

**KIMBLE COUNTY
GROUNDWATER CONSERVATION DISTRICT**

MANAGEMENT PLAN

2004-2014

**P. O. Box 31
Junction, Texas 76849-0031
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Adopted: 6-15-04

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DISTRICT MISSION

The mission of the Kimble County Groundwater Conservation District is to develop, promote and implement water conservation and management strategies to conserve, preserve, and protect the groundwater supplies of the District, to protect and enhance recharge, prevent waste and pollution, and to effect efficient use of groundwater within the District. The District seeks to protect the owners of water rights within the District from impairment of their groundwater quality and quantity, pursuant to the powers and duties granted under Chapter 36, Subchapter D of the Texas Water Code.

REGIONAL COOPERATION AND COORDINATION

As a groundwater conservation district within the boundaries of the Region F Regional Water Planning Group, the District may become a cooperating member of the West Texas Regional Groundwater Alliance. In 1988, four groundwater conservation districts; Coke County UWCD, Glasscock County UWCD, Irion County WCD, and Sterling County UWCD signed an original Cooperative Agreement. In the fall of 1996, the original Cooperative Agreement was redrafted and the West Texas Regional Groundwater Alliance was created.

The regional alliance presently has a membership of twelve locally created and locally funded groundwater conservation districts that encompass almost 9.34 million acres or 14,594 square miles of West Texas. This West Texas region is very diverse in aquifer characteristics, aquifer yields, types of agricultural production, water quality and other factors which make it necessary for each member district to develop its own unique management programs to best serve its constituents. At the same time, however, the member districts share data and technical information, coordinate management strategies, develop certain uniform procedures and forms, and conduct policy discussions.

The current member districts are:

| | |
|-----------------------|--------------------|
| Coke County UWCD | Emerald UWCD |
| Glasscock County UWCD | Hickory UWCD#1 |
| Irion County WCD | Lipan-Kickapoo WCD |
| Plateau UWC & SD | Santa Rita UWCD |
| Sterling County UWCD | Sutton County UWCD |
| Menard County UWD | Lone Wolf GCD |

TIME PERIOD OF THIS PLAN

This plan becomes effective upon adoption by the Board of Directors and certification by the Texas Water Development Board. The plan remains in effect for ten years after the date of Board approval and TWDB certification, or until such time as a revised or amended plan is approved and certified.

STATEMENT OF GUIDING PRINCIPLES

The District recognizes that its groundwater resources are of utmost importance to the citizens of Kimble County and to the region.

The District is created for the purpose of conserving, preserving and protecting groundwater supply quantity and quality in the District by:

- (1) Acquiring, understanding and beneficially employing scientific data on the District's aquifers and their hydrogeologic qualities and identifying the extent and location of water supply within the District, for the purpose of developing sound management procedures
- (2) Preventing depletion of the aquifers underlying the District
- (3) Protecting the private property rights of landowners in groundwater by ensuring that such landowners continue to have the opportunity to use the groundwater underlying their land
- (4) Promulgating rules for permitting the regulation of spacing, production and transportation of groundwater resources in the District to protect the quantity and quality of the resource
- (5) Educating the public and regulating for conservation and beneficial use of the water
- (6) Educating the public and regulating to prevent pollution of groundwater resources
- (7) Cooperating and coordinating with other groundwater conservation districts with which the District shares aquifer resources.

GENERAL DESCRIPTION OF THE DISTRICT

History

The enabling legislation creating the District, Senate Bill 2, was passed during the 77th Regular Legislative Session (2001). The confirmation election was held on May 4, 2002 with the majority of the votes cast in favor of confirming the creation of the District. On the same ballot the proposition authorizing the District to levy taxes and set the maximum tax rate at 20 cents per \$100. ad valorem value was passed.

The District is governed by a five member locally elected Board of Directors. The directors serve staggered four year terms with three directors elected in May of even numbered years and the two other directors elected to four year terms two years later. The initial directors' terms were chosen by drawing lots in accordance with the Districts enabling legislation enacted in 2001. With elections of directors taking place every two years, the District is very responsive to voters' approval or disapproval of the local management of their groundwater and/or services provided by the District.

Location and Extent

The Kimble County Groundwater Conservation District comprises the entire area of Kimble County which is not included within the boundaries of the Hickory Underground water District No. 1, and covers an area of approximately 766,864 acres (1198 square miles) in the west central part of Texas. Kimble County ranges in elevation from approximately

1783 to 2372 feet above mean sea level. Total population in 2000 was 4356 including the county seat, the City of Junction (population 2771).

Topography

The District lies within the Colorado River Basin and is bisected by the Llano River which arises, on the North Llano River, in Sutton County and, on the South Llano River, in Edwards County. The North and South Llano join within the District to become the Llano River at the city of Junction. Within the District there are numerous creeks which are tributaries of the Llano. Drainage of the river is in a generally eastward direction.

The Edwards-Trinity aquifer formation is made up of lower Cretaceous age Trinity Group formations and overlying limestones and dolomites of the Comanche Peak, Edwards, and the Georgetown formations. It ranges in thickness from 0 to 750 feet in the District, with the largest area being from 100 to 500 feet thick. Springs issuing from the aquifer form the headwaters for the Llano River, which flows eastward, and for numerous creeks which are tributary to it.

The Edwards-Trinity formation outcrops over the majority of the area in the District with exception of the alluvial areas along the Llano River and its tributaries and a very small area in the northeastern corner of the county. Underlying the Edwards-Trinity (Plateau) aquifer in the eastern half of the district is a down-dip portion of the Hickory aquifer.

The Hickory formation is comprised of Cambrian-age sands and gravels eroded from the granites of the Llano uplift of central Texas. There is no outcrop area of the Hickory formation in Kimble County, but the formation down-dips fairly uniformly to the west, underlying the Edwards-Trinity formation in the eastern half of the county.

GROUNDWATER RESOURCES ¹

Edwards-Trinity aquifer

The Edwards-Trinity is the principle aquifer in the District. According to the TWDB, total groundwater use in Kimble County in 1997 was 862 acre-feet, almost all of which came from the Edwards-Trinity. ²

The saturated thickness of the formation is from 100-300 feet throughout most of county. The water levels have generally remained constant or have fluctuated only with seasonal use. The formation is very fractured, with the water supply lying on the joints and fractures of the limestone. The limestone is porous, and recharge to the aquifer is rapid because of the formation of horizontal and vertical dissolution channels in the limestone.

The Edwards-Trinity formation overlies more than 797,000 acres of the county and the Texas Water Development Board estimates total retrievable storage in the District to be

¹ All estimates of groundwater availability, usage, supplies, recharge, storage, and future demands are from data supplied by the Texas Water Development Board, unless otherwise noted. Data sources include "Water for Texas-2002, adopted by the TWDB in January of 2002 and incorporating data included in the Region F Regional Water Plan completed in September of 2000. These estimates will be used until other data are available from ongoing studies of the region's aquifers.

² Table 1-15, 1997 Ground Water Pumping by County and Aquifer, Water for Texas-2002

457,000 acre-feet. However, this area of the aquifer has received minimal study, and that figure may be over-estimated.

Water quality is good, though generally very hard, with 97.9% of the water supply in the District from this formation having Total Dissolved Solids (TDS) concentrations below 1000 mg/l.³

Ellenberger-San Saba aquifer

The Ellenberger-San Saba aquifer consists of upper Cambrian limestone and sandstone San Saba Formation overlain by the Ordovician limestone and dolomite Ellenberger formation. The latter is highly porous. The aquifer is present in a small area in the northeastern corner of Kimble County, in saturated thickness up to 500 feet, but most of the formation varies from 100-300 feet. Retrievable storage is estimated by the TWDB to be 130,200 acre-feet in the county, but total effective recharge is 216 acre-feet,⁴ which is the estimated available water supply. The quality of the water pumped in the District is good, with TDS less than 1000 mg/l.

Hickory aquifer

The Hickory aquifer has an average saturated thickness of 200-400 feet in the northeast corner of the county, with a very small pocket averaging 400-600 feet. There is no known recharge to the aquifer within the District, most of the recharge occurring in the adjoining county of McCulloch and Mason and more distantly in San Saba and Lampasas Counties. Retrievable storage in the Hickory within the District is estimated by the TWDB to be 6,009,000 acre-feet.

The water quality varies, with only about 57% of the supply in the District having TDS <3000 mg/l.⁵ The extent of radioactivity, which is known to exist in other areas of the aquifer, is not yet known in Kimble County. However, all of the formation within the District is down dip from the outcrop area, so it is probable that the Hickory water supply within the District will contain these radioactive decay products in most areas.

SURFACE WATER RESOURCES

There are 12,056 acre-feet of water rights permitted by the TCEQ in the Llano River and its tributaries in Kimble County, of which 1,000 acre-feet are permitted for municipal use, 2466 for industrial, 100 for mining and the remaining 8,490 acre-feet are permitted for

³ Table 3-2, Edwards Trinity aquifer, Water for Texas-2002, TWDB 2002

⁴ Table 3-15, Ellenberger-San Saba aquifer, Region F Regional Water Plan, January 2001

⁵ Table 3-5, Hickory aquifer, Ibid.

irrigation purposes.⁶ However, the TWDB estimates that total surface water use in the county amounted to only 1850 acre-feet in 1997.⁷

HISTORICAL AND CURRENT GROUNDWATER USE

Kimble County has seen total combined annual surface and groundwater use decline from 6524 acre-feet in 1980 to 2712 acre-feet in 1997.

Kimble County Historical Water Use⁸ (Surface and Groundwater Combined)

| | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|
| <u>1980</u> | <u>1985</u> | <u>1990</u> | <u>1995</u> | <u>1996</u> | <u>1997</u> |
| 6524 | 5766 | 4084 | 3367 | 3052 | 2712 |

Historical Groundwater Use in Kimble County⁹ (in acre-feet)

Total combined pumping from all aquifers within the District for 1990-2001 was:

| <u>Year</u> | <u>Total Use</u> | <u>Year</u> | <u>Total Use</u> | <u>Year</u> | <u>Total Use</u> |
|-------------|------------------|-------------|------------------|-------------|------------------|
| 1990 | 845 | 1994 | 908 | 1998 | 868 |
| 1991 | 904 | 1995 | 967 | 1999 | 908 |
| 1992 | 911 | 1996 | 930 | 2000 | 707 |
| 1993 | 884 | 1997 | 862 | 2001 | 692 |

Source of Supply by Category in 1997¹⁰

| <u>Source of Water</u> | <u>Municipal</u> | <u>Manufac- turing</u> | <u>Irrigation</u> | <u>Steam Electric</u> | <u>Mining</u> | <u>Livestock</u> | <u>Total</u> |
|------------------------|------------------|----------------------------|-------------------|---------------------------|---------------|------------------|--------------|
| Ground | 195 | 3 | 235 | 0 | 91 | 338 | 862 |
| Surface | <u>709</u> | <u>272</u> | <u>785</u> | <u>0</u> | <u>0</u> | <u>84</u> | <u>1850</u> |
| Total | 904 | 275 | 1020 | 0 | 91 | 422 | 2712 |

⁶ Table 1-12, Surface Water Rights by County (Data from 1999 TNRCC water rights list), Draft Regional Water Plan F, July 2000 p. 1-34

⁷ Table 1-11, Water for Texas-2002, Adopted Regional Water Plan Region F, TWBD 2002

⁸ Table 1-6, Ibid.

⁹ TWBD, Water Resources Planning Division

¹⁰ Table 1-11, Water for Texas-2002

GROUNDWATER AVAILABILITY 2000-2050

In order to maintain dependable and sufficient groundwater supplies to support population growth and future economic activity, the guiding principle for the District is that demand should not exceed recharge to the aquifers. The total projected groundwater supply is the estimated sustainable annual yield, or effective recharge for those aquifers that have recharge within the District boundaries.

The Hickory Underground Water Conservation District No. 1, which adjoins the District, has adopted a policy of limiting depletion of the aquifer to 75% of recoverable storage over a hundred-year period. Since there is no recharge to the Hickory aquifer in Kimble County but there is substantial recoverable storage of Hickory groundwater, the District has consulted with the Hickory UWCD No. 1 and has adopted, for a period of ten years or until the two Districts develop better information on recoverable storage, the Hickory District's policy for the recoverable storage of Hickory waters within the Kimble County GCD.

Total annual available groundwater supply in the District is estimated to be 72,017 acre-feet annually, as follows:

A) Groundwater availability from the Edwards-Trinity aquifer formation in the District is limited to annual recharge, which is estimated at 26,734 acre-feet.¹¹

B) Groundwater availability from the Ellenberger-San Saba formation is limited to annual recharge, which is estimated at 216 acre-feet.¹²

C) Recoverable storage in the District's portion of the Hickory aquifer formation is approximately 6,009,000 acre-feet,¹³ thus available supply of Hickory groundwater in the District is 45,067 acre-feet annually, based on 75% depletion of recoverable storage over a 100-year period.

SURFACE WATER AVAILABILITY 2000-2050¹⁴

Surface water availability projected to be 3600 acre feet annually 2000-2050 as follows:

| | |
|-------------------------|------|
| Irrigation Local Supply | 1980 |
| Livestock Local Supply | 98 |
| Other Local Supply | 1522 |

¹¹ Table 3-1, Annual Groundwater Availability, Region F Adopted Regional Water Plan, Water for Texas-2002

¹² Table 3-1, Annual Groundwater Availability, Ibid.

¹³ Table 3-5, Hickory aquifer, Ibid.

¹⁴ Table 4, 2002 State Water Planning Database

Total combined surface and groundwater availability for the District for the period 2000-2050 is 30,550 annually from the Edwards-Trinity-Plateau and Ellenberger-Saba Aquifers¹⁵ and 45,067 from the Hickory Aquifer.¹⁶

**PROJECTED WATER SUPPLY BY WATER USER GROUP
2000-2050¹⁷**

| <u>WUG</u> | <u>Source Type</u> | <u>2000</u> | <u>2010</u> | <u>2020</u> | <u>2030</u> | <u>2040</u> | <u>2050</u> |
|---------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Junction | Surface | 862 | 861 | 861 | 861 | 862 | 862 |
| County-Other | Surface | 11 | 12 | 12 | 12 | 11 | 11 |
| County-Other | GW:E-T | 206 | 218 | 215 | 211 | 207 | 208 |
| Irrigation | Surface | 1980 | 1980 | 1980 | 1980 | 1980 | 1980 |
| Irrigation | GW:E-T | 296 | 296 | 296 | 296 | 296 | 296 |
| Livestock | Surface | 98 | 98 | 98 | 98 | 98 | 98 |
| Livestock | GW:E-T | 466 | 466 | 466 | 466 | 466 | 466 |
| Manufacturing | Surface | 649 | 649 | 649 | 649 | 649 | 649 |
| Manufacturing | GW:E-T | 31 | 31 | 31 | 31 | 31 | 31 |
| Mining | GW:E-T | 105 | 100 | 99 | 98 | 100 | 103 |

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PROJECTED DEMANDS FOR GROUNDWATER

The Texas Water Development Board has based its combined surface and groundwater projections for Kimble County on the premise that population will increase in Kimble County from 4,446 to only 4,785 over the next 50 years.¹⁸

Total Projected Water Demand by Category¹⁹
(acre-feet per year))

| | <u>2000</u> | <u>2010</u> | <u>2020</u> | <u>2030</u> | <u>2040</u> | <u>2050</u> |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Municipal | 1157 | 1155 | 1122 | 1105 | 1097 | 1094 |
| Irrigation | 1128 | 1089 | 1049 | 1009 | 970 | 930 |
| Livestock | 564 | 564 | 564 | 564 | 564 | 564 |
| Manufacturing | 1637 | 1777 | 1849 | 1909 | 2067 | 2229 |
| Mining | 105 | 100 | 99 | 98 | 100 | 103 |
| Total | 4591 | 4685 | 4683 | 4685 | 4798 | 4922 |

¹⁵ Table 4, 2002 State Water Planning Database

¹⁶ See Note 13 above

¹⁷ Table 5, 2002 State Water Planning Database

¹⁸ Table 2-2, Population Projections for Region F Counties, Water for Texas-2002

¹⁹ Table 2, 2003 State Water Planning Database

Obviously, then, since the TWDB projects no increase in over-all demand for water within the District, groundwater use is projected to remain at historical levels of 900-1000 acre-feet/year.

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However, the experience of the District in the last two years suggests that population numbers may be on the verge of a significant increase and the character of water use in the county may be changing to the extent that there will be some substantial reason for concern. The District has observed that:

- a) There were new subdivision plats.
- b) Newcomers appear to be coming from areas where they are accustomed to higher levels of water use than the long-time residents. The District has experienced a dramatic increase in numbers of inquiries about irrigation wells from new county residents for properties that have not previously had irrigation.
- c) New residents have impounded riparian waters for domestic and livestock use, pursuant to the 200 acre-foot statutory exemption on creeks and streams where water was formerly withdrawn for those purposes on a daily-need basis, but not impounded.
- d) Municipalities in nearby surrounding areas are experiencing acute municipal water shortages and are looking outside of their areas for additional water supplies.
- e) Even though studies indicate that Kimble County has plentiful water supplies, in the years 2000-2002 there have been a number of reports of wells going dry during this prolonged period of drought. There is increased drilling in the county.

It is apparent, then, that there is need for management of the groundwater resource, and for better information on the characteristics, recoverable supplies, and recharge of the aquifers.

ADDITIONAL NATURAL OR ARTIFICIAL RECHARGE THAT COULD RESULT FROM IMPLEMENTATION OF A FEASIBLE METHOD FOR RECHARGE

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Historical accounts of Kimble County and historical photographs in the possession of the District make it apparent that during the period from 1850 through 1885, when Kimble County was experiencing the beginning of European settlement, the country was mostly open grassland with little brush and few trees, and there was considerably greater flow of water in the Llano River and its creeks and tributaries than occurs at present. Now there is extensive invasion of brush, particularly mesquite and juniper, over large areas of the district.

District personnel have observed that in the late Spring when brush and trees come out of dormancy creeks (including those from which there are no irrigation withdrawals at any time) and sections of the Llano River dry up and remain in that condition throughout the summer during droughts. In the Fall, when brush and trees become dormant, creeks begin to flow again regardless of whether or not there has been rainfall.

A current study demonstrates that for the entire watershed of the North Concho River, which lies within the same region, average annual water yield level increases by 81%, or about 48,523 acre-feet with removal of all growths of mesquite and juniper in areas with heavy and moderate brush coverage (leaving areas with light brush growth intact).²⁰ The

²⁰ "Main Concho River Watershed" in Brush Management/Water Yield Feasibility Studies of Eight Watersheds in Texas TWRI Study 192, p. 3

average annual water yield increase in subbasin 8 of the study, being the subbasin closest to Kimble County, is 89,889 gallons per acre, or .27 acre-foot, annually.²¹

Average annual rainfall for the Main Concho river basin averages 23.6 inches annually, compared with Kimble County's 23.8 inches. The study finds that the average annual evapo-transpiration for the land in the Main Concho River basin with heavy to moderate brush on it is 22.04 inches (93% of precipitation) while it is 20.89 inches (89% of precipitation for the no-brush condition.²² The Edwards-Trinity aquifer outcrops at the surface of subbasin 8 of the Main Concho basin and over all of Kimble County. The authors of the study believe that the re-evaporation coefficient of such shallow aquifers is higher for brush than other types of cover than it is in deeper aquifers because brush is deeper rooted. They base their assumptions on a re-evaporation coefficient for brush-covered units of 0.4, while non-brush units were estimated at a coefficient of 0.1.²³

Applying those coefficients to areas of Kimble County heavily infested with brush, about 80% of the county, and assuming removal of only half the brush from those areas and that Kimble County would, overall, only increase yield by the same average as the entire North Concho basin, (as opposed to the higher yield found in subbasin 8) surface water yield could be increased by 40%, and re-evaporation from the aquifer will also increase total annual recharge.

MANAGEMENT OF GROUNDWATER SUPPLIES

A primary function of the District is to obtain data about aquifer supplies and conditions in order to develop more effective management of the resource. The District has established monitor wells to gather baseline data in order to monitor changing storage conditions of groundwater supplies within the District. The District will obtain data from the monitor wells on a regular basis, make reports thereon to the Board of Directors, and maintain cumulative records of the water levels in the wells.

The District has adopted rules to regulate groundwater withdrawal by means of spacing regulation and production limits. If regular monitoring indicates that aquifer levels are declining, the District will amend those rules, within the limitations imposed by Chapter 36 of the Texas Water Code, to protect the aquifer resources.

The District may deny a well permit or limit a high production permit in accordance with the provisions of the District Rules and this Management Plan. The relevant factors to be considered in denying or limiting a permit shall be:

- (1) the purpose of the District Rules, including but not limited to preserving and protecting the quality and quantity of the aquifer resources, and protecting existing uses
- (2) the equitable distribution of resources
- (3) the economic hardship resulting from denial or limitation of a permit.

²¹ Ibid., p. 3

²² Tables 2-5, Ibid.

²³ Ibid., p. 2

The District will enforce the terms and conditions of permits and the Rules of the District.

The District recognizes the importance of public education to encourage efficient use, implement conservation practices, prevent waste, and preserve the integrity of groundwater, and will seek opportunities to educate the public on water conservation issues and other matters relevant to the protection of the aquifer resources through public meetings, newspaper articles, and other means which may become available.

**ACTIONS, PROCEDURES, PERFORMANCE AND AVOIDANCE
FOR PLAN IMPLEMENTATION**

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The District will implement the provisions of this plan and will utilize the provisions of this plan as a guide for determining the direction and/or priority for all District activities. All operations of the District and all agreements entered into by the District will be consistent with the provisions of this plan.

The District will adopt rules for the management of groundwater resources through permitting wells and production of groundwater, pursuant to Chapter 36 of the Texas Water Code and the provisions of this Plan, and will amend those rules as necessary. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best scientific and technical evidence available.

For good cause shown the District, in its discretion, and after notice and hearing, may grant an exception to the District Rules. In doing so, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board shall not be construed as limiting the power of the Board.

The District will seek cooperation in the implementation of this plan and the management of groundwater supplies within the District. The District will cooperate and coordinate with other water districts managing water resources from the same aquifers, and with other local water management entities.

The Board of Directors and Manager of the District will meet at least once yearly with the Kimble County Water Control and Improvement District to discuss conjunctive use issues and joint water management goals.

The District will hold a regular, at least quarterly, Board Meeting for the purpose of conducting District Business. Each meeting, the Manager's Report will reflect the number of meetings attended; number of water levels monitored; articles published concerning water issues; number of water analysis samples collected and analyzed; resulting action regarding potential contamination, or remediation of actual contamination; reports on any school or civic group programs; meetings with the surface water management district; and other matters of district importance.

During the last monthly Board of Directors' meeting each fiscal year, the District Manager will prepare and present an annual report to the Board of Directors on District performance in regards to achieving management goals and objectives. The annual report will be maintained on file at the District Office.

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GOALS, MANAGEMENT OBJECTIVES AND PERFORMANCE STANDARDS

Goal 1.0 – Providing the Most Efficient Use of Groundwater

1.1 Management Objective

At least once each year the District will provide, in a public meeting or forum, available information on water conservation practices for the efficient use of water. These will include but are not limited to publications from Texas Agricultural Extension Service and other sources.

1.1 Performance Standard

One distribution of informational materials in a public meeting or forum each year.

1.2 Management Objective

At least once each year the District will publish in a newspaper with local circulation an article on efficient water use and availability of information materials.

1.2 Performance Standard

One article published each year.

1.3 Management Objective

Each year the District will present a program on water conservation practices, water quality analysis, or other water issues.

1.3 Performance Standard

One program on water conservation practices, water quality analysis or other water issues.

Goal 2.0 – Controlling and Preventing the Waste of Groundwater

2.1 Management Objective

To collect data for the purpose of managing for prevention of waste of groundwater, The District will, over the next five years, develop a network of monitor wells distributed as evenly as practicable around the county.

2.1 Performance Standard

The addition of two monitor wells each year to the district well-monitoring network for a total of 16.

2.2 Management Objective

To measure, record and accumulate a historic record of static water levels in monitor wells on a regular periodic basis.

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2.2 Performance Standard

The static water levels in two monitor wells will be measured and recorded every quarter until the district has four monitor wells in its network. Thereafter four monitor wells will be measured and recorded every quarter.

2.3 Management Objective

At least twice each year the District will publish the availability of water analysis services in the local newspaper.

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2.3 Performance Standard

Two advertisements for water testing services published each year.

2.4 Management Objective

To monitor water quality in the district, the District will sample and conduct water quality tests on selected monitor wells at least once each year for possible contamination which would jeopardize the integrity of the groundwater supply.

2.4 Performance Standard

Four water quality analysis tests performed each year on selected monitor wells.

Goal 3.0 – Addressing natural Resource Issues which impact the use and Availability of Groundwater, and Which are Impacted by the Use of Groundwater

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3.1 Management Objective

Although there is very little oil production in Kimble County the District will monitor one or more selected wells within areas of the District where there is oil production, for possible contamination problems which would jeopardize the integrity of the groundwater resource.

3.1 Performance Standard

Twice each year two well samples will be collected and analyzed for petroleum-related contamination in areas of the district where there is oil production.

Goal 4.0 – Addressing Conjunctive Surface Water Management Issues

4.1 Management Objective

Each year the District will conduct a joint planning and/or policy meetings with the City of Junction or another water entity to discuss conjunctive use issues.

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4.1 Performance Standard

One joint planning and/or policy meeting conducted jointly with the City of Junction, or another water entity, each year.

Goal 5.0 – Addressing Drought Conditions

5.1 Management Objective

Each year the District will monitor the Palmer Drought Severity Index. If the index indicates that the District will experience severe drought conditions, the District will publish a notice or article in the local paper bringing attention to the severity of drought and the need to practice water conservation.

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5.1 Performance Standard

Annual report to Board of Directors listing number of times Palmer Drought Severity Index indicated severe drought conditions and the number of times a notice was published in the local newspaper.

Goal 6.0 – Conservation

6.1 Management Objective

At least once each year the District will distribute water conservation literature in a public forum such as a district meeting, a livestock show, or a county function.

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6.1 Performance Standard

Annual report to Board of Directors listing when and where water conservation information was distributed.

Goals not applicable to the Kimble County Groundwater Conservation District

1.0 Management Objective

Controlling and preventing subsidence

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There is no history of subsidence of aquifer formations within the district upon water level depletion and available scientific information is that the formations are of sufficient rigidity that subsidence will not occur.

DEFINITIONS AND CONCEPTS

“Board” – the Board of Directors of the Kimble County Groundwater Conservation District

“District” – the Kimble County Groundwater Conservation District

“Effective recharge” – the amount of water that enters the aquifer and is available for development

“Groundwater” – water percolating below the surface of the earth

“Integrity” – the preservation of groundwater quality

“Natural Recourse Issues” – includes groundwater integrity preservation

“Ownership” – pursuant to TWC Chapter 36, §36.002, means the recognition of the rights of the owners of the land pertaining to groundwater

“Recharge” – the addition of water to an aquifer

“Surface Water Entity” – TWC Chapter 15 Entities with authority to store, take divert, or supply surface water for use within the boundaries of a district

“TNRCC” – Texas Natural Resource Conservation Commission

“TWDB” – Texas Water Development Board

“Waste” – pursuant to TWC Chapter 36, §36.001(8), means any one of more of the following:

- (1) withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threatens to cause intrusion into the reservoir of water unsuitable for agricultural, gardening, domestic, or stock raising purposes;
- (2) the flowing or producing of wells from a groundwater reservoir if the water produced is not used for a beneficial purpose;
- (3) escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater;
- (4) pollution or harmful alteration of groundwater in a groundwater reservoir by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground;
- (5) willfully or negligently causing suffering or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the commission under chapter 26;
- (6) groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge; or
- (7) for water produced from an artesian well, “waste” has the meaning assigned by Section 11.205.

“Well” – an artificial excavation that is dug or drilled for the purpose of producing groundwater

NOTICE OF PUBLIC HEARING

**Kimble County
Groundwater Conservation District**

will conduct a public hearing
to accept oral and written comments on
the District's Proposed Management Plan

June 15, 2004, 6:00 PM
Kimble County Courtroom
Kimble County Courthouse
501 Main St.
Junction, Texas

Written comments on the Management Plan
will be accepted from now until June 15, 2004
at the office of the KCGCD in the Kimble County Courthouse
Monday through Wednesday
and also may be submitted to:

**Kimble County Groundwater Conservation District
P. O. Box 31
Junction, Texas 76849-0031**

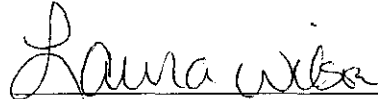
Copies of the Management Plan are available to the public
at the office of the KCGCD in the Kimble County Courthouse
Monday through Wednesday.

For inquiries or questions,
call Jerry Kirby at 325-446-4826

Filed June 2, 2004
4:45 p.m.
Haydee Torres
Haydee Torres, County Clerk, Kimble County Texas
By Audrey Sellers, Deputy
AUDREY SELLERS

**STATE OF TEXAS
COUNTY OF KIMBLE**

I, the undersigned Secretary of the Kimble County Groundwater Conservation District, do hereby certify that the above and foregoing document is a true and correct copy of the Minutes of the Meeting of the Kimble County Groundwater Conservation District held on June 15, 2004 and of the Resolution of the Board of Directors approved at that meeting and attached to the minutes.



Laura Wilson, Secretary

RESOLUTION
OF THE
KIMBLE COUNTY GROUNDWATER CONSERVATION DISTRICT

WHEREAS, the Management Plan of the Kimble County Groundwater Conservation District was completed, reviewed and accepted by the undersigned Board of Directors; and

10

WHEREAS, Notice of a Public Meeting to be held on June 15, 2004 to accept comments on the Plan was published in the Junction Eagle on May 27, June 3, and June 10; and

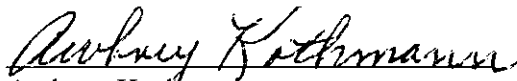
WHEREAS said Public Meeting was held on June 15, 2004 to accept public comments on the District Management Plan; and

WHEREAS, no public comments were submitted;

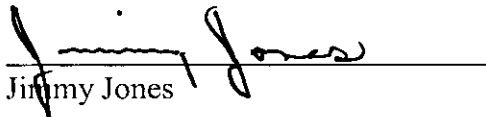
NOW, THEREFORE, BE IT RESOLVED:


That the Board of Directors of the Kimble County Groundwater Conservation District, pursuant to Texas Water Code Section 36.1071, approves and adopts the above and foregoing Management Plan for the Kimble County Groundwater Conservation District for a period of ten years following the certification of said Plan by the Texas Water Development Board.

APPROVED AND PASSED this the 15 day of June, 2004.

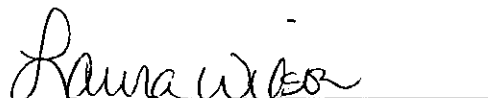

Awbrey Kothmann


Nancy Walker Nunns


Jimmy Jones


Hayden Woodard
Board President

Attest:


Laura Wilson
Board Secretary

KIMBLE COUNTY GROUNDWATER CONSERVATION DISTRICT

**P. O. Box 31
Junction, Texas 76849-0031
325-446-4826
FAX 325-446-4823
kimblewd@ktc.com**

**Awbrey Kothmann, Vice President
Precinct 14**

**Hayden Woodard, President
Precinct 12**

**Laura Wilson, Secretary-Treasurer
Precinct 15**

**Nancy Walker, Director
Precinct 11**

**Jerry Kirby
District Manager**

**Jimmy Jones, Director
Precinct 13**

June 15, 2004

Ms. Rimi Petrossian
Manager
Groundwater Technical Assistance Section
Texas Water Development Board
P. O. Box 13231
Austin, Texas 78711-3231

Dear Ms. Petrossian:

This letter is in response to your undated letter received July 7, 2004 by the District by fax. 12

Item 12

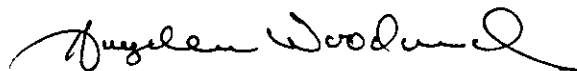
The surface water in the District is regulated by the Texas Natural Resource Conservation Commission. We have no local surface water management entity in the District.

Item 13a

The District did provide a copy of our plan by certified mail (not return receipt requested) to our Region F Regional Planning Group. 13(a)

Please contact me if you need any material information concerning the District's plan.

Yours truly,



Hayden Woodard
President

HW/lll

Copy to: Jerry Kirby
District Manager

KIMBLE COUNTY GROUNDWATER CONSERVATION DISTRICT

**P. O. Box 31
Junction, Texas 76849-0031
325-446-4826
FAX 325-446-4823**

**Awbrey Kothmann, Vice President
Precinct 14**

**Hayden Woodard, President
Precinct 12**

**Laura Wilson, Secretary-Treasurer
Precinct 15**

**Nancy Walker, Director
Precinct 11**

**Jerry Kirby
District Manager**

**Jimmy Jones, Director
Precinct 13**

June 16, 2004

**T W D B
RECEIVED**

JUN 17 2004

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

ROUTE TO: _____

CCTO: KW, RR - original

Re: Kimble County Groundwater Conservation District Management Plan

Dear Mr. Ward:

I am submitting herewith for certification pursuant to Section 36.1071 of the Texas Water Code our District's management plan, which was adopted June 15, 2004, for your review.

Enclosed herewith are:

- 1) A copy of the adopted management plan.
- 2) Copies of the District Board's resolution adopting the original plan.

Copies of the plan have been sent to the following entities:

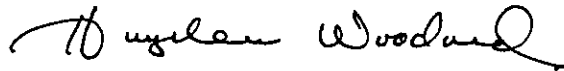
- a) Mr. John Grant, Chairman
Region F Regional Water Planning Group
P. O. Box 869
Big Spring, Texas 79721-0869
- b) Mr. Steve Musick, Leader
Groundwater Planning and Assessment Team
MC-147
P. O. Box 13087
Austin, Texas 78711-3087

Any comments received within 30 days by the District from the Region F Regional Water Planning Group or the TNRCC will be forwarded to you immediately upon receipt.

Please let me know if any additional documentation is required to complete the certification process.

Thank you for your consideration.

Yours truly,

A handwritten signature in cursive script that reads "Hayden Woodard".

Hayden Woodard
President

HW/III

Copy to: Mr. John Grant
Region F Regional Water Planning Group
P. O. Box 869
Big Spring, Texas 79721-0869

Mr. Steve Musick
Groundwater Planning and Assessment Team
MC-147
P. O. Box 13087
Austin, Texas 78711-3087

From: "Michelle Rhodes" <mrhodes@crmwd.org>
To: <Sherry.Cordry@twdb.state.tx.us>
Date: Thursday, August 05, 2004 1:46:00 PM
Subject: Re: Kimble County GCD plan

j3(a)

Sherry,

Mr. Grant is out of the office today. We received the GCD for Kimble County on June 24, 2004.

Thanks,
Michelle

>>> "Sherry Cordry" <Sherry.Cordry@twdb.state.tx.us> 08/05/04 01:38PM >>>
John, we are reviewing the GCD plan for Kimble County. they say they
sent it to Region F - Have you all recieved it yet?

Thanks.

Sherry Cordry
512-936-0824
When you drink the water, remember the spring.
Chinese Proverb

CC: "John Grant" <jgrant@crmwd.org>