# MENARD COUNTY

# UNDERGROUND WATER DISTRICT

Draft Management Plan August 2005

Revisions to Management Plan Adopted November 14, 2000 and Certified by Texas Water Development Board September 2001

### MENARD COUNTY UNDERGROUND WATER DISTRICT

## MANAGEMENT PLAN

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#### **District Mission**

The mission of the Menard County Underground Water District is to develop promote and implement water conservation and management strategies a) to conserve, preserve, and protect the surface and groundwater supplies of the District, b) to protect and enhance recharge, prevent waste and pollution, c) to effect efficient use of groundwater within the District and d) to protect the owners of water rights within the District from impairment of their groundwater quality and quantity.

## Time Period for 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 economy and environment, first to the citizens of Menard County and then to the region.

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

- 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;

- Preventing depletion of the aquifers underlying the District to protect springflows and assure an adequate supply of water for future municipal, domestic, agricultural and commercial use,

- Protecting the private property rights of landowners by ensuring that landowners continue to have an adequate groundwater supply underlying their land;

- Promulgating rules for permitting and regulation of spacing, production and transportation of groundwater resources in the District to protect the quantity and quality of the resource;

- Educating the public and regulating for conservation and beneficial use of the water, and to prevent pollution of groundwater resources;

- Cooperating and coordinating with other groundwater conservation districts with which the District shares aquifer resources.

### GENERAL DESCRIPTION OF THE DISTRICT

#### History

The citizeus of Menard County, recognizing the importance of protecting and maximizing beneficial use of the scarce water resources of the county and the necessity for protecting integrity of the county's groundwater quality, introduced legislation in the 71st<sup>th</sup> Regular Legislative

Session (1991) for creation of the District. A confirmation election was held on August 14, 1999 with 119 (94%) of the votes cast in favor of confirming the creation of the District and 7 (6%) against.

The District is governed by a five-member locally elected Board of Directors. The directors serve staggered two year terms, making the District is very responsive to voters' approval or disapproval of the local management of their groundwater and/or the services provided by the District.

#### Location and Extent

The Menard County Underground Water District comprises the entire area of Menard County which is not included within the boundaries of the Hickory Underground Water Conservation District No. 1, and covers an area of approximately 502,703 acres (785.5 square miles) in the west-central part of Texas. Menard County ranges in elevation from approximately 2,000 to 2,700 feet above mean sea level. Total county population is 2336 including the county seat, the City of Menard (population 1606).

#### Topography

The District lies within the Colorado River Basin and is bisected by the San Saba River, the headwaters of which are located in Menard and Schleicher Counties near Ft. McKavett. There are numerous creeks which are tributaries of the San Saba. Drainage of the river is in a generally eastward direction.

The Edwards-Trinity 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 250 feet. Springs issuing from the aquifer form the headwaters for the San Saba River, which flows eastward, and supply several creeks which are tributary to the San Saba.

The Edwards-Trinity formation outcrops over the majority of the area in the District with exception of the alluvial areas along the San Saba River and its tributaries and a small portion of the southeastern 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 Ellenburger-San Saba formation has a few small outcrops in the eastern part of the county.

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

#### **REGIONAL COOPERATION AND COORDINATION**

#### 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. As new districts were created, they too signed the 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 eleven 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 as diverse as the State of Texas. Due to the diversity of this region, each member district provides its own unique management programs to best serve its constituents.

The current member districts are:

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

This Alliance was created for local districts to co-ordinate and implement common objectives of facilitating the conservation, preservation, and beneficial use of water resources. Local districts monitor water-related activities which include but are not limited to farming, ranching, and oil and gas production. The alliance coordinates management activities of the member districts primarily through exchange of information and policy discussions.

#### **GROUNDWATER RESOURCES<sup>1</sup>**

#### Edwards-Trinity(Plateau) aquifer

The Edwards-Trinity is the principle aquifer in the District. According to the TWDB, total groundwater use in Menard County in 1999 was 1027 acre-feet. Of this amount 992 acre-feet

<sup>&</sup>lt;sup>1</sup><u>All estimates of groundwater availability, usage, supplies, recharge, storage, and future demands are from data</u> supplied by the Texas Water Development Board, unless otherwise noted. TWDB data sources include "Groundwater Conditons in Menard County, Texas" Texas Water Commission Bulletin 6519, August 1965; "Water for Texas, Today and Tomorrow, August 1997", and the Region F Regional Water Plan January 2001 and the IPP Region F Regional Water Plan adopted in July 2005.

came from the Edwards-Trinity.2

The saturated thickness of the formation is from 100–300 feet throughout most of the county, except an area in the northwestern corner of the county where it is only 50-100 feet. The water levels have generally remained constant or have fluctuated only with seasonal use. The formation is very fractured, with the water supply lying in the joints and fractures of the limestone. The limestone is porous, and recharge to the aquifer is rapid because of the existence of horizontal and vertical dissolution channels in the limestone.

The Edwards -Trinity formation overlies 578, 196 acres of the county. Total retrievable storage in the District is estimated to be 299,750 acre-feet.<sup>3</sup> However, this area of the aquifer has received little study, and that figure may be over-estimated. There are very few high-production wells in this formation in the District, but supplies are presently believed to be sufficient for domestic and livestock use in the sparsely populated county where wells are drilled into the fractures and joints. Most Edwards-trinity wells in the District pump less than 15gpm. District rules limit production from the Edwards-Trinity aquifer to annual recharge under drought conditions. Annual drought recharge is estimated to be 15,357 acre-feet.<sup>4</sup>

Water quality is good, though generally very hard, with 98.5% of the water supply in the District from this formation having Total Dissolved Solids (TDS) concentrations below 1000 mg/l.<sup>5</sup>

#### Hickory aquifer

The Hickory aquifer has an average saturated thickness of 400-600 feet in the northeast corner of the county and 200-400 feet in the southeast quarter. There is no recharge to the aquifer within the District, but recoverable storage in the District is estimated to be about 4,500,000 acrefeet.

The water quality varies, with only about 56% of the supply in the District having TDS <1000 mg/l.<sup>6</sup> The extent of radioactivity, which is known to exist in other areas of the aquifer, is not yet known in Menard 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.

#### Ellenburger-San Saba aquifer

The Ellenberger-San Saba formation consists of upper Cambrian limestone and sandstone San Saba Formation overlain by the Ordovician limestone and dolomite Ellenberger formation. The latter is highly porous and outcrops in several small areas along the San Saba River in the

<sup>6</sup> Table 3-5, Hickory Aquifer, Region F Regional Water Plan, January 2001

<sup>&</sup>lt;sup>2</sup> Table 1-13, 1999 Ground Water Pumping by County and Aquifer, IPP Regional Water Plan, Region F, June 2005

<sup>3</sup> TWDB, Water Resources Planning Division

<sup>&</sup>lt;sup>4</sup>Table 3-1, Groundwater Supplies in Region F, Region F IPP Regional Water Plan, July 2005

<sup>&</sup>lt;sup>5</sup> Figure 3-2, Edwards Trinity (Plateau) Aquifer Water Quality, Region F Regional Water Plan, January 2001

eastern part of the county. Retrievable storage is estimated by the TWDB to be 51,000 acre-feet in the county. Total effective recharge is 159 acre-feet,<sup>7</sup> which is the estimated available water supply. The quality of the water pumped in the District is good, with TDS less than 1000mg/l.

#### SURFACE WATER RESOURCES

The San Saba River is perennial in the western half of the county due to the presence of aquifer-fed springs that maintain flows. However, east of the City of Menard springflow is inadequate during times of drought to maintain any flow in many reaches of the river.

There are 9,954 acre-feet of water rights permitted by the TNRCC in the San Saba River and its tributaries in Menard County. 1,016 acre-feet are permitted for municipal use by the City of Menard and the remaining 8,935 acre-feet are permitted for irrigation purposes.<sup>8</sup> Primarily due to insufficient flows of the river during dry years, historic use of surface water over the years 1989-1997 has ranged from a high of approximately 6,680 acre-feet in 1994 to a low of approximately 1,235 acre-feet in 1990.<sup>9</sup>

#### HISTORICAL AND CURRENT GROUNDWATER USE IN THE MENARD COUNTY UNDERGROUND WATER DISTRICT

In the last twenty years, Menard County has seen total combined annual surface and groundwater use as high as 7,080 acre-feet in 1994 and as low as 1635 acre-feet in 1990.

#### <u>Menard County</u> <u>Historical Water Use<sup>10</sup></u> (Surface and Groundwater Combined)

1980	1985	<u>1990</u>	1995	1998	1999	2000
4,670	2,751	1,635	5,780	4,456	5,045	3,989

<sup>7</sup> Table 3-1, Groundwater Supplies in Region F, Region F IPP Regional Water Plan, July 2005

<sup>8</sup> Table 1-12, Surface Water Rights by County (Data from 1999 TNRCC water rights list), <u>Draft Regional Water</u> <u>Plan, Region F</u>, July 2000, p. 1-34

<sup>9</sup> Estimated from Table 1-5, Historical Total Water Use in County in Region F, <u>Region F IPP Regional Water Plan</u>, July 2005

<sup>10</sup> Table 1-6, <u>Region F Regional Water Plan</u>, January 2001 and Table 1-5, <u>Region F IPP Regional Water Plan Region</u> <u>F</u>, July 2005

# Source of Supply by Category in Menard County in 200011

Source of Water	<u>Municipal</u>	Manufac- facturing	Irrigation	Steam	<u>Mining</u>	Livestock	Total
Ground	0	0	370	0	0	335	705
Surface	427	0	2,773	0	0	84	3,284
Total	427	0	3,143	0	0	419	3,989

(acre-feet)

## Historical Groundwater Use in Menard County1990-1997<sup>12</sup>

(in acre-feet)

Total combined pumping from all aquifers within the District for 1990-1999 was:

1990	767	1994	1076
1991	878	1995	1015
1992	1141	1996	913
1993	1062	1997	896

# Estimated Historical Groundwater Production by Aquifer and Use Menard County<sup>13</sup>

Year	<u>Aquifer</u>	<u>Muni-</u> <u>cipal</u>	Manu- facturing	Power	Mining	<u>Irrigation</u>	Live- stock	<u>Total</u> <u>Use</u>
1998	Edwards-Trinity	62	0	0	0	436	295	793
	Ellenburger	1	0	0	0	0	4	5
	Other	12	0	0	0	0	24	36
1999	Edwards-Trinity	66	0			627	299	992
	Ellenburger	1	0			0	4	5
	Other	13	0			0	17	30
2000	Edwards-Trinity	352	0			370	313	1035
	Ellenburger	5	0			0	4	9
	Other	69	0			0	25	94

<sup>11</sup> Table 1-11, <u>Region F IPP Regional Water Plan</u>, July 2005

<sup>12</sup> TWDB Water Resources Planning Division

<sup>13</sup> TWDB Water Use Survey Database

#### PROJECTED GROUNDWATER SUPPLY AVAILABILITY

#### Edwards-Trinity Aquifer

In order to maintain dependable and sufficient groundwater supplies for future generations, the District has as its goal zero percent depletion of the Edwards-Trinity aquifer. Until better data is available, this goal of sustainability will be implemented by limiting annual production within the aquifer to estimated annual drought recharge.

#### Hickory Aquifer

There is no recharge to the Hickory aquifer in Menard 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 of limiting depletion to 75% of recoverable storage over a hundred-year period.

Total annual available groundwater supply in the District is estimated to be 49,876 acrefeet annually, as follows:

A) Groundwater availability from the Edwards-Trinity aquifer formation in the District is limited to annual recharge, which is estimated at 15,357 acre-feet.<sup>14</sup>

B) Recoverable storage in the District's portion of the Hickory aquifer formation is approximately 4,581,349 acre-feet, thus available supply of Hickory water is 34,360<sup>15</sup> acre-feet annually, based on 75% depletion of recoverable storage over a 100-year period.

C) Effective recharge to the Ellenburger-San Saba aquifer in the District is 159 acrefeet/year<sup>16</sup>. This is considered to be the annual available groundwater supply from the formation.

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

#### **Brush control**

Historical accounts of Menard County and historical photographs in the possession of the District make it apparent that during the period from 1850 through 1885, when Menard County was experiencing the beginning of European settlement, the country was mostly open grassland

16 See Note 7, supra.

<sup>&</sup>lt;sup>14</sup> Table 3-1, Groundwater Supplies in Region F, Region F IPP Regional Water Plan, Region F, July 2005

<sup>&</sup>lt;sup>15</sup> Table 3-1, Groundwater Supplies in Region F, Region F IPP Regional Water Plan, July 2005

with little brush and few trees. There was considerably greater flow of water in the San Saba 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). Sections of the San Saba River dry up and remain in that condition throughout the summer during droughts. In the Fall, when brush and trees become dormant, creeks usually 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 extends to the northwestern corner of Menard County, average annual water yield level increases by 81%, or about 48,523 acre feet with removal of all growths of mesquite and juniper. This occurs in areas with heavy and moderate brush coverage (leaving areas with light brush growth intact)<sup>17</sup>. The average annual water yield increase in subbasin 8 of the study, being the subbasin that includes a portion of Menard County, is 89,889 gallons per acre, or .27 acre-foot, annually.<sup>18</sup>

Average annual rainfall for the Main Concho River basin is 23.6 inches annually, compared with Menard County's 22.3 inches. The study finds that the average annual evapotranspiration for 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.<sup>19</sup>

The Edwards-Trinity aquifer outcrops at the surface of subbasin 8 of the Main Concho basin and over all of Menard 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 is 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.<sup>20</sup>

Applying those coefficients to areas of Menard County heavily infested with brush, about 40% of the county, and assuming removal of only half the brush from those areas and that Menard 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%,

<sup>18</sup> Ibid., p. 3

<sup>19</sup> Ibid., p. 3

<sup>20</sup> Ibid. p. 2

<sup>&</sup>lt;sup>17</sup> "Main Concho River Watershed" in <u>Brush Management/Water Yield Feasibility Studies of Eight Watersheds in</u> <u>Texas</u>, TWRI Study 182, p. 3

and re-evaporation from the aquifer reduced by approximately 14,000 acre-feet, equivalent to a 70% increase in total annual recharge.

#### PROJECTED DEMANDS FOR GROUNDWATER IN MENARD COUNTY

The Texas Water Development Board has based its combined surface and groundwater projections for Menard County on the premise that there will be little or no population increase in Menard County over the next 50 years.

			ter Demand acre-feet per	Projections <sup>21</sup> year)			
<u>2000</u> 3,988	<u>2010</u> 7,161	<u>2020</u> 7,138	<u>2030</u> 7,110	<u>2040</u> 7,083		<u>2050</u> 7,058	<u>2060</u> 7,039
			Vater Deman In acre-feet p	d by Categor er year)	<b>y</b> <sup>22</sup>		
	<u>201</u>	<u>0</u> <u>20</u>	20 2	2030	2040	2050	<u>2060</u>
Municipal Irrigation	458 6,061			446 022 6	438	435 5,981	435 5,962
Livestock	642		12	642	642	642	642

The TWDB projects no increase in over-all demand for water within the District, so that groundwater use is projected to remain at historical levels of 900-1000 acre-feet/year. 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 and amount 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) Large livestock ranches, which typically have one or fewer wells per square mile, are being divided into smaller tracts that are used primarily as vacation homes or for recreation, resulting in more homesites per acre. Water use on some of these lands is going from a few widely-scattered low-production livestock wells to a much greater number of higher-impact domestic, and in some cases irrigation, wells.

b) According to the Menard County Appraisal District, 60% of all county landowners are non-resident. These landowners are producing water for livestock, wildlife and recreational use

<sup>&</sup>lt;sup>21</sup> Table 2-3, Draft Regional Water Plan, Region F, June, 2005

<sup>&</sup>lt;sup>22</sup> Tables 2-5, 2-9, 2-13, Region F IPP Regional Water Plan, July 31, 2005

year-round, and domestic use on week-ends and during vacation and hunting seasons, but their production is not being accounted for either as domestic use, which is calculated on the basis of the number of county residents, nor for wildlife or non-municipal recreation, which are categories not included in regional planning.

c) Many new landowners are from areas where they are accustomed to higher levels of water use than long-time District residents. The District has experienced a noticeable increase in inquiries about irrigation wells from new landowners for properties that have not previously been irrigated.

d) 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) During the drought which extended over most of the period from 1997 until the Fall of 2004, the District received a number of reports of wells going dry which had produced water throughout the drought of the '50's.

f) Driller's reports submitted to the District are indicating as many dry holes as successful wells.

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

#### MANAGEMENT OF GROUNDWATER SUPPLIES

Obtaining data about aquifer supplies and conditions in order to develop more effective management of the resource is a primary function of the District. The District will establish monitor wells to gather baseline data concerning aquifer levels within the District's major aquifer. 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. There will be particular emphasis on monitoring wells in areas affecting springflows into the San Saba River and its tributaries.

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. Some 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;

- 2) protecting existing uses
- 3) the equitable distribution of resources

4) The economic benefit or hardship resulting from the grant or denial or limitation of a

permit.

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. The District 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

The District will implement this plan and utilize its provisions 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 permitting of 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 enforced. The promulgation and enforcement of the rules will be based on the best scientific and technical evidence available to the District.

For good cause, 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 from , and co-ordinate with, neighboring groundwater districts in managing water resources from common aquifers.

#### **Coordination With Surface Water Entities**

The Board of Directors and Manager of the District will meet at least once yearly with the Menard County Water Control and Improvement District No. 1 to discuss joint water management goals.

#### Methodology for Tracking Progress

The District will hold a regular monthly Board Meeting for the purpose of conducting District business. 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 of presentations in public forums; meetings with the surface water management district; and other matters of district importance.

During the last monthly Board of Directors' meeting each fiscal year, beginning with October 1, 2002, 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.

#### 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 the Texas Water Development Board, Texas Natural Resource Conservation Commission, Texas Agricultural Extension Service, and other sources.

1.1 Performance Standard

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

#### 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, at the rate of at least two additional wells per year until the network includes a total of ten wells distributed around the county, with priority given to locations that will better enable the district to monitor aquifer levels that affect spring flows.

#### 2.1 Performance Standard

The addition of two monitor wells each year to the district well-monitoring network until a total of ten is reached.

#### 2.2 Management Objective

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

#### 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 well be measured and recorded every quarter.

#### 2.3 Management Objective

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

2.3 Performance Standard

One advertisement 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

One water quality analysis test performed each year on two selected water quality 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

#### 3.1. Management Objective

Although there is very little oil production in Menard 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

Once each year two well samples will be collected and analyzed for petroleumrelated contamination in areas of the district where there is oil production.

#### Goal 4.0 - To Provide for Addressing Conjunctive Surface Water Management Issues

#### 4.1 Management Objective

Each year the District shall conduct joint planning and/or policy meetings with the Menard County Water Control and Improvement District No. 1 to discuss conjunctive use issues.

#### 4.1 Performance standards

One joint planning and/or policy meeting conducted jointly with the Menard County Water Control and Improvement District No. 1, or another surface water entity, each year.

#### 5.0 - To provide for addressing drought conditions

#### 5.1 Management Objective

To raise public awareness of the need for additional conservation during periods of drought in the district.

#### 5.1 Performance Standard

Publication in the local newspaper of a notice for need to conserve water once each month during times that the LCRA stream gauge has readings of less than 8 cfs for the duration of a week or more.

#### 6.0 - To provide for addressing conservation

#### 6.1 Management Objective

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

6.1 Performance Standard One article on conservation published each year.

#### Goals not applicable to the Menard County Underground Water District.

1.0 Management Objective Controlling and preventing subsidence.

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 Menard County Underground Water Conservation District.

"District" - the Menard County Underground Water District.

"Effective recharge" - the amount of water that enters the aquifer and is available for development

"Groundwater" - means water percolating below the surface of the earth.

"Integrity" - means 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 or more of the following:

- 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;
- 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" - means an artificial excavation that is dug or drilled for the purpose of producing groundwater.

#### RESOLUTION OF THE MENARD COUNTY UNDERGROUND WATER DISTRICT

WHEREAS, the Management Plan of the Menard County Underground Water District and revisions thereto was completed, reviewed and accepted by the undersigned Board of Directors; and

WHEREAS, a Public Meeting was duly noticed and held on August 25, 2005 to accept oral and written comments on the Management Plan and the revisions thereto; and

WHEREAS, no public comments were submitted at the August 25, 2005, meeting;

#### NOW, THEREFORE, BE IT RESOLVED:

That the Board of Directors of the Menard County Underground Water District, pursuant to Texas Water Code Section 36.1071, approves and adopts the above and foregoing Menard County Underground Water District Management Plan to which this resolution is attached as the Management Plan for the District for a period of ten years following the certification of said Plan by the Texas Water Development Board.

APPROVED AND PASSED this  $\frac{25}{25}$  day of August, 2005.

James A. Davis Board Chairman

Richard R. McTaggart

Buster Terrell

Jimmie Bray

Secretary-Treasurer

# MENARD COUNTY UNDERGROUND WATER DISTRICT

### NOTICE OF MEETING

The Board of Directors of the Menard County Underground Water District will hold a specially called meeting Thursday, August 25, 2005 at 5:25 pm in the Commissioners Courtroom, Menard County Courthouse, 213 E. San Saba Street, Menard, Texas. Matters to come before the Board are as follows:

- 1. Discussion and possible action on adoption of District Management Plan.
- 2. Discussion and possible action on adoption of 2006 tax rate.
- 3. Any other items to come before the Board.

Notice is hereby given on this the 22 day of U Notices are posted at the Menard County Courthouse and the Menard

Underground Water District Office.

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Caroline R. Runge, Manager *V* Menard County Underground Water District

Filed for Record in my Office the 22 nd day of U 20/24 ut 4:25 o'clock A County Clerk, Menard, County,

# publisher of THE MENARD NEWS, a newspaper of general circulation which has been continuously and regularly published for a period of not less than who, after being duly sworn by me, deposes and says that he is the Underground Water D. Starc Votary Public, Menard County, Texas 2005 Aublisher Subscribed and sworn to before me this 29th day of aug A. D. 2005 one year in the County of Menard, Texas, preceding the date of the attached notice On this day personally appeared DAU FEATHER JR Notice and that the said notice was published in said paper on the following dates: Public HEARINS Votary Public, State of Texas My Commission Expires 2000 PAULINE W. REEVES MAN AGement COUNTY OF MENARD "mm

December 02, 2008

**PUBLISHERS AFFIDAVIT** 

THE STATE OF TEXAS

#### 8 - AUGUST 25, 2005 MENARD (TX) NEWS

# Texas Press Association - State Capital Highlights Legislature Adjourns With Mission Unac

#### By Ed Sterling

AUSTIN - Attempts to upgrade the funding of public education and simultaneously bring tax relief failed yet again, as month-long special session II of the 79th Texas Legislature ended.

After House and Senate gavels signaled adjournment sine die on Aug. 19, in the minds of some the only thing missing around the Capitol was a sound resembling the release of air from a birthday balloon. Others thought no legislation is better than bad legislation.

During the regular session that ended May 30 and the following special sessions, House and Senate majorities, in effect, conceded they could not act without hurting people who sent them to Austin in the first place.

Lawmakers could have knocked down property tax levies, but not without closing franchise tax loopholes, not without raising cigarette and alcohol taxes, and not without

# **Public Notices**

#### NOTICE OF PUBLIC HEARING The Menard County

Underground Water District will conduct a public hearing to accept oral and written comments on the District's MANAGEMENT PLAN August 25, 2005 at 5: 00 P.M. The Commissioners' Courtroom Menard County Courthouse 213 E. San Saba Street, Menard, Texas

Written comments on the Management Plan will be accepted from now until August 25 and should be submitted to: Caroline Runge, Manager P.O. Box 1215, Menard, Texas 76859

The Management Plan is the revision required by state law to the District's original Plan which was certified by the Texas Water Development Board in September 2001. Copies of the Management Plan are available at the County Clerk's office and the Menard County Underground Water District office in the County Courthouse, and the Menard Public Library. For additional information call Caroline Runge at 325,306,3670 216,418,43 hurting their friends in the oil business, among others.

Some lawmakers even suggested legalizing Las Vegas-style video lottery terminals to generate revenue. But that was a no-go.

No - not even mounting pressure from a governor who is seeking reelection that would put him in that high office for an unprecedented 10 years - could make House members wrench loose their dug-in rowels.

Maybe not individually, but collectively, lawmakers saw that doing nothing turned out to be the best way for them to go, especially in light of a lawsuit by poorer school districts heard by Travis County District Judge John Dietz.

In August 2004, Dietz ruled that current state laws violate the Texas Constitution by taking away school districts' meaningful discretion in setting local property tax rates and through unfair funding formulas making the cost of funding an adequate education beyond the means of poorer school districts.

On Nov. 30, 2004, Dietz gave the Legislature until Oct. 1, 2005, to address his legal conclusions.

The state appealed Dietz's ruling and oral arguments were heard by the Texas Supreme Court on July 6. A ruling on the state's appeal could come any day.

House Speaker Tom Craddick resisted the passage of slap-dash fixes to these enormous problems. He has been content to wait for the Texas Supreme Court to hand down what he E hopes will be a template for the Leg-s islature to use to satisfy the state constitution.

It is anyone's guess how such a 11 template might look in regards to caps p on Robin Hood contributions by d wealthy school districts, increases in d teacher pay and benefits, and dollars h spent per pupil on actual classroom s instruction that has nothing to do with X the time-consuming Texas Assessment of Knowledge and Skills exam. s

Suppose the Supreme Court rules.

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The governor may be moved to call another special session if so directed by the court. Lawmakers could find themselves back in Austin fairly soon.

Executive authority to the rescue

Gov. Rick Perry swatted the Legislature for its failure. On Aug. 20, he trumpeted his intention to use executive authority to pay for new textbooks and grant teachers a modest raise.

"Even though the Legislature did not act, I will," Perry said. Craddick and Lt. Gov. David Dewhurst, joint chairs of the Legislative Budget

Plan A Garage Sale! Want Ads Pay! Menard News 396-2243 Tuesday Noon Deadline

# The best kinds of family breakfasts aren't always at home.



Public Notices	NOTICE OF PUBLIC HEARING	The Menard County Underground Water District will conduct a public hearing to accept oral and written comments	on the District's MANAGEMENT PLAN August 25, 2005 at 5: 00 P.M. The Commissioners' Courtroom	Menard County Courthouse 213 E. San Saba Street, Menard, Texas	Written comments on the Management Plan will be accepted from now until Au- gust 25 and should be submitted to:	Caroline Runge, Manager P.O. Box 1215, Menard, Texas 76859 The Management Plan is the revision	required by state law to the District's origi- nal Plan which was certified by the Texas Water Development Board in September 2001. Copies of the Management Plan are	available at the County Clerk's office and the Menard County Underground Water District office in the County Courthouse,	and the Menard Public Library. For addi- tional information call Caroline Runge at 325-396-3670. 2te - 41 & 43
iation - State Capit R. D.	Tosses Wothmann eal Estate	School Fint 1701 Main Junction, Tx 76849	unselors a of in time for m school year si	Dewll y's words little-s of the bill: Ellis.	day that passes without edu- islation 325-396-2305 reform is another day text- and init		State Licensed Septic System Installer II btic Tanks Installed & Repaired	All Types Excavating Backhoe & Dump Truck	396
6 - AUGUST II, 2005 MENARD (TX) NEWS Texas Press Association	<b>Craddick To</b>	Senate's Scl			3) but the embers cooled considerably "Each day that I thereafter. cation reform is An Aug. 4 statement from House books remain in		that have and have not happened. What has happened: The House killed its own property	tax reform and school finance bills. Without a House-originated rev- enue-raising bill, the Senate's school	finance solving plans can't move. What has not happened:

# NOTICE OF PUBLIC HEARING

# The Menard County Underground Water District

will conduct a public hearing to accept oral and written comments on the District's **MANAGEMENT PLAN August 25, 2005 at 5: 00 P.M.** The Commissioners' Courtroom Menard County Courthouse 213 E. San Saba Street.

Menard, Texas

Written comments on the Management Plan will be accepted from now until August 25 and should be submitted to: Caroline Runge, Manager P. O. Box 1215, Menard, Texas 76859

The Management Plan is the revision required by state law to the District's original Plan which was certified by the Texas Water Development Board in September 2001.

Copies of the Management Plan are available at the County Clerk's office and the Menard County Underground Water District office in the County Courthouse, and the Menard Public Library. For additional information call Caroline Runge at 325-396-3670.

Filed for Record in my Office the 12 ch day of Que 2005 al 2:50 o'clock CLAIL mas County Clerk, Menard, County.

# MENARD COUNTY UNDERGROUND WATER DISTRICT

#### Minutes of a Public Hearing Conducted on

August 25, 2005

Pursuant to notice duly posted and published in accordance with law, the Board of Directors of the Menard County Underground Water District conducted a Public Meeting at 5:00 p.m. at the Menard County Commissioner's Court Room at 213 East San Saba Ave. Menard, Texas for the purpose of receiving comment on the District's revised management plan.

Directors Present: Jay Kothmann, Jimmie Bray and Buster Terrell Directors Absent: James A. Davis, Richard R. McTaggart Staff Present: Caroline Runge and Wanda Ellis Members of the public present: none

Jimmie Bray, Secretary/Treasurer of the District, opened the meeting at 5:00 p.m. and explained that the purpose of the meeting was to review and receive public comments on changes to the district's Management Plan which had been reviewed and approved by the Board of Directors on August 11, 2005. Mr. Bray explained that the District's initial Management Plan was certified by the Texas Water Development Board in September of 2005 and that provisions of the Texas Water code require that the District review and readopt, or adopt a revision, every five years. Thus re-adoption or revision of the plan would have to take place in 2006, but since the District obtained local legislation during the recent regular session of the Texas Legislature which allows the District to limit domestic and livestock production on tracts of land under 100 acres in size, the District decided to revise the management plan this year prior to re-adopting new rules. The legislation was sought to help the district protect surface water supplies in the district, and the management plan is being revised to better implement this District goal.

Mr. Bray then turned the meeting over to Caroline Runge, District manager, to explain the nature of the changes to the management plan.

Caroline explained that the main changes were to a) revise the supply and demand and recharge numbers to bring the plan into conformity with the Region F Regional Water Plan, the draft of which recently received initial approval prior to going through a public comment period and then being sent to the Texas Water Development Board for final approval and incorporation into the State Water Plan of 2006 and b) to adjust the management goals to better implement the district's objectives of preventing aquifer depletion and preserving the District's spring-flows. In particular, she explained that the District's experience in the past four years had indicated that important information on aquifer levels is being obtained by well-level monitoring, but that District objectives would be better served by a smaller number of wells located strategically and with levels taken more often.

In addition, the District is required to address conservation and drought contingency management goals which were not required in the initial plan.

Following the presentation by the manager, Mr., Bray asked if there were any comments from the Board members present.

There were none, and as there were no members of the public present, Mr. Bray adjourned the meeting at 6:11 p.m.

Jimmie Bray, Chairman of the meeting

Attest:

Wanda Ellis, Secretary of the Meeting

# MENARD COUNTY UNDERGROUND WATER DISTRICT

Specially Called Meeting

August 25, 2005

Pursuant to notice duly posted in accordance with law, the Board of Directors of the Menard County Underground Water District met in a specially called meeting at 5:25 p.m. at the Menard County Commissioner's Court Room at 213 East San Saba Ave.

Directors Present: Jay Kothmann, Jimmie Bray and Buster Terrell Directors Absent: James A. Davis, Richard R. McTaggart Staff Present: Caroline Runge and Wanda Ellis Guests: none

The meeting was called to order at 5:30 p.m. by Jay Kothmann in the absence of chairman Jim Davis. Jay announced that the purpose of the meeting was to consider the public comments received at the public hearing held at 5:00 p.m. this date, and determine whether any consequent changes should be made to the revised district management plan approved by the Board at the regular monthly meeting on August 11, 2005.

As no comments had been submitted by the public, either in writing or orally at the Public Meeting held at 5:00pm on August 25, 2005, at the Menard County Commissioners Court Room at 213 East San Saba Ave., Jimmie Bray moved that the Board approve a Resolution adopting the revised Management Plan for the Menard County Underground Water District and that the plan be forwarded to the Executive Director of the Texas Water Development Board for certification. Buster Terrell seconded the motion. The motion passed unanimously.

A copy of the Resolution is attached to these minutes.

Buster Terrell moved that consideration of the tax rate for 2006 be tabled until the meeting following the public hearing on September 7. Jimmie Bray seconded, the motion carried unanimously.

There being no further business to come before the Board, Jay Kothmann made a motion to adjourn, Buster Terrell seconded - motion carried

Jimmie Bray, Secretary-Treasurer

#### STATE OF TEXAS COUNTY OF MENARD

I, the undersigned Secretary of the Menard County Underground Water District, do hereby certify that the above and foregoing document is a true and correct copy of the Minutes of the Meeting of the Menard County Underground Water District held on August 25, 2005, and of the Resolution of the Board of Directors approved at that meeting and attached to the minutes.

Jimmie Bray, Secretary/Treasurer

U.S. Postal Service 8506 **CERTIFIED MAIL** RECEIPT (Domestic Mail Only; No Insurance Coverage Provided) For delivery information visit our website at www.usps.com 6087 Δ 06 Postage e 2510 0007 30 Certified Fee 7. ostmark Return Receipt Fee (Endorsement Required) 1.75 Restricted Delivery Fee (Endorsement Required) 11 Total Postage & Fees \$ 1004 Sent To I Gock ha WA Street, Apt. Apt. Apt. or PO Box No. 869 City, State 797210865 PS Form 3800, June 2005 See Reverse for Instructions U.S. Postal Service CERTIFIED MAIL RECEIPT 853<sup>7</sup> (Domestic Mail Only; No Insurance Coverage Provided) For delivery information visit our website at www.usps.com 7004 2510 0007 6087 Postage Certified Fee Return Receipt Fee (Endorsement Required) **Restricted Delivery Fee** (Endorsement Required) 5.11 \$ Total Postage & Fees Sent To W Street, Apt. No. OX 13087 or PO Box No. City, State, ZIF 78711-308 PS Form 3800, June 2002 See Reverse for Instructions

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# MENARD COUNTY UNDERGROUND WATER DISTRICT P. O. Box 1215 Menard, Texas 76859

Menard County Courthouse 213 East San Saba Street Telephone: 325-396-3670 Fax : 325-396-3921 e-mail: mcuwd@wcc.net

26 August 2005

Mr. John Grant, Chairman Region F Regional Water Planning Group c/o Colorado River Municipal Water District P. O. Box 869 Big Spring, TX 79721-0869

#### BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED

#### Re: Menard County Underground Water District Management Plan

Dear John:

Pursuant to Section 356.6 TAC pertaining to the certification process for groundwater conservation district management plans, I enclose herewith a copy of the amended Menard County Underground Water District Management Plan adopted by our board on August 25<sup>th</sup>.

We respectfully request that you review it for "consistency with the regional water plan" and that you "specify any areas of conflict between the management plan and the Region F regional water plan."

This plan is being submitted to the TWDB for certification next week, so if you find any such inconsistencies I would much appreciate having your comments by September 29<sup>th</sup> so I may forward them to the Board.

Many thanks, as always, for your attention to our district.

Sincerely yours,

Caroline R. Runge Manager

Cc: Mr. Kevin Ward

# MENARD COUNTY UNDERGROUND WATER DISTRICT P. O. Box 1215 Menard, Texas 76859

Menard County Courthouse 213 East San Saba Street Telephone: 325-396-3670 Fax : 325-396-3921 e-mail: mcuwd@wcc.net

29 August 2005

District Administrator Water Utilities Division Texas Commission on Environmental Quality P. O. Box 13087 Austin, TX 78711-3087

#### BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Re: Menard County Underground Water District Management Plan

Dear Sir:

Pursuant to Section 356.6 TAC pertaining to the certification process for groundwater conservation district management plans, I enclose herewith a copy of the amended Menard County Underground Water District Management Plan adopted by our board on August 25<sup>th</sup>.

This management plan is being forwarded simultaneously to the Executive Director of the Texas Water Development Board for certification as required under Section 36.1072 of the Texas Water Code. Please submit any comments you may have to the Mr. Kevin Ward, Executive Director, Texas Water Development Board, P. O. Box 13231, Austin, Texas 78711-3231, with a copy to me at the address above.

Thank you for your attention to this matter.

Sincerely yours,

Caroline R. Runge

Manager

Cc: Mr. Kevin Ward