to, the following circumstances in which: (i) a permit has been granted, but the applicable fees have not been paid within the time period provided for payment; (ii) representations have been made by the well owner or operator that no groundwater is to be withdrawn from a well during a particular period; (iii) no application has been made for a permit to withdraw groundwater from an existing well that is not excluded or exempted from the requirement that a permit be obtained in order to lawfully withdraw groundwater; (iv) the Board has denied, cancelled, or revoked a permit; (v) permit conditions have not been met; or (vi) a threat of, or potential for, contamination to the aquifer exists. (b) The well may be physically sealed by the District, and if sealed by the District, the well shall then be red-tagged to indicate that the well has been sealed. Other appropriate action may be taken as necessary to preclude operation of the well or to identify unauthorized operation of the well.

(c) Tampering with, altering, damaging, or removing the seal or red tag of a sealed or red tagged well, or in any other way violating the integrity of the seal or red tag, or the pumping of groundwater from a well that has been sealed or red tagged shall constitute a violation of these Rules and shall subject the person performing that action, as well as any well owner and/or operator who authorizes or allows that action, to such penalties as provided by the Act and these Rules.

§11.5 REQUEST FOR INJUNCTIVE RELIEF.

If it appears that a person has violated, is violating, or is threatening to violate any provision of the Act or any Rule, permit, Board order, or other order of the District, the Board may institute and conduct a suit in the name of the District for injunctive relief, for recovery of a civil penalty, or for both injunctive relief and penalty.

§11.6 PENALTIES FOR LATE PAYMENT OF FEES.

(a) <u>Failure to Make Production or Export Fee Payment</u>. Failure to make the production or export fee payment within the time period specified shall constitute grounds for the District to declare the permit void.

(b) <u>Late Payment Penalties</u>. Failure to make complete and timely payments of a fee will automatically result in a late payment penalty of 10 percent of the amount not paid. The fee payment plus the late payment fee must be made within thirty (30) days following the date the payment is due, otherwise the permit may be declared void by the Board.

(c) <u>Loss of Installment Payment Option</u>. The option of making payment of a production or export fee in installments may be made available by the District in order to avoid causing cash flow problems for permittees. Any permittee who, two or more times during the permit term, makes late payment of fee installments, will be required to pay production or export fees during the following two (2) years as an annual payment upon permit issuance, without an installment payment option.

(d) After a permit is declared void for failure to make payment of production or export fees, all enforcement mechanisms provided by this Rule and the Act shall be available to prevent unauthorized use of the well, and may be initiated by the General Manager without further authorization from the Board.

§11.7 FAILURE TO REPORT PUMPAGE AND/OR EXPORTED VOLUMES.

The accurate reporting and timely submission of pumpage and/or exported volumes is necessary for the proper management of water resources. Failure of the permittee to submit complete, accurate, and timely pumpage, export and water quality reports, as required by Section 3.40 of these Rules, may result in forfeiture of the permit, civil penalties, or payment of increased meter reading and inspection fees as a result of District

inspections to obtain current and accurate pumpage and/or exported volumes and water quality reports.

§11.8 EMERGENCY ORDERS.

The District will develop Emergency Contingency Plans to deal with water quality or water quantity emergencies. Public hearings on Emergency Contingency Plans shall be conducted by the Board prior to adoption. To implement Emergency Contingency Plans, the Board, or the General Manager if specifically authorized by an Emergency Contingency Plan, may adopt emergency orders of either a mandatory or prohibitory nature, requiring remedial action by a permittee or other party responsible for the emergency condition.

§11.9 CIVIL PENALTIES.

(a) The District may enforce these Rules by injunction or other appropriate remedy in a court of competent jurisdiction.

(b) Any person who violates any District Rule is subject to a civil penalty of up to \$10,000 for each violation and for each day of continuing violation. Each day a violation continues may be considered a separate violation.

(c) All civil penalties recovered by the District shall be paid to the **Coastal Bend Groundwater Conservation District**.

(d) A penalty under this section may be enforced by complaints filed in the appropriate court of jurisdiction in **Wharton** County.

(e) A penalty under this section is in addition to penalties provided under H.B. 1038, Acts of the 77th Legislature.

Appendix C

Estimate of Irrigation Groundwater Use

	Region K			Region P		
Category of Irrigation Water Use	Total Irrigation Water Demand (ac- ft/year)	% of Irrigation obtained from GW	GW Use for Irrigation (ac ft/year)	Total Irrigation Water Demand (ac- fl/year)	% of Irrigation obtained from GW	GW Use for Irrigation (ac ft/year)
RICE Irrigated crop	174,181	14.3%	24,915	106,969	85.2%	91,092
COTTON Irrigated crop	6,663	90.0%	5,997	2,721	90.0%	2,449
CORN Irrigated crop	7,344	80.0%	5,875	1,723	80.0%	1,378
MILO Irrigated crop	1,738	65.0%	1,130	1,883	65.0%	1,224
SOYBEAN Irrigated crop	1,443	65.0%	938	338	65.0%	220
TURFGRASS Irrigated	40,000	88.0%	35,200	3,250	88.0%	2,860
FORAGE Irrigated crop	1,000	50.0%	500	1,000	50.0%	500
HORTICULTURE Irrigated	1,500	100.0%	1,500	2,500	100.0%	2,500
WATERFOWL HABITAT Irrigated	505	14.3%	72	610	14.3%	87
AQUACULTURE Irrigated	3,154	100.0%	3,154	1,000	100.0%	1,000
Total Regional Irrigation Water Demand	237,528			121,994		
Regional Groundwater Irrigation Total			79,281			103,311
Wharton County Total (Regions K+P) Groundwater Irrigation Use	182,593					

Description of the Data Collection Process Used in Developing the Sitespecific Estimate of Groundwater Irrigation Use for the Year 2000

The Coastal Bend Groundwater Conservation District (District) included site-specific data for the year 2000 estimate of irrigation water use instead of using the Texas Water Development Board (TWDB) data for this estimate. The year 2000 value for irrigation is the only instance where site-specific data was substituted for TWDB estimates of groundwater use. The estimate development process included coordination with Regional Water Planning Groups, local federal agricultural agencies and collection of firsthand accounts of irrigation practices in the District.

The estimate of irrigation groundwater use for the year 2000 was developed in conjunction with the Regions K and P Regional Water Planning Group (RWPG) processes for estimating projected irrigation water demand. The District process also extended through the public hearing on the draft GMP. Regions K, H and P initiated processes to develop irrigation use estimates in response to the TWDB draft water demand projections which, among other things, did not include projected transportation losses for groundwater irrigation of rice.

A joint meeting of Regions K, H and P was held at Bear Creek Park near Houston, Texas on April 21, 2003 where the regions received a presentation from the National Resource Conservation Service (NRCS) on the methodology used to develop irrigation demand values for TWDB. Additional separate meetings were held for each of the three regions to involve local stakeholders. The Region K agricultural demand meeting was held in Wharton on May 29, 2003. This meeting was attended by agricultural interest stakeholders that included the Agricultural Extension Agent for Wharton County, Rick Jahn, John Cosper (former Wharton County Agent, Currently Executive Director of the Texas Turfgrass Association), local rice and row crop producers, and the meeting also included the General Manager of the Coastal Bend and Coastal Plains Groundwater Conservation Districts. In these meetings the acreage under cultivation and irrigation application rates were discussed for each type of crop and tabulated for each county.

There were several categories of groundwater irrigation use which appeared to be underrepresented in the TWDB values. These areas include a growing turf grass industry as well as aquaculture and waterfowl habitat uses. The District used the crop acreage estimates for all crops for which the Farm Services Agency (FSA) establishes estimates. However, where required, estimates were made of the annual application or diversion rates and acreages were estimated based on local knowledge of tracts of land and locations. The only acreages that were estimated from local knowledge were those categories of groundwater irrigation use for which FSA does not publish data.

Canal losses for groundwater transportation were estimated based on the local knowledge of the extent of groundwater use in canals, as well as using published documents by Dr. Gary McCauley with the Texas Agricultural Experiment Service. At the District public hearing on the GMP additional discussion was devoted to the estimates of groundwater irrigation use which included input from local stakeholders.