

**AMENDED AGENDA  
RED RIVER GROUNDWATER CONSERVATION DISTRICT  
BOARD OF DIRECTORS MEETING  
GTUA BOARD ROOM  
5100 AIRPORT DRIVE  
DENISON, TEXAS 75020  
1:00 P.M., MONDAY, JULY 26, 2010**

Notice is hereby given that a meeting of the Board of Directors of the Red River Groundwater Conservation District will be held on the 26<sup>th</sup> day of July, 2010, at 1:00 p.m. in the GTUA Board Room, 5100 Airport Drive, Denison TX, 75020, at which time the following items will be discussed:

**Agenda:**

- I. Call to Order
- II. Introduction of Visitors
- III. Consider and act upon approval of Minutes of May 24, 2010 Meeting
- IV. Consider and act upon request by the City of Tom Bean for approval of a water well site
- V. Citizens to be Heard
- VI. Discuss future meeting date and agenda
- VII. Adjourn

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<sup>1</sup>The Board may vote and/or act upon each of the items listed in this agenda.

**WORK SESSION**

The Board Work Session will begin at 1:30 PM or upon adjournment of the Board Meeting, whichever is later. Work Sessions are primarily for the benefit of the Board, although they are open to the public. During work sessions of the Board, no public comment will be heard, unless specifically requested by a Director and recognized by the President. Public comment may be made at the time the item is set for discussion at a regular Board Meeting. The Board of Directors may discuss, consider, and take all necessary action regarding each of the Work Session agenda items below:

- I. Call to Order
- II. Discuss and prepare timeline of activities
- III. Discuss creation of Bylaws

- IV. Consider and discuss draft Management Plan
- V. Discuss Policies and Procedures for the Board of Directors
- VI. Adjourn

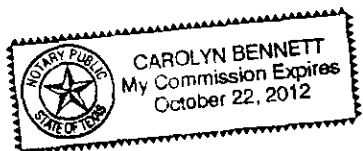
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<sup>1</sup>The Board may vote and/or act upon each of the items listed in this agenda.

This is to certify that I, Carmen Catterson, posted this agenda on the outdoor bulletin board of the Administrative Offices of the Greater Texoma Utility Authority, on the west side of the building, at 2:00 p.m. on May 19, 2010. I also provided this agenda to the County Clerks in Fannin and Grayson Counties with a request that it be posted.

Carmen Catterson  
Carmen Catterson

Sworn and subscribed to before me this 21 day of July 2010.



(S E A L)

Carolyn Bennett  
Notary Public

PERSONS WITH DISABILITIES WHO PLAN TO ATTEND THIS MEETING, AND WHO MAY NEED ASSISTANCE, ARE REQUESTED TO CONTACT CARMEN CATTERSON AT (903) 786-4433 TWO (2) WORKING DAYS PRIOR TO THE MEETING, SO THAT APPROPRIATE ARRANGEMENTS CAN BE MADE.

### ATTACHMENT III

**MINUTES OF THE BOARD OF DIRECTORS' MEETING  
RED RIVER GROUNDWATER CONSERVATION DISTRICT**

**MONDAY, MAY 24, 2010**

**AT THE GREATER TEXOMA UTILITY AUTHORITY  
BOARD ROOM  
5100 AIRPORT DRIVE  
DENISON TX 75020**

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Members Present: George "Butch" Henderson, George Olson, Don Wortham, David Gattis, Harold Latham, Don Morrison

Members Absent: John Young

Staff: Jerry Chapman and Carmen Catterson

Visitors: Mike Mahoney, Evergreen Underground Water Conservation District  
Gary Westbrook, Post Oak Savannah Groundwater Conservation District

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I. Call to Order

President Henderson called the meeting to order at 2:05 p.m. The Board Members introduced themselves and the entities they represent. All members except John Young were present.

II. Introduction of Visitors

Mr. Chapman spoke briefly over the trials the District has experienced. He introduced visitors Mike Mahoney with the Evergreen Underground Water Conservation District and Gary Westbrook with the Post Oak Savannah Groundwater Conservation District. The Evergreen Underground Water Conservation District (EUWCD) has been in existence since 1965 and has the benefit of being a tax-based district. The Post Oak Savannah Groundwater Conservation District (POSGCD) has been in existence since 2001. Both managers are attending the meeting to provide their knowledge and insight without receiving any compensation. President Henderson introduced Carmen Catterson, the secretary for the District and extended thanks for all her hard work.

III. Consider and act upon approval of Minutes of March 29, 2010 Meeting.

Vice President Olson motioned to approve the Minutes of the March 29, 2010 Meeting. The motion was seconded by Board Member Morrison and passed unanimously.

IV. Receive presentation by Mike Mahoney, General Manager of Evergreen Underground Water Conservation District.

Mr. Mahoney with the EUWCD brought a copy of their Director and Employee Policy. He explained that the document is a good place to begin for new GCDs. The policies should be established before beginning operations. The document contains a code of conduct for both employees and Directors and offers solutions for possible problems. The policy discusses vehicles, nepotism, travel, reimbursement of expenses, how Chapter 36 applies to GCDs, general conduct, alcohol, sleeping on the job, inappropriate attire, absences, tardiness, safety, security, inspections for illegal substances, handicap requirements, political activities by employees, pre-employment screening, overtime, unemployment benefits, jury duty, annual and sick leave, holidays, and disability leave. The policy protects the District and the employees. Each page has a place for the employee to sign and initial to verify they have read and understand the document.

The Texas Water Development Board (TWDB) records well data from several wells in each county annually. This is a good place to retrieve historical data to establish water levels of the aquifer over time. Mr. Mahoney recommended comparing water use to population growth to determine trends and patterns and to find the relationship between the increase in water use compared to the increase in population growth. Since the District is fee-based, a fee schedule can be established before the management plan so that funding can begin. Mr. Mahoney recommended the District use the numbers from the TWDB to determine how much will need to be charged per 1,000 gallons of groundwater to meet the budget requirements.

Mr. Mahoney briefly explained the history of the EUWCD and its formation. He also explained the budget and amount of groundwater used. He then explained the EUWCD's permitting process. Each new well requires two permits – one for drilling and one for production. The drilling permit costs \$125. However, once the well is drilled if the driller's log is registered at the District, \$75 is reimbursed. The production permit depends on the production requested. They do actively enforce by issuing fines. The most recent incident occurred when a farmer was flood irrigating and refused to stop flooding his neighbors' properties. The EUWCD's budget is \$700,000 per year. 40% of the budget is composed of administrative costs. The EUWCD is a tax-based district and the current rate is \$0.0137 or \$13.70 per \$100,000 in property value. This amount generates the budget requirements without putting a heavy burden on any one person.

Mr. Mahoney recommended the District pursue joining the Texas Alliance of Groundwater Districts. It is free to join for one year after the District confirmation. The free members are non-voting, but can attend meetings and have access to resources. The website is [www.texasgroundwater.org](http://www.texasgroundwater.org).

Vice President Olson thanked Mr. Mahoney for his insight. He knows the District has much to accomplish, but has no idea where to begin and appreciates all the assistance. President Henderson confirmed the Board's thanks.

V. Receive presentation by Gary Westbrook, District Manager of Post Oak Savannah Groundwater Conservation District

Mr. Westbrook of the POSGCD explained that some of the first steps taken in his District included hiring for hydrology services. They created a budget, determined what the expenses would

be without staff, and only hired a General Manager. He worked from his home for some time before an office was acquired.

Mr. Westbrook explained briefly the creation of the POSGCD and their unique situation. The POSGCD area is very controversial due to water marketing. The POSGCD assesses fees based on permitted amounts. This is much better for the district because in wet years not enough revenue will be accumulated to meet the budgetary requirements.

Mr. Westbrook emphasized how important planning and evaluation of current and future needs is to the District. With adequate planning, drawdowns can be modified with no problem and groundwater use can be more carefully controlled. Adequate planning can also help protect shallow wells so they do not receive more drawdown they necessary.

The POSGCD budget is \$2 million. More than \$1 million is given in grants to rural water providers for conservation and repair projects. As far as Mr. Westbrook is aware, the POSGCD is the only entity to provide grants to local water providers. Mr. Westbrook explained the POSGCD's rules and procedures. The well spacing is based on production. A 1,000 gallon per minute (GPM) well would need to be 1,000 feet from the property line or 2,000 feet from a neighboring well. The rule is 1 foot per GPM from property line or 2 feet per GMP from well. The permit for a new well is \$100 and if it is non-agricultural, a hearing must be held. Existing wells cannot be repaired without registering the well first. The well drillers were disgruntled at first, but were pacified by being able to register the well themselves. The cost to register an existing well is \$10. The POSGCD charges a transport fee to send water out of the district. Due to water marketers, they have to treat all entities the same.

Mr. Westbrook recommended the Board be transparent in developing rules and procedures. The Board should post notices publicly and invite well drillers to comment and make recommendations. Encourage the public to participate in the meetings.

#### VI. Discuss the development of policies and procedures for the Board of Directors

President Henderson recommended the Board not reinvent the wheel while developing policies and procedures. The enabling legislation provides the basic information for the bylaws and most of the policies. The Board discussed hosting a workshop to discuss policies and procedures and developing a time line. Policies and procedures need to be well thought out to avoid catastrophes and controversy. The Board discussed using the North Texas GCD (NTGCD) bylaws as a template. The NTGCD used the North Trinity GCD bylaws as a template. The NTGCD has approved the bylaws and the rules should be in place by September. More info about management plans. The Board recommended inviting well drillers to future meetings to discuss policies and procedures. President Henderson stated the District was formed for a reason and the Board should not be spending time accomplishing nothing. Board Member Latham stated it was his understanding the Red River GCD is a political subdivision and it does not seem like the Board is being responsible by not accomplishing goals. He stated he was not sure what needed to be accomplished first, but felt that reading the enabling legislation was a good start. Vice President Olson stated the Board should take time and do things right, but that things need to be accomplished as quickly as is responsible. President Henderson recommended using a meeting to establish a time line and discuss developing strategies. He recommended a workshop be held.

VII. Discuss future meeting date and agenda

Board Member Morrison motioned to hold the next meeting on July 12 at 1:00 PM to discuss creating bylaws and reviewing the enabling legislation to create draft rules and procedures. The motion was seconded by Secretary/Treasurer Wortham and passed unanimously.

VIII. Citizens to be Heard

No citizen comments were received.

IX. Adjourn

Upon motion by Vice President Olson seconded by Board Member Latham and passed unanimously, the Board adjourned at approximately 4:38 p.m.

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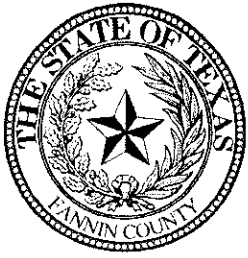
Recording Secretary

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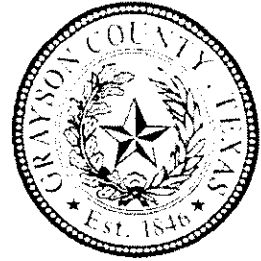
Secretary-Treasurer

ATTACHMENT IV





**RED RIVER**  
**GROUNDWATER CONSERVATION DISTRICT**  
FANNIN COUNTY AND GRAYSON COUNTY



**MEMO**

TO: Board of Directors, Red River Groundwater Conservation District

FROM: Jerry W Chapman

DATE: July 22, 2010

RE: Tom Bean Well Request

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Recently, Mayor Sherry Howard of the City of Tom Bean e-mailed a letter dated July 7, 2010 to the District requesting consideration of a permit for a proposed well located 1.5 miles from the nearest water well on the east side of Tom Bean. This request has been made because the funding agency the United States Department of Agriculture (USDA) will require, prior to closing the loan, evidence that the City has the appropriate approval for the well from the District.

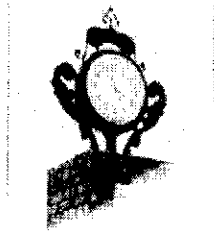
Upon receipt of the information, contact was made with Alan Lambright, the USDA representative in McKinney office to ascertain the time in which this approval will be needed. According to Mr. Lambright no application has been received from the City of Tom Bean, but they expect one in the near future. Mr. Lambright stated he would not anticipate funding of the application until some time in 2011.

The application process would not be slowed because of a lack of permit approval by the District according to Mr. Lambright. He stated they would make the permit a condition of closing, which would occur in 2011 by his estimation.

**STAFF RECOMMENDATION:** Since the District does not currently have rules adopted and in place, there is no standard for the Board to grant a permit. To do so might be in conflict with Chapter 36 of the Texas Water Code. However, the City could be notified that the letter will be kept on file until such time as the rules have been adopted by the District so action can be taken at that time. Apparently the funding application will be more than twelve months away, giving the District time to adopt rules.

JWC:cc

**TOM BEAN**



**Office of the Mayor  
City of Tom Bean  
P.O. Box 659  
201 S. Britton Street  
Tom Bean, Texas 75489**

**July 7, 2010**

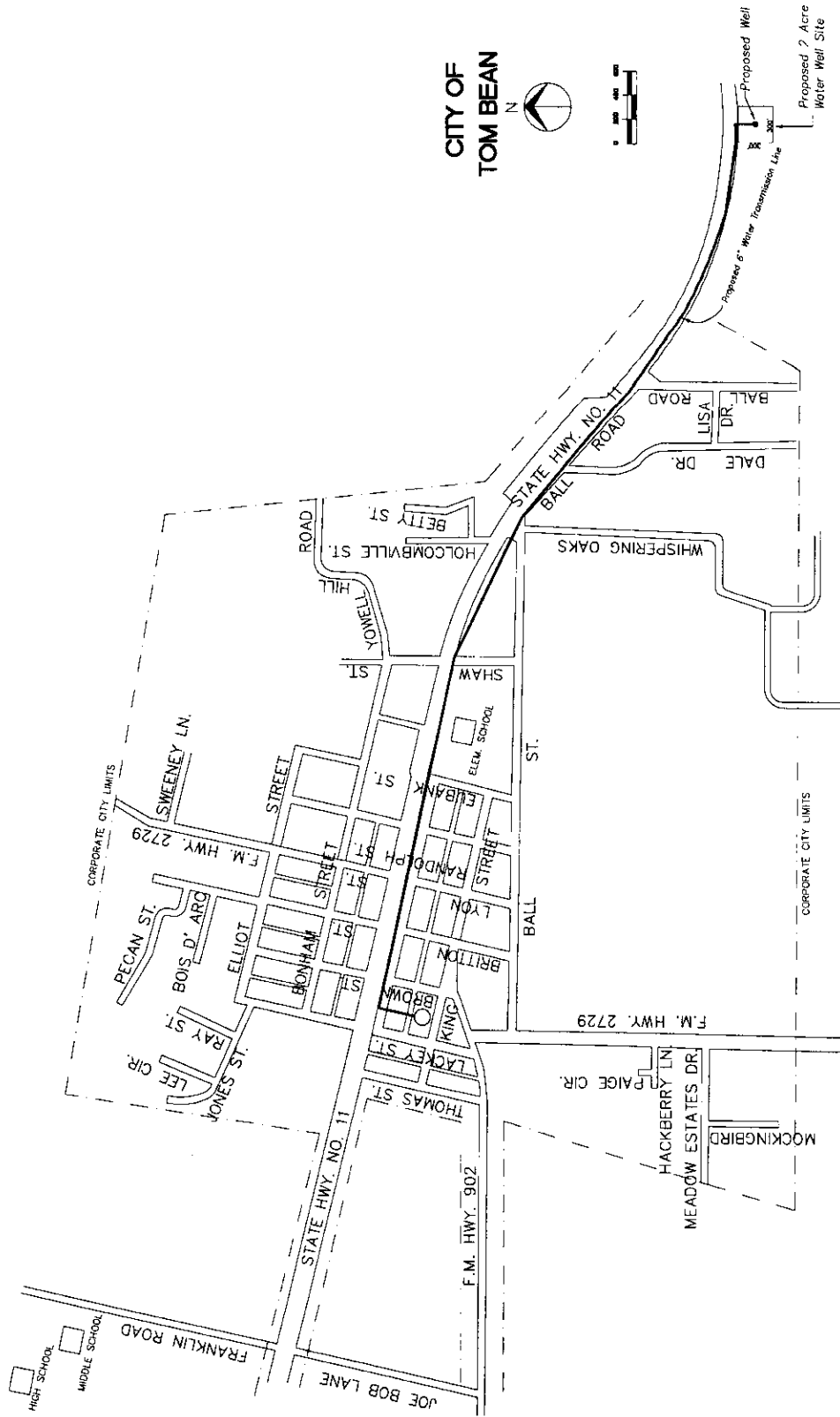
**The City of Tom Bean is deficient in its water well capacity (TCEQ reprimand) and is applying to the USDA Rural Utilities Services for a Grant/Loan to drill a new water supply well. The well will be located inside the City Limits of Tom Bean on the east side of town along State Hwy 11. (See attached Map)**

**The proposed well will be located at least 1.5 miles away from the nearest water well. It will be completed in the deep Woodbine Sands at least 1500 feet deep. We expect to receive 200 gallons per minute from the well.**

**The USDA will require this approval by the Red River WCB before we can be funded.**

**Sincerely,**

**Sherry E. Howard  
Mayor of Tom Bean  
201 S. Britton PO Box 659  
Tom Bean, Texas 75489  
[sherryhoward@cableone.net](mailto:sherryhoward@cableone.net)  
903-815-8162 (cell)**



|              |                |                |                 |       |
|--------------|----------------|----------------|-----------------|-------|
| DESIGNED BY: | REVIEWED BY:   | ISSUANCE FILE: | ISSUANCE SCALE: | DATE: |
| DRAWN BY:    | FIELD MARKING: | ISSUANCE DATE: | PROJECT NUMBER: | 1     |

**WORK SESSION ATTACHMENT III**

# Red River Groundwater Conservation District Bylaws

Adopted and Effective \_\_\_\_\_ (date)\_\_\_\_\_

## SECTION 1. DISTRICT CREATION AND PURPOSE

### 1.1 Creation and Purpose

The Red River Groundwater Conservation District (the "District") was created by the 81<sup>st</sup> Texas Legislature under the authority of Section 59, Article XVI, of the Texas Constitution, and in accordance with Chapter 36 of the Texas Water Code ("Water Code"), by the Act of May 25, 2009, 81<sup>st</sup> Leg., R.S., ch. 248, 2009 Tex. Gen. Laws 686, codified at TEX. SPEC. DIST. LOC. LAWS CODE ANN. ch. 8856 ("the District Act").

The District is a governmental agency and a body politic and corporate. The District was created to serve a public use and benefit, and is essential to accomplish the objectives set forth in Section 59, Article XVI, of the Texas Constitution. The District's boundaries are coextensive with the boundaries of Fannin and Grayson Counties, Texas, and all lands and other property within these boundaries will benefit from the works and projects that will be accomplished by the District.

## SECTION 2. BOARD OF DIRECTORS

### 2.1 Composition and Appointment

The District is governed by a Board of Directors, which is comprised of seven appointed Directors, three from Fannin County and four from Grayson County. Director appointments shall be made as follows for Fannin County: one Director shall be appointed by the Fannin County Commissioners Court at the discretion of the Commissioners Court, one Director shall be appointed by the Fannin County Commissioners Court from a list of nominees submitted to the Commissioners Court by the governing bodies of the groundwater producing municipalities in Fannin County, and one Director shall be appointed by Fannin County Commissioners Court from a list of nominees submitted to the Commissioners Court by the water services districts and water supply corporations that provide retail water service to customers in Fannin County. Director appointments shall be made as follows for Grayson County: two Directors shall be appointed by the municipality in Grayson County with the largest annual production of groundwater by volume for the four years preceding the appointment, one Director shall be jointly appointed by the governing bodies of the remaining municipalities in Grayson County, and one Director shall be jointly appointed by the governing boards of all water services districts and water supply corporations that provide retail water service

to customers in Grayson County. To be eligible to serve as a Director, a person must be a registered voter in the appointing county and must qualify to serve as a Director in the manner provided by Section 36.055 of the Texas Water Code. A Director may serve multiple consecutive terms.

## **2.2 Terms of Office; Director Vacancies; Notification**

Directors shall serve staggered four-year terms, with the terms of three or four directors from each appointing county expiring on August 31 of each odd-numbered year. Directors must be appointed not later than the second Monday in August of each odd-numbered year. Not later than the 60<sup>th</sup> day before the second Monday in August of each odd-numbered year, the District shall mail written notice to each entity authorized to make an appointment. Should a vacancy occur on the Board for any reason, the entity(ies) that appointed the Director who vacated the office shall appoint a person to fill the vacancy for the unexpired term in a manner that meets the representational requirements of The District Act. Within thirty (30) days after any appointment of a Director, the District shall notify the Executive Director of the Texas Commission on Environmental Quality in accordance with Section 35.054(e), Water Code. A Director shall serve until the Director's successor has been qualified.

## **2.3 Sworn Statement; Bond; Oath of Office**

As soon as practicable after a Director is appointed, the Director shall make the sworn statement prescribed by the Texas Constitution, take the oath of office, and execute a bond, as required by Section 36.055, Water Code. The District shall file the sworn statement, oath, and bond as prescribed in Section 36.055(d).

## **2.4 Officers**

Each odd-numbered year at its regular August meeting, or at its next regular meeting if there is no August meeting, the Board shall meet and elect three Directors to serve as officers, whose titles shall be President, Vice-President, and Secretary/Treasurer. Officers shall be elected for terms of one year. Officers may serve multiple consecutive terms.

The President shall serve as the Board Chair, preside at all Board meetings, execute all documents on behalf of the District, and perform other duties prescribed by the Board.

The Vice-President shall act as the President in case of the absence or disability of the President, and perform other duties prescribed by the Board.

The Secretary/Treasurer shall be responsible for seeing that all records and books of the District are properly kept, according to the requirements of Sections 36.054(c) and 36.065, Water Code, shall attest the President's signature on all documents, and shall perform other duties prescribed by the Board.

The Board may appoint other Directors, the General Manager, or any employee as an Assistant Secretary to assist the Secretary/Treasurer, and any such person shall be entitled to certify as to the authenticity of any record of the District, including but not limited to all proceedings relating to bonds, contracts, or indebtedness of the District.

The Board shall fill vacant officer positions as needed to serve the remainder of the unexpired term of such vacant officer. A vacancy in the position of President/Board Chair must be filled by a Director from the same county. If the Board selects a Director who holds another office at the time of the vacancy to fill the unexpired term, the Board shall select another Director to serve the remainder of the unexpired term of such second officer.

## **2.5 Indemnification of Directors and Employees**

The District may purchase and maintain insurance or bonding on behalf of any person who is a Director or employee of the District in any capacity or arising out of his status as such.

Each Director and employee is indemnified by the District against any liability imposed upon him and for any expense reasonably incurred by him in connection with any claim made against him, or any action, suit or proceeding to which he may be a party by reason of his being, or having been, a Director or employee, and against such sums as counsel selected by the Board shall deem reasonable payment made in settlement of any such claim, action, suit, or proceeding; provided, however, that no Director or employee shall be indemnified with respect to actual damages arising out of a cause of action for a willful act or omission, an act or omission constituting gross negligence or official misconduct, or with respect to matters for which such indemnification would be unlawful or against public policy. Any right of indemnification granted by this Section is in addition to and not in lieu of any other such right for which any Director or employee of the District may at any time be entitled under the laws of the State of Texas; and if any indemnification that would otherwise be granted by this Section is disallowed by any competent court or administrative body as illegal or against public policy, then any Director or employee with respect to whom such adjudication was made, and any other Director or employee, shall be indemnified to the fullest extent permitted by law or public policy, it being the express intent of the District to indemnify its Directors and employees to the fullest extent possible in conformity with these Bylaws, all applicable laws and public policy. The indemnification provided herein shall inure to the benefit of the heirs, executors, and administrators of each Director and employee of the District.

## **2.6 Conflicts of Interest**

Directors shall, pursuant to the provisions of Chapters 171 and 176, Local Government Code, and the current District Code of Ethics, disclose any conflict of interest with matters pending before the Board, execute and file the appropriate disclosure affidavits and statements, and refrain from participation in any discussion or decision relating to such matters.

## **2.7 Open Meetings and Public Information Training**

Directors shall comply with the requirements for open meetings and public information training as provided by Sections 551.005 and 552.012, Government Code.

## **2.8 Fees of Office and Reimbursement of Expenses**

Directors may not receive fees of office or other compensation for performing the duties of director. However, subject to approval of the Board, a director is entitled to reimbursement of actual expenses reasonably and necessarily incurred while engaging in activities on behalf of the District.

# **SECTION 3. BOARD MEETINGS**

## **3.1 Regular and Special Meetings of the Board**

The Board shall schedule regular meetings at least quarterly as the Board may establish from time to time. At the request of the President or presiding officer, or by written request of at least three Directors, the Board shall hold special meetings. All Board meetings shall be held in accordance with the Open Meetings Act, Chapter 551, Texas Government Code. The Board President shall prepare and accept items for inclusion on the official agenda of all Board meetings subject to policies and rules adopted by the Board.

The Board may provide members of the public an opportunity to speak and may place reasonable limitations on such public comment, including time limitations, prohibiting unduly repetitious comments or improper conduct, and requiring persons wishing to provide comment to complete an information card. A registration form may be provided for this purpose. At the discretion of the President or presiding officer, the Board may seek public comment or ask questions of any person in attendance. Public comment at permit application hearings and rulemaking hearings shall be as provided in the District Rules.

To the extent necessary for orderly conduct of meetings at the discretion of the President, the guidelines of "Parliamentary Procedure at a Glance," New Edition, by O. Garfield Jones, 1971 revised edition, or as amended, "Roberts Rules of Order Newly Revised," New Edition, by Henry M. Robert III, 10<sup>th</sup> Edition, 2000, or as amended, or other



guidelines as preferred may be followed, insofar as such procedures do not conflict with the District Rules, orders or resolutions of the District, or state law.

### **3.2 Work Sessions**

From time to time, a regular or special Board meeting, or portion thereof, may be designated as a Work Session for the Board and its employees to discuss and evaluate issues that may require lengthy presentations not generally possible during a regular Board meeting. Work Sessions are primarily for the benefit of the Board and employees, although they will be open to the public. During work sessions of the Board, no public comment will be heard, unless specifically requested by a Director and recognized by the President.

### **3.3 Quorum**

A quorum of the Board must be present to conduct District business. A quorum exists when four or more Directors are present. Unless otherwise expressly provided herein, a concurrence of a majority of the entire Board is required for transacting any business of the District. When the quorum is four Directors, all four Directors must vote in agreement for a motion to prevail. A concurrence of not fewer than six Directors is required for transacting the following District business: (1) establishing or amending a groundwater production fee assessed by the District based on the amount of groundwater authorized by permit to be withdrawn from a well or on the amount of water actually withdrawn from a well; (2) adopting the annual budget of the District ; and (3) granting or denying a permit or permit amendment from a well that is intended to produce water within the District which will be transported in any amount for use outside the boundaries of the District.

## **SECTION 4. COMMITTEES**

### **4.1 Committees**

The President may establish and appoint Directors and/or other persons for advisory committees for formulation of recommendations to the Board or for such other purposes as the President may designate. The President shall establish an audit or finance committee comprised only of Directors. The President shall select a person to serve as Chair of each committee. Each member of a committee shall have a single vote on any issue before the committee. Written proxy votes shall not be allowed. A meeting of a committee where less than a quorum of the Board is present is not subject to the provisions of the Open Meetings Act.

Committee members serve at the pleasure of the President. Committee membership is voluntary and without compensation or reimbursement, except for reimbursement of expenses of Directors as set forth under Section 2.8.

## **SECTION 5. EMPLOYEES**

### **5.1 General Manager and Employees**

The Board may employ or contract with a person to perform such services as General Manager for the District and set the General Manager's salary. A Director may not be employed as General Manager of the District. At least annually, the Board shall review the actions and performance of the General Manager to determine how the General Manager has fulfilled his responsibilities and whether additional responsibilities should be delegated to him.

### **5.2 Delegation of Authority**

The General Manager shall be the chief administrative officer of the District and shall have full authority to manage and operate the affairs of the District, subject only to the direction given by the Board through policies, resolutions, and orders adopted by it. The General Manager, with the approval of the Board, may employ all persons necessary for the proper handling of the business and operations of the District and determine the compensation to be paid all employees other than the General Manager, subject to the constraints of the annual budget approved by the Board. The General Manager may delegate his administrative duties as may be necessary to effectively and expeditiously accomplish his duties, provided however, that no such delegation shall ever relieve him of responsibilities which are ultimately his under the District Act, District Rules, District Bylaws, or Board orders. In the absence of a General Manager, the President shall exercise all of the duties delegated to the General Manager.

## **SECTION 6. DISTRICT ADMINISTRATION**

### **6.1 District Address:**

The District's mailing and physical address is 5100 Airport Drive, Denison, Texas 75020. Such addresses may be changed by resolution of the Board.

### **6.2 Minutes and Records of the District**

All documents, reports, records, taped recordings, and minutes of the District shall be available for public inspection in accordance with the Texas Public Information Act, Chapter 552, Texas Government Code. The preservation, storage, destruction, or other disposition of the District's records is subject to Chapter 201, Texas Government Code.

### **6.3 Office Hours**

After an office has been established, the regular office hours of the District shall be determined by the Board. From time to time, circumstances may require the General Manager to modify these hours on a temporary basis. Operating hours, both regular and temporary, shall be posted on or near the front door to the District office. Permanent

changes in the District's regular office hours may be approved by the Board from time to time as needed or as may be appropriate.

#### **6.4 Official Seal**

The Board, by resolution, may adopt an official seal for the District to be used on official documents of the District.

### **SECTION 7. FINANCIAL**

#### **7.1 Contracts, Instruments, and Documents:**

The Board may authorize the President or the General Manager to enter into any contract or to execute and deliver any instrument or document in the name of and on behalf of the District. All contracts shall be executed by either the President or the General Manager, attested by the Board Secretary/Treasurer, and, if deemed necessary by the Board or General Manager, approved by the District's legal counsel.

#### **7.2 Loans**

No loans shall be contracted on behalf of the District and no evidence of indebtedness shall be issued in its name unless authorized by the Board, executed by the President, and attested to by the Board Secretary/Treasurer.

#### **7.3 Expenditures**

The District's money may be disbursed only by check, draft, order, or other instrument, which shall be signed by at least two Directors unless the Board has authorized by resolution certain employees, or a combination of employees and Directors, to so sign.

#### **7.4 Depositories**

The Board shall name one or more banks to serve as depository for district funds and shall deposit such funds in accordance with Section 36.155, Water Code.

#### **7.5 Investments**

Funds of the District may be invested and reinvested in accordance with the provisions of the Public Funds Investment Act, Chapter 2256, Government Code, and in accordance with the investment policy of the District.

#### **7.6 Annual Audit**

The Board at the end of each fiscal year shall have prepared an audit of its affairs by an independent certified public accountant, which shall have no personal interest directly or indirectly in the fiscal affairs of the District and shall be experienced and qualified in the

accounting and auditing of public bodies. This audit shall be open to public inspection. The audit shall be performed in accordance with generally accepted auditing standards and shall satisfy all requirements imposed by Chapter 36, Texas Water Code. The District's auditors may undertake consulting services for the District in addition to their duties in connection with the annual audit.

#### **7.7 Budget**

Prior to the commencement of each fiscal year, the Board shall adopt an annual budget in accordance with Section 36.154, Water Code.

#### **7.8 Taxes Prohibited; Assessment of Fees; Use of Revenue**

The District may not impose a tax. The Board shall annually set groundwater production fees and other fees in accordance with the District Act and the Water Code. The District may use revenues generated from fees for any lawful purpose.

#### **7.9 Fiscal Year**

The District's fiscal year shall begin on the first day of \_\_\_\_\_.

#### **7.10 Purchasing**

The Board shall have the right to purchase all materials, supplies, equipment, vehicles, and machinery needed by the District to perform its purposes. Expenditures to acquire goods or services valued at greater than five hundred dollars (\$500.00) require approval by the Board in advance. If the General Manager determines that an emergency acquisition must be made which requires an expenditure greater than five hundred dollars (\$500.00), he shall obtain verbal approval from the President. The transaction shall be presented to the Board for approval and validation at its next meeting. Expenditures of less than five hundred dollars (\$500.00) may be made by the President or General Manager without prior Board approval if the expenditure falls within the existing budget.

No expenditures shall be made that are not authorized by the budget. This requirement shall not, however, prevent the Board from amending the budget at the same time that it authorizes an expenditure, provided that funds are available from other budget categories or that reserve funds are available.

All purchases from \$500 to \$5000 shall require at least three verbal estimates, and all purchases between \$5,000 and \$50,000 shall require at least three written bids/quotes if the purchase is not from a sole-source vendor. Construction contracts and contracts for the acquisition of materials and machinery requiring the expenditure of \$50,000 or more must be purchased under formal competitive sealed bidding rules or other competitive procurement method as provided by law.

**7.11 Bond Requirement**

The Board shall require a Director, employee, or consultant who collects, pays, or handles any funds of the district to furnish good and sufficient bond as provided under Section 36.057(d), Water Code.

**SECTION 8.0. BYLAWS**

The Board may amend or repeal in whole or in part these Bylaws by a majority vote of the entire Board.

AN ACT

relating to the creation of the Red River Groundwater Conservation District; providing authority to issue bonds; granting the power of eminent domain.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subtitle H, Title 6, Special District Local Laws Code, is amended by adding Chapter 8859 to read as follows:

CHAPTER 8859. RED RIVER GROUNDWATER CONSERVATION DISTRICT

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 8859.001. DEFINITIONS. In this chapter:

(1) "Board" means the board of directors of the district.

(2) "Director" means a member of the board.

(3) "District" means the Red River Groundwater Conservation District.

(4) "Water services district" means a district created under the authority of Section 59, Article XVI, or Section 52, Article III, Texas Constitution, with the authority to provide retail water service in the district.

(5) "Water supply corporation" means a water supply corporation operating under Chapter 67, Water Code.

Sec. 8859.002. NATURE OF DISTRICT; FINDINGS. (a) The district is a groundwater conservation district in Grayson and Fannin Counties created under and essential to accomplish the

1 purposes of Section 59, Article XVI, Texas Constitution.

2 (b) The district is created to serve a public use and  
3 benefit.

4 (c) All of the land and other property included within the  
5 boundaries of the district will be benefited by the works and  
6 projects that are to be accomplished by the district under powers  
7 conferred by this chapter and by Chapter 36, Water Code.

8 (d) Any fees imposed by the district under this chapter are  
9 necessary to pay for the costs of accomplishing the purposes of the  
10 district, including the conservation and management of groundwater  
11 resources, as provided by this chapter and Section 59, Article XVI,  
12 Texas Constitution.

13 Sec. 8859.003. INITIAL DISTRICT TERRITORY. The initial  
14 boundaries of the district are coextensive with the boundaries of  
15 Grayson and Fannin Counties.

16 Sec. 8859.004. APPLICABILITY OF OTHER GROUNDWATER  
17 CONSERVATION DISTRICT LAW. (a) Except as otherwise provided by  
18 this chapter, Chapter 36, Water Code, applies to the district.

19 (b) Subchapter B, Chapter 36, Water Code, does not apply to  
20 the district.

21 Sec. 8859.005. CONSTRUCTION OF CHAPTER. This chapter shall  
22 be liberally construed to achieve the legislative intent and  
23 purposes of Chapter 36, Water Code. A power granted by Chapter 36,  
24 Water Code, or this chapter shall be broadly interpreted to achieve  
25 that intent and those purposes.

26 [Sections 8859.006-8859.020 reserved for expansion]

1                    SUBCHAPTER A-1. TEMPORARY PROVISIONS

2            Sec. 8859.021. INITIAL DIRECTORS; APPOINTMENT. (a) Not  
3 later than the 30th day after the effective date of the Act creating  
4 this chapter, the persons designated by Sections 8859.053(a)(1),  
5 (2), (3), and (4) to appoint directors shall appoint initial  
6 directors as prescribed by Section 8859.053 and in writing shall  
7 submit the appointed directors' names to the county judge of Fannin  
8 County. The persons responsible for making nominations for the  
9 appointments under Sections 8859.053(a)(2) and (3) shall submit  
10 initial director nominations to the commissioners court of Fannin  
11 County not later than the 20th day after the effective date of the  
12 Act enacting this chapter.

13            (b) Not later than the 30th day after the effective date of  
14 the Act creating this chapter, the county judge of Fannin County  
15 shall set the date, time, and location for a meeting of the  
16 representatives designated under Subsection (d) for the  
17 appointment of initial directors by the entities that Sections  
18 8859.053(a)(5) and (6) authorize to appoint directors.

19            (c) The county judge of Fannin County shall give notice of  
20 the meeting required by Subsection (b) not later than the 20th day  
21 before the date of the meeting by:

22            (1) providing a notice to the county clerk of Fannin  
23 County for public posting; and

24            (2) mailing a notice to the commissioners court of  
25 Grayson County.

26            (d) The governing body of each entity described by Sections  
27 8859.053(a)(5) and (6) shall designate a representative to attend



1 the meeting described by Subsection (b) and to cast the vote on  
2 behalf of the entity. Failure of a governing body to designate a  
3 representative or of a representative to cast a vote does not  
4 invalidate the appointment of the initial directors.

5 (e) The county judge of Fannin County shall preside at the  
6 meeting described in Subsection (b) and may require representatives  
7 described by Subsection (d) to provide evidence demonstrating  
8 representation of an appropriate entity and qualification under  
9 Section 8859.053(f). The county judge of Fannin County in writing  
10 shall certify to the board and to the executive director of the  
11 Texas Commission on Environmental Quality the results of the  
12 meeting described in Subsection (b), including:

13 (1) the identity of each representative described by  
14 Subsection (d) who attended the meeting; and

15 (2) the names and terms of each initial director  
16 appointed.

17 (f) If the county judge of Fannin County does not perform  
18 any duty established by this section before the 90th day after the  
19 effective date of the Act creating this chapter, the executive  
20 director of the Texas Commission on Environmental Quality shall  
21 perform that duty as soon as practicable after that date.

22 Sec. 8859.022. INITIAL DIRECTORS; TERMS OF OFFICE.

23 (a) The following initial directors shall serve from the date of  
24 appointment until August 31, 2011:

25 (1) the initial director appointed by the  
26 commissioners court of Fannin County under Section 8859.053(a)(1);

27 (2) one initial director appointed by the governing

1 body of the municipality under Section 8859.053(a)(4); and

2 (3) the initial director appointed by the governing  
3 bodies of the municipalities under Section 8859.053(a)(5).

4 (b) The following initial directors shall serve from the  
5 date of appointment until August 31, 2013:

6 (1) the two initial directors appointed by the  
7 commissioners court of Fannin County under Sections 8859.053(a)(2)  
8 and (3);

9 (2) one initial director appointed by the governing  
10 body of the municipality described by Section 8859.053(a)(4); and

11 (3) the initial director appointed by the governing  
12 boards described by Section 8859.053(a)(6).

13 (c) The governing body of the municipality that appoints  
14 initial directors under Section 8859.053(a)(4) shall indicate in  
15 the submission for each appointment the length of the term for the  
16 appointment as described by Subsection (b).

17 Sec. 8859.023. INITIAL DIRECTORS; QUALIFICATIONS. (a) To  
18 be eligible to serve as an initial director:

19 (1) a person appointed under Section 8859.053(a)(1),  
20 (2), or (3) must be a registered voter of Fannin County; and

21 (2) a person appointed under Section 8859.053(a)(4),  
22 (5), or (6) must be a registered voter of Grayson County.

23 (b) Each initial director must qualify to serve as a  
24 director in the manner provided by Section 36.055, Water Code.

25 Sec. 8859.024. ORGANIZATIONAL MEETING OF INITIAL  
26 DIRECTORS. (a) As soon as practicable after all the initial  
27 directors have qualified under Section 36.055, Water Code, a

1 majority of the initial directors shall convene the organizational  
2 meeting of the district at the Grayson County courthouse or at  
3 another location in the district agreeable to a majority of the  
4 initial directors.

5 (b) The initial directors shall elect officers of the  
6 initial board in accordance with Section 36.054(b), Water Code, at  
7 its organizational meeting.

8 Sec. 8859.025. EXPIRATION OF SUBCHAPTER. This subchapter  
9 expires December 31, 2013.

10 [Sections 8859.026-8859.050 reserved for expansion]

11 SUBCHAPTER B. BOARD OF DIRECTORS

12 Sec. 8859.051. GOVERNING BODY; TERMS. (a) The district is  
13 governed by a board of seven directors appointed as provided by this  
14 section.

15 (b) Directors serve staggered four-year terms, with the  
16 terms of three or four directors from each appointing county  
17 expiring on August 31 of each odd-numbered year.

18 (c) A director serves until the director's successor has  
19 qualified to serve.

20 Sec. 8859.052. DIRECTOR ELIGIBILITY; QUALIFICATION.

21 (a) To be eligible to serve as a director:

22 (1) a person appointed under Section 8859.053(a)(1),  
23 (2), or (3) must be a registered voter of Fannin County; and

24 (2) a person appointed under Section 8859.053(a)(4),  
25 (5), or (6) must be a registered voter of Grayson County.

26 (b) Each director must qualify to serve in the manner  
27 provided by Section 36.055, Water Code.

1        (c) A person who qualifies as a director may participate in  
2 all votes relating to the business of the district, regardless of  
3 any common law doctrine or statutory prohibition related to  
4 conflicts of interest or incompatibility.

5        (d) Section 36.058, Water Code, does not apply to a  
6 director.

7        Sec. 8859.053. APPOINTMENT OF DIRECTORS. (a) The board  
8 consists of seven directors as follows:

9                (1) one director appointed by the commissioners court  
10 of Fannin County at the discretion of the commissioners court;

11               (2) one director appointed by the commissioners court  
12 of Fannin County selected from a list of nominees submitted to the  
13 commissioners court by the governing bodies of the municipalities  
14 in Fannin County;

15               (3) one director appointed by the commissioners court  
16 of Fannin County selected from a list of nominees submitted to the  
17 commissioners court by the water services districts and water  
18 supply corporations that provide retail water service to customers  
19 in Fannin County, subject to the limitation provided by Subsection  
20 (f);

21               (4) two directors appointed by the governing body of  
22 the municipality in Grayson County that has the largest annual  
23 production of groundwater by volume for the four years preceding  
24 the appointment;

25               (5) one director appointed jointly by the governing  
26 bodies of the municipalities in Grayson County other than the  
27 municipality described by Subdivision (4); and

- 1           (6) one director appointed jointly by the governing  
2 boards of all water services districts and water supply  
3 corporations that provide retail water service to customers in  
4 Grayson County, subject to the limitation provided by Subsection  
5 (f).
- 6           (b) Directors must be appointed not later than the second  
7 Monday in August of each odd-numbered year.
- 8           (c) Not later than the 60th day before the second Monday in  
9 August of each odd-numbered year, the district shall mail written  
10 notice to each entity authorized to make an appointment under  
11 Subsection (a).
- 12           (d) The board by rule shall adopt a procedure for the  
13 written submission of appointments to the district.
- 14           (e) An entity that Subsection (a)(2) or (3) authorizes to  
15 nominate persons for director shall submit a list of nominees not  
16 later than the 30th day before the date the appointment is to be  
17 made under this section. If an entity designated by Subsection  
18 (a)(2) or (3) does not submit the list before that date, the  
19 commissioners court of Fannin County may appoint a director to the  
20 position for which the list was not received at the discretion of  
21 the commissioners court.
- 22           (f) A water services district or water supply corporation in  
23 Grayson and Fannin Counties may not participate in the appointment  
24 of a director unless that district or corporation used groundwater  
25 produced from wells located within the district to provide retail  
26 water service in the district during the calendar year of the  
27 appointment or the calendar year preceding the appointment. The

1 board may require evidence of eligibility to participate.

2 Sec. 8859.054. VACANCIES. If a vacancy occurs on the board,  
3 the entity that appointed the director who vacated the office shall  
4 appoint a person to fill the vacancy for the unexpired term in the  
5 manner provided for the vacant position by Section 8859.053.

6 Sec. 8859.055. COMPENSATION; REIMBURSEMENT.  
7 (a) Notwithstanding Sections 36.060(a) and (d), Water Code, a  
8 director may not receive compensation for performing the duties of  
9 director.

10 (b) A director is entitled to reimbursement of actual  
11 expenses reasonably and necessarily incurred while engaging in  
12 activities on behalf of the district.

13 (c) A position on the board is not a civil office of  
14 emolument for any purpose, including a purpose described in Section  
15 40, Article XVI, Texas Constitution.

16 Sec. 8859.056. QUORUM; CONCURRENCE FOR TRANSACTING  
17 BUSINESS. (a) A majority of the board membership constitutes a  
18 quorum for any meeting and a concurrence of a majority of the board  
19 shall be sufficient to transact district business, except as  
20 provided by Subsection (b).

21 (b) A concurrence of not fewer than six directors is  
22 required for transacting the following district business:

23 (1) establishing or amending a groundwater production  
24 fee assessed by the district based on the amount of groundwater  
25 authorized by permit to be withdrawn from a well or on the amount of  
26 water actually withdrawn from a well;

27 (2) adopting the annual budget of the district; and

1           (3) except as provided by Subsection (c), granting or  
2 denying a permit or permit amendment for a well that is intended to  
3 produce water within the district which will be transported in any  
4 amount for use outside the boundaries of the district.

5           (c) A concurrence of a majority of the board is sufficient  
6 to grant or deny a permit or permit amendment submitted by a retail  
7 public utility that provides retail water service in the district  
8 and intends to:

9           (1) produce water from a well located:

10               (A) within the district; and

11               (B) inside the boundaries or a certificated  
12 service area of a retail public utility; and

13           (2) transport the water outside the district, so long  
14 as the water is used within the same certificated service area or  
15 boundary of the retail public utility.

16           Sec. 8859.057. DECENNIAL REVIEW OF DISTRICT  
17 REPRESENTATION. (a) Not later than January 1, 2019, and every 10  
18 years following that date, the board shall complete a review of the  
19 adequacy of representation of water users on the board based on  
20 groundwater production and use within the district.

21           (b) Not later than the 20th day following the date the  
22 review is complete, the board shall submit the review described in  
23 Subsection (a) and any recommendation the board may have relating  
24 to the reapportionment of directors or the representational  
25 structure of the board to each member of the house of  
26 representatives and each member of the senate whose state  
27 legislative district includes territory in the district.

1           [Sections 8859.058-8859.100 reserved for expansion]

2                       SUBCHAPTER C. POWERS AND DUTIES

3           Sec. 8859.101. GROUNDWATER CONSERVATION DISTRICT POWERS  
4 AND DUTIES. Except as provided by this chapter, the district has  
5 the powers and duties provided by the general law of this state,  
6 including Chapter 36, Water Code, applicable to groundwater  
7 conservation districts created under Section 59, Article XVI, Texas  
8 Constitution.

9           Sec. 8859.102. CONTRACTS. The district may enter into a  
10 contract with any person, public or private, for any purpose  
11 authorized by law.

12           Sec. 8859.103. APPLICABILITY OF DISTRICT RULES REGULATING  
13 GROUNDWATER. District rules regulating groundwater adopted under  
14 this chapter apply to all persons except as exempted under Section  
15 36.117, Water Code, or this chapter.

16           Sec. 8859.104. WELL SPACING RULES; EXEMPTIONS. (a) Except  
17 as provided by Subsection (b), the district shall exempt from the  
18 well spacing requirements adopted by the district any well that is  
19 completed on or before the effective date of those requirements.

20           (b) The district by rule may provide that a well may lose its  
21 exemption under this section if the well is modified in a manner  
22 that substantially increases the capacity of the well after the  
23 effective date of the well spacing requirements adopted by the  
24 district.

25           (c) Except as provided by this section and notwithstanding  
26 Section 8859.103, the district may require any well or class of  
27 wells exempt from permitting under Chapter 36, Water Code, to



1 comply with the well spacing requirements adopted by the district.  
2 The district shall apply well spacing requirements uniformly to any  
3 well or class of wells based on the size or capacity of the well and  
4 without regard to the type of use of the groundwater produced by the  
5 well.

6 Sec. 8859.105. REGISTRATION AND REPORTING REQUIREMENTS FOR  
7 CERTAIN EXEMPT WELLS. The district may adopt rules that require the  
8 owner or operator of a well or class of wells exempt from permitting  
9 under Section 36.117, Water Code, to register the well with the  
10 district and, except for a well exempt from permitting under  
11 Subsection (b)(1) of that section, to report groundwater  
12 withdrawals from the well using reasonable and appropriate  
13 reporting methods and frequency.

14 Sec. 8859.106. ENFORCEMENT. (a) The district may enforce  
15 this chapter in the manner provided by Chapter 36, Water Code. In  
16 lieu of a remedy available to the district under Section 36.102,  
17 Water Code, or in addition to those remedies, the district may  
18 impose a fee in addition to a fee assessed under Section 8859.152 on  
19 a person producing groundwater in violation of a rule of the  
20 district, including the failure or refusal to comply with any order  
21 or rule of the district to reduce or cease groundwater usage. The  
22 purpose of a fee authorized under this subsection is to serve as a  
23 disincentive to producing groundwater except as authorized by the  
24 district.

25 (b) A fee imposed under Subsection (a) may not exceed an  
26 amount equal to 10 times the amount of a fee assessed under Section  
27 8859.152.

1           [Sections 8859.107-8859.150 reserved for expansion]

2                   SUBCHAPTER D. GENERAL FINANCIAL PROVISIONS

3           Sec. 8859.151. TAXES PROHIBITED. The district may not  
4 impose a tax. Sections 36.201-36.204, Water Code, do not apply to  
5 the district.

6           Sec. 8859.152. DISTRICT REVENUES. (a) The district by  
7 rule, resolution, or order may establish, amend, pledge, encumber,  
8 expend the proceeds from, and assess to any person production fees  
9 based on the amount of groundwater authorized by permit to be  
10 withdrawn from a well or on the amount of water actually withdrawn,  
11 to enable the district to fulfill its purposes and regulatory  
12 functions as provided by this chapter. The district may use  
13 revenues generated by fees it assesses for any lawful purpose.

14           (b) Notwithstanding any provision of general law to the  
15 contrary, a fee authorized by Subsection (a) may not exceed:

16                   (1) \$1 per acre-foot annually for groundwater used for  
17 agricultural purposes; or

18                   (2) 30 cents per thousand gallons annually for  
19 groundwater used for nonagricultural purposes.

20           (c) Notwithstanding any provision of general law or this  
21 chapter to the contrary, the district may assess a production fee  
22 under this section for groundwater produced from a well or class of  
23 wells exempt from permitting under Section 36.117, Water Code,  
24 except for a well exempt from permitting under Subsection (b)(1) of  
25 that section. A production fee assessed by the district under this  
26 subsection must be based on the amount of groundwater actually  
27 withdrawn from the well and may not exceed the amount established by

1 the district for permitted uses under Subsection (b)(2) of this  
2 section.

3 (d) Notwithstanding Section 36.1071(f), Water Code, the  
4 district by rule, resolution, or order before the adoption of its  
5 management plan may:

6 (1) establish, assess, and enforce the collection of  
7 production fees under this section; and

8 (2) establish and enforce metering and reporting  
9 requirements, except for a well exempt from permitting under  
10 Section 36.117(b)(1), Water Code.

11 (e) The district by rule may establish a temporary or  
12 permanent discounted fee rate for persons who prepay production  
13 fees to the district under this section on or before the dates  
14 established by district rule.

15 (f) The district may not assess a fee for transporting water  
16 that is produced from a well located inside the district and inside  
17 a certificated service area of a retail public utility and  
18 transported outside of the district, if the water is used in the  
19 same certificated service area of the retail public utility.

20 SECTION 2. The legislature finds that for the purpose of  
21 Subdivision (4), Subsection (a), Section 8859.053, Special  
22 District Local Laws Code, as added by this Act, the City of Sherman  
23 is the municipality in Grayson County with the largest annual  
24 production of groundwater by volume for the four years preceding  
25 the effective date of this Act.

26 SECTION 3. (a) The legal notice of the intention to  
27 introduce this Act, setting forth the general substance of this

S.B. No. 2529

1 Act, has been published as provided by law, and the notice and a  
2 copy of this Act have been furnished to all persons, agencies,  
3 officials, or entities to which they are required to be furnished  
4 under Section 59, Article XVI, Texas Constitution, and Chapter 313,  
5 Government Code.

6 (b) The governor has submitted the notice and Act to the  
7 Texas Commission on Environmental Quality.

8 (c) The Texas Commission on Environmental Quality has filed  
9 its recommendations relating to this Act with the governor,  
10 lieutenant governor, and speaker of the house of representatives  
11 within the required time.

12 (d) All requirements of the constitution and laws of this  
13 state and the rules and procedures of the legislature with respect  
14 to the notice, introduction, and passage of this Act are fulfilled  
15 and accomplished.

16 SECTION 4. This Act takes effect September 1, 2009.

S.B. No. 2529

\_\_\_\_\_  
President of the Senate

\_\_\_\_\_  
Speaker of the House

I hereby certify that S.B. No. 2529 passed the Senate on April 28, 2009, by the following vote: Yeas 31, Nays 0.

\_\_\_\_\_  
Secretary of the Senate

I hereby certify that S.B. No. 2529 passed the House on May 25, 2009, by the following vote: Yeas 145, Nays 0, one present not voting.

\_\_\_\_\_  
Chief Clerk of the House

Approved:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Governor

**WORK SESSION ATTACHMENT IV**

# **Red River Groundwater Conservation District**

5100 Airport Drive

Denison, Texas 75020

Phone: 903 / 786 - 4433

Fax: 903 / 786 - 8211

Email: [carmenc@gtua.org](mailto:carmenc@gtua.org)

Website: [www.gtua.org/red\\_river\\_gcd.asp](http://www.gtua.org/red_river_gcd.asp)

*President: George "Butch" Henderson      Vice President: George Olson*

**Adopted . 2010**

## **Groundwater Management Plan**

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# **RED RIVER GROUNDWATER CONSERVATION DISTRICT**

## **GROUNDWATER MANAGEMENT PLAN**

### **1) DISTRICT MISSION**

The Red River Groundwater Conservation District (RRGCD) mission is to conserve and preserve groundwater availability and protect groundwater users, by adopting and enforcing Rules consistent with state law. The District will accomplish this mission by imposing spacing requirements, limiting production, requiring permits for wells and production, establishing water drawdown levels and monitoring aquifer levels and production, making appropriate adjustments to allowable and permitted production, and encouraging conservation to limit pumping, thereby extending the quantity and quality of the water available in all the aquifers in Fannin and Grayson counties.

### **2) TIME PERIOD OF THIS PLAN**

This plan will become effective upon adoption by the RRGCD Board of Directors and certification as administratively complete by the Texas Water Development Board. The plan will remain in effect for five (5) years after the date of certification or until a revised plan is adopted and certified.

### **3) BACKGROUND**

The RRGCD was created in Fannin and Grayson counties by SB 2529, 81<sup>st</sup> Legislature, 2009. The purpose of this bill is to provide locally controlled groundwater districts to conserve and preserve groundwater, protect groundwater users, protect and recharge groundwater, prevent pollution or waste of groundwater in the northern Trinity area, control subsidence caused by withdrawal of water from the groundwater reservoirs in that area, and regulate the transport of water out of the boundaries of the districts. The RRGCD has 7 directors, 3 from Fannin County and 4 from Grayson County. It does not have the power to tax and receives all of its revenue from fees imposed on municipal/commercial pumpers.

### **4) GROUNDWATER RESOURCES**

The RRGCD has within its boundaries the Trinity and Woodbine aquifers. The following paragraphs describe the aquifers and their location within the District. Estimates of projected groundwater availability for the aquifers in the District have been made by several organizations including the Region C planning group and the Texas Water Development Board (TWDB). The Groundwater Availability Model (hereafter referred to as the GAM), which includes the Trinity aquifer system, has been applied as a means of evaluating groundwater availability and water budgets for the aquifers and management zones in the District.

#### **(a) Trinity**



The Trinity aquifer is located in Fannin and Grayson Counties, with its recharge area located in the counties to the west. Based on the Groundwater Management Area 8, the projected groundwater availability in Grayson County is 9,399 acre-feet per year and the 700 acre-feet per year in Fannin County.

#### **(b) Woodbine**

The Woodbine Aquifer outcrops on the western edge of the District and then dips into the east and south direction under both Fannin and Grayson Counties. The Woodbine is considered a minor aquifer but the water quality is of high quality in most instances. Both Trinity and Woodbine groundwater is used in Grayson County. However, more than 80% of the Modeled Available Groundwater in Fannin County is from the Woodbine formation. According to the GMA 8 documents, 3,297 acre-feet of Woodbine water is available annually to Fannin County and 12,087 acre-feet is available in Grayson County.

### **5) MANAGEMENT ZONES**

The District will be divided into two groundwater management zones for the purpose of evaluating and managing groundwater resources recognizing the different characteristics and anticipated future development of the aquifers in the District. Figures 1 and 2 illustrate the locations of the management zones. The District will establish and enforce Rules for the spacing of wells, the maximum allowable production of groundwater per acre of land located over an aquifer, require permits for production, limit water drawdown levels, and provide for a reduction in the maximum allowable production and permitted production based on the different characteristics and continuing evaluation and monitoring within the Management Zones; provided that the Trinity Aquifer and the Woodbine Aquifer will be regulated and managed only by regulating spacing and maximum production. These Management Zones are as briefly described below:

#### **a) Trinity Management Zone**

This zone includes that part of the Trinity aquifer located in the western part of the District. Monitoring wells are not planned for this Management Zone. The Trinity formation is further divided into the Paluxy, Glen Rose, Hnsell, and Hosston components. No effort will be made by the District to regulate the subcategories of the Trinity.

### **6) PRODUCTION AND SPACING OF WELLS**

Production and spacing of all wells within the District will be regulated by the District according to the Rules of the District. The Trinity Aquifer and the Woodbine Aquifer will be managed only by regulating the spacing of wells and the permitted production. The District does not anticipate installing any monitoring wells in either the Trinity Aquifer or the Woodbine Aquifer.

### **7) MANAGEMENT OF GROUNDWATER SUPPLIES**

The District will evaluate and monitor groundwater availability and regulate production consistent with the District rules and the supply of groundwater. Production will be regulated as needed to conserve groundwater, preserve groundwater availability, and protect groundwater users, in a manner not to unnecessarily and adversely limit production or impact the economic viability of the groundwater users, public and private. In consideration of the importance of groundwater availability to the economy and culture of the District, the District will identify and engage in such activities and practices that will permit groundwater production and, as appropriate, protect the aquifer and groundwater availability by reducing permitted production of groundwater. A well observation network will be established and maintained in order to monitor aquifer conditions within the District. The District will make a regular assessment of water supply and groundwater storage conditions and will report those conditions to the Board and to the public. The District will undertake investigations, and co-operate with third-party investigations, of the groundwater resources within the District, and the results of the investigations will be made available to the public upon being presented at a meeting of the Board.

The District will adopt rules to regulate groundwater withdrawals by means of well spacing and production limits. The District may deny a well construction permit or limit groundwater withdrawals in accordance with the rules of the District. In making a determination to deny a permit or limit groundwater withdrawals, the District will consider the available evidence and, as appropriate and applicable, weigh the public benefit against the individual needs and hardship.

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

1. The purpose of the rules of the District;
2. The equitable distribution of the resource;
3. The economic hardship resulting from grant or denial of a permit, or the terms prescribed by the permit; and
4. The potential effect the permit may have on the aquifer, sustainability of the recharge on the aquifer as a whole, and groundwater users.

The transport of groundwater out of the District will be regulated by the District according to the Rules of the District.

In pursuit of the District's mission of protecting the resource, the District may require reduction of groundwater withdrawals to amounts that, based on then current information, will not knowingly cause permanent harm to an aquifer. To achieve this purpose, the District may, at the Board's discretion after notice and hearing, amend or revoke any permit for non-compliance, or reduce the production authorized by permit for the purpose of protecting the aquifer and groundwater availability. The determination to seek the amendment of a permit will be based on aquifer conditions observed by the District. The determination to seek revocation of a permit will be based on compliance and non-compliance with the District's rules and regulations. The District will enforce the terms and conditions of permits and the rules of the District, as necessary, by fine and

enjoining the permit holder in a court of competent jurisdiction as provided for in Texas Water Code (TWC) Ch. 36.102, etc.

A contingency plan to cope with the effects of water supply deficits due to climatic or other conditions will be developed by the District and will be adopted by the Board after notice and hearing. In developing the contingency plan, the District will consider the economic effect of conservation measures upon all water resource user groups, the local implications of the degree and effect of changes in water storage conditions, the unique hydro geologic conditions of the aquifers within the District and the appropriate conditions under which to implement the contingency plan.

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

#### **8) ACTIONS, PROCEDURES, PERFORMANCE AND AVOIDANCE FOR PLAN IMPLEMENTATION**

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

The District will adopt rules relating to the permitting of wells, production and transport of groundwater. The rules adopted by the District shall be adopted pursuant to TWC Chapter 36 and provisions of this plan. All rules will be adhered to and enforced. The promulgation and enforcement of the rules will be based on the best technical data reasonably available.

The District shall treat all citizens equally. Citizens may apply to the District for a variance in enforcement of the rules on grounds of adverse economic effect or unique local conditions. In granting a variance to any rule, the Board shall consider the potential for adverse effect on adjacent landowners. The exercise of said discretion by the Board, shall not be construed as limiting the power of the Board.

The District will seek cooperation with other agencies in the implementation of this plan and the management of groundwater supplies within the District. All activities of the District will be undertaken in co-operation and coordinated with the appropriate state, regional or local water management entity.

#### **9) METHODOLOGY FOR TRACKING DISTRICT PROGRESS IN ACHIEVING MANAGEMENT GOALS**

The general manager of the District will prepare and present an annual report to the Board of

Directors on the performance of the District in regards to achieving management goals and objectives. The presentation of the report will occur during the last monthly Board meeting each fiscal year, beginning after the adoption and certification of this plan. The report will include the number of instances in which each of the activities specified in the Districts management objectives was engaged in during the fiscal year. Each activity will be referenced to the estimated expenditure of staff time and budget in accomplishment of the activity. The notations of activity frequency, staff time and budget will be referenced to the appropriate performance standard for each management objective describing the activity, so that the effectiveness and efficiency of the Districts operations may evaluated. The Board will maintain the adopted report on file, for public inspection, at the District's offices. This methodology will apply to all management goals contained within this plan.

## **10. MANAGEMENT GOALS, OBJECTIVES, & PERFORMANCE STANDARDS**

### **10.1 Efficient Use of Groundwater**

#### Management Objectives:

1. The District will establish the RRGCD Aquifer Water Level Observation Well Program with at least \_\_\_\_\_ observation wells located according to management zones within the District, and measure those wells at least once annually.
2. The District will provide educational leadership to citizens within the District concerning this subject. The activity will be accomplished annually through at least one printed publication, such as a brochure, and public speaking at service organizations and public schools as provided for in the District's Public Education Program.

#### Performance Standards:

1. Establish the RRGCD Aquifer Water Level Observation Well Program and its criteria, and begin measurements of at least \_\_\_\_\_ of the observation wells within one year following the adoption and certification of this plan.
2. Number of observation wells measured annually by the District. Water levels at these observation wells will be measured a minimum of once annually.
3. The number of publications and speaking appearances by the District each year under the District's Public Education Program.

### **10.2 Controlling and Preventing Waste of Groundwater.**

#### Management Objectives:

The District will provide educational leadership to citizens within the District concerning

this subject. The activity will be accomplished annually through at least one printed publication, such as a brochure, and public speaking at service organizations and public schools as provided for in the District's Public Education Program. The District will also offer at least one grant, during years when the District's revenues remain at a level sufficient to fund the program, to sponsor the attendance of students at summer camps/seminars that place emphasis on the conservation of water resources.

Performance Standards:

The number of publications and speaking appearances by the District each year, and the number of grants offered and students actually accepting and attending an educational summer camp or seminar.

**10.3 Control and Prevent Subsidence**

Subsidence is unlikely to occur in the Red River Groundwater Conservation District. The geologic formations in the District range in age from the Trinity to Woodbine Aquifers. These formations are not likely to experience subsidence.

**10.4 Conservation of Groundwater including Rainwater Harvesting, Precipitation Enhancement, Brush Control, and/or Recharge Enhancement of Groundwater Resources in the District**

Management Objectives:

1. The District will provide educational leadership to citizens within the District concerning this subject. The educational efforts will be through at least one printed publication, such as a brochure, and at least one public speaking program at a service organization and/or public school as provided for in the District's Public Education Program. Each of the following topics will be addressed in that program:
  - A. Water Conservation
  - B. Rainwater Harvesting
  - C. Brush Control
2. The District will offer to sponsor the attendance of at least one student at summer camps/seminars that place emphasis on the conservation of groundwater, groundwater recharge enhancement, or precipitation enhancement of water resources.
3. The District will encourage and support projects and programs to conserve and/or preserve groundwater, and/or enhance groundwater recharge by annually funding the District's Groundwater Conservation and Enhancement Grant Program, during years when the District's revenues remain at a level sufficient to fund the program. The objective of this program is to obtain the active participation and cooperation of local

**Optional**

water utilities in the funding and successful completion of programs and projects that will result in the conservation of groundwater and the protection or enhancement of the aquifers in the District. The qualifying water conservation projects and programs will include, as appropriate, projects that: result in the conservation of groundwater, reduce the loss or waste of groundwater, recharge enhancement, rainwater harvesting, precipitation enhancement, brush control, or any combination thereof. The District's objective is to benefit the existing and future users of groundwater in the District by providing for the more efficient use of water, increasing recharge to aquifers, reducing waste, limiting groundwater level declines, and maintaining or increasing the amount of groundwater available, by awarding at least one grant under the program in each county annually.

4. The District will implement the RRGCD Well Closure Program. The objective of the well closure program is to obtain the closure and plugging of derelict and abandoned wells in a manner that is consistent with state law, for the protection of the aquifers, the environment, and the public safety. The District will conduct a program to identify, inspect, categorize and cause abandoned and derelict water, oil and gas wells to be closed and plugged, by annually funding the program or segments or phases of the program appropriate to be funded in such fiscal year. The District will fund the closure of at least one abandoned well during years when the District's revenues remain at a level sufficient to fund the program.

Performance Standards:

1. The number of publications and speaking appearances by the District each year under the District's Public Education Program.
2. The number of students sponsored to attend a summer camp/seminar emphasizing the conservation of water.
3. Annual funding, when applicable, for the District's Groundwater Conservation and Enhancement Grant Program, and the number of projects and programs reviewed, approved, and funded under that program.
4. Annual funding, when applicable, for the District's Well Closure Program, and the number of wells closed and plugged as a result of the Well Closure Program.

## **10.5 Conjunctive Use of Surface and Groundwater**

Management Objective:

Each year the District will confer at least once with the Greater Texoma Utility Authority (GTUA) on cooperative opportunities for conjunctive resource management.

Performance Standard:

The number of conferences with the GTUA on conjunctive resource management each year.

**10.6 Develop a Management Strategy to Address Drought Conditions**

Management Objective:

The District will develop and adopt a Drought Management Strategy Plan within five years of the adoption and certification of this plan, review it annually, and revise it if necessary. The plan will be implemented when specified conditions require.

Performance Standard:

1. Development and adoption of a Drought Management Strategy Plan within five years of the adoption and certification of this plan.
2. Review all of the conditions and requirements specified in the Drought Management Strategy Plan that would trigger implementation on an annual basis.

**10.7 Address Natural Resource Issues That Impact the Use and Availability of Groundwater and Which are Impacted By the Use of Groundwater**

Management Objective:

1. Each year the District will confer at least once with a representative of the Texas Railroad Commission (RRC) on the impact of oil and gas production on groundwater availability, as well as the impact of groundwater production on the production of oil and gas in the District.
2. Also, during each year the District will evaluate all permit applications for new wells, if any are filed, and the information submitted by the applicants on those wells prior to drilling, in order to assess the impact of these wells on the groundwater resources in the District.

Performance Standard:

1. The number of conferences with a representative of the Texas RRC each year; and
2. Monthly reports to the RRGCD Board of Directors on the number of new well permit applications filed, and the possible impacts of those new wells on the groundwater resources in the District.

## 10.8. Mitigation

Management Objective: ***Optional***

The District will assess the need and benefit of adopting a mitigation plan for the District on an annual basis, with the first study to be completed within two years of the adoption and certification of this plan. Upon determining the need for a mitigation plan, the District will prepare a draft plan, seek public comment, hold appropriate hearings and adopt a plan for mitigation within one year of the assessment that finds a need for a mitigation plan. The plan will be reviewed on an annual basis thereafter. Possible practices for mitigation within the District would include producers funding projects that are included in a natural or artificial recharge plan adopted under the following paragraph 11, establishing fees to fund infrastructure in areas of the District in which groundwater was but is no longer readily available, and producers contracting to provide water to such areas at or near their cost.

## 11. NATURAL OR ARTIFICIAL RECHARGE ENHANCEMENT OF GROUNDWATER WITHIN THE DISTRICT

The District will assess the need and opportunity for recharge enhancement in the District at least once every five years, with the first study to be completed within five years of the adoption and certification of this plan. Upon determining the need for recharge the District will adopt a plan for natural and/or artificial recharge within two years of the assessment for the need of that recharge. The plan will be reviewed on an annual basis. Possible practices for recharge in the District would be Brush Management or construction of surface ponds in key recharge areas.

## 12. PROJECTED WATER DEMANDS WITHIN THE DISTRICT

Below is a table of Adopted Water Demands within the District in acre-feet per year according to Tables 2.9 and 2.11 of the 2011 Region C Water Planning Database.



### FANNIN COUNTY

| Water Use Group                                              | 2006          | 2010          | 2020          | 2030          | 2040          | 2050          | 2060          |
|--------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Municipal                                                    | 4,591         | 6,036         | 6,961         | 8,237         | 10,131        | 12,608        | 14,967        |
| Manufacturing                                                | 5             | 73            | 82            | 90            | 98            | 105           | 114           |
| Steam-Electric-Power                                         | 361           | 1,261         | 6,363         | 11,474        | 11,910        | 12,443        | 13,092        |
| Irrigation                                                   | 5,567         | 4,608         | 4,608         | 4,608         | 4,608         | 4,608         | 4,608         |
| Mining                                                       | 6             | 12            | 12            | 12            | 12            | 12            | 12            |
| Livestock                                                    | 1,661         | 1,270         | 1,270         | 1,270         | 1,270         | 1,270         | 1,270         |
|                                                              |               |               |               |               |               |               |               |
| <b>Total Projected Water Demands in acre-feet per year =</b> | <b>12,191</b> | <b>13,260</b> | <b>19,296</b> | <b>25,691</b> | <b>28,029</b> | <b>31,046</b> | <b>34,063</b> |

### GRAYSON COUNTY

| Water Use Group                                                                                           | 2006          | 2010          | 2020          | 2030          | 2040          | 2050           | 2060           |
|-----------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| Municipal                                                                                                 | 26,000        | 24,278        | 28,835        | 33,513        | 37,498        | 41,813         | 47,013         |
| Manufacturing                                                                                             | 2,222         | 7,010         | 7,781         | 8,453         | 9,088         | 9,621          | 10,444         |
| Steam-Electric-Power                                                                                      | 0             | 5,600         | 8,963         | 12,326        | 12,326        | 12,326         | 12,326         |
| Irrigation                                                                                                | 1,271         | 3,561         | 3,751         | 3,950         | 4,158         | 4,381          | 4,616          |
| Mining                                                                                                    | 20            | 1,052         | 1,050         | 1,049         | 1,048         | 1,047          | 1,046          |
| Livestock                                                                                                 | 1,440         | 1,297         | 1,297         | 1,297         | 1,297         | 1,297          | 1,297          |
|                                                                                                           |               |               |               |               |               |                |                |
| <b>Total Projected Water Demands in acre-feet per year =</b>                                              | <b>30,953</b> | <b>42,798</b> | <b>51,677</b> | <b>60,588</b> | <b>65,415</b> | <b>70,485</b>  | <b>76,742</b>  |
|                                                                                                           |               |               |               |               |               |                |                |
| <b>Total Projected Water Demands (acre-feet per year) for Fannin County and Grayson County per year =</b> | <b>43,144</b> | <b>56,058</b> | <b>70,973</b> | <b>86,279</b> | <b>93,444</b> | <b>101,583</b> | <b>110,085</b> |

The District also established future Municipal Groundwater Use Demands in the District for planning purposes. Following are the methodology and results of that effort:

#### Method for Establishing Future Municipal Use Demands of Groundwater in the District

**Optional**

The District will establish a production rights for Local Water Utilities (water supply corporations, special utility districts, municipal utility districts and cities) in the District, as a rule. This rule allows these Local Water Utilities to obtain a permit to produce a volume of water annually according to one of two methods:

1. An amount equal to the highest annual pumpage it reported from wells within the District in any consecutive twelve months prior to September 31, 2010; or
2. The Local Water Utility could present to the Board a Long-Term Plan prepared by a qualified engineer that projects the annualized long-term water needs as the official projection of the water required by that Local Water Utility in the planning period (for not more than forty (40) years) for providing retail water service within that Local Water Utility's defined service area. Having adopted this plan on or before \_\_\_\_\_, and the Board finding that the highest annual pumpage projected in the Long-Term Plan (the "Plan Amount") is not unreasonable, the Local Water Utility might then obtain a permit to pump and produce up to the Plan Amount.

The table below contains the results of this effort:

| <b>Municipal Use Groundwater Demands Projected through 2060</b> |                                         |
|-----------------------------------------------------------------|-----------------------------------------|
| <b>Producer</b>                                                 | <b>Estimated Acre<br/>Feet per year</b> |
| <b>Fannin County</b>                                            |                                         |

Total for Fannin Co.

**Grayson County**

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Total for Grayson Co.

### **DISTRICT TOTALS**

### **13. PROJECTED WATER SUPPLIES WITHIN THE DISTRICT**

Below is a table of Projected Water Supplies within the District in acre-feet per year according to Table \_\_\_\_\_ of the 2011 Region C Water Planning Database. This includes projected surface water and groundwater supplies.

The District has participated and will in the future participate in regional water planning, and consider the water supply needs and water management strategies included in the adopted state water plan.

**PROJECTED WATER SUPPLIES  
RED RIVER GROUNDWATER CONSERVATION DISTRICT**

**FANNIN COUNTY**

| <b>Aquifer</b>                                                    | <b>Basin</b> | <b>2000</b>  | <b>2010</b>  | <b>2020</b>  | <b>2030</b>  | <b>2040</b>  | <b>2050</b>  | <b>2060</b>  |
|-------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Trinity                                                           | Red          | 617          | 617          | 617          | 617          | 617          | 617          | 617          |
| Trinity                                                           | Sulphur      | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| Trinity                                                           | Trinity      | 83           | 83           | 83           | 83           | 83           | 83           | 83           |
| Woodbine                                                          | Red          | 2,676        | 2,676        | 2,676        | 2,676        | 2,676        | 2,676        | 2,676        |
| Woodbine                                                          | Sulphur      | 21           | 21           | 21           | 21           | 21           | 21           | 21           |
| Woodbine                                                          | Trinity      | 600          | 600          | 600          | 600          | 600          | 600          | 600          |
| Woodbine                                                          | Red          | 2,919        | 2,919        | 2,919        | 2,919        | 2,919        | 2,919        | 2,919        |
|                                                                   |              |              |              |              |              |              |              |              |
| <b>Total Projected Water Supplies in<br/>acre-feet per year =</b> |              | <b>6,916</b> | <b>6,916</b> | <b>6,916</b> | <b>6,916</b> | <b>6,916</b> | <b>6,916</b> | <b>6,916</b> |

**GRAYSON COUNTY**

| <b>Aquifer</b>                                                    | <b>Basin</b> | <b>2000</b>   | <b>2010</b>   | <b>2020</b>   | <b>2030</b>   | <b>2040</b>   | <b>2050</b>   | <b>2060</b>   |
|-------------------------------------------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Other                                                             | Red          | 35            | 35            | 35            | 35            | 35            | 35            | 35            |
| Other                                                             | Trinity      | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| Trinity                                                           | Red          | 7,722         | 7,722         | 7,722         | 7,722         | 7,722         | 7,722         | 7,722         |
| Trinity                                                           | Trinity      | 1,678         | 1,678         | 1,678         | 1,678         | 1,678         | 1,678         | 1,678         |
| Woodbine                                                          | Red          | 6,590         | 6,590         | 6,590         | 6,590         | 6,590         | 6,590         | 6,590         |
| Woodbine                                                          | Trinity      | 5,497         | 5,497         | 5,497         | 5,497         | 5,497         | 5,497         | 5,497         |
|                                                                   |              |               |               |               |               |               |               |               |
| <b>Total Projected Water Supplies in<br/>acre-feet per year =</b> |              | <b>21,522</b> | <b>21,522</b> | <b>21,522</b> | <b>21,522</b> | <b>21,522</b> | <b>21,522</b> | <b>21,522</b> |

|                                                                                                      |  |  |               |               |               |               |               |               |
|------------------------------------------------------------------------------------------------------|--|--|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>Total Projected Water Supplies (acre-feet per<br/>year)<br/>for Fannin and Grayson Counties =</b> |  |  | <b>28,438</b> | <b>28,438</b> | <b>28,438</b> | <b>28,438</b> | <b>28,438</b> | <b>28,438</b> |
|------------------------------------------------------------------------------------------------------|--|--|---------------|---------------|---------------|---------------|---------------|---------------|

#### 14. ESTIMATE OF GROUNDWATER BEING USED WITHIN THE DISTRICT

Following are tables of estimated Groundwater use within the District in acre-feet per year according to Texas Water Development Board's Water User Survey Database.

| HISTORICAL GROUNDWATER USE<br>RED RIVER GROUNDWATER CONSERVATION DISTRICT<br>FANNIN COUNTY |      |           |               |       |            |        |           |
|--------------------------------------------------------------------------------------------|------|-----------|---------------|-------|------------|--------|-----------|
| Aquifer Name                                                                               | Year | Municipal | Manufacturing | Power | Irrigation | Mining | Livestock |
| Other                                                                                      | 1998 | 0         | 0             | 0     | 2,096      | 0      | 0         |
| Trinity                                                                                    |      | 574       | 0             | 0     | 0          | 0      | 23        |
| Woodbine                                                                                   |      | 2,367     | 0             | 142   | 0          | 0      | 98        |
| Other                                                                                      | 1999 | 0         | 0             | 0     | 2,096      | 0      | 0         |
| Trinity                                                                                    |      | 494       | 0             | 0     | 0          | 0      | 25        |
| Woodbine                                                                                   |      | 2,035     | 0             | 142   | 0          | 0      | 103       |
| Other                                                                                      | 2000 | 2,529     | 0             | 142   | 2,096      | 0      | 128       |
| Trinity                                                                                    |      | 582       | 0             | 0     | 0          | 0      | 23        |
| Woodbine                                                                                   |      | 2,308     | 0             | 405   | 0          | 0      | 101       |
| Other                                                                                      | 2001 | 0         | 0             | 0     | 1,848      | 0      | 0         |
| Trinity                                                                                    |      | 490       | 0             | 0     | 0          | 0      | 24        |
| Woodbine                                                                                   |      | 2,308     | 0             | 405   | 0          | 0      | 101       |
| Other                                                                                      | 2002 | 0         | 0             | 0     | 1,862      | 0      | 0         |
| Trinity                                                                                    |      | 366       | 0             | 0     | 0          | 0      | 23        |
| Woodbine                                                                                   |      | 1,982     | 0             | 260   | 0          | 0      | 98        |
| Other                                                                                      | 2003 | 0         | 0             | 0     | 1,132      | 0      | 0         |
| Trinity                                                                                    |      | 356       | 0             | 0     | 0          | 0      | 266       |
| Woodbine                                                                                   |      | 2,045     | 0             | 258   | 0          | 0      | 1,121     |
| Trinity                                                                                    | 2004 | 425       | 0             | 0     | 0          | 0      | 0         |
| Woodbine                                                                                   |      | 2,071     | 0             | 243   | 0          | 7      | 0         |
| Trinity                                                                                    | 2005 | 2,496     | 0             | 243   | 0          | 7      | 0         |
| Woodbine                                                                                   |      | 2,303     | 0             | 71    | 0          | 19     | 0         |
| Trinity                                                                                    | 2006 | 376       | 0             | 0     | 0          | 0      | 0         |
| Woodbine                                                                                   |      | 2,637     | 0             | 80    | 0          | 6      | 0         |
| Trinity                                                                                    | 2007 | 277       | 0             | 0     | 0          | 0      | 0         |
| Woodbine                                                                                   |      | 2,377     | 0             | 373   | 0          | 1      | 0         |
| Trinity                                                                                    | 2008 | 263       | 0             | 0     | 0          | 0      | 0         |
| Woodbine                                                                                   |      | 2,525     | 0             | 486   | 0          | 0      | 0         |

**HISTORICAL GROUNDWATER USE  
RED RIVER GROUNDWATER CONSERVATION DISTRICT**

**MILAM COUNTY**

| <b>Aquifer Name</b> | <b>Year</b> | <b>Municipal</b> | <b>Manufacturin<br/>g</b> | <b>Power</b> | <b>Irrigation</b> | <b>Mining</b> | <b>Livestock</b> |
|---------------------|-------------|------------------|---------------------------|--------------|-------------------|---------------|------------------|
| Other               | 1998        | 36               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 10426            | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 3,909            | 0                         | 0            | 2,759             | 466           | 123              |
| Other               | 1999        | 37               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 10,788           | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 4,045            | 0                         | 0            | 3,223             | 457           | 137              |
| Other               | 2000        | 37               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 10,890           | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 4,082            | 0                         | 0            | 2,972             | 466           | 130              |
| Other               | 2001        | 31               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 9,056            | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 3,975            | 1,306                     | 0            | 1,720             | 466           | 131              |
| Other               | 2002        | 31               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 7,599            | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 4,026            | 844                       | 0            | 1,738             | 466           | 126              |
| Other               | 2003        | 31               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 7,360            | 0                         | 0            | 0                 | 349           | 0                |
| Woodbine            |             | 4,155            | 903                       | 0            | 1,733             | 466           | 371              |
| Other               | 2004        | 20               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 6,913            | 0                         | 0            | 0                 | 0             | 0                |
| Woodbine            |             | 3,893            | 0                         | 0            | 0                 | 20            | 0                |
| Other               | 2005        | 20               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 6,823            | 0                         | 0            | 0                 | 0             | 0                |
| Woodbine            |             | 4,533            | 0                         | 0            | 0                 | 20            | 0                |
| Other               | 2006        | 20               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 7,582            | 0                         | 0            | 0                 | 0             | 0                |
| Woodbine            |             | 4,585            | 0                         | 0            | 0                 | 20            | 0                |
| Other               | 2007        | 20               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 7,428            | 0                         | 0            | 0                 | 0             | 0                |
| Woodbine            |             | 3,485            | 0                         | 0            | 0                 | 19            | 0                |
| Other               | 2008        | 20               | 0                         | 0            | 0                 | 0             | 0                |
| Trinity             |             | 7,536            | 0                         | 0            | 0                 | 0             | 0                |
| Woodbine            |             | 3,818            | 0                         | 0            | 0                 | 20            | 0                |

## 15. PROJECTED ANNUAL RECHARGE OF GROUNDWATER RESOURCES WITHIN THE DISTRICT

Following is a table of projected annual recharge of groundwater for all aquifers (except the Trinity, GTUA River and Little River Alluvium, and Yegua/Jackson aquifers) within the District according to the GAM 05-05 simulation. This recharge is the result of precipitation.

| Projected Annual Recharge For Groundwater Resources<br>Red River Groundwater Conservation District |                                |
|----------------------------------------------------------------------------------------------------|--------------------------------|
| County                                                                                             | Average Recharge (acre-ft/yr.) |
| Fannin                                                                                             |                                |
| Grayson                                                                                            |                                |
| Total                                                                                              |                                |

## 16. ESTIMATE OF ANNUAL DISCHARGES AND FLOWS OF GROUNDWATER

The GAM for the northern part of the Trinity and Woodbine aquifers for the year 2050 has been run by the TWDB (GAM Run 05-05). The following tables summarize the results of GAM 05-05 and show the flow of groundwater in and out of the counties, as well as the discharge from the aquifers to streams.

Pumpage in the model is based on the 2002 State Water Plan, and long-term average annual recharge is assumed. However, as part of the joint planning for GMA 8, the District will assess current conditions and develop updated GAM-based estimates of groundwater discharge to surface water and groundwater flow into and out of the district and between aquifers in the district. Appendix A includes a table that provides more detail on the groundwater flow budget for these aquifers.

**Groundwater Flow Budget (acre-feet per year) for Trinity and Woodbine Aquifers (based on results of GAM 05-05 simulation by TWDB)**

| Aquifer      | Fannin County        |                 |                | Grayson County       |                 |                |
|--------------|----------------------|-----------------|----------------|----------------------|-----------------|----------------|
|              | Discharge to streams | Lateral Outflow | Lateral Inflow | Discharge to streams | Lateral Outflow | Lateral Inflow |
| Trinity      |                      |                 |                |                      |                 |                |
| Woodbine     |                      |                 |                |                      |                 |                |
| <b>Total</b> |                      |                 |                |                      |                 |                |

## 17. ESTIMATE OF EXISTING TOTAL USEABLE GROUNDWATER WITHIN THE DISTRICT

The total estimate of existing useable groundwater in the District was derived from several sources and is presented in the following paragraphs. The source for the Woodbine aquifer in the District is the Projected Water Availability in acre-feet per year according to Table 4 of the 2011 Region C Water Planning Database. Since none of these aquifers appear to be targeted for a substantial increase in production activity, these estimates should prove satisfactory.

The District will periodically revise the estimate based on changes in the anticipated groundwater use in nearby counties, the presumed physical and hydraulic properties of the subsurface deposits, and changes to the GAM. As additional information becomes available, the District will also reevaluate the estimate based on other criteria such as migration of the fresh water line and



localized impacts in different management zones.

| <b>Management Zone</b> | <b>Aquifer</b> | <b>Estimated Useable<br/>Groundwater<br/>(ac-ft/yr)</b> |
|------------------------|----------------|---------------------------------------------------------|
| Trinity                | Trinity        |                                                         |
| Woodbine               | Woodbine       |                                                         |

#### **Future Desired Conditions of the Groundwater Resources in the District**

As of March 2010, the District is engaged in joint planning with other GCDs in Groundwater Management Area No. 8. Statements regarding future desired conditions of groundwater resources will be developed from this effort and will be incorporated into the Districts' Groundwater Management Plan in compliance with the schedule established by the Texas Water Development Board.

**Figure 1. Map of Groundwater Management Zones**

**Figure 2. Schematic Cross-Section of Aquifer Management Zones.**