

**RED RIVER  
GROUNDWATER  
CONSERVATION  
DISTRICT**

**BOARD MEETING**

**BOARD ROOM  
GREATER TEXOMA UTILITY AUTHORITY  
5100 AIRPORT DRIVE  
DENISON, TEXAS 75020**

**THURSDAY  
DECEMBER 11, 2014**

**AGENDA**  
**RED RIVER GROUNDWATER CONSERVATION DISTRICT**  
**BOARD OF DIRECTORS BOARD SPECIAL MEETING**  
**GREATER TEXOMA UTILITY AUTHORITY BOARD ROOM**  
**5100 AIRPORT DRIVE**  
**DENISON, TEXAS 75020**  
**THURSDAY, DECEMBER 11, 2014**

**Board Meeting**

The Board Meeting will begin at 2:00 PM.

Notice is hereby given that the Board of Directors of the Red River Groundwater Conservation District ("District") may discuss, consider, and take all necessary action, including expenditure of funds, regarding each of the agenda items below:

**Agenda:**

1. Call to order, declare meeting open to the public, and take roll.
2. Public Comment
3. Consider approval of Minutes of October 9, 2014, Board Meeting
4. Review and approval of monthly invoices.
5. Receive monthly financial information
6. Consider and act upon investment strategies
7. Consider and act upon amended budget for 2014
8. Consider and act upon engagement letter for audit services for fiscal year ending December 31, 2014
9. Consider and act upon 2015 Administrative Services contract with the Greater Texoma Utility Authority
10. Consider and act upon draft irrigation use estimates
11. Receive update and possible action on GMA 8 activities and development of Desired Future Conditions
12. Consider and discuss the Northern Trinity/Woodbine Aquifer GAM Predictive Simulations
13. Consider and act upon compliance and enforcement activities for violations of District rules

14. General Manager's report: The General Manager will update the Board on operational, educational and other activities of the District

15. Open forum / discussion of new business for future meeting agendas

16. Adjourn

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

<sup>2</sup>At any time during the meeting or work session and in compliance with the Texas Open Meetings Act, Chapter 551, Government Code, Vernon's Texas Codes, Annotated, the Red River Groundwater Conservation District Board may meet in executive session on any of the above agenda items or other lawful items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gifts (§551.073); personnel matters (§551.074); and deliberation regarding security devices (§551.076). Any subject discussed in executive session may be subject to action during an open meeting.

<sup>3</sup>Persons with disabilities who plan to attend this meeting, and who may need assistance, are requested to contact Carmen Catterson at (800) 256-0935 two (2) working days prior to the meeting, so that appropriate arrangements can be made.

ATTACHMENT 3

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

**THURSDAY, OCTOBER 9, 2014**

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

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Members Present: Mark Patterson, Don Wortham, Mark Gibson, Harold Latham, William Purcell  
Members Absent: David Gattis, Mark Newhouse  
Staff: Drew Satterwhite, Debi Atkins, and Carmen Catterson  
Visitors: Mike Keester, LBG Guyton (by conference call)

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1. Call to order, declare meeting open to the public, and take roll.

President Patterson called the meeting to order at 2:04 PM. All members were present except Board Member Latham. The Board introduced themselves and the manner of their appointment.

2. Public Comment.

No comments received.

3. Consider approval of Minutes of August 21, 2014 board meeting

Board Member Gibson requested that his title be corrected to Board Member.

Board Member Purcell motioned to approve the Minutes of the August 21, 2014 board meeting with Board Member Gibson's title corrected. The motion was seconded by Secretary/Treasurer Wortham and passed unanimously.

The Board discussed the rate increase for 2015. No comments were received from the public.

4. Review and approval of monthly invoices.

Mr. Satterwhite reviewed the monthly invoices.

Secretary/Treasurer Wortham motioned to approve the monthly invoices for a total of \$36,036.35. The motion was seconded by Board Member Gibson and passed unanimously.

5. Receive Monthly Financial Information

Mr. Satterwhite reviewed the monthly financial information. Before the end of the year, a budget amendment may be desired to more closely match actual expenditures. The legal line item is over budget and will need to be increased. The Board discussed hiring a field technician and purchasing a vehicle in 2015.

6. Review Investment Policy

The investment policy was adopted in 2012 and the Public Funds Investment Act (PFIA) requires the policy to be reviewed and re-adopted annually. The policy was approved by legal counsel and is in compliance with the PFIA. The only change is to reference Mr. Satterwhite instead of Mr. Chapman, the previous General Manager.

The Board discussed the liquidity requirements and possible expenses that would require additional liquid funds. Currently the District has all funds in American Bank of Texas with no diversification. The Board discussed the possibility of utilizing brokerage firms to invest funds.

Board Member Gibson motioned to adopt a resolution approving the Investment Policy. The motion was seconded by Vice President Latham and passed unanimously.

7. Consider and act upon investment strategies

Mr. Satterwhite explained that the staff developed three basic strategies for investment. There is currently approximately \$225,000 in the bank account which has no interest earnings, but offsets banking fees in the account. One option would be a one year CD with approximately a 0.4% return. This would result in approximately \$420. A more liquid option would be a Money Market checking account, with a 0.25% return. The money market account is limited to 6 transactions per month meaning that the district would still need a checking account to make most transactions. This would result in a net positive of approximately \$195 in a year. In order to maintain FDIC insurance, the funds would either need to be invested with another banking institution, or request the bank to pledge securities against the funds.

President Patterson discussed possible expenses, including the purchase of a truck, legal expenses, GAM runs, and other potential charges. He recommended keeping approximately \$125,000 to \$150,000 in the checking account for possible expenses. Mrs. Atkins explained that TexSTAR and TexPOOL provide some interest, but the money is still liquid. The bank also has a CDRS program, where the money is liquid. With that program, the bank would have to pledge securities and invests the money into CDs with other banks.

Board Member Purcell recommended that the District might make more money with an online bank. Mrs. Atkins responded that the Greater Texoma Utility Authority has utilized an online bank, but used a broker-dealer. President Patterson recommended the staff look into investing \$150,000 in a ladder pattern with \$50,000 in 6 months, \$50,000 in one-year and \$50,000 in 18-months, including penalties for early termination.

8. Receive Quarterly Report

Mr. Satterwhite reviewed the quarterly investment report.

9. Receive report from LBG Guyton on GAM runs and Outcrop memo

Mr. Keester joined the Board by conference call to provide a presentation on the inflows and outflows of the outcrop and a review of the Desired Future Conditions (DFCs) generated by the three Groundwater Availability Model (GAM) runs that were completed. Mr. Keester explained that there were inaccuracies in the runs and that they were being reviewed by multiple consultants to determine how to best fix the problems. The inconsistencies included higher pumping levels on the conservation run and lower pumping levels on the maximum use run in certain aquifers/counties.

The Board discussed the three GAM runs and the possible implications of each. The Board also discussed the accuracy of the inflow and outflow numbers for the outcrop.

10. Receive update on GMA 8 activities and development of Desired Future Conditions (DFCs)

Private property rights will be discussed, but has been delayed until more GAM runs have been completed. The Board discussed the current feelings in GMA 8 regarding the future of GAM runs and DFCs. At this time GMA 8 has not established any future desires. The Board also discussed the possibility of water being transported out of the District and fees charged for that use. The Board brought up the point that transporting water from the RRGCD would still have lower fees than pumping within some of the other districts in the region.

The Board also discussed the current rules regarding agriculture and other non-exempt wells and agreed that they would prefer to continue with a \$0 charge for agricultural use. The Board also discussed the model and the results of the model regarding the local area.

11. General Manager's Report

Mr. Satterwhite reviewed the well registrations for the last two months. Regarding the water loss report discussed at the last meeting, the staff feels it would be more accurate to request an annual report from the public water suppliers. The Board agreed.

Mr. Satterwhite also reported that the next meeting will include enforcement action on a driller that is not complying with District Rules.

The first late fees were charged on October 1<sup>st</sup> for the 2<sup>nd</sup> quarter billings. The staff will now begin working on the entities that are not submitting readings on time.

Vice President Latham presented information to Region C, which will qualify as an educational presentation for the District's Management Plan. The District must have a certain amount of presentations each year.

Board Member Purcell recently held a meeting with a city regarding DFCs and he is drafting articles regarding groundwater and the integration with surface water. The Board discussed the benefits

of meeting with small groups and it was mentioned that meeting with larger, more focused groups is sometimes more beneficial.

13. Open forum / discussion of new business for future meeting agendas

The next meeting was tentatively scheduled for December 11, 2014 at 2:00 PM. The next agenda will include the audit engagement letter, an update on GMA 8, a budget amendment, and discuss on the DFC process.

14. Adjourn

The Board adjourned at approximately 4:17 PM.

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

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



ATTACHMENT 6



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 4, 2014

**SUBJECT:** AGENDA ITEM NO. 6

## CONSIDER AND ACT UPON INVESTMENT STRATEGIES

### ISSUE

Consider and act upon investment strategies for the funds held by the District

### BACKGROUND

At the August 2014 meeting, the Board requested that staff look into a few possible strategies for investing funds held by the District. At the October meeting, staff presented 3 different options to the board. The Board subsequently directed the staff to explore the possibility of staggering a portion of the fund balance across multiple CDs in order to present at a future meeting.

### STAFF RECOMMENDATIONS

The staff requests direction from the Board regarding investing funds held by the District.

### ATTACHMENTS

Investment Summary will be distributed at the meeting

### PREPARED AND SUBMITTED BY:

A handwritten signature in blue ink, appearing to read "Drew Satterwhite", is written over a horizontal line.

Drew Satterwhite, P.E.  
General Manager

ATTACHMENT 7



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 4, 2014

**SUBJECT:** AGENDA ITEM NO. 7

## CONSIDER AND ACT UPON AMENDING 2014 BUDGET

### ISSUE

Consider and act upon amendments to the 2014 budget

### BACKGROUND

At the May 2014 meeting, the Board of Directors approved a budget amendment to account for previously approved consultant contracts with Mullican and Associates, Bill Hutchison, and LBG Guyton and Associates. Also included in this budget amendment were funds to purchase well level monitoring equipment, a portable flow metering device, and additional funds for legal services.

The adjustments in the proposed budget amendment include the following:

#### **Increases**

- Web Maintenance
- Dues and Subscriptions
- Internet Services
- Legal
- Meetings and Conferences
- Software Maintenance

#### **Decreases**

- Ads-Legal
- Auditing
- Fees-GMA8
- Field Services
- Transportation

### OPTIONS/ALTERNATIVES

The Board can complete the 2014 fiscal year without making any adjustments to its budget. The result will be a variance in budget expenditures when audited by the independent auditing firm. The second option would be to modify the budget to more closely reflect actual expenditures.

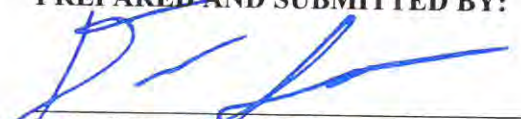
### STAFF RECOMMENDATIONS

The staff recommends the Board approve the proposed amended budget.

### ATTACHMENTS

Draft amended budget

### PREPARED AND SUBMITTED BY:

  
\_\_\_\_\_  
Drew Satterwhite, P.E. General Manager

**RED RIVER GROUNDWATER CONSERVATION DISTRICT  
BUDGET YEAR 2014**

	Amended Budget 2014	Actual @10/31/14		Amended (2) Budget 2014
<b>Income</b>				
46002 GW Production Cost	\$250,000.00	212,387.79	283,183.72	\$250,000.00
<b>Total Income</b>	<u>\$250,000.00</u>	<u>\$212,387.79</u>	<u>\$283,183.72</u>	<u>\$250,000.00</u>
<b>Gross Profit</b>	\$250,000.00			\$250,000.00
<b>Expense</b>				
77010 ADMINISTRATIVE COST	\$115,000.00	77,584.67	93,101.60	\$115,000.00
77033 ADS-LEGAL	2,500.00	383.65	400.00	\$500.00
77027 AUDITING	5,000.00	3,750.00	3,750.00	\$3,750.00
77855 CONTRACT SERVICES				
Web Maintenance	6,000.00	7,200.00	7,200.00	\$7,200.00
Hydro-Geologist	27,400.00	20,353.75	24,424.50	\$27,400.00
GMA8 Consulting				
77040 DIRECT COST	5,000.00	2,251.72	2,702.06	\$5,000.00
77450 DUES & SUBSCRIPTIONS	1,000.00	1,302.50	1,302.50	\$1,302.50
77550 EQUIPMENT	6,550.00	1,230.31	1,230.31	\$6,550.00
77555 FEES-GMA8	4,000.00	2,029.19	2,435.03	\$2,500.00
77035 FIELD SERVICES	50,000.00	18,598.00	22,317.60	\$30,000.00
77810 INSURANCE & BONDING	3,000.00	1,172.00	2,942.00	\$3,000.00
77840 INTERNET SERVICES	3,500.00	4,557.75	4,557.75	\$4,560.00
77970 LEGAL	11,000.00	13,479.22	16,175.06	\$16,500.00
78010 MEETINGS AND CONFEREN	2,000.00	2,150.62	2,580.74	\$2,600.00
78310 RENT	2,400.00	2,000.00	2,400.00	\$2,400.00
78600 SOFTWARE MAINT	2,000.00	1,750.00	2,100.00	\$2,100.00
78770 TRANSPORTATION	5,000.00	2,345.96	2,815.15	\$3,000.00
78750 TELEPHONE	2,000.00	1,130.85	1,357.02	\$2,000.00
78780 WELL MONITORING/TESTING	0.00			\$0.00
<b>Total Expense</b>	<u>\$253,350.00</u>	<u>\$163,270.19</u>	<u>\$193,791.32</u>	<u>\$235,362.50</u>
Contingencies				
<b>Total Expenditures</b>	253,350.00			\$235,362.50
<b>Net Income</b>	<u>-3,350.00</u>			<u>14,637.50</u>

ATTACHMENT 8



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 2, 2014

**SUBJECT:** AGENDA ITEM NO. 8

## CONSIDER AND ACT UPON ENGAGEMENT LETTER FOR AUDIT SERVICES FOR FISCAL YEAR ENDING DECEMBER 31, 2014

### ISSUE

Consider and act upon confirming execution of engagement letter for audit services fiscal year ending December 31, 2014

### BACKGROUND

Last year, the Board had instructed the staff to solicit proposals for audit services for the fiscal year ending December 31, 2013. The staff initiated invitations to several firms in North Central Texas. As a result of that solicitation, four proposals were received. The audit selection committee reviewed the proposals and selected McClanahan and Holmes, LLP of Bonham, Texas. This selection was confirmed at the March 2014 meeting.

### OPTIONS/ALTERNATIVES

The Board has the option to re-solicit for proposals or to engage with McClanahan and Holmes, LLP of Bonham, Texas.

### CONSIDERATIONS

District staff is of the opinion that McClanahan and Holmes, LLP of Bonham, Texas provided a thorough and quality audit last year.

### STAFF RECOMMENDATIONS

The staff recommends the Board authorize an engagement letter with McClanahan and Holmes, LLP of Bonham, Texas for the 2014 audit

### ATTACHMENTS

Engagement Letter

### **PREPARED AND SUBMITTED BY:**

  
\_\_\_\_\_  
Debi Atkins, Finance Officer

**McClanahan and Holmes, LLP**  
CERTIFIED PUBLIC ACCOUNTANTS

R. E. BOSTWICK, CPA  
STEVEN W. MOHUNDRO, CPA  
GEORGE H. STRUVE, CPA  
ANDREW B. REICH, CPA  
RUSSELL P. WOOD, CPA  
DEBRA J. WILDER, CPA

228 SIXTH STREET S.E.  
PARIS, TEXAS 75460  
903-784-4316  
FAX 903-784-4310

.....  
304 WEST CHESTNUT  
DENISON, TEXAS 76020  
903-466-6070  
FAX 903-466-6093

.....  
1400 WEST RUSSELL  
BONHAM, TEXAS 75418  
903-583-5574  
FAX 903-583-9453

Bonham, Texas  
September 30, 2014

Members of Management  
Red River Groundwater Conservation District

We are pleased to confirm our understanding of the services we are to provide Red River Groundwater Conservation District for the year ended December 31, 2014. We will audit the financial statements of the governmental activities and the aggregate remaining fund information, including the related notes to the financial statements, which collectively comprise the basic financial statements of Red River Groundwater Conservation District as of and for the year ended December 31, 2014.

Accounting standards generally accepted in the United States of America provide for certain required supplementary information (RSI), such as management's discussion and analysis (MD&A), to supplement Red River Groundwater Conservation District's basic financial statements. Such information, although not a part of the basic financial statements, is required by Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to Red River Groundwater Conservation District's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

1. Management's Discussion and Analysis
2. Budgetary Comparison Schedule

#### Audit Objective

The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with generally accepted accounting principles and to report on the fairness of the supplementary information referred to in the second paragraph when considered in relation to the financial statements as a whole. Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America and will include tests of the accounting records and other procedures we consider necessary to enable us to express such opinions. We cannot provide assurance that unmodified opinions will be expressed. Circumstance may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinions on the financial statements are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.



### Management Responsibilities

Management is responsible for the basic financial statements and all accompanying information as well as all representations contained therein. You agree to assume all management responsibilities for any nonattest services we provide; oversee the services by designating an individual, preferably from senior management, with suitable skill, knowledge, or experience; evaluate the adequacy and results of the services; and accept responsibility for them.

Management is responsible for establishing and maintaining effective internal controls, including monitoring ongoing activities; for the selection and application of accounting principles; and for the preparation and fair presentation in the financial statements in conformity with U.S. generally accepted accounting principles.

Management is also responsible for making all financial records and related information available to us and for the accuracy and completeness of that information. You are also responsible for providing us with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence.

Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the written representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

You are responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government received in communications from employees, former employees, regulators, or others. In addition, you are responsible for identifying and ensuring that the entity complies with applicable laws and regulations.

You are responsible for the preparation of the supplementary information in conformity with U.S. generally accepted accounting principles. You agree to include our report on the supplementary information in any document that contains and indicates that we have reported on the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon or make the audited financial statements readily available to users of the supplementary information no later than the date the supplementary information is issued with our report thereon. Your responsibilities include acknowledging to us in the representation letter that (1) you are responsible for presentation of the supplementary information in accordance with GAAP; (2) that you believe the supplementary information, including its form and content, is fairly presented in accordance with GAAP; (3) that the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

#### **Audit Procedures – General**

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant account estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable rather than absolute assurance about whether the financial statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us, even though the audit is properly planned and performed in accordance with U.S. generally accepted auditing standards. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements. However, we will inform the appropriate level of management of any material errors or any fraudulent financial reporting or misappropriation of assets that come to our attention. We will also inform the appropriate level of management of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, and may include tests of the physical existence of inventories, and direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions. We will request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will also require certain written representations from you about the financial statements and related matters.

#### **Audit Procedures – Internal Control**

Our audit will include obtaining an understanding of the entity and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify deficiencies in internal control. However, during the audit, we will communicate to management and those charged with governance internal control related matters that are required to be communicated under AICPA professional standards.

#### **Audit Procedures – Compliance**

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the District's compliance with the provisions of applicable laws, regulations, contracts, and agreements. However, the objective of our audit will not be to provide an opinion on overall compliance and we will not express such an opinion.

**Engagement Administration, Fees, and Other**

We understand that your employees will prepare all cash or other confirmations we request and will locate any documents selected by us for testing.

We expect to begin our audit approximately in May, 2015 and to issue our reports no later than June 1, 2015. Andrew B. Reich is the engagement partner and is responsible for supervising the engagement and signing the report. Our fee for these services will be at our standard hourly rates plus out-of-pocket costs except that we agree that our gross fee, including expenses will not exceed \$3,750. Our standard hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. Our invoice for these fees will be rendered upon completion of the audit. The above fee is based on anticipated cooperation from your personnel and the assumption that unexpected circumstances will not be encountered during the audit. If significant additional time is necessary, we will discuss it with you and arrive at a new fee estimate before we incur the additional costs.

We appreciate the opportunity to be of service to the Red River Groundwater Conservation District and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If you agree with the terms of our engagement as described in this letter, please sign the enclosed copy and return it to us.

Sincerely,

McCLANAHAN AND HOLMES, LLP

  
Andrew B. Reich, CPA

**RESPONSE:**

This letter correctly sets forth the understanding of the Red River Groundwater Conservation District.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

ATTACHMENT 9



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 2, 2014

**SUBJECT:** AGENDA ITEM NO. 9

## CONSIDER AND ACT UPON 2015 ADMINISTRATIVE SERVICES CONTRACT WITH GREATER TEXOMA UTILITY AUTHORITY

### ISSUE

Renewal of contract with Greater Texoma Utility Authority (GTUA) for administrative services for 2015

### BACKGROUND

In November 2010, the District and GTUA entered into an agreement for administrative services to be provided by GTUA for the District. The Board of Directors of GTUA is satisfied with the outcome of the agreement and have indicated their desire to continue the arrangement. This agreement was authorized by the GTUA Board of Directors at the November 10, 2014 meeting.

### CONSIDERATIONS

This contract contains the same provisions as the contract executed for 2014. The amounts identified in the contract are consistent with the 2015 budget adopted by the District.

### STAFF RECOMMENDATIONS

The staff recommends that the contract between the District and GTUA be approved.

### ATTACHMENTS

2015 Administrative Services contract with GTUA  
2015 Budget

### PREPARED AND SUBMITTED BY:

A handwritten signature in blue ink, appearing to read "Drew Satterwhite", written over a horizontal line.

Drew Satterwhite, P.E., General Manager

**ADMINISTRATIVE SERVICES AGREEMENT  
BETWEEN THE GREATER TEXOMA UTILITY AUTHORITY AND  
THE RED RIVER GROUNDWATER CONSERVATION DISTRICT**

STATE OF TEXAS	§	STATE OF TEXAS
	§	
GREATER TEXOMA UTILITY AUTHORITY	§	RED RIVER GROUNDWATER CONSERVATION DISTRICT
	§	

This Agreement, made and entered into by and between the Greater Texoma Utility Authority, hereinafter referred to as (“Authority”) and the Red River Groundwater Conservation District in Fannin and Grayson Counties, Texas, hereinafter referred to as (“District”).

WITNESSETH:

WHEREAS, the District is experiencing a need for administrative services in order to achieve the objectives provided in its enabling legislation and Chapter 36 of the Texas Water Code; and

WHEREAS, the Authority has staff experienced in water related activities; and

WHEREAS, the District has determined that it is in the best interest of the District to engage the Authority to assist in providing administrative assistance in establishing the District’s programs and activities; and

WHEREAS, the District has determined that the proposal dated November 4, 2014 from the Authority, as said proposal is modified and supplemented herein, is in the best interest of the District and that the Authority is qualified and capable of providing such services;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and of the terms and conditions hereinafter set forth, the parties agree as follows:

1. The Scope of Services. The term "Scope of Services" as used herein refers to the Scope of Services made and submitted by the Authority to the District dated November 4, 2014, as amended, modified, or supplemented herein. (attached hereto as “Exhibit A”)

The Scope of Services is a general guideline for the commencement of administrative activities and related services. Said Scope of Services is amended and superseded by specific terms of this Agreement, which may be amended in writing from time to time upon agreement of the Authority and the District.

2. Administrative Services. The Authority shall perform administrative services for the District at the direction of the District Board, and the District Board President to the extent that the Board President’s direction does not conflict with any District or Authority rule, policy, or order of the District

or Authority Board. Such directions from the District Board and Board President regarding the performance of administrative services shall supplement any specific services delineated in this Agreement or the attached Scope of Services. Administrative services shall include, but not be limited to recording and communication services, database collection and well registration services, as well as assistance in developing personnel policies, operating procedures, refining of temporary rules and developing a management plan. Administrative services shall also include performance of the duties of the "General Manager" as set forth in the District's Temporary District Rules, Bylaws, rules and orders, subject to the directions and orders of the District Board and Board President. The Authority shall not retain outside professional services to be reimbursed by the District without prior authorization from the District. The District Board shall retain ultimate authority in decision-making under the District's Rules.

3. Charges and Payment. Monthly payments shall be made by the District to the Authority for actual costs incurred including hourly wages and benefits of the Authority employees, extra travel costs to and from the District, and other direct costs, including fees for professional services. The Authority shall invoice the District for any such services performed hereunder during the preceding thirty (30) day period, said invoice to be presented by the 25<sup>th</sup> day of the following month. Said invoice shall be itemized in such a manner that the District may determine the reasonableness of the charges submitted. The District shall pay the full amount of invoices received from the Authority by the tenth day of the month following receipt of any such invoice unless notice of protest or disagreement is given to the Authority within seven (7) business days after receipt of said invoice. Failure of the Authority and the District to agree upon payment of such invoice within thirty (30) days of protest shall be grounds for termination under Paragraph 4 unless the parties can otherwise agree in writing to a schedule of payment.

4. Terms of Agreement. The Term of this Agreement shall be for a 12-month period commencing as of the effective date of this Agreement, which shall be the later date that the District or the Authority executes this Agreement. This Agreement may be renewed upon expiration of the 12-month term of this Agreement by written agreement between the parties. Either the District or the Authority may terminate this agreement for any reason at any time upon ninety (90) days written notice of termination to the other party. Should the Authority or the District elect to terminate this Agreement, the District shall remain responsible for its share of any costs for which it is obligated that remain existing and unpaid as of the effective date of termination.

5. Indemnity. Neither the District nor the Authority shall be liable to the other for loss, either direct or consequential. All such claims for any and all loss, however caused, are hereby waived. Said absence of liability shall exist whether or not the damage, destruction, injury, or loss of life is caused by the negligence of either party or of any of their respective agents, servants, or employees. It is contemplated that each party shall look to its respective insurance carriers for reimbursement of any such loss. Neither party shall have any interest or claim in the other's insurance policy or policies, or the proceeds thereof, unless it is specifically covered therein as an additional insured. Nothing contained in this Agreement is intended by either party to create a partnership or joint venture, and any implication to the contrary is hereby expressly disavowed. It is understood and agreed that this Agreement does not create a joint enterprise, nor does it appoint any party as an agent of any other party, for any purpose whatsoever. It is understood and agreed that by execution of this Agreement, no governmental powers

or immunities are waived or surrendered by either the District or the Authority.

6. Independent Contractor. The Authority is, and shall perform this agreement as, an independent contractor, and as such, shall have and maintain complete control over all of its employees, subcontractors, agents, and operations. Neither the Authority nor anyone employed by it shall be, represent, act, purport to act or be deemed to be the agent, representative, subcontractor, employee, officer or servant of the District. No employee or agent of the District shall be, represent, act, or purport to act or be deemed to be the agent, representative, subcontractor, employee, officer, or servant of the Authority.

7. Surety Bond. Any officer, employee, or agent of the Authority who collects, pays, or handles any funds of the District shall furnish good and sufficient bond payable to the District in an amount determined by the District Board to safeguard the District. The bond shall be conditioned on the faithful performance of that person's duties and on accounting for all funds and property of the District. The bond shall be signed or endorsed by a surety company authorized to do business in Texas. The District Board hereby determines that the initial amount of each bond shall be set at \$50,000.00, and may alter the amount pursuant to a minute order or resolution adopted at a properly noticed meeting. The District Board shall provide the Authority with notice of any such alternative amount. The District shall reimburse the Authority for costs incurred in connection with providing administrative services to the District. Any such out-of-pocket costs exceeding \$2,500.00 per year shall require prior approval of the District Board. The Authority shall limit the collection, payment, or handling of District funds only to the officers, employees, and agents of the Authority who have been bonded in accordance with this paragraph.

8. No Third Party Rights. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the parties hereto, and all duties and responsibilities undertaken pursuant to this Agreement shall be for the sole and exclusive benefit of the parties hereto, and not for the benefit of any other party. There are no third party beneficiaries to this Agreement.

9. Assignment. This Agreement shall not be assignable except at the written consent of the Authority and the District hereto, and if so assigned, shall extend to and be binding upon the successors and assigns of the Authority and the District thereto.

10. Notices. All notices given under this agreement shall be deemed properly served if delivered in writing personally, or sent by certified mail to Mark Patterson, President, Red River Groundwater Conservation District, PO Box 1214, Sherman, TX 75091-1214, and to the Authority addressed to the President, Greater Texoma Utility Authority, 5100 Airport Drive, Denison, TX 75020-8448. Date of service of notice served by mail shall be the date on which such notice is deposited in a post office of the United States Postal Service. Either party may change their respective addresses for notice by providing notice of such address change in the aforesaid manner with specific reference to this Agreement.

11. Authority Financial Obligations. Nothing in this agreement shall be construed to require the Authority to expend funds from any source other than the revenues received hereunder. All costs



required by valid rules, regulations, laws, or orders passed or promulgated by the United States of America, the State of Texas, and regulatory or judicial branches thereof having lawful jurisdiction shall be the responsibility of the District.

12. Entire Agreement. This agreement embodies the entire understanding between the Authority and the District hereto relative to the subject matter hereof and shall not be modified, changed or altered in any respect except in writing signed by the Authority and the District.

13. Governing Law and Severability. This agreement shall be governed by the laws of the State of Texas and the venue in Grayson County, Texas. The provisions of this agreement shall be deemed to be severable and the invalidity of or inability to enforce other provisions hereof. In the event of a conflict between the terms of this Agreement and any exhibit attached hereto, the terms and conditions of this Agreement shall take precedence.

14. Interpretation. Although drawn by the Authority, this contract shall, in the event of any dispute over its meaning or application, be interpreted fairly and reasonably, and neither more strongly for or against either party. Captions and headings used in this Agreement are for reference purposes only and shall not be deemed a part of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused the signatures of their legally authorized representatives to be affixed hereto, having been duly approved by the respective governing bodies and effective on the last date of execution as set forth below.

GREATER TEXOMA UTILITY AUTHORITY  
5100 AIRPORT DRIVE  
DENISON TX 75020-8448

RED RIVER GCD  
PO BOX 1214  
SHERMAN TX 75091-1214

BY: \_\_\_\_\_  
President

BY: \_\_\_\_\_  
President

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

ATTEST:

ATTEST:

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

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

Exhibit "A"

Scope of Services

- I. Recording and Communication Services
  - Act as point of contact for well owners by answering questions regarding rules
  - Provide all postings for meetings and submit to county clerks
  - Provide notice postings in timely manner
  - Mail notices and rules as needed
  - Prepare agenda after consultation with President
  - Prepare and e-mail draft minutes to Board of Directors
  - Complete minutes after review by Board of Directors
  - Maintain website as needed
  - Establish and maintain paper and electronic filing system
  - Provide written communications to well owners, TWDB and others as needed
  - Draft correspondence for signature by designated persons
- II. Database Collection for Registered and Non-Registered Wells in the District
  - Work with chosen database development firm to create the well registration system for the District
  - Operate and maintain well registration website and map, which will depict wells in each District county
  - Work with well owners to register wells and collect well registration fees
  - Employ field technician to locate and verify wells in each District county
- III. Development of Personnel and Other Policies
  - Prepare and present drafts of personnel policies for review by appropriate committee and Board of Directors
  - Prepare and present drafts of operating procedures for future staff to follow
  - Assist Board of Directors in training personnel for District at appropriate time
- IV. Assistance for Rule Development
  - Assist Board of Directors in development of permanent rules
  - Assist Board of Directors in the development and implementation of a Management Plan
- V. Accounting
  - Provide accounting services including keeping financial records, issuing invoices, paying invoices, etc.
  - Prepare and present monthly financial statements
  - Assist Board of Directors with development of budget
  - Prepare and provide documentation for audit

### Approach to Provision of Services

- Staff is able to work diplomatically with well owners and others
- Use 800 number on all letterhead and other communication for calls to make contact easier for well owners
- Well-acquainted with TWDB staff
- Utilize assistance from Texas Alliance of Groundwater District members
- Coordinate District activities with GMA 8 activities
- Develop records and procedures in a manner that will make for easy transition when desired

### Estimated Cost of Services

The Authority is a public agency. The Board's approach to provision of services has always been to seek reimbursement for the costs of providing the services requested. These costs include:

- The salary and employer personnel costs (social security, worker's compensation insurance, retirement, and accounting, etc.)
- Mileage for travel required at the rate set annually by IRS
- Any direct expenses required to provide the services requested (telephone charges, copies, postage, and similar expenses directly associated with the project)
- The contract for services will not exceed \$115,000 for administration and accounting, and \$50,000 for the field technician without prior authorization from the Board of Directors
- Field personnel costs will be an expense of the District, which will include salary, benefits, transportation and other costs directly associated with verification of well and pumping information
- Billing Rates:
  - Administration – \$80 per hour
  - Project Coordinator - \$45 per hour
  - Secretary/Mapping Technician - \$37 per hour
  - Finance Officer - \$60 per hour
  - Accounting Assistant - \$38 per hour
  - Office Clerk - \$20 per hour
  - Field Technician - \$42 per hour
  - Operation Supervisor - \$52 per hour

ATTACHMENT 10



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 2, 2014

**SUBJECT:** AGENDA ITEM NO. 10

## CONSIDER AND ACT UPON 2013 DRAFT AGRICULTURAL IRRIGATION USE ESTIMATES

### ISSUE

2013 Draft Agricultural Irrigation Use Estimates

### BACKGROUND

Each year the Texas Water Development Board (TWDB) submits draft agricultural irrigation use estimates to the District and asks for confirmation and clarification if the District has better information.

### OPTIONS/ALTERNATIVES

The District could respond to the TWDB stating that these estimates appear to be adequate or that the District has no better information to be provided. Another possible alternative is to provide changes in the estimates provided by the TWDB.

### STAFF RECOMMENDATIONS

The staff does not have any specific information on the provided agricultural estimates. If the Board feels the estimates are too high or low, the Board can modify the estimates and provide them back to the TWDB.

### ATTACHMENTS

2013 Draft Agricultural Irrigation use Estimates

### **PREPARED AND SUBMITTED BY:**

A handwritten signature in blue ink, appearing to read "Drew Satterwhite", is written over a horizontal line.

Drew Satterwhite, P.E., General Manager



# Texas Water Development Board



P.O. Box 13231, 1700 N. Congress Ave.  
Austin, TX 78711-3231, [www.twdb.texas.gov](http://www.twdb.texas.gov)  
Phone (512) 463-7847, Fax (512) 475-2053

October 3, 2014

To: District Managers and Board Members

**Re: 2013 DRAFT Agricultural Irrigation Water Use Estimates**

The Texas Water Development Board (TWDB) staff developed a draft of the estimated irrigated acres and irrigation water use in each county for the 2013 crop season.

The draft of the 2013 irrigation water use estimates for your area of responsibility is enclosed for your review. Based on your local knowledge and expertise, **please provide revisions to the following:**

1. Irrigated acres, irrigation application rate, and irrigation water use for each crop;
2. Irrigation water use by source (groundwater, surface water, waste-water reuse);
3. Estimated county-average irrigation application efficiency.

TWDB staff compiles these draft numbers using various sources of information including historical use estimates, available weather data, certified irrigated acres from the U.S. Department of Agriculture – Farm Service Agency, and surface water diversions from the Texas Commission on Environmental Quality.

*\*Note: The irrigation water use estimates are meant to be reflective of actual use, not potential.*

Please return your revisions by **December 12, 2014**. If you have any questions about the enclosed estimates or need additional information, please feel free to contact me at (512)-936-6090 or Antonio Delgado at (512) 463-7984. Please direct emails to [AgConservation@twdb.texas.gov](mailto:AgConservation@twdb.texas.gov). Thank you in advance for helping us improve our annual irrigation water use estimates.

Sincerely,

Cameron G. Turner  
TWDB Agricultural Water Conservation

Enclosures: 2013 DRAFT Agricultural Irrigation Water Use Estimates

<p>Our Mission</p> <p>To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas</p>	<p>Board Members</p> <p>Carlos Rubinstein, Chairman   Bech Bruun, Member   Kathleen Jackson, Member</p> <p>Kevin Patteson, Executive Administrator</p>
---	--

**Texas Water Development Board  
2013 Draft Irrigation Water Use Estimates**

**Red River Groundwater Conservation District**

**FANNIN COUNTY**

*\*Note, these estimates are for crop year 2013, not 2014!*

Crop Number	Crop Name	Draft Acres	Draft Inches per Acre	Draft Acre-Feet
1	COTTON	0		0
2	SORGHUM	0		0
3	CORN	1,610	30	4,025
4	RICE	0		0
5	WHEAT	1,660	24	3,320
6	OTHER_GRAIN	0		0
7	FORAGE_HAY_PASTURE	1,280	28	2,987
8	PEANUTS	0		0
9	SOY_OIL	670	30	1,675
10	VINEYARD	0		0
11	ORCHARD	0		0
12	ALFALFA	0		0
13	SUGARCANE	0		0
14	VEGETABLES	0		0
15	OTHER	0		0
16	GOLF_COURSES	200	45	750
17	FAILED	0		0
<b>County Total</b>		<b>5,420</b>		<b>12,757</b>

Estimated county-wide  
average irrigation application  
efficiency percentage: 65%

Groundwater (Acre-Feet): 676  
Surface Water (Acre-Feet): 12,081  
Waste-Water Reuse (Acre-Feet): 0

Please review the draft 2013 irrigation water use estimates and provide any necessary revisions via email to [Agconservation@twdb.texas.gov](mailto:Agconservation@twdb.texas.gov), or mail to Texas Water Development Board, Attention: Ag Conservation, 1700 North Congress Avenue, P.O. Box 13231, Austin, TX 78711-3231 Direct calls to Cameron Turner (512-936-6090) or Antonio Delgado (512-463-7984).

**Texas Water Development Board  
2013 Draft Irrigation Water Use Estimates**

**Red River Groundwater Conservation District**

**GRAYSON COUNTY**

*\*Note, these estimates are for crop year 2013, not 2014!*

Crop Number	Crop Name	Draft Acres	Draft Inches per Acre	Draft Acre-Feet
1	COTTON	0		0
2	SORGHUM	0		0
3	CORN	0		0
4	RICE	0		0
5	WHEAT	0		0
6	OTHER_GRAIN	0		0
7	FORAGE_HAY_PASTURE	1,400	17	1,983
8	PEANUTS	0		0
9	SOY_OIL	0		0
10	VINEYARD	10	12	10
11	ORCHARD	0		0
12	ALFALFA	0		0
13	SUGARCANE	0		0
14	VEGETABLES	0		0
15	OTHER	700	23	1,342
16	GOLF_COURSES	350	28	817
17	FAILED	0		0
<b>County Total</b>		<b>2,460</b>		<b>4,152</b>

Estimated county-wide average irrigation application efficiency percentage: <u>75%</u>	Groundwater (Acre-Feet): <u>3,533</u>
	Surface Water (Acre-Feet): <u>619</u>
	Waste-Water Reuse (Acre-Feet): <u>0</u>

Please review the draft 2013 irrigation water use estimates and provide any necessary revisions via email to [Agconservation@twdb.texas.gov](mailto:Agconservation@twdb.texas.gov), or mail to Texas Water Development Board, Attention: Ag Conservation, 1700 North Congress Avenue, P.O. Box 13231, Austin, TX 78711-3231 Direct calls to Cameron Turner (512-936-6090) or Antonio Delgado (512-463-7984).



ATTACHMENT 11

RECEIVED  
DEC 02 2014  
BY: llgcn

# Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.  
Austin, TX 78711-3231, [www.twdb.texas.gov](http://www.twdb.texas.gov)  
Phone (512) 463-7847, Fax (512) 475-2053

November 21, 2014

Mr. William F. Mullican,  
on behalf of the groundwater conservation districts in Groundwater Management Area 8  
Mullican and Associates  
19212 Luedtke Lane  
Pflugerville, TX 78660

Re: Approval of the updated Northern Trinity and Woodbine Aquifers Groundwater Model as the Official Groundwater Availability Model for the Northern Trinity and Woodbine Aquifers

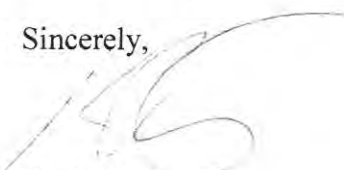
Dear Mr. Mullican,

I am approving the request, transmitted in your letter dated September 2, 2014, on behalf of districts in Groundwater Management Area 8, to designate the updated Northern Trinity and Woodbine Aquifers Groundwater Model as the official groundwater availability model of the Northern Trinity and Woodbine aquifers. This action is pursuant to the provisions of Texas Water Code Section 16.012 (1) and is based on our technical evaluation of the updated Northern Trinity and Woodbine Groundwater Model compared to the existing groundwater availability model (Trinity (northern portion) and Woodbine Aquifers Groundwater Availability Model). My staff has conducted this evaluation considering the technical requirements of joint planning and establishment of desired future conditions for the aquifers of Groundwater Management Area 8.

By copy of this letter I am also informing the groundwater conservation districts in Groundwater Management Area 8 and the regional water planning groups of this action.

Please contact Mr. Larry French of my staff at (512) 463-5067 if you have any questions.

Sincerely,

  
Kevin Patteson  
Executive Administrator

Our Mission	:	Board Members
To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas	:	Carlos Rubinstein, Chairman   Bech Bruun, Member   Kathleen Jackson, Member
	:	Kevin Patteson, Executive Administrator

ATTACHMENT 12



# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

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**DATE:** December 3, 2014

**SUBJECT:** AGENDA ITEM NO. 12

## CONSIDER AND DISCUSS THE NORTHERN TRINITY/WOODBINE AQUIFER GAM PREDICTIVE SIMULATIONS

### ISSUE

Consider and discuss the Northern Trinity/Woodbine Aquifer Groundwater Availability Model (NTGAM) Predictive Simulations

### BACKGROUND

On September 3<sup>rd</sup>, Intera distributed a memo that discussed the four (4) predictive simulations included with the original NTGAM Overhaul Project. At the October 2014 Board Meeting, LBG-Guyton presented this information to the board and also discussed the information that directly related the Red River Groundwater Conservation District (RRGCD).

At the November GMA-8 meeting, the district representatives directed Bill Mullican to hold a meeting where each district could send their technical consultants. This meeting was held on November 24<sup>th</sup> to discuss options for future predictive simulations. LBG-Guyton attended the meeting on behalf of RRGCD.

### CONSIDERATIONS

The technical consultants from all GMA-8 districts have met and discussed the options moving forward. The attached document summarizes the recommendations that resulted from the meeting.

### STAFF RECOMMENDATIONS

In concurrence with Sledge-Fancher and LBG Guyton, the district Staff recommends supporting the inputs on the attached simulations. These simulations will to assist the GMA-8 districts and stakeholders with gaining insight into the Trinity and Woodbine aquifers.

### ATTACHMENTS

Proposed GAM Runs

**PREPARED AND SUBMITTED BY:**

---

Drew Satterwhite, P.E., General Manager

December 3, 2014

To: GMA 8 District Representatives  
From: Bill Mullican, P.G., Mullican and Associates  
Subject: Recommended approach and GAM runs for evaluating potential desired future conditions (DFCs)

In an effort to help GMA-8 districts and stakeholders gain insight into the Trinity and Woodbine aquifers, and to understand and establish desired future conditions in GMA 8, the following standardized series of analyses are recommended. The intent is for these analyses to be performed and reported by the entity performing the simulations on behalf of GMA-8.

- Future results from GAM runs will be presented in a manner that documents the impacts to wells currently used to produce groundwater as best can be accomplished with data compiled for and utilized in the Northern Trinity and Woodbine Aquifer GAM data.
- Water budget information including recharge, discharge, lateral flow, and cross formational flow on an aquifer/county basis.
- Average changes in hydraulic head (drawdowns) on an aquifer/county basis.
- Remaining average vertical separation between potentiometric surface and the top of an aquifer on an aquifer/county basis.
- Average percentage of pre-development head (confined or unconfined) remaining on an aquifer/county basis for Run 5 only as defined below.
- Average annual change in average water levels (ft/year) for the last stress period of the predictive simulation on an aquifer/county basis.

This list is not meant to be inclusive of other types of analyses that individual GCDs may want to have performed by their hydrogeologist/consultant. Other

analyses may include presenting results in the context of a GCD monitoring network, compliance with DFCs and review of time series data (hydrographs).

The following predictive simulations are recommended for consideration by the GCD representatives for GMA 8. These recommendations were developed during a meeting of designated hydrogeological representatives held on November 24, 2014, at the INTERA, Inc., offices in Austin. Four additional predictive simulations, (GAM runs) are being recommended with the understanding that at any point during this effort, the need for additional GAM runs may be realized. To maintain continuity from GAM runs and scenarios already analyzed, the recommended GAM run reference IDs shall be maintained starting with GAM Run 5. (See INTERA, Inc., Technical Memorandum dated September 3, 2014). It is noted that results from GAM Run 2 (INTERA, Inc., 2014) did not yield practical results from a management perspective, and therefore additional analysis was performed using an alternative approach analyzed in order to better understand the concept of "Highest Practicable" pumping levels in the Northern Trinity and Woodbine aquifers in GMA 8.

- GAM Run 5 - As part of the Northern Trinity and Woodbine Aquifer GAM Project recently completed on September 1 and approved by the Texas Water Development Board on November 24, 2014, four GAM runs were executed to better understand multiple scenarios. Results from these four GAM runs and additional analyses were presented in INTERA, Inc., (2014), and subsequently distributed to all GMA 8 GCDs. These results were also presented during the GMA 8 meeting held in Cleburne, Texas on November 4, 2014. GAM Run 4 was a predictive simulation based on pumping levels and pumping locations established for 2010 throughout GMA 8. The recommendation is that pumping data utilized in GAM Run 4 (see INTERA, Inc. 2014) be further reviewed by each GCD in GMA 8 and necessary revisions made to pumping levels and locations and the model rerun utilizing any necessary revisions to pumping for 2010. Simulated 2070 results from this GAM run will then be analyzed and presented as discussed above. For future reference, GAM Run 5 will then also be referred to as the baseline predictive simulation.

- GAM Run 6 - will be a spanning set of simulations utilizing 70 percent, 130 percent, 160 percent, and 190 percent of the pumping levels utilized in GAM Run 5. Run 6 will have 4 independent simulations and the 2070 results will be processed and presented for each simulation.
- GAM Run 7 - will be a one-off analysis where 5,000 acre-feet of pumping will be added to each county, one by one, on a proportional basis consistent with the distribution of pumping by aquifer in Run 5. While the one county is modified, pumping in all other counties will be identical to GAM Run 5. Changes in water level decline and other outputs will be compared to Run 5 to provide insight into how changes in one county affect other counties. GAM Run 7 will contain one independent simulation for each county in the model.
- GAM Run 8 - will entail termination of all pumping in the predictive simulation at the beginning of the 50-year simulation to assess the response of the aquifers with no production. GAM Run 8 is a recommended predictive simulation strictly as an educational run to help GMA 8 participants understand the basic hydrodynamics of the aquifers in the system. Please note that this GAM run is not being recommended in any way as a potential management goal or strategy. It is simply to provide a better understanding of the practical realities of the Northern Trinity and Woodbine Aquifer system. It is also noted that other GAM runs, either previously executed or recommended in this memorandum, are also strictly for educational purposes.
- Additional GAM runs as necessary.

ATTACHMENT 14





# RED RIVER GROUNDWATER CONSERVATION DISTRICT AGENDA COMMUNICATION

---



**DATE:** December 2, 2014

**SUBJECT:** AGENDA ITEM NO. 14

## GENERAL MANAGER'S REPORT

### SUMMARY

The registered well information is attached for your information and use. All wells are drilled in the Woodbine, Trinity or Red River Alluvial aquifers.

### ATTACHMENTS

Well Registration Summary

**PREPARED AND SUBMITTED BY:**

A handwritten signature in blue ink, appearing to read "Drew Satterwhite", is written over a horizontal line.

Drew Satterwhite, P.E., General Manager

# Red River Groundwater Conservation District

## Well Registration Summary As of November 30, 2014

Well Type	Total Registered Fannin County	Total Registered Grayson County	September 2014	New Registrations
Domestic	56	97	147	6
Agriculture	7	20	27	0
Oil/Gas	0	17	17	0
Surface Impoundments	0	6	4	2
Commercial	3	2	5	0
Golf Course	0	14	14	0
Livestock	14	10	21	3
Irrigation	0	4	3	1
Public Water	54	209	263	0
<b>Total</b>	<b>134</b>	<b>379</b>	<b>501</b>	<b>12</b>

ADJOURN