

**AGENDA**  
**RED RIVER GROUNDWATER CONSERVATION DISTRICT**  
**BOARD OF DIRECTORS MEETING**  
**GTUA BOARD ROOM**  
**5100 AIRPORT DRIVE**  
**DENISON, TEXAS 75020**  
**2:00 P.M., MONDAY, AUGUST 30, 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 30<sup>th</sup> day of August, 2010, at 2:00 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 July 26, 2010 Meeting
- IV. Receive update on legal expenses
- V. Consider and act upon request by the American Legion Post 231 for approval to drill well
- VI. Consider and act upon adoption of Bylaws
- VII. Receive report on well information collection process
- VIII. Consider and discuss draft Management Plan
- IX. Consider and act upon authorizing the President to submit a request to the TWDB to prepare a Groundwater Availability Model run
- X. Consider and discuss creation and development of Rules
- XI. Citizens to be Heard
- XII. Discuss future meeting date and agenda
- XIII. Adjourn

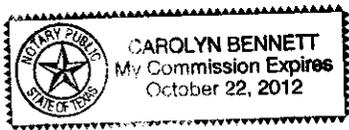
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<sup>1</sup>The Board may vote and/or act upon each of the items listed in this agenda.

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 August 26, 2010. I also provided this agenda to the County Clerks in Fannin and Grayson Counties with a request that it be posted.

  
Carmen Catterson

Sworn and subscribed to before me this 25 day of August 2010.



(S E A L)

  
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, JULY 26, 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, John Young

Members Absent: Don Morrison

Staff: Jerry Chapman and Carmen Catterson

Visitors: Jonathan Cannon, Herald Democrat  
Robin McCoy, Senator Craig Estes Office  
Cheryl Reynolds, Pink Hill WSC  
Heather Waldriff, Pink Hill WSC  
Mayor Sherry Howard, City of Tom Bean  
Mayor Ruth Ann Collins, City of Van Alstyne  
Bill Herrington, City of Van Alstyne

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I. Call to Order

President Henderson called the meeting to order at 1:00 p.m. The Board Members introduced themselves and the entities they represent. All members except Don Morrison were present.

II. Introduction of Visitors

Mr. Chapman introduced visitors Heather Waldriff and Cheryl Reynolds with Pink Hill Water Supply Corporation, Robin McCoy with Senator Craig Estes' office, Mayor Sherry Howard with the City of Tom Bean, Jonathan Cannon with the Herald Democrat, Bill Herrington and Mayor Ruth Ann Collins with the City of Van Alstyne. Mr. Chapman also introduced Secretary Carmen Catterson and the Board of Directors.

III. Consider and act upon approval of Minutes of May 24, 2010 Meeting.

Vice President Olson motioned to approve the Minutes of the May 24, 2010 Meeting. The motion was seconded by Board Member Latham and passed unanimously.

IV. Consider and act upon request by the City of Tom Bean for approval of a water well site.

Mayor Howard of Tom Bean provided information on the request from the City for a permit to drill a well on property owned by the City. The Texas Commission on Environmental Quality (TCEQ) has issued a Notice of Deficiency to the City for not pumping enough water to meet the City's needs. The City owns a 300-foot by 300-foot piece of property and would like a permit to drill a new water well. The City has two wells, but only one is used to supply the City's water. The City is in the process of applying for United States Department of Agriculture (USDA) funding and will need written authorization from the District for the well

before the funding can be approved. The City requested that the Board expedite the creation of rules so that the permit can be issued as soon as possible. Board Member Henderson explained that the District cannot issue a permit until the rules are approved. Mr. Chapman reported that he discussed the situation with Mr. Alan Lambright of the USDA and that waiting until the rules are in place to take action on this item will not affect the City's application. Board Member Henderson informed the City that the rules should be in place within one year and that this matter would be revisited at that time. This motion died for a lack of action.

V. Citizens to be Heard

Mr. Chapman requested to speak to the Board for a few minutes to discuss Desired Future Conditions (DFC) for Groundwater Management Area (GMA) 8. GMA 8 encompasses the area from the Red River south to Waco as far as Montague County and east to Texarkana with 57 counties and 13 Groundwater Conservation Districts. Mr. Chapman explained that the DFCs were created without input from the Red River District because the District had not been formed at that time. The available groundwater according to the DFCs is currently within the available margins. The District does not currently have the time or resources to devote to contesting the DFCs. Mr. Chapman recommended the Board accept the current DFCs and pursue modifying them when the next round occurs in five years.

VI. Discuss future meeting date and agenda.

Board Member Henderson expressed a desire to meet more often. The Board needs time to make decisions and pursue completing several necessary tasks. He recommended the Board meet once a month for a few months until things are more settled. If necessary, meetings could be held more often. The Board agreed to meet on the last Monday of each month with the next meeting being held at 2:00 PM on Monday, August 30<sup>th</sup>.

Vice President Olson motioned to schedule the next meeting on August 30 at 2:00 PM. The motion was seconded by Secretary/TreasurerWortham and passed unanimously.

VII. Adjourn

Upon motion by Olson seconded by Gattis and passed unanimously, the Board adjourned at approximately 1:30 p.m.

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WORK SESSION

I. Call to Order

President Henderson called the Board Work Session to order at 1:30 p.m. The Board Members introduced themselves and the entities they represent. All members except Don Morrison were present.

II. Discuss and prepare timeline of activities

The Board needs to actively pursue the development of the Bylaws, Groundwater Management Plan, and Temporary Rules so they can address issues like the well Tom Bean needs to drill. Mr. Chapman explained that the Groundwater Management Plan needed to be developed and approved before a fee schedule could be approved and funds collected. The Board agreed to work toward a timeline that includes approving the Bylaws in August, the Groundwater Management Plan by October and the Temporary Rules by

December. This timeline is subject to change, but at least provides some idea of where the Board would like to be by January 2011.

III. Discuss creation of Bylaws

Mr. Chapman explained that many cities follow a fiscal year from October 1<sup>st</sup> to September 30<sup>th</sup>. However, the Texas Water Development Board and many rural water providers use a calendar year for their budgets. The Board agreed that using a calendar year budget would be more reasonable. The Board also agreed to use Robert's Rules of Order. The Board agreed that the Bylaws would be ready for action in August.

IV. Consider and discuss draft Management Plan

A Groundwater Management Plan is required. A draft version has been provided to the Board for review. The document is very rough and will need more input from the Board before it is ready to submit to the TWDB for review. This will be placed on the August agenda for further discussion. The template was based on the Post Oak Savannah GCD plan and modified accordingly.

V. Discuss Policies and Procedures for the Board of Directors

The Policies and Procedures for the District have been discussed for the last few months. Mr. Chapman provided a draft copy of the rules the North Texas GCD is considering approving. The North Texas GCD is not too far ahead of the Red River GCD. The rules will be temporary at first to allow for changes. Normally, wells under 25,000 gallons per day are exempted. All wells are required to be permitted, though. The goal would be to have the rules in place to begin collecting funds before January 2012. Mr. Chapman also recommended inviting water providers and well drillers to the meetings so they can provide information and input into the development of rules. President Henderson confirmed that six Board members are needed to approve the Rules. The Board will have to work together to achieve the desired goal.

VI. Adjourn

Upon motion by Gattis seconded by Olson and passed unanimously, the Board adjourned at approximately 2:38 p.m.

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\_\_\_\_\_  
Recording Secretary

\_\_\_\_\_  
Secretary-Treasurer

**ATTACHMENT IV**

Mr. Sledge's Direct Line: (512)322-5839  
bsledge@lglawfirm.com

July 7, 2010

Cooke Fannin and Grayson County Steering Committee  
Attn. W. D. Welch  
P.O. Box 340  
Whitesboro, TX 76273

✓ Mr. Jerry Chapman  
Greater Texoma Utility Authority  
5100 Airport Drive  
Denison, TX 75020

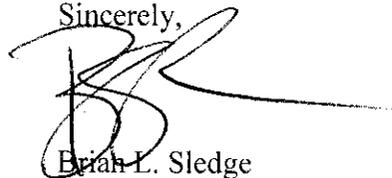
Re: Notice of Account Closure and Write-Off of Outstanding Balance;  
Groundwater Conservation District Creation  
Client Matter No.: 2886-00

Dear Mayor Welch and Mr. Chapman:

The enclosed statement and list of participants reflects the outstanding balances still owed with regard to this matter. Effective August 1, 2010, it is my intention to write-off the remaining balance due Lloyd Gosselink for the provision of legal services on this account.

On behalf of the firm, I would like to thank you for the opportunity to represent the steering committee on this matter. If I can be of further service to you in the future, please do not hesitate to call.

Sincerely,

  
Brian L. Sledge

BLS/sb

Enclosure

RECEIVED  
BY: G-TUA

Entity	2006 Groundwater Production, gallons	Percent of Total	Total Cost \$ 56,700.37	PAID
1 Arledge Ridge WSC	40,703,800	0.82%	\$ 463.82	463.82
2 Bailey	10,982,448	0.22%	\$ 125.14	
3 Bartley Woods WSC	75,125,560	1.51%	\$ 856.05	
4 Bells	54,441,900	1.09%	\$ 620.36	620.36
5 Bois d'Arc MUD	65,322,000	1.31%	\$ 744.34	744.34
6 Collinsville	87,437,900	1.76%	\$ 996.35	996.35
7 Denison	76,170,000	1.53%	\$ 867.96	867.96
8 Desert WSC	53,243,500	1.07%	\$ 606.71	606.71
9 Dial WSC	13,684,300	0.28%	\$ 155.93	155.93
10 Dodd City	30,459,831	0.61%	\$ 347.09	347.09
11 Dorchester	73,413,000	1.48%	\$ 836.54	836.54
12 Eco Resources	6,430,700	0.13%	\$ 73.28	
13 Ector	31,212,000	0.63%	\$ 355.66	355.66
14 Gober MUD	13,895,000	0.28%	\$ 158.33	158.33
15 Gunter	63,009,000	1.27%	\$ 717.99	717.99
16 Honey Grove	111,541,000	2.24%	\$ 1,271.01	1,271.01
17 Howe	98,382,100	1.98%	\$ 1,121.06	1,121.06
18 Kentuckytown WSC	127,140,000	2.56%	\$ 1,448.76	1,448.76
19 Ladonia	54,567,795	1.10%	\$ 621.80	621.80
20 Lanniss MUD	2,939,681	0.06%	\$ 33.50	33.50
21 Lattimore Materials Co.	1,919,262	0.04%	\$ 21.87	21.87
22 Leonard	81,896,000	1.65%	\$ 933.20	933.20
23 Luella SUD	130,231,000	2.62%	\$ 1,483.98	1,483.98
24 Luminant Valley Steam Electric Plant	26,084,270	0.52%	\$ 297.23	
25 Marilee SUD	205,902,337	4.14%	\$ 2,346.25	2,346.25
26 Monarch Utilities	146,272,100	2.94%	\$ 1,666.77	1,666.77
27 Northwest Grayson WCID #1	53,930,000	1.08%	\$ 614.53	614.53
28 Oak Creek Mobile Village	1,735,000	0.03%	\$ 19.77	19.77
29 Pink Hill WSC	73,694,000	1.48%	\$ 839.74	839.74
30 Pottsboro	13,998,510	0.28%	\$ 159.51	159.51
31 Randolph WSC	9,432,900	0.19%	\$ 107.49	107.49
32 Ravenna-Nuntee WSC	17,901,050	0.36%	\$ 203.98	203.98
33 Sadler	12,470,900	0.25%	\$ 142.11	142.11
34 Savoy	27,329,400	0.55%	\$ 311.42	311.42
35 Sengas, LP	6,395,000	0.13%	\$ 72.87	
36 Sheppard AFB	2,415,900	0.05%	\$ 27.53	
37 Sherman	1,615,100,000	32.46%	\$ 18,404.05	18,404.05
38 South Grayson WSC	232,419,000	4.67%	\$ 2,648.41	2,648.41
39 Southmayd	17,118,479	0.34%	\$ 195.06	195.06
40 Southwest Fannin SUD	202,536,900	4.07%	\$ 2,307.91	2,307.91
41 Starr WSC	83,906,800	1.69%	\$ 956.12	956.12
42 Tioga	47,636,260	0.96%	\$ 542.81	542.81
43 Tom Bean	69,706,219	1.40%	\$ 794.30	797.30 paid 3.00 too much
44 Trenton	40,624,100	0.82%	\$ 462.91	462.91
45 Two Way SUD	187,973,000	3.78%	\$ 2,141.95	2,141.95
46 Van Alstyne	123,436,000	2.48%	\$ 1,406.55	1,406.55
47 West Leonard WSC	54,325,200	1.09%	\$ 619.04	619.04
48 White Shed WSC	83,306,400	1.67%	\$ 949.28	949.28
49 Whitesboro	187,740,700	3.77%	\$ 2,139.30	2,139.30
50 Whitewright	90,490,000	1.82%	\$ 1,031.13	1,031.13
51 Windom	14,381,600	0.29%	\$ 163.88	163.88
52 WSWWS Co.	23,493,858	0.47%	\$ 267.71	267.71
<b>Total GW Production</b>	<b>4,975,903,560</b>	<b>100.00%</b>	<b>\$ 56,700.37</b>	<b>55,251.24</b>
				<b>DUE: 1,449.13</b>

Source - Texas Water Development Board

**RECEIVED**  
 BY: GTU17

ATTACHMENT V

**MISSING - IN - ACTION POST 231**

DEPARTMENT OF TEXAS  
THE AMERICAN LEGION

133 ARMY LANE  
POTTSBORO, TEXAS 75076



August 20, 2010

George Henderson, President  
Red River Groundwater  
Conversation District  
5100 Airport Dr.  
Denison, TX. 75020

Sir,

Since our request to drill a new well-dated August 2, 2010, The American Legion well has gone dry. Currently we are using emergency water furnished by the Red River Authority for our lease area.

We are again requesting your permission to drill a well. Your approval is required before we can attain an approval from The Corps of Engineers.

Your immediate attention to this request will be greatly appreciated.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Henry Salisbury'.

Henry Salisbury  
Post 231 Commander

**RECEIVED**  
AUG 23 2010  
**GTUA**

# MISSING - IN - ACTION POST 231

DEPARTMENT OF TEXAS  
THE AMERICAN LEGION

133 ARMY LANE  
POTTSBORO, TEXAS 75076



RECEIVED

GTUA

August 2, 2010

George Henderson, President  
Red River Groundwater  
Conservation District  
5100 Airport Dr.  
Denison, TX. 75020

Sir,

The American Legion Post 231 is requesting approval to drill a new well on their lease site.

The current well is thirty years old and has deteriorated to a point it can no longer produce an adequate amount of water.

We want to drill approximately 200 feet to the Trinity Sand, as close to the current site as possible. (Corner of Army Ave. and Navy Loop)

The well water will not be for sale.

Thank you for your attention to this request.

Henry Salisbury  
Post 231 Commander

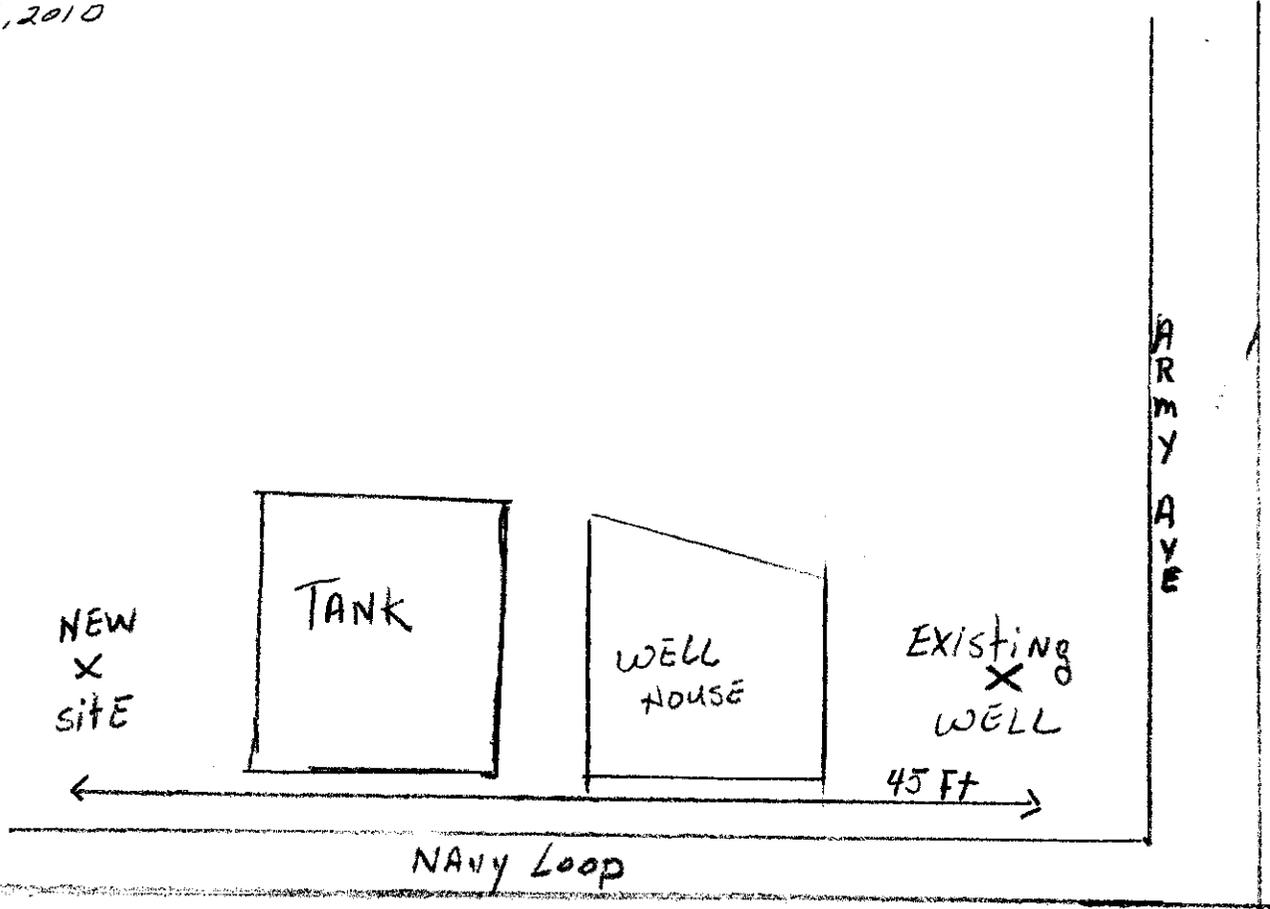
903 786 2353 Legion

903 814 0758 Cell

AMERICAN Legion Post 231

Request for Site # 9

July 29, 2010



ATTACHMENT VI

# 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 "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 January.

#### **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.

**ATTACHMENT VIII**

## **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 approval as administratively complete by the Texas Water Development Board. The plan will remain in effect for five (5) years after the date of approval or until a revised plan is adopted and approved.

#### **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 down 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 District's management objectives was engaged in during the fiscal year. Each activity will be referenced to the estimated expenditure of staff time and budget in accomplishment of the activity. The notations of activity frequency, staff time and budget will be referenced to the appropriate performance standard for each management objective describing the activity, so that the effectiveness and efficiency of the Districts operations may be 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. Therefore this management goal is not applicable.

#### **10.4 Conservation of Groundwater including Rainwater Harvesting, Precipitation Enhancement, Brush Control, and 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 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 and will be documented in the annual report.

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

Management Objective:

The District will develop and adopt a Drought Management Strategy Plan within two 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:

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**

<b>Water Use Group</b>	<b>2006</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
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**

<b>Water Use Group</b>	<b>2006</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
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>
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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**

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 Feet per year</b>
<b>Fannin County</b>	
Total for Fannin Co.	
<b>Grayson County</b>	
Total for Grayson Co.	
<b>DISTRICT TOTALS</b>	

### 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 acre-feet per year =</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 acre-feet per year =</b>		<b>21,522</b>						

<b>Total Projected Water Supplies (acre-feet per year) 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>
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**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 RED RIVER GROUNDWATER CONSERVATION DISTRICT							
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>Manufacturing</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.

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

**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						
<i>Total</i>						

**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 Groundwater (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.**

ATTACHMENT IX

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



August 27, 2010

Masud Hassan  
Groundwater Availability Modeling Section  
Texas Water Development Board  
PO Box 13231  
Austin, TX 78711-3231

RE: Groundwater Modeling for Red River Groundwater Conservation District

Dear Mr. Hassan:

The Red River Groundwater Conservation District (RRGCD) is a recently formed groundwater conservation district encompassing Fannin and Grayson Counties in part of the North Central Texas Priority Groundwater Management Area. We are in the process of developing our Groundwater Management Plan. One of the necessary components in any Groundwater Management Plan is a Groundwater Availability Model, which we understand is provided by the Texas Water Development Board.

Please accept this letter as a formal request to provide our District with the Groundwater Availability Model runs for both the Trinity and Woodbine Aquifers in Fannin and Grayson Counties. We would appreciate receiving this information as soon as possible in order to be able to complete our Groundwater Management Plan. Please advise the District of the time period you believe will be needed to complete this work. Should any additional information be needed from the District, please inform me.

Sincerely,

George "Butch" Henderson  
President  
Red River Groundwater Conservation District