APPENDIX I

Supporting Documentation

District Resolution

Notices of Public Meetings and Hearings

Coordination with Regions K and L

Coordination with Surface Water Entities

Coordination with GMAs 9 and 10

STATE OF TEXAS	§	
	§	**RESOLUTION #092712-01**
COUNTIES OF HAYS, TRAVIS	§	
AND CALDWELL	§	

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BARTON SPRINGS / EDWARDS AQUIFER CONSERVATION DISTRICT AUTHORIZING ADOPTION OF THE DISTRICT MANAGEMENT PLAN

WHEREAS, the Management Plan of the Barton Springs/Edwards Aquifer Conservation District (District), attached hereto as Attachment A, has been developed for the purpose of conserving, preserving, protecting, and recharging the aquifers in the District, and this action is taken under the District's statutory authority to prevent waste and protect rights of owners of interest in groundwater;

WHEREAS, the Management Plan meets the requirements of Texas Water Code § 36.1071 and § 36.1072 and 31 TAC § 356.5;

WHEREAS, the draft Management Plan was submitted for pre-review by the Texas Water Development Board, and has been revised to comport with the pre-review data and report provided by Texas Water Development Board staff;

WHEREAS, the proposed Management Plan was the subject of a public hearing before the Board of Directors of the District on July 26, 2012; and

WHEREAS, under no circumstances and in no particular case, will this Management Plan, or any part of it, be construed as a limitation or restriction upon the exercise of any discretion where such exists; nor will it in any event be construed to deprive the Board of an exercise of powers, duties and jurisdiction conferred by law, nor to limit or restrict the amount and character of data or information which may be required for the proper administration of the law:

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District that:

1) The "Management Plan of the Barton Springs/Edwards Aquifer Conservation District" contained in attachment A is hereby adopted;

2) This Management Plan will take effect upon approval by the Texas Water Development Board. It will remain in effect until a revised District Management Plan is adopted and approved, or December, 2017, whichever is earlier.

AND IT IS SO ORDERED.

In Favor 5 Opposed 0

PASSED AND APPROVED THIS _____ DAY OF SEPTEMBER 2012.

Mary Stone

Mary Stone, President

ATTEST:

Craig Smith

Craig Smith, Secretary

TRV 201180021
2 PGS

NOTICE OF OPEN MEETING

Notice is given that a **Special Called Meeting and Work Session** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held at the District office, located at 1124 Regal Row, Austin, Texas, on **Saturday, January 15, 2011, commencing at 9:00 a.m.** for the following purposes:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. Call to Order.

2. Citizens Communications.

3. Work Session.

   The Board will recess into a Work Session for reviewing and assessing the FY 2010 performance of the District as to the goals, objectives and performance standards in the current District Management Plan, and for identifying possible needed changes to the District Management Plan for the future. Note: The Work Session is open to the public but there will not be opportunity for further public participation in this session.

4. Discussion and possible action related to approving the performance of the District as to the goals, objectives and performance standards in the current District Management Plan, for incorporation into the District's 2010 Annual Report. Note: This item will be taken up immediately after the Work Session in Item 3 above.

5. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Travis County, Texas, on this, the 6th day of January, 2011, at 1:36 pm

SEAL OF COUNTY CLERK ★ TRAVIS COUNTY, TEXAS ★ T E X A S

Deputy Clerk
D. DAVIS Travis County, TEXAS

Please note:

This agenda and available related documentation has been posted on our website, www.hsecad.org. The District Management Plan is also posted on the website.

The Barton Springs/Edwards Aquifer is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

Tammy Raymond

From: liaison@sos.state.tx.us
Sent: Thursday, January 06, 2011 4:09 PM
To: Tammy Raymond
Subject: S.O.S. Acknowledgment of Receipt

Agency: Barton Springs/Edwards Aquifer Conservation District
Liaison: Tammy Raymond

Acknowledgment of Receipt

The Office of the Secretary of State has posted notice of the following meeting:

Meeting Information:
Barton Springs Edwards Aquifer Conservation District
01/15/2011 09:00 AM "TRD# 2011000147"
Notice posted: 01/06/11 04:08 PM
Proofread your current open meeting notice at:

http://info.sos.state.tx.us/pls/pub/pubomquery$omquery.queryTRD?p_trd=2011000147

Open Meeting Submission

Success!

Row inserted

TRD:	2011000147
Date Posted:	01/06/2011
Status:	Accepted
Agency Id:	0775
Date of Submission:	01/06/2011
Agency Name:	Barton Springs/Edwards Aquifer Conservation District
Board:	Barton Springs Edwards Aquifer Conservation District
Liaison Id:	7
Date of Meeting:	01/15/2011
Time of Meeting:	09:00 AM **(##:## AM Local Time)**
Street Location:	1124 Regal Row
City Location:	Austin
State Location:	TX
Liaison Name:	Tammy Raymond
Additional Information Obtained From:	Kirk Holland
Agenda:	Notice is given that a Special Called Meeting and Work Session of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held at the District office, located at 1124 Regal Row, Austin, Texas, on Saturday, January 15, 2011, commencing at 9:00 a.m. for the following purposes: Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

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New

NOTICE OF PUBLIC HEARING

Notice is given that the Barton Springs/Edwards Aquifer Conservation District Board of Directors will hold a public hearing on proposed revisions to its Management Plan at its regularly scheduled meeting on Thursday, July 26, 2012, at the District office, 1124 Regal Row, Austin, TX 78748. The public hearing will begin about but no earlier than 6:30 pm.

The revisions to the Management Plan address changes in response to new statutory requirements; changes to incorporate new planning data and to achieve and maintain the Desired Future Conditions of the District's aquifers; and changes to effect operational efficiencies and other improvements, including improved performance metrics. A copy of the revised and proposed Management Plan is available for inspection at the District office and may be downloaded and copied from the District's website at www.bseacd.org.

Came to hand and posted on a Bulletin Board in the Travis County, Texas, on this, the 13th day of July 2012, at 3:58 p.m.

SEAL OF COUNTY COURT TRAVIS COUNTY, TEXAS

K. Haywood Deputy Clerk

K. HAYWOOD Travis County, TEXAS

Please note:

The Barton Springs/Edwards Aquifer Conservation District is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

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Came to hand and posted on a Bulletin Board in the Courthouse, Hays County, Texas, on this, the_____ day of _____ 2012, at _____ p.m.

_____, Deputy Clerk

Hays County, TEXAS

Please note:

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Came to hand and posted on a Bulletin Board in the Courthouse, Caldwell County, Texas, on this, the ___ day of _____ 2012, at _____ p.m.

_____, Deputy Clerk

Caldwell County,

TEXAS

Please note:

The Barton Springs/Edwards Aquifer Conservation District is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

FILED this 13th day of July 2012
10:10 a. M
CAROL HOLCOMB
COUNTY CLERK, CALDWELL COUNTY, TEXAS
By Kathleen Reeves Deputy

Austin American-Statesman

PO#:
Ad ID#: **5403222**
Acct#: **5122828441**
Account Name: **BARTON S**

BARTON SPRINGS EDWARDS
1124 REGAL ROW #A
AQUIFER CONS DIST STE F
AUSTIN, TX 78748
Attn: Tammy Raymond

Public Hearing
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A copy of the revised and proposed Management Plan is available for inspection at the District office and may be downloaded and copied from the District's website at www.bseacd.org.

AFFIDAVIT OF PUBLICATION

THE STATE OF TEXAS
COUNTY OF TRAVIS

Before me, the undersigned authority, a Notary Public in and for the County of Travis, State of Texas, on this day personally appeared:

Sharry Fowler

Advertising Agent of the Austin American-Statesman, a daily newspaper published in said County and State that is generally circulated in Bastrop, Bell, Blanco, Brazos, Burleson, Burnet, Caldwell, Colorado, Comal, Coryell, Fayette, Gillespie, Gonzales, Guadalupe, Hays, Kerr, Lampasas, Lee, Llano, Milam, Nueces, San Saba, Travis, Washington, and Williamson Counties, who being duly sworn by me, states that the attached advertisement was published at the lowest published rate for Classified advertising in said newspaper on the following date(s), to wit:

First Published:	**7/16/2012**	Last Published:	**7/16/2012**
Times Published:	**1**	Classification:	**Legal Notices (9980)**
Lines:	**22**	Cost:	**$210.56**

and that the attached is a true copy of said advertisement.

SWORN AND SUBSCRIBED TO BEFORE ME, this the 16 day of July, 2012

SARA STARICHA SMITH
My Commission Expires
November 5, 2015

Notary Public in and for
TRAVIS COUNTY, TEXAS

Austin American-Statesman
305 South Congress Ave., P.O. Box 670, Austin, Texas 78767-0670 512-445-3832

Monday, July 16, 2012 8:38 AM

Hays Free Press

109 West Center Street § 122 N. Main St.
P.O. Box 2530 • Kyle, Texas 78640 § P.O. Box 339 • Buda, Texas 78610

(512) 262-NEWS (Kyle office) • (512) 295-9760 (Buda office) • (512) 268-0262 (fax)

State of Texas §
County of Hays §

Affidavit of Publication

My name is Cyndy Slovak-Barton, and I am Publisher of the Hays Free Press. I am over the age of 18, have personal knowledge of the facts stated herein, and am otherwise competent to make this affidavit.

The Hays Free Press is a legal newspaper publication under Texas law, headquartered and regularly published in Hays County, Texas. It is a newspaper of general circulation, and is generally circulated in Hays, Travis, and Caldwell Counties.

The attachment hereto was published in the Hays Free Press on the following dates at or below the classified legals rate:

July 18, 2012,

_____,

_____,

_____,

Cyndy Slovak-Barton, Co-Publisher
Hays Free Press

Subscribed and sworn before me this the 20 day of July, 2012.

Notary Public
Connie Brewer

CONNIE E. BREWER
NOTARY PUBLIC STATE OF TEXAS
COMMISSION EXPIRES:
10-22-2012

...nty Purchasing Office, ...uth Stagecoach Trail, Suite ...San Marcos, TX 78666.

To submit Proposals for this Contract, prospective bidder shall, on Tuesday, July 17, 2012, meet the following requirements: 1) be qualified via "Full Participation" or "Bidder's Questionnaire" by the Texas Department of Transportation (TxDOT) for bidding on State projects or within the 90 day grace period for the preparation of a new qualification statement, or have submitted the Bidder's Questionnaire or the Confidential Questionnaire and have it on file with TxDOT at least 10 days before the date proposals are to be opened; (2) be registered with the State of Texas; and (3) provide suitable evidence of prior experience for similar work and be able to provide written documentation of successfully completed similar contracts.

Plans, Specifications, and Bidding documents for pre-qualified bidders and interested non-bidders may be secured from CivCast's website (www.civcastusa.com) beginning Monday, June 25, 2012. To receive the official Bid Form, contact Cindy Malorka at 512-393-2273 or cindym@co.hays.tx.us.

Bid security in the amount not less than five percent (5%) of the total amount of the bid, issued by an acceptable surety company or in the form of a certified or cashier's check, must accompany each bid as a guarantee that the successful bidder will enter into a proper contract and execute bonds and guaranties within ten (10) days after the date contract documents are received by the awarded contractor. Performance and Payment Bonds will be required as stated in the bidding documents.

Hays County is an Affirmative Action/Equal Opportunity Employer.

Any bid may be withdrawn prior to the above scheduled time for the opening of the bids or authorized postponement thereof. Any bid received after the time and date specified shall not be accepted.

Issued by order of the Hays County Commissioners Court on Tuesday, May 22, 2012.

PUBLIC HEARING

The Barton Springs/Edwards Aquifer Conservation District Board of Directors will hold a Public Hearing in its regularly scheduled meeting on **Thursday, July 26, 2012**, at 1124 Regal Row, Austin, TX 78748. The Board Meeting will commence at 6:00 p.m., and the Public Hearing will begin shortly thereafter.

The Public Hearing concerns the District's proposed fiscal year 2013 Annual Budget, and the proposed 2013 District Fee Schedule. At the conclusion of this Public Hearing the Board may approve the fiscal year 2013 Fee Schedule by resolution and the fiscal year 2013 budget.

The proposed budget and fee schedule are available for inspection and copying in the District office at 1124 Regal Row, Austin, TX 78748. For more information about these items, please contact the District at (512) 282-8441.

Management Plan

PUBLIC HEARING

Notice is given that the Barton Springs/Edwards Aquifer Conservation District Board of Directors will hold a public hearing on proposed revisions to its Management Plan at its regularly scheduled meeting on Thursday, July 26, 2012, at the District office, 1124 Regal Row, Austin, TX 78748. The public hearing will begin about but no earlier than 6:30 p.m.

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NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting and two Public Hearings** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office,** 1124 Regal Row, Austin, TX, on **Thursday, July 26, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. Call to Order.

2. Citizen Communications (Public Comments of a General Nature).

3. Routine Business.

a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as an item of Regular Business.

1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

2. Approval of minutes from the Board's July 12, 2012, Regular Meeting.

3. Approval of purchasing a down-hole camera using up to $12,500 in FY 2012-budgeted funds, in lieu of $9,000 of FY 2013-budgeted funds as now proposed.

4. Approval of issuing a letter of intent to join with other GCDs in GMA 9 in participating in jointly contracted studies related to DFC monitoring, with financial participation of $1000 in FY 2012-budgeted funds and up to $1500 in proposed FY 2013-budgeted funds.

5. Approval of modifying the currently proposed FY 2013 Budget before adoption by: reducing the Regulatory Compliance Team expenses by $9,000 for the included down-hole camera cost, now to be expensed in FY 2012 (item 3 above); increasing the General Management Team expenses by up to $2,000 for actual GMA-related contractual expenses associated with DFC monitoring (item 4 above); and moving the balance of $7,000 as a transfer from the operational budget into reserves.

b. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

   i. Personnel matters and utilization;
   ii. Upcoming public events of possible interest;
   iii. Aquifer conditions and status of drought indicators.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as an item for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

   i. Review of Status Update Report – at Directors' discretion.
   ii. Update on activities of GMA 9 and GMA 10.
   iii. Update on coordination with TDS and possibly other parties concerning saline zone investigations.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Public Hearings.

a. The Board will hold a public hearing on the Proposed FY 2013 Budget and Proposed FY 2013 Fee Schedule. At the conclusion of the public hearing, the Board may take action to approve and adopt the Proposed FY 2013 Budget and to approve by resolution the Proposed FY 2013 Fee Schedule. **(6:05 p.m.)**

b. The Board will hold a public hearing on the Proposed District Management Plan. **(6:30 p.m.)**

5. **Board Discussion and Possible Action.**

a. Discussion and possible action related to the application submitted by the DDC Creekside Villas, Ltd. for a Class C Conditional Production Permit to withdraw an annual permitted volume of approximately 1,998,200 gallons per year of groundwater from an existing water well producing from the freshwater Edwards Aquifer. DDC Creekside Villas, Ltd. will operate the well, located at 590 FM 967, Buda, TX, as an irrigation well, providing water only for landscape irrigation of grass, shrubs, bushes and trees during non-drought conditions.

b. Discussion and possible action on approving the resolution adopting the Proposed FY 2013 Fee Schedule, as revised if warranted.

c. Discussion and possible action on revising, approving and adopting the Proposed FY 2013 Budget as the Annual Budget for FY 2013.

6. **Adjournment.**

Came to hand and posted on a Bulletin Board in the Courthouse, Travis County, Texas, on this, the 19th day of July, 2012, at 12:45P.m.

_____, Deputy Clerk

Travis County, TEXAS

Please note:

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SEAL OF COUNTY COURT ☆ TRAVIS COUNTY, TEXAS ☆

Came to hand and posted on a Bulletin Board in the Courthouse, Austin, Travis County, Texas on this the 19th day of July, 2012

Dana DeBeauvoir
County Clerk, Travis County, Texas

By _____ Deputy

Y. CORTEZ

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Dana DeBeauvoir

Jul 19, 2012 12:35 PM 201281614

CORTEZ: $3.00

Dana DeBeauvoir, County Clerk

Travis County TEXAS

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b. Discussion and possible action on approving the resolution adopting the Proposed FY 2013 Fee Schedule, as revised if warranted.

c. Discussion and possible action on revising, approving and adopting the Proposed FY 2013 Budget as the Annual Budget for FY 2013.

6. **Adjournment.**

Came to hand and posted on a Bulletin Board in the Courthouse, Hays County, Texas, on this, the _____day of July, 2012, at_____ .m.

_____, Deputy Clerk

Hays County, TEXAS

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FILED this 19th day of July 2012
4:20 P.M
CAROL HOLCOMB
COUNTY CLERK, CALDWELL COUNTY, TEXAS
By Kristina Reyes Deputy

NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting and two Public Hearings** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office**, 1124 Regal Row, Austin, TX, on **Thursday, July 26, 2012**, commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

> Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as an item of Regular Business.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's July 12, 2012, Regular Meeting.

      3. Approval of purchasing a down-hole camera using up to $12,500 in FY 2012-budgeted funds, in lieu of $9,000 of FY 2013-budgeted funds as now proposed.

      4. Approval of issuing a letter of intent to join with other GCDs in GMA 9 in participating in jointly contracted studies related to DFC monitoring, with financial participation of $1000 in FY 2012-budgeted funds and up to $1500 in proposed FY 2013-budgeted funds.

      5. Approval of modifying the currently proposed FY 2013 Budget before adoption by: reducing the Regulatory Compliance Team expenses by $9,000 for the included down-hole camera cost, now to be expensed in FY 2012 (item 3 above); increasing the General Management Team expenses by up to $2,000 for actual GMA-related contractual expenses associated with DFC monitoring (item 4 above); and moving the balance of $7,000 as a transfer from the operational budget into reserves.

   b. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will

not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

   i. Personnel matters and utilization;
   ii. Upcoming public events of possible interest;
   iii. Aquifer conditions and status of drought indicators.

J.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as anitem for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

   i. Review of Status Update Report – at Directors' discretion.
   ii. Update on activities of GMA 9 and GMA 10.
   iii. Update on coordination with TDS and possibly other parties concerning saline zone investigations.

c. Directors' Reports. Note. Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Public Hearings.

a. The Board will hold a public hearing on the Proposed FY 2013 Budget and Proposed FY 2013 Fee Schedule. At the conclusion of the public hearing, the Board may take action to approve and adopt the Proposed FY 2013 Budget and to approve by resolution the Proposed FY 2013 Fee Schedule. **(6:05 p.m.)**

b. The Board will hold a public hearing on the Proposed District Management Plan. **(6:30 p.m.)**

5. Board Discussion and Possible Action.

a. Discussion and possible action related to the application submitted by the DDC Creekside Villas, Ltd. for a Class C Conditional Production Permit to withdraw an annual permitted volume of approximately 1,998,200 gallons per year of groundwater from an existingwater well producing from the freshwater Edwards Aquifer. DDC Creekside Villas, Ltd. will operate the well, located at 590 FM 967, Buda, TX, as an irrigation well, providing water only for landscape irrigation of grass, shrubs, bushes and trees during non-drought conditions.

b. Discussion and possible action on approving the resolution adopting the Proposed FY 2013 Fee Schedule, as revised if warranted.

c. Discussion and possible action on revising, approving and adopting the Proposed FY 2013 Budget as the Annual Budget for FY 2013.

6. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Caldwell County, Texas, on this the ________ day of July, 2012, at________ .m.

______________________________, Deputy Clerk

Caldwell County, TEXAS

Please note:

This agenda and available related documentation [illegible] posted on our website, [illegible]. If you have a special interest in a particular item on this agenda and would like any additional documentation that may be developed for Board consideration, please let staff know at least 24 hours in advance of the Board Meeting so that we can have those copies made for you.

The Barton Springs/Edwards Aquifer Conservation District is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office**, 1124 Regal Row, Austin, TX, on **Thursday, September 13, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's August 23, 2012, Regular Meeting.

      3. Approval and setting of new dates for the November 2012 and December 2012 Regular Meetings of the Board.

      4. Approval of sponsorship of the Austin Youth River Watch's 20th Anniversary Celebration and selection of the desired sponsorship level within existing FY 2013 budget.

      5. Approval of a small, fixed-price contract with former intern Richard Casteel to complete the grant project report titled "Evaluating the Hydrologic Connection of the Blanco River and Barton Springs Using Discharge and Geochemical Data."

   a. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

      1. Standing Topics.

i. Personnel matters and utilization;
ii. Upcoming public events of possible interest;
iii. Aquifer conditions and status of drought indicators.

1.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as anitem for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

i. Review of recent activities of staff and teams.
ii. Update on recent permitting and non-drought regulatory activities.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Board Discussion and Possible Action.

a. Discussion and possible action related to the November 6, 2012, director elections including amending the order calling the general election on November 6, 2012, for Directors of Precinct 1, 3 & 4; approving election services contracts and joint election agreements; approving election day polling places; approving location, dates and times of early voting; and, any other action necessary for the November 6, 2012, general election.

b. Discussion and possible action related to establishing the FY 2013 District goals and objectives and approving the FY 2013 goals and objectives for the General Manager.

c. Discussion and possible action related to planned saline zone investigations and initiatives, including engaging a drilling contractor for minor well rehabilitation and/or sampling.

d. Discussion and possible action related to comments received from TWDB on the proposed revisions to the District Management Plan and authorizing a course of action.

e. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District.*

5. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Hays County, Texas, on this, the _____ day of September, 2012, at_____ .m.

_____, Deputy Clerk

Hays County, TEXAS

Please note:

This agenda and available related documentation have been posted on our website, www.bseacd.org. If you have a special interest in a particular item on this agenda and would like any additional documentation that may be developed for Board consideration, please let staff know at least 24 hours in advance of the Board Meeting so that we can have those copies made for you.

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NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office**, 1124 Regal Row, Austin, TX, on **Thursday, September 13, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's August 23, 2012, Regular Meeting.

      3. Approval and setting of new dates for the November 2012 and December 2012 Regular Meetings of the Board.

      4. Approval of sponsorship of the Austin Youth River Watch's 20th Anniversary Celebration and selection of the desired sponsorship level within existing FY 2013 budget.

      5. Approval of a small, fixed-price contract with former intern Richard Casteel to complete the grant project report titled "Evaluating the Hydrologic Connection of the Blanco River and Barton Springs Using Discharge and Geochemical Data."

   b. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

   i. Personnel matters and utilization;
   ii. Upcoming public events of possible interest;
   iii. Aquifer conditions and status of drought indicators.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as an item for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

   i. Review of recent activities of staff and teams.
   ii. Update on recent permitting and non-drought regulatory activities.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Board Discussion and Possible Action.

a. Discussion and possible action related to the November 6, 2012, director elections including amending the order calling the general election on November 6, 2012, for Directors of Precinct 1, 3 & 4; approving election services contracts and joint election agreements; approving election day polling places; approving location, dates and times of early voting; and, any other action necessary for the November 6, 2012, general election.

b. Discussion and possible action related to establishing the FY 2013 District goals and objectives and approving the FY 2013 goals and objectives for the General Manager.

c. Discussion and possible action related to planned saline zone investigations and initiatives, including engaging a drilling contractor for minor well rehabilitation and/or sampling.

d. Discussion and possible action related to comments received from TWDB on the proposed revisions to the District Management Plan and authorizing a course of action.

e. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District.*

5. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Travis County, Texas, on the 6 day of September, 2012, at 1:18 p.m.

Michael P Gonzales, Deputy Clerk
MICHAEL P. GONZALES Travis County, TEXAS

Please note:

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FILED AND RECORDED
OFFICIAL PUBLIC RECORDS
Dana DeBeauvoir
Sep 06, 2012 01:18 PM 201282028
GONZALESM: $3.00
Dana DeBeauvoir, County Clerk
Travis County TEXAS

NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in the District office, 1124 Regal Row, Austin, TX, on **Thursday, September 13, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's August 23, 2012, Regular Meeting.

      3. Approval and setting of new dates for the November 2012 and December 2012 Regular Meetings of the Board.

      4. Approval of sponsorship of the Austin Youth River Watch's 20th Anniversary Celebration and selection of the desired sponsorship level within existing FY 2013 budget.

      5. Approval of a small, fixed-price contract with former intern Richard Casteel to complete the grant project report titled "Evaluating the Hydrologic Connection of the Blanco River and Barton Springs Using Discharge and Geochemical Data."

   a. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

      1. Standing Topics.

FILED this 7th day of Sep. 2012
9:50 a.M
CAROL HOLCOMB
COUNTY CLERK, CALDWELL COUNTY, TEXAS
By Katrena Reyna Deputy

i. Personnel matters and utilization;
ii. Upcoming public events of possible interest;
iii. Aquifer conditions and status of drought indicators.

1.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as anitem for possible action. A Director may request an indlvidual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

i. Review of recent activities of staff and teams.
ii. Update on recent permitting and non-drought regulatory activities.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

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- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Board Discussion and Possible Action.

a. Discussion and possible action related to the November 6, 2012, director elections including amending the order calling the general election on November 6, 2012, for Directors of Precinct 1, 3 & 4; approving election services contracts and joint election agreements; approving election day polling places; approving location, dates and times of early voting; and, any other action necessary for the November 6, 2012, general election.

b. Discussion and possible action related to establishing the FY 2013 District goals and objectives and approving the FY 2013 goals and objectives for the General Manager.

c. Discussion and possible action related to planned saline zone investigations and initiatives, including engaging a drilling contractor for minor well rehabilitation and/or sampling.

d. Discussion and possible action related to comments received from TWDB on the proposed revisions to the District Management Plan and authorizing a course of action.

e. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District.*

5. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Caldwell County, Texas, on this, the _____ day of September, 2012, at_____ .m.

_____, Deputy Clerk

Caldwell County, TEXAS

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NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office**, 1124 Regal Row, Austin, TX, on **Thursday, September 27, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. Call to Order.

2. Citizen Communications (Public Comments of a General Nature).

3. Routine Business.

a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

2. Approval of minutes from the Board's September 13, 2012, Regular Meeting.

3. Approval of issuing the earned Conservation Credits to permittees for FY 2012.

4. Review and approval of FY 2012 financial performance reports: Actual Receipts and Expenses vs. Budgeted Amounts, and EoY Balance Sheet.

5. Approval of amendments to the District's Purchasing Policy related to authorizations by the new Assistant General Manager position.

6. Re-designation of Brian Hunt as the District Representative on the GMA 9 Joint Planning Committee, and the designation of John Dupnik as the District Representative on the GMA 10 Joint Planning Committee, replacing the GM on that Committee.

7. Approval of the date, time, and place for the District's Holiday Party.

8. Approval of a task order to Dave Anderson d/b/a FormYourPlanet, for stakeholder engagement and coordination consulting services in support of the District HCP process, using budgeted funds.

b. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

   i. Personnel matters and utilization;
   ii. Upcoming public events of possible interest;
   iii. Aquifer conditions and status of drought indicators.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as an item for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

   i. Review of Status Update Report – at directors' discretion.
   ii. Update on GMA 9 and GMA 10 activities.
   iii. Update on the status of the Jeremiah Venture's contested Texas Land Application Permit application.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. Public Hearing.

The Board will hold a public hearing on proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections. **(6:05 p.m.)**

5. Board Discussion and Possible Action.

a. Discussion and possible action related to approving the proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections.

b. Discussion and possible action related to approving minor revisions made to the proposed Management Plan in response to comments provided by the TWDB, and then adoption of the proposed District Management Plan and direction to the general manager to transmit the adopted plan to GMA 9 and 10 GCDs for acknowledgement and then to the TWDB for approval.

c. Discussion and possible action related to the November 6, 2012, director elections including: approval of joint election agreements and election services contracts with Hays, Caldwell and Travis Counties; approval of election day polling places; approval of locations, dates and times of early voting; ratification of Board President's actions on election matters since September 13, 2012 Board meeting, adopting orders or amendments to prior Board orders in connection with the election; and, any other action necessary for the November 6, 2012, director elections.

d. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District.*

6. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Hays County, Texas, on this, the _____ day of September, 2012, at_____ .m.

_____, Deputy Clerk

Hays County, TEXAS

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ORIGINAL
FILED FOR RECORD

NOTICE OF OPEN MEETING

Notice is given that a **Regular Meeting** of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in **the District office,** 1124 Regal Row, Austin, TX, on **Thursday, September 27, 2012,** commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's September 13, 2012, Regular Meeting.

      3. Approval of issuing the earned Conservation Credits to permittees for FY 2012.

      4. Review and approval of FY 2012 financial performance reports: Actual Receipts and Expenses vs. Budgeted Amounts, and EoY Balance Sheet.

      5. Approval of amendments to the District's Purchasing Policy related to authorizations by the new Assistant General Manager position.

      6. Re-designation of Brian Hunt as the District Representative on the GMA 9 Joint Planning Committee, and the designation of John Dupnik as the District Representative on the GMA 10 Joint Planning Committee, replacing the GM on that Committee.

      7. Approval of the date, time, and place for the District's Holiday Party.

8. Approval of a task order to Dave Anderson d/b/a FormYourPlanet, for stakeholder engagement and coordination consulting services in support of the District HCP process, using budgeted funds.

b. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

   i. Personnel matters and utilization;
   ii. Upcoming public events of possible interest;
   iii. Aquifer conditions and status of drought indicators.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as an item for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

   i. Review of Status Update Report – at directors' discretion.
   ii. Update on GMA 9 and GMA 10 activities.
   iii. Update on the status of the Jeremiah Venture's contested Texas Land Application Permit application.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. **Public Hearing.**

The Board will hold a public hearing on proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections. **(6:05 p.m.)**

5. **Board Discussion and Possible Action.**

a. Discussion and possible action related to approving the proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections.

b. Discussion and possible action related to approving minor revisions made to the proposed Management Plan in response to comments provided by the TWDB, and then adoption of the proposed District Management Plan and direction to the general manager to transmit the adopted plan to GMA 9 and 10 GCDs for acknowledgement and then to the TWDB for approval.

c. Discussion and possible action related to the November 6, 2012, director elections including: approval of joint election agreements and election services contracts with Hays, Caldwell and Travis Counties; approval of election day polling places; approval of locations, dates and times of early voting; ratification of Board President's actions on election matters since September 13, 2012 Board meeting, adopting orders or amendments to prior Board orders in connection with the election; and, any other action necessary for the November 6, 2012, director elections.

d. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District*.

6. **Adjournment.**

Came to hand and posted on a Bulletin Board in the Courthouse, Travis County, Texas, on this, the 20 day of September, 2012, at 1:38 p.m.

Michael P. Gonzales, Deputy Clerk
MICHAEL P. GONZALES
Travis County, TEXAS

Please note:

This agenda and available related documentation have been posted on our website, www.bseacd.org. If you have a special interest in a particular item on this agenda and would like any additional documentation that may be developed for Board consideration, please let staff know at least 24 hours in advance of the Board Meeting so that we can have those copies made for you.

The Barton Springs/Edwards Aquifer Conservation District is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal opportunity for effective communications will be provided upon request. Please contact the District office at 512-282-8441 at least 24 hours in advance if accommodation is needed.

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS
Dana DeBeauvoir
Sep 20, 2012 01:38 PM 201282169
GONZALESM: $3.00
Dana DeBeauvoir, County Clerk
Travis County TEXAS

NOTICE OF OPEN MEETING

Notice is given that a Regular Meeting of the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District will be held in the District office, 1124 Regal Row, Austin, TX, on **Thursday, September 27, 2012**, commencing at **6:00 p.m.** for the following purposes, which may be taken in any order at the discretion of the Board:

Note: The Board of Directors of the Barton Springs/Edwards Aquifer Conservation District reserves the right to adjourn into Executive Session at any time during the course of this meeting to discuss any of the matters listed on this agenda, as authorized by the Texas Government Code Sections §551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), 551.087 (Economic Development) 418.183 (Homeland Security). No final action or decision will be made in Executive Session.

1. **Call to Order.**

2. **Citizen Communications (Public Comments of a General Nature).**

3. **Routine Business.**

   a. Consent Agenda. Note: These items may be considered and approved as one motion. Directors or citizens may request any consent item be removed from the consent agenda, for consideration and possible approval as a separate item of Regular Business on this agenda.

      1. Approval of Financial Reports under the Public Funds Investment Act, Directors' Compensation Claims, and Specified Expenditures greater than $5,000.

      2. Approval of minutes from the Board's September 13, 2012, Regular Meeting.

      3. Approval of issuing the earned Conservation Credits to permittees for FY 2012.

      4. Review and approval of FY 2012 financial performance reports: Actual Receipts and Expenses vs. Budgeted Amounts, and EoY Balance Sheet.

      5. Approval of amendments to the District's Purchasing Policy related to authorizations by the new Assistant General Manager position.

      6. Re-designation of Brian Hunt as the District Representative on the GMA 9 Joint Planning Committee, and the designation of John Dupnik as the District Representative on the GMA 10 Joint Planning Committee, replacing the GM on that Committee.

      7. Approval of the date, time, and place for the District's Holiday Party.

FILED this 20th day of Sep. 2012
3:30 P.M
CAROL HOLCOMB
COUNTY CLERK, CALDWELL COUNTY, TEXAS
By Katrena Klepna Deputy

8. Approval of a task order to Dave Anderson d/b/a FormYourPlanet, for stakeholder engagement and coordination consulting services in support of the District HCP process, using budgeted funds.

a. General Manager's Report. Note: Topics discussed in the General Manager's Report are intended for general administrative and operational information-transfer purposes. The Directors will not take any action on them in this meeting, unless the topic is specifically listed elsewhere in this as-posted agenda.

1. Standing Topics.

i. Personnel matters and utilization;
ii. Upcoming public events of possible interest;
iii. Aquifer conditions and status of drought indicators.

1.

2. Discussion related to current staff work areas and specific activities of staff teams and directors. Note: Individual topics listed below may be discussed by the Board in this meeting, but no action will be taken unless a topic is specifically posted elsewhere in this agenda as anitem for possible action. A Director may request an individual topic that is presented only under this agenda item be placed on the posted agenda of some future meeting for Board discussion and possible action.

i. Review of Status Update Report – at directors' discretion.
ii. Update on GMA 9 and GMA 10 activities.
iii. Update on the status of the Jeremiah Venture's contested Texas Land Application Permit application.

c. Directors' Reports. Note: Board Member comments in this part of the agenda cannot address any aspect of an agenda item posted elsewhere on this agenda, and no substantive discussion among the Board Members or action by the Board on these comments will be allowed in this meeting.

Individual Board Members may, on a voluntary basis, make a brief report to the entire Board on their personal involvement in activities and dialogue that are of likely interest to the rest of the Board, in one or more of the following topical areas:

- Meetings and conferences attended or that will be attended;
- Conversations with public officials, permittees, other stakeholders, and private citizens;
- Kudos and recognition of people doing good things for groundwater management in the District;
- Concerns about specific issues or problems for groundwater management in the District.

4. **Public Hearing.**

The Board will hold a public hearing on proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections. (6:05 p.m.)

5. Board Discussion and Possible Action.

a. Discussion and possible action related to approving the proposed revisions to the District Rules and Bylaws related generally to: definitions, permit application requirements, considerations for actions on permits, provisions related to adjusting permitted volumes, multi-user well requirements, nonexempt domestic use wells, temporary transfer permits, designation and retirement of historic-use status, Desired Future Conditions (DFCs) and Modeled Available Groundwater (MAG) estimates for District aquifers, permit and drought requirements for conditional permits, conservation-oriented rate structures for public water systems, drought stage triggers, drought contingency plans, curtailment of historical permits in Emergency Response Periods (ERP), alternate curtailment schedules for historical permits, enforcement of drought rules, officer election dates, hearing and protest procedures, well construction standards, and other general administrative clarifications and corrections.

b. Discussion and possible action related to approving minor revisions made to the proposed Management Plan in response to comments provided by the TWDB, and then adoption of the proposed District Management Plan and direction to the general manager to transmit the adopted plan to GMA 9 and 10 GCDs for acknowledgement and then to the TWDB for approval.

c. Discussion and possible action related to the November 6, 2012, director elections including: approval of joint election agreements and election services contracts with Hays, Caldwell and Travis Counties; approval of election day polling places; approval of locations, dates and times of early voting; ratification of Board President's actions on election matters since September 13, 2012 Board meeting, adopting orders or amendments to prior Board orders in connection with the election; and, any other action necessary for the November 6, 2012, director elections.

d. Discussion and possible action related to the Austin Court of Appeals decision in *SOS Alliance v. City of Kyle, Goodman et al., and the Barton Springs/Edwards Aquifer Conservation District.*

6. Adjournment.

Came to hand and posted on a Bulletin Board in the Courthouse, Caldwell County, Texas, on this, the _____ day of September, 2012, at_____ .m.

_____, Deputy Clerk

Caldwell County, TEXAS

Please note:

This agenda and available related documentation have been posted on our website, www.bseacd.org. If you have a special interest in a particular item on this agenda and would like any additional documentation that may be developed for Board consideration, please let staff know at least 24 hours in advance of the Board Meeting so that we can have those copies made for you.

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Responses from Regions K and L
as of November 26, 2012.

Dana Wilson Region K

Subject: FW: proposed new BSEACD Management Plan

From: Fox, Jeff
Sent: Thursday, October 25, 2012 11:30 AM
To: 'John Burke'; Lutes, Teresa; 'Barbara Johnson'; 'Bill Neve'; 'info@fayettecountygroundwater.com'; 'Doug Powell '; 'Haskell Simon '; 'James Kowis'; 'Jennifer Walker'; 'jimbarho@gmail.com'; 'Karen Haschke'; 'Pansy Benedict(Billy Roeder)'; 'Ptybor@gmail.com'; 'Rob Ruggiero '; 'Ronald G. Fieseler'; 'judge@co.san-saba.tx.us'; 'Ronaldg59@gmail.com'; 'jsking@stpegs.com'; 'David Bradsby'; 'David Meesey (David.Meesey@twdb.texas.gov)'; 'richard.eyster@texasagriculture.gov'; 'Garren'; 'blcomm2@co.blanco.tx.us'; 'haschkk@LabCorp.com'; 'lpgcd@lostpineswater.org'; 'jim@ccgcd.net'; 'john@bseacd.org'; 'Bill Luedecke (texasland.bill@gmail.com)'; 'Burke, Jaime'; 'Martina Bluem (Martina.Bluem@LCRA.ORG)'; 'Wilkinson, Virginia (Virginia.Wilkinson@aecom.com)'; 'Krystal Cantu (Krystal.Cantu@LCRA.ORG)'; Martin, Danielle
Subject: proposed new BSEACD Management Plan

Planning Group Members,

Please see the attached letter from Kirk Holland, General Manager of the Barton Springs Edwards Aquifer Conservation District (BSEACD). Also attached is a copy of the proposed new BSEACD Management Plan which has been adopted by the BSEACD Board. The proposed plan substantially revises the existing BSEACD 2008 management plan. Also attached is a pdf of the plan appendices. BSEACD is making these documents available for Region K members to comment on the new proposed plan. Martina has loaded the letter and a link to the new proposed management plan on the Region K website under public announcements.

Jeff

Dana Wilson

From: Con Mims [cmims@nueces-ra.org]
Sent: Wednesday, October 24, 2012 2:20 PM
To: Kirk Holland
Cc: Dana Wilson; John Dupnik; Erin Newberry; Steve Raabe P. E.; Sam Vaugh; Brian Perkins
Subject: RE: Notice of Availability of BSEACD Adopted Management Plan

Kirk:

This is to acknowledge my receipt of BSEACD's new Management Plan. By copy of this, I am asking Erin to provide copies of your letter to the Region L members for their comments back to you, if any. Let me know if we can be of further assistance.

Con Mims, Chair
Region L

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 11:33 AM
To: 'Con'
Cc: Dana Wilson; Kirk Holland; John Dupnik
Subject: Notice of Availability of BSEACD Adopted Management Plan

Con,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of you and the RWPG. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Con Mims, Chair
South Central Texas Regional Water Planning Group
% Nueces River Authority
P O Box 349
Uvalde, TX 78801

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Con:

Pursuant to Texas Water Code §36.1071 and Texas Administrative Code §356.6(a)(4), the Barton Springs/Edwards Aquifer Conservation District (District) is hereby providing notice of the availability of the revised District Management Plan (Plan) to the South Central Texas Regional Water Planning Group (Region L). I am enclosing a hard copy of this Plan for your convenience; the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, by the individual GCDs in our two GMAs, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan authorizes and guides the groundwater management programs and activities of the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

We have used the TWDB-supplied information from the current State Water Plan in preparing this Plan, in particular the demand projections, surface-water supplies, water needs, and water management strategies applicable to WUGs in our jurisdictional area. The groundwater supply projections contained in the Plan similarly conform to the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies and which achieve the applicable Desired Future Conditions for aquifers that provide groundwater in Region L. Region L may reliably utilize the supplies that the District's objectives and strategies provide, as enumerated in this Plan, for its groundwater supply planning.

As you know, the District staff has actively participated in Region L planning activities for some time. The District has been proactive in discussing the development of alternative water supplies in Region L, especially desalination and aquifer storage and recovery evaluations. We look forward to continuing and expanding that collaboration.

We would request that you disseminate notice of this Plan's availability to members of Region L for both their individual comments and their prospective use, as provided by statute. I would also appreciate a reply to this notice that the Plan has been received by Region L and distributed for use in its water planning activities. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the

version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide you an electronic link to the approved Plan, complete with all appendices.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

Enclosure

The District has not yet received any responses from
Surface Water Entities
as of November 26, 2012.

Following are the responses received from
Groundwater Conservation Districts within GMAs 9 and 10,
as of November 26, 2012.

Dana Wilson

From: Kirk Holland
Sent: Monday, October 29, 2012 3:28 PM
To: Dana Wilson
Subject: FW: BCRAGD Response
Attachments: Barton Springs Ltr 10-29-12.pdf

Coordination with GMA 9's Bandera Co. River Authority and Groundwater District:

From: Prari Blair [mailto:PBlair@bcragd.org]
Sent: Monday, October 29, 2012 2:53 PM
To: Kirk Holland
Cc: Ron Fiesler; dmauk@bcragd.org
Subject:

Dear Kirk,

We have received your revised Management Plan. We will forward the Plan to our board. I have attached the letter acknowledging our receipt of the revised Management Plan. We are also sending the original copy via US Mail.

Should you have any questions, please don't hesitate to contact myself or General Manager David Mauk. Thank you.

Sincerely,

Prari Blair

Prari Blair
Administrative Assistant/ Records Management Officer/ Finance Coordinator
Bandera County River Authority & Groundwater District
PO Box 177
Bandera, TX 78003
pblair@bcragd.org
(830) 796 7260

Dana Wilson

From: Ronald G Fieseler [manager@blancocountygroundwater.org]
Sent: Thursday, November 08, 2012 8:38 AM
To: Kirk Holland
Cc: Dana Wilson
Subject: RE: BSEACD Adopted Management Plan

Kirk,

Per your request below, I am confirming that the Blanco-Pedernales GCD has received the new BSEACD Adopted Management Plan. I will provide our Board members with either a copy or the link to the online copy at our next Board Meeting.

We are in the process of working with GMA 9 GCDs to prepare a common review process for groundwater management plans. I will provide you with the results of any review conducted by the BPGCD Board or staff.

Regards,

Ron Fieseler
General Manager, BPGCD

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 10:49 AM
To: Ron Fiesler
Cc: Dana Wilson; Kirk Holland
Subject: BSEACD Adopted Management Plan

Dear Ron,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Ron Fieseler, General Manager
Blanco-Pedernales Groundwater Conservation District
601 West Main
P.O. Box 1516
Johnson City, Texas 78636-1516

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ron:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Blanco-Pedernales Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming BPGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by BPGCD and that we thereby have provided an *opportunity* for BPGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

Enclosure

Dana Wilson

From: Kirk Holland
Sent: Wednesday, October 24, 2012 10:53 AM
To: 'Micah Voulgaris'
Cc: Dana Wilson; Kirk Holland; Ron Fiesler
Subject: BSEACD Adopted Management Plan
Attachments: Cow Creek GCD.pdf

Micah,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Micah Voulgaris, General Manager
Cow Creek Groundwater Conservation District
201 E. San Antonio Ave., Ste 100
Boerne, Texas 78006

Subject: New Management Plan Adopted by the Board of Directors of the

Barton Springs/Edwards Aquifer Conservation District

Dear Micah:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Cow Creek Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming CCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by CCGCD and that we thereby have provided an *opportunity* for CCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Dana Wilson

From: Kirk Holland
Sent: Wednesday, October 24, 2012 3:51 PM
To: Dana Wilson
Subject: FW: BSEACD Adopted Management Plan

From: Gene Williams [mailto:gene@hgcd.org]
Sent: Wednesday, October 24, 2012 3:45 PM
To: Kirk Holland
Cc: Ron Fiesler
Subject: RE: BSEACD Adopted Management Plan

Thanks Kirk, I agree, and now might be a good time to move on that. I have had my review approved by TWDB on our management plan revision, so it won't be long I will need to send it out to everyone. I am willing to meet in participate in getting that done.

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 3:22 PM
To: 'Gene Williams'
Cc: Dana Wilson; Kirk Holland; John Dupnik; Brian Hunt; Ron Fiesler
Subject: RE: BSEACD Adopted Management Plan

Gene, there is no required timeline, or minimum participation requirement. We would welcome your (or your directors') thoughts on the Plan at anytime, whether before or after we submit it to the TWDB for approval.

We have suggested to the GMA 9 Coordinator that all of the member GCDs might benefit from having a similar approach, if not a standard checklist, for responding to new or amended management plans. We also don't want to suggest that the individual boards shouldn't have some discretion in how they go about such reviews. That said, I do think this is something that could be put on the agenda for an upcoming GMA 9 Committee meeting.

Kirk

From: Gene Williams [mailto:gene@hgcd.org]
Sent: Wednesday, October 24, 2012 1:38 PM
To: Kirk Holland
Subject: RE: BSEACD Adopted Management Plan

Will do Kirk,

I will have to see how the board president wants to handle it, however he is going off the board end of December, we are in the middle of an election and we will have a minimum of 3 new directors out of 5. We are already short 1 director, with some out of town, we had to cancel our last meeting due to lack of a quorum, so it is an unsettled time for our district. I have a feeling it is all going to be my responsibility to review all the plans and report to the board my recommendation. Is there a timeline you need feedback and do you think the GMA 9 committee is going to pursue putting together a standard checklist for everyone?

Call me if you need to, I don't want to do anything to slow down your process in finishing up your plan revision.

Gene

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 1:22 PM
To: 'Gene Williams'
Cc: Dana Wilson; Ron Fiesler; Kirk Holland
Subject: RE: BSEACD Adopted Management Plan

Thanks, Gene.

Please let me know if there is any reason that someone from BSEACD should plan to attend one of your board meetings, if this becomes an agenda item.

Kirk Holland, P.G.

From: Gene Williams [mailto:gene@hgcd.org]
Sent: Wednesday, October 24, 2012 12:12 PM
To: Kirk Holland
Cc: Dana Wilson; Ron Fiesler
Subject: RE: BSEACD Adopted Management Plan

Kirk,

I acknowledge receipt of your revised Management Plan and will make it available to the HGCD Board of Directors.

Gene Williams, HGCD General Manger

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 10:46 AM
To: 'Gene Williams'
Cc: Dana Wilson; Kirk Holland; Ron Fiesler
Subject: BSEACD Adopted Management Plan

Dear Gene,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Gene Williams, General Manager
Headwaters Groundwater Conservation District
125 North Lehmann Drive
Kerrville, TX 78028

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Gene:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Headwaters Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review

comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming HGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by HGCD and that we thereby have provided an *opportunity* for HGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Dana Wilson

From: Kirk Holland
Sent: Wednesday, October 24, 2012 1:20 PM
To: 'Rick Broun'; '1 Jimmy Skipton'; '2 Mark Key'; '3 Dr. Joan Jernigan'; '4 Greg Nesbitt'; '5 Edward Pope'
Cc: 'Broun Al'; 'Tressy Gumbert'; Ron Fiesler; Dana Wilson; Kirk Holland
Subject: RE: BSEACD Adopted Management Plan

Thanks, Rick.

Please let me know if there is any reason that someone from BSEACD should plan to attend your Board meeting for that item.

Kirk Holland, P.G.

From: Rick Broun [mailto:manager2@haysgroundwater.com]
Sent: Wednesday, October 24, 2012 11:28 AM
To: '1 Jimmy Skipton'; '2 Mark Key'; '3 Dr. Joan Jernigan'; '4 Greg Nesbitt'; '5 Edward Pope'
Cc: 'Broun Al'; 'Tressy Gumbert'; 'Rick Broun'; Kirk Holland; Ron Fiesler
Subject: FW: BSEACD Adopted Management Plan

Board and Staff:

Please see the email below from Kirk Hollon, General Manager of BSEACD, concerning their proposed management plan. The email does provide a link to BSEACD's website to review their plan www.bseacd.org/about-us/governing-documents#Revisions
I can add their proposed management plan as an agenda item for our November meeting.

Thank you,

Rick Broun, General Manager
Hays Trinity Groundwater Conservation District
Center Lake Business Park: 14101 Hwy 290 W, Bldg 100, Ste 212
Mail: P. O. Box 1648: Dripping Springs, TX 78620
E-mail: manager2@haysgroundwater.com
Phone: 512-858-9253 Fax: 512-858-2384
Website: www.haysgroundwater.com

Hays Trinity Groundwater Conservation District

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 11:01 AM
To: 'Rick Broun'
Cc: Dana Wilson; Kirk Holland; Ron Fiesler
Subject: BSEACD Adopted Management Plan

Rick,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Rick Broun, General Manager
Hays Trinity Groundwater Conservation District
14101 Hwy 290 W. Bldg 100 Ste 212
Austin, TX 78737

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Rick:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Hays Trinity Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming HTGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by HTGCD and that we thereby have provided an *opportunity* for HTGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Dana Wilson

From: Ron Naumann [mailto:ronnaumann@sbcglobal.net]
Sent: Thursday, October 25, 2012 11:20 AM
To: Kirk Holland
Subject: Re: BSEACD Adopted Management Plan

I don't see a need for anyone attending our meeting I will give the directors and those in attendance a copy of your plan
Ron

From: Kirk Holland <kholland@bseacd.org>
To: Ron Naumann <ronnaumann@sbcglobal.net>
Cc: Dana Wilson <dana@bseacd.org>; Kirk Holland <kholland@bseacd.org>
Sent: Wed, October 24, 2012 1:24:30 PM
Subject: RE: BSEACD Adopted Management Plan

Thanks, Ron.

Please let me know if there is any reason at this juncture that someone from BSEACD should plan to attend your board meeting.

Kirk Holland, P.G.

From: Ron Naumann [mailto:ronnaumann@sbcglobal.net]
Sent: Wednesday, October 24, 2012 11:25 AM
To: Kirk Holland
Subject: Re: BSEACD Adopted Management Plan

10-24-12
Kirk;
I have forwarded your e-mail to the Board of GCGCD and have placed this on our next agenda for meeting to be held on November 8, 2012
Ron

From: Kirk Holland <kholland@bseacd.org>
To: Ron Naumann <ronnaumann@sbcglobal.net>
Cc: Dana Wilson <dana@bseacd.org>; Kirk Holland <kholland@bseacd.org>; Rick Illgner <rillgner@edwardsaquifer.org>
Sent: Wed, October 24, 2012 11:09:51 AM
Subject: BSEACD Adopted Management Plan

Ron,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Ron Naumann, General Manager
Guadalupe County Groundwater Conservation District
PO Box 1221
Seguin, Texas 78156

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ron:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Guadalupe County Groundwater Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the

groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming GCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by GCGCD and that we thereby have provided an *opportunity* for GCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

Dana Wilson

From: Kirk Holland
Sent: Wednesday, October 24, 2012 3:04 PM
To: 'Kinney County GCD'
Cc: Dana Wilson; Kirk Holland; John Dupnik
Subject: RE: BSEACD Adopted Management Plan

Thanks, Ken. Let us know if you believe it would be advantageous for someone from BSEACD to attend your Board meeting in this regard.

Kirk

From: Kinney County GCD [mailto:kcgcd@sbcglobal.net]
Sent: Wednesday, October 24, 2012 1:39 PM
To: Kirk Holland
Subject: Re: BSEACD Adopted Management Plan

Kirk

We acknowledge that we at the Kinney County Groundwater Conservation District have received your revised Management Plan. I will distribute it to the Board of Directors and will place it on a Board Agenda for official conseration.

Thank you,
Ken Carver, General Manager
Kinney County Groundwater Conservation District
(830)563-9969
Fax: (830)563-6906
Email: kcgcd@sbcglobal.net

From: Kirk Holland <kholland@bseacd.org>
To: Ken Carver <kcgcd@sbcglobal.net>
Cc: Dana Wilson <dana@bseacd.org>; Kirk Holland <kholland@bseacd.org>; Rick Illgner <rillgner@edwardsaquifer.org>
Sent: Wed, October 24, 2012 11:12:28 AM
Subject: BSEACD Adopted Management Plan

Ken,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Ken Carver, General Manager
Kinney County Groundwater Conservation District
112 West Spring Street
Brackettville TX 78832

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ken:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Kinney County Groundwater Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the

groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming KCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by KCGCD and that we thereby have provided an *opportunity* for KCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

Dana Wilson

From: Kirk Holland
Sent: Wednesday, October 24, 2012 3:05 PM
To: 'Johnie Halliburton'
Cc: Dana Wilson; Kirk Holland; John Dupnik
Subject: RE: BSEACD Adopted Management Plan

Thanks, Johnie. Let us know if you think it would be beneficial for someone from BSEACD to visit with your Directors, either individually or in a Board meeting, to discuss our Plan further.

Kirk

From: Johnie Halliburton [mailto:johnie@pccd.org]
Sent: Wednesday, October 24, 2012 1:39 PM
To: Kirk Holland
Subject: RE: BSEACD Adopted Management Plan

Kirk,

I will pass your proposed Management Plan on to our Directors.

Thank you,
Johnie

Johnie Halliburton
Executive Manager
Plum Creek Conservation District
1101 W. San Antonio
Lockhart, Texas 78644
512-398-2383 Office
512-398-7776 Fax
Email: johnie@pccd.org

From: Kirk Holland [mailto:kholland@bseacd.org]
Sent: Wednesday, October 24, 2012 11:15 AM
To: Johnie Halliburton; Daniel Meyer
Cc: Dana Wilson; Kirk Holland; 'Rick Illgner'
Subject: BSEACD Adopted Management Plan

Johnie and Daniel,

Please read the letter below, concerning the BSEACD's adoption of a new Management Plan. The letter includes two requests of your GCD. A signed, .pdf version, as USPS-mailed to you yesterday along with a hard copy of the Plan, is also attached, for your records.

Regards,

Kirk Holland, P.G.
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124 Regal Row
Austin, TX 78748
Tel. 512.282.8441
Cell 512.923.7416
kholland@bseacd.org

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Barton Springs Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Johnie Halliburton, General Manager
Plum Creek Conservation District
1101 West San Antonio Street
PO Box 328
Lockhart, Texas 78644

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Johnie:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Plum Creek Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the

groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming PCCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by PCCD and that we thereby have provided an *opportunity* for PCCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

APPENDIX II

HYDROGEOLOGY AND WATER AVAILABILITY OF THE DISTRICT'S AQUIFERS

HYDROGEOLOGY AND SUSTAINABLE YIELD OF THE BARTON SPRINGS SEGMENT OF THE EDWARDS AQUIFER

APPENDIX II

HYDROGEOLOGY AND WATER AVAILABILITY OF THE DISTRICT'S AQUIFERS

HYDROGEOLOGY AND SUSTAINABLE YIELD OF THE BARTON SPRINGS SEGMENT OF THE EDWARDS AQUIFER

Hydrogeology Background

The most prolific aquifers within the study area are composed of Cretaceous-age limestone and siliciclastic units that comprise the Edwards and Trinity Aquifers. These aquifers are defined as major aquifers of Texas (Ashworth and Hopkins, 1995). Both aquifers are discussed in some detail below. Regional geologic and hydrogeology information for the Edwards and Trinity Aquifer systems are summarized in Lindgren et al. (2004), Ryder (1996), and Barker et al. (1994).

Two regional structural features greatly influence the geology and hydrogeology of Central Texas. The San Marcos Arch, a SE-NW plunging structural high feature, provided detrital material and influenced deposition of the lower Cretaceous sediments of central Texas (Striklin et al., 1971). The San Marcos Arch is an extension of the Llano Uplift. The Balcones Fault Zone (BFZ) is an area of intense Miocene-age northeast-trending normal (down to the coast) faulting. Miocene-age normal faulting is not limited to the BFZ, but also extends west into the Hill Country.

Central Texas Climate

The climate of the study area is characterized as humid subtropical with an annual rainfall amount of 33.5 inches. Precipitation is fairly evenly distributed throughout the year with peaks occurring in May and September (Brune and Duffin, 1983). However, the region often receives a large portion of its annual rainfall in a very short period of time, resulting in flash flooding and periods of short, but intense recharge events.

Central Texas' worst drought on record was a 7-year period from 1950 through 1956. The lowest total annual rainfall for Austin's Camp Mabry in 1954 was 11.42 inches. During this drought, water levels reached historic low levels and many springs stopped flowing completely, including Comal Springs. The annual mean discharge for Barton Springs was 13 cubic feet per second (cfs) in 1956, with the lowest monthly mean discharge of 11 cfs occurring in July and August of 1956. The lowest measured spring discharge value was 9.6 cfs on March 26, 1956. Long-term average springflow values for Barton Springs are about 53 cfs (Slade et al., 1986; Scanlon et al., 2001).

Edwards Aquifer

The Edwards Aquifer of Central Texas is a freshwater karst aquifer developed in faulted and fractured Cretaceous-age Edwards Group limestones and dolomites. The Edwards Aquifer system lies within the BFZ. Hydrologic divides separate the Edwards Aquifer into three segments. The smallest segment, the Barton Springs segment of the Edwards Aquifer (Barton Springs aquifer), is the segment managed by the District.

The Barton Springs segment provides water for about 60,000 people and currently has about 7,800 acre-feet/year (2.5 billion gallons; 11 cfs) of authorized pumping from 94 permit holders under non-drought conditions. Groundwater use is characterized as 80 percent public-supply, 13 percent industrial (quarry operations), and 7 percent irrigation (golf courses). The District contains about 1,230 operational wells, with the majority producing water from the Edwards (Hunt et al., 2006a).

The Barton Springs aquifer is 155 mi^2 in area, with about 80 percent of the aquifer under unconfined conditions, and a maximum thickness of about 450 feet. The primary natural discharge point is Barton Springs, located in Barton Creek about ¼ mile upstream of its confluence with the Colorado River. The Barton Springs aquifer is bounded to the north by the Colorado River and by the outcrop and saturated thickness of the Edwards Group to the west. The eastern boundary of the aquifer is the interface between freshwater and saline or brackish water (>1,000 mg/L total dissolved solids) and is a complex, three-dimensional, freshwater/saline-water boundary, often called the "bad water line." The saline-water zone is also characterized by a decrease in the relative transmissivity (Flores, 1990). Hovorka et al. (1998) describe this boundary as hydrodynamically controlled rather than separated by a distinct hydrologic barrier, although local fault control was noted. The southern hydrologic divide between the Barton Springs and San Antonio segments is approximately located between Onion Creek and the Blanco River. This divide may fluctuate according to hydrologic conditions, as supported by potentiometric-surface elevations and recent tracer testing results (LBG-Guyton Associates, 1994; Hunt et al., 2005).

Mapping of the Barton Springs aquifer has delineated geologic faults and several informal stratigraphic members of the Kainer and Person Formations of the Edwards Group (Rose, 1972), each having distinctive hydrogeologic characteristics (Small et al., 1996). Formation of the aquifer was influenced significantly by fracturing and faulting associated with Miocene-age BFZ and dissolution of limestone and dolomite units by infiltrating meteoric water (Sharp, 1990; Barker et al., 1994; Hovorka et al., 1995). Faults trend predominantly to the northeast and are downthrown to the southeast, with total offset of about 1,100 feet across the study area. As a result of faulting and erosion, the aquifer ranges from about 450 feet at its thickest along the east side, to 0 feet along the west side of the recharge zone (Slade et al., 1986). Dissolution along

fractures, faults, and bedding plane partings and within certain lithologic units has created numerous sinkholes, sinking streams, springs, conduits, and caves.

Groundwater Flow

The karstic Edwards Aquifer is inherently heterogeneous and anisotropic, which strongly influence groundwater flow and storage (Slade et al., 1985; Maclay and Small, 1986; Hovorka et al., 1996 and 1998; Hunt et al., 2005). Groundwater generally flows west to east across the recharge zone, converging with preferential groundwater flow paths subparallel to major faulting, and then flowing north toward Barton Springs.

The Edwards Aquifer can be described as a triple porosity and permeability system consisting of matrix, fracture, and conduit porosity (Hovorka et al., 1995; Halihan et al., 2000; Lindren et al., 2004) reflecting an interaction between rock properties, structural history, and hydrologic evolution (Lindgren et al., 2004). Halihan et al., (1999) describe permeability that varies with the direction and scale of measurement and values ranging over nine orders of magnitude. Accordingly, the system is often characterized as having a slow flow system (diffuse or matrix flow) and a fast flow system (fracture/conduit flow). Mean hydraulic conductivities are two orders of magnitude higher in the confined zone compared to the unconfined zone (Lindgren et al., 2004). Median specific capacity of wells in the Barton Springs aquifer is higher within the confined zone compared to the unconfined zone (BSEACD, unpublished data). Matrix porosity and permeability is dwarfed by the fracture and conduit permeability. Fractures may control flow on the well-scale, with conduits controlling flow on the regional scale (Halihan et al., 2000). The probability of wells intersecting conduits is very low (Halihan et al., 2000), therefore most wells are influenced by matrix and fracture permeability, rather than conduit permeability, to varying degrees. This is consistent with a study by Hovorka et al (1998) that reported only 1 percent of flow is from the matrix. However, a trend of relatively high matrix permeability is observed on both sides of the freshwater/saline-water boundary. In contrast, the matrix permeability is relatively low for rocks in the outcrop (Hovorka et al., 1998). Groundwater dye-tracing and other studies demonstrate that a significant amount of groundwater flow is discrete, occurring in a well integrated network of conduits, caves, and smaller dissolution features (Hauwert et al., 2002a; Hauwert et al., 2002b). Interpreted flow paths from tracer testing generally coincide with troughs in the potentiometric surface and are parallel to the N40E (dominant) and N45W (secondary) fault and fracture trends presented on geologic maps, indicating the structural influence on groundwater flow. Rates of groundwater flow along preferential flow paths, determined from dye tracing, can be as fast as 4 to 7 miles/day under high-flow conditions or about 1 mile/day under low-flow conditions (Hauwert et al., 2002a). Tracer tests have also helped define groundwater basins such as the Cold Springs, Sunset Valley, and Manchaca sub-basins of the Barton Springs aquifer. Traces from two features in Onion Creek have produced divergent flow paths that appear to reconverge before discharging at Barton Springs. Despite the rapid groundwater flow rates within conduits, Kresic (2007) states that, "a disproportionately larger

volume of any karst aquifer has relatively low groundwater velocities (laminar flow) through small fissures and rock matrix."

Water Quality

The U.S. Environmental Protection Agency (USEPA) has identified karst aquifers, such as the Barton Springs aquifer, as one of the aquifer types most vulnerable to pollution (Schindel et al., 1996). Karst aquifers are noted for their rapid groundwater velocities and limited ability to filter contaminants. Despite that fact, water quality in the freshwater Barton Springs aquifer is currently very good. Contaminant levels in most of the sampled wells and springs are low compared to EPA MCLs (Smith et al., 2001). However, recent studies have begun to detect persistent, but low levels of contaminants in discharge from Barton Springs (Mahler et al., 2006).

The Edwards Group limestone contains saline water east of the Barton Springs aquifer and may also provide a source of water in the future with desalinization, or a reservoir for freshwater injected through an aquifer storage and recovery system. Studies are underway to evaluate that potential.

Trinity Aquifer

The Trinity Aquifer is a major aquifer of Texas composed of Cretaceous-age limestones and sandstones subdivided into the Upper, Middle, and Lower Trinity Aquifers. The Trinity Aquifer in the Central Texas Hill Country dips and thickens to the southeast off the Llano Uplift toward the BFZ. The aquifer extends into the BFZ, below the Barton Springs aquifer, although the eastern boundary of the Trinity Aquifer is a line demarking total dissolved solids greater than 3,000 mg/L (Ashworth and Hopkins, 1995). The District has five permittees that pumped about 44.3 million gallons from the Middle Trinity Aquifer in 2005. This total represents about 2 percent of the total groundwater pumped in 2005 by all District permittees (Hunt et al., 2006a). In this document an attempt is made to distinguish between the Trinity Aquifer of the Hill Country and the Trinity Aquifer within the BFZ. Much more is known about the Trinity Aquifer in the Hill Country region, while investigations are under way to learn more about the Trinity Aquifer within the BFZ.

The Upper Trinity Aquifer consists solely of the Upper Glen Rose Formation. The Upper Glen Rose Formation is about 350 to 400 feet thick with beds of alternating limestone, dolomite, marl, and shale; gypsum and anhydrite are common. Repeating marl units within the Upper Trinity have low permeability and impede vertical flow so that flow is generally lateral to incised streams and rivers providing base flow (Mace et al., 2000). This aquifer satisfies, almost exclusively, domestic and livestock needs with very small (less than 5 gpm) to small (5 to 20 gpm) yields of highly mineralized water (relative to the Edwards Aquifer) in the Central Texas Hill Country, and within the western portion of the District (DeCook, 1960; Ashworth, 1983;

Muller and McCoy, 1987). The division between the Upper and Middle Trinity Aquifers is defined by the geologically distinctive "Corbula Bed" (Bluntzer, 1992). In the Hill Country, the Upper Trinity Aquifer is generally unconfined.

The Middle Trinity Aquifer consists of (from stratigraphically lowest to highest) the Cow Creek, Hensell Sand, and the Lower Glen Rose Formation. The Cow Creek is a massive, sandy dolomitic limestone. The Hensell Sand is lithologically diverse and composed of gravel, sand, silt, limestone, and shale. The Lower Glen Rose Formation is composed of massive fossiliferous limestone and dolomite that grade upward into thin beds of limestone, shale, and marl. The thickness of the Middle Trinity averages about 320 feet (Al Broun, unpublished data). The Middle Trinity Aquifer yields small to moderate quantities of freshwater to moderately saline water (Brune and Duffin, 1983). The Middle Trinity Aquifer in the Hill Country varies from unconfined in the west to partially confined conditions to the east. The Middle Trinity Aquifer is confined in the BFZ.

The Lower Trinity Aquifer is separated from the overlying Middle Trinity Aquifer by the Hammett Shale, which is about 30-60 feet thick (Al Broun, unpublished data). The Lower Trinity Aquifer is composed of the Hosston and overlying Sligo Formations. The Hosston is composed of conglomerate, sand, siltstone, and shale. The Sligo is composed of limestone and dolomite with locally sandy units. The average thickness of the Lower Trinity Aquifer is about 190 feet, however due to depth, the Lower Trinity Aquifer is rarely fully penetrated, so this may underestimate the thickness (Al Broun, unpublished data). This aquifer yields small to large amounts of freshwater to moderately saline water in the Hill Country (Brune and Duffin, 1983). The water quality and yield from wells in the Lower Trinity of the BFZ is unknown at this time.

Regional Groundwater Flow

Groundwater flow in the Trinity Aquifer of the Hill Country is generally from the west, where Trinity units are exposed on the structurally high Llano Uplift, to the east toward the BFZ. Potentiometric maps of the Hill Country area indicate lateral flow from the Upper and Middle Trinity Aquifer toward the Colorado River in northwestern Hays and western Travis Counties (Mace et al., 2000). Groundwater modeling indicates flow into the BFZ in Hays and Travis counties is much less (only 3 percent of the budget) than the rest of the Hill Country (Mace et al., 2000). The Trinity Aquifer is described as a leaky aquifer system with potential for vertical groundwater flow downward in the Hill Country (Muller and McCoy, 1987).

Water Quality

Water quality is variable for the Trinity Aquifer and often contains high total dissolved solids and undesirable constituents such as sulfates, iron, and fluorides (Ashworth, 1983; Muller and McCoy, 1987). Although the water quality is generally considered acceptable, locally it can be

unsuitable for potable use. In particular there are two distinctive evaporite zones in the upper Glen Rose composed of gypsum and anhydrite (Bluntzer, 1992; Striklin et al., 1971) that are often the source of the sulfates. These units, coupled with poor well construction practices, have contributed to degraded water quality of the Middle Trinity Aquifer (Ashworth, 1983; Bluntzer, 1992). The boundary between fresh and slightly saline (1,000-3,000 mg/l) water is poorly defined for the Trinity Aquifer. Along the western part of the District, where the Edwards Aquifer is thin, water-supply wells commonly penetrate the lower Edwards units and are completed in the Upper and Middle Trinity Aquifers.

Sustainable Yield Analysis

Texas state law requires water planning for DOR conditions and use of groundwater modeling information in conjunction with other studies or data about the aquifer. Results of the District's sustainable yield studies for the Barton Springs aquifer are presented in Smith and Hunt (2004a) and generally followed the approach outlined by the TWDB (Mace et al., 2000).

Evaluation of sustainable yield was based on modification of a Groundwater Availability Model developed for the Barton Springs segment by Scanlon et al. (2001). The model was recalibrated to better match simulated and measured springflow and water-level data from the 1950's drought (Smith and Hunt, 2004a). The recalibrated model was then used to predict springflow and water-level declines under 1950's drought conditions and various future (increasing) pumping scenarios. Hydrogeological data, such as saturated-thickness maps, potentiometric-surface maps, and well-construction and yield data, were evaluated along with the model results so that impacts to water-supply wells under 1950's drought conditions and various rates of pumping could be estimated (Hunt and Smith, 2004a).

Results of the evaluations indicate that water levels and spring flow are significantly affected by 1950's drought conditions and increased pumping rates. Simulations indicate that a given pumping rate applied under 1950's drought conditions would diminish Barton Springs flow by an amount equivalent to the pumping rate. At 10 cfs of pumping a small amount of spring flow (~1 cfs monthly average) would be maintained. However, according to a minimum daily discharge of 9.6 cfs, such as that measured in 1956, spring flow could temporarily cease for days or weeks. At 15 cfs of pumping, spring flow would cease for at least 4 months. As many as 19 percent of all water-supply wells in the District may have adverse impacts under 1950's drought conditions and a pumping rate of 10 cfs (Smith and Hunt, 2004a).

APPENDIX III

TWDB REPORT

ESTIMATED HISTORICAL GROUNDWATER USE AND 2012 STATE WATER PLAN DATASETS:

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

APPENDIX III

TWDB REPORT

ESTIMATED HISTORICAL GROUNDWATER USE AND 2012 STATE WATER PLAN DATASETS:

BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT

Estimated Historical Groundwater Use and 2012 State Water Plan Datasets:

Barton Springs/Edwards Aquifer Conservation District

by Stephen Allen
Texas Water Development Board
Groundwater Resources Division
Groundwater Technical Assistance Section
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(512) 463-7317
September 24, 2012

GROUNDWATER MANAGEMENT PLAN DATA:

This package of water data reports (part 1 of a 2-part package of information) is being provided to groundwater conservation districts to help them meet the requirements for approval of their five-year groundwater management plan. Each report in the package addresses a specific numbered requirement in the Texas Water Development Board's groundwater management plan checklist. The checklist can be viewed and downloaded from this web address:

http://www.twdb.texas.gov/groundwater/docs/GCD/GMPchecklist0911.pdf

The five reports included in part 1 are:

1. Estimated Historical Groundwater Use (checklist Item 2)
   from the TWDB Historical Water Use Survey (WUS)
2. Projected Surface Water Supplies (checklist Item 6)
3. Projected Water Demands (checklist Item 7)
4. Projected Water Supply Needs (checklist Item 8)
5. Projected Water Management Strategies (checklist Item 9)
   reports 2-5 are from the 2012 State Water Plan (SWP)

Part 2 of the 2-part package is the groundwater availability model (GAM) report. The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov or (512) 936-0883.

DISCLAIMER:

The data presented in this report represents the most updated Historical Groundwater Use and 2012 State Water Planning data available as of 9/24/2012. Although it does not happen frequently, neither of these datasets are static and are subject to change pending the availability of more accurate data (Historical Water Use data) or an amendment to the 2012 State Water Plan (2012 State Water Planning data). District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The Historical Water Use dataset can be verified at this web address:

http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/

The 2012 State Water Planning dataset can be verified by contacting Wendy Barron (wendy.barron@twdb.texas.gov or 512-936-0886).

The values presented in the data tables of this report are county-based. In cases where groundwater conservation districts cover only a portion of one or more counties the data values are modified with an apportioning multiplier to create new values that more accurately represent district conditions. The multiplier used as part of the following formula is a land area ratio: (data value * (land area of district in county / land area of county)). For two of the four State Water Plan tables (Projected Surface Water Supplies and Projected Water Demands) only the county-wide water user group (WUG) data values (county other, manufacturing, steam electric power, irrigation, mining and livestock) are modified using the multiplier. WUG values for municipalities, water supply corporations, and utility districts are not apportioned; instead, their full values are retained if they are located within the district, and eliminated if they are located outside (we ask each district to identify these locations).

The two other SWP tables (Projected Water Supply Needs and Projected Water Management Strategies) are not apportioned because district-specific values are not statutorily required. Each district needs only "consider" the county values in those tables.

In the Historical Groundwater Use table every category of water use (including municipal) is apportioned. Staff determined that breaking down the annual municipal values into individual WUGs was too complex.

TWDB recognizes that the apportioning formula used is not perfect but it is the best available process with respect to time and staffing constraints. If a district believes it has data that is more accurate it has the option of including those data in the plan with an explanation of how the data were derived. Apportioning percentages are listed above each applicable table.

For additional questions regarding this data, please contact Stephen Allen (stephen.allen@twdb.texas.gov or 512-463-7317) or Rima Petrossian (rima.petrossian@twdb.texas.gov or 512-936-2420).

Estimated Historical Groundwater Use
TWDB Historical Water Use Survey (WUS) Data

Groundwater use estimates are currently unavailable for 2005. TWDB staff anticipates the calculation and posting of these estimates at a later date.

CALDWELL COUNTY

4.54 % (multiplier)

All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	139	9	0	4	3	11	166
1980	GW	122	2	0	5	0	8	137
1984	GW	166	2	0	9	0	4	181
1985	GW	148	2	0	7	1	3	161
1986	GW	154	2	0	7	0	4	167
1987	GW	150	0	0	7	1	4	162
1988	GW	152	0	0	7	1	4	164
1989	GW	155	0	0	7	1	4	167
1990	GW	163	0	0	31	1	4	199
1991	GW	141	0	0	0	1	4	146
1992	GW	146	0	0	34	1	4	185
1993	GW	158	0	0	7	1	3	169
1994	GW	156	0	0	7	1	4	168
1995	GW	155	0	0	10	1	4	170
1996	GW	180	1	0	10	1	4	196
1997	GW	162	0	0	9	1	4	176
1998	GW	172	0	0	33	1	4	210
1999	GW	171	0	0	28	1	4	204
2000	GW	170	0	0	6	1	4	181
2001	GW	146	9	0	10	0	3	168
2002	GW	139	0	0	10	0	3	152
2003	GW	161	0	0	6	0	3	170
2004	GW	154	0	0	7	0	3	164
2006	GW	76	0	0	16	0	9	101
2007	GW	69	0	0	3	0	9	81
2008	GW	139	0	0	12	0	8	159
2009	GW	123	0	0	7	0	7	137

Estimated Historical Groundwater Use
TWDB Historical Water Use Survey (WUS) Data

Groundwater use estimates are currently unavailable for 2005. TWDB staff anticipates the calculation and posting of these estimates at a later date.

HAYS COUNTY

15.45 % (multiplier)

All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	780	28	0	71	1	12	892
1980	GW	1,285	208	0	46	0	9	1,548
1984	GW	1,612	196	0	23	15	10	1,856
1985	GW	1,727	212	0	29	15	10	1,993
1986	GW	1,784	184	0	20	134	11	2,133
1987	GW	1,931	164	0	16	0	10	2,121
1988	GW	1,910	238	0	13	0	11	2,172
1989	GW	2,017	115	0	0	0	11	2,143
1990	GW	1,788	45	0	0	0	10	1,843
1991	GW	1,747	44	0	0	8	11	1,810
1992	GW	1,807	62	0	0	11	7	1,887
1993	GW	1,945	67	0	0	11	9	2,032
1994	GW	1,966	74	0	0	25	10	2,075
1995	GW	2,164	70	0	0	25	10	2,269
1996	GW	2,165	76	0	0	25	8	2,274
1997	GW	2,103	91	0	0	24	7	2,225
1998	GW	2,351	93	0	0	23	8	2,475
1999	GW	2,355	54	0	0	23	9	2,441
2000	GW	1,470	96	0	2	23	8	1,599
2001	GW	1,550	423	0	2	19	4	1,998
2002	GW	1,636	85	0	2	19	4	1,746
2003	GW	1,475	86	0	15	25	4	1,605
2004	GW	1,329	51	0	19	25	4	1,428
2006	GW	1,872	81	0	37	2	32	2,024
2007	GW	1,651	73	0	189	0	18	1,931
2008	GW	1,932	79	0	40	0	13	2,064
2009	GW	1,844	24	0	113	102	47	2,130

Estimated Historical Groundwater Use
TWDB Historical Water Use Survey (WUS) Data

Groundwater use estimates are currently unavailable for 2005. TWDB staff anticipates the calculation and posting of these estimates at a later date.

TRAVIS COUNTY *11.46 % (multiplier)* All values are in acre-feet/year

Year	Source	Municipal	Manufacturing	Steam Electric	Irrigation	Mining	Livestock	Total
1974	GW	560	1	0	12	4	13	590
1980	GW	478	33	0	23	0	67	601
1984	GW	1,157	30	0	33	9	48	1,277
1985	GW	943	29	0	23	0	51	1,046
1986	GW	616	33	2	19	0	54	724
1987	GW	742	31	0	19	0	50	842
1988	GW	708	39	2	17	0	54	820
1989	GW	1,560	38	2	60	0	53	1,713
1990	GW	951	47	2	51	0	54	1,105
1991	GW	994	44	13	51	0	55	1,157
1992	GW	1,107	49	13	51	0	52	1,272
1993	GW	1,105	59	13	93	0	60	1,330
1994	GW	1,009	66	0	79	0	49	1,203
1995	GW	1,089	73	0	89	0	49	1,300
1996	GW	939	60	13	90	0	102	1,204
1997	GW	993	57	4	85	0	48	1,187
1998	GW	1,200	101	1	57	0	34	1,393
1999	GW	1,092	87	1	45	0	43	1,268
2000	GW	1,076	81	1	137	0	40	1,335
2001	GW	1,152	26	2	156	0	56	1,392
2002	GW	1,195	27	2	156	0	54	1,434
2003	GW	1,200	30	5	97	0	32	1,364
2004	GW	1,028	22	7	90	0	30	1,177
2006	GW	1,770	106	8	234	0	13	2,131
2007	GW	1,760	93	0	87	0	13	1,953
2008	GW	1,653	105	0	144	0	14	1,916
2009	GW	1,950	87	0	32	135	15	2,219

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

CALDWELL COUNTY

4.54 % (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
L	COUNTY LINE WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	COUNTY LINE WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	COUNTY-OTHER	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER	23	23	23	23	23	23
L	GOFORTH WSC	GUADALUPE	CANYON LAKE/RESERVOIR	151	151	151	151	151	151
L	GONZALES COUNTY WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	4	4	4	4	4	4
L	LIVESTOCK	GUADALUPE	LIVESTOCK LOCAL SUPPLY	17	17	17	17	17	17
L	MARTINDALE	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	MARTINDALE WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	MARTINDALE WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	MAXWELL WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	MAXWELL WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
	Sum of Projected Surface Water Supplies (acre-feet/year)			**195**	**195**	**195**	**195**	**195**	**195**

HAYS COUNTY

15.45 % (multiplier) except for Kyle which is 4.0%

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	BUDA	COLORADO	CANYON LAKE/RESERVOIR	1,120	1,680	1,680	1,680	1,680	1,680
K	COUNTY-OTHER	COLORADO	CANYON LAKE/RESERVOIR	260	260	260	260	260	260
K	COUNTY-OTHER	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM	220	220	220	220	220	220
K	DRIPPING SPRINGS	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	DRIPPING SPRINGS WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	HILL COUNTRY WSC	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	HILL COUNTRY WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	IRRIGATION	COLORADO	COLORADO RIVER COMBINED RUN-OF-RIVER IRRIGATION	6	6	6	6	6	6
K	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	30	30	30	30	30	30
L	COUNTY LINE WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	COUNTY LINE WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	COUNTY-OTHER	GUADALUPE	CANYON LAKE/RESERVOIR	485	485	485	485	485	485
L	CRYSTAL CLEAR WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	CRYSTAL CLEAR WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	GOFORTH WSC	GUADALUPE	CANYON LAKE/RESERVOIR	899	899	899	899	899	899
L	IRRIGATION	GUADALUPE	GUADALUPE RIVER COMBINED RUN-OF-RIVER IRRIGATION	19	19	19	19	19	19
L	KYLE	GUADALUPE	CANYON LAKE/RESERVOIR	118	118	118	118	118	118
L	LIVESTOCK	GUADALUPE	LIVESTOCK LOCAL SUPPLY	22	22	22	22	22	22
L	MAXWELL WSC	GUADALUPE	CANYON LAKE/RESERVOIR						
L	MAXWELL WSC	GUADALUPE	GUADALUPE RIVER RUN-OF-RIVER						
L	PLUM CREEK WATER COMPANY	GUADALUPE	CANYON LAKE/RESERVOIR	560	560	560	560	560	560
L	SAN MARCOS	GUADALUPE	CANYON LAKE/RESERVOIR						
L	STEAM ELECTRIC POWER	GUADALUPE	CANYON LAKE/RESERVOIR	381	381	381	381	381	381
	Sum of Projected Surface Water Supplies (acre-feet/year)			**4,120**	**4,680**	**4,680**	**4,680**	**4,680**	**4,680**

TRAVIS COUNTY

11.46 % (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	AUSTIN	COLORADO	COLORADO RIVER RUN-OF-RIVER	2,520	3,335	3,351	3,370	3,377	3,377

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	AUSTIN	COLORADO	COLORADO RIVER RUN-OF-RIVER	162,310	152,237	142,035	127,378	116,897	106,234
K	AUSTIN	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM	112,410	120,534	120,534	120,534	120,534	120,521
K	BARTON CREEK WEST WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	BEE CAVE VILLAGE	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	BRIARCLIFF VILLAGE	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	CEDAR PARK	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	COUNTY-OTHER	COLORADO	COLORADO RIVER RUN-OF-RIVER	513	533	486	470	489	534
K	COUNTY-OTHER	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM	2,197	2,197	2,198	2,198	2,198	2,198
K	CREEDMOOR-MAHA WSC	COLORADO	COLORADO RIVER RUN-OF-RIVER	596	0	0	0	0	0
K	CREEDMOOR-MAHA WSC	GUADALUPE	COLORADO RIVER RUN-OF-RIVER	16	0	0	0	0	0
K	HILL COUNTRY WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	IRRIGATION	COLORADO	COLORADO RIVER COMBINED RUN-OF-RIVER IRRIGATION	72	74	75	76	76	77
K	IRRIGATION	GUADALUPE	COLORADO RIVER COMBINED RUN-OF-RIVER IRRIGATION	14	13	12	11	10	9
K	JONESTOWN	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	JONESTOWN WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	LAGO VISTA	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	LAKEWAY	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	LIVESTOCK	COLORADO	LIVESTOCK LOCAL SUPPLY	100	100	100	100	100	100

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	LIVESTOCK	GUADALUPE	LIVESTOCK LOCAL SUPPLY						
K	LOOP 360 WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	LOST CREEK MUD	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	MANOR	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	MANOR	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	MANUFACTURING	COLORADO	COLORADO RIVER RUN-OF-RIVER	2,557	3,163	4,334	5,706	6,533	7,330
K	MANUFACTURING	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM	60	60	60	60	60	60
K	MANVILLE WSC	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	MANVILLE WSC	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	MINING	COLORADO	OTHER LOCAL SUPPLY	539	596	658	729	810	810
K	NORTH AUSTIN MUD #1	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	NORTH TRAVIS COUNTY MUD #5	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	PFLUGERVILLE	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	PFLUGERVILLE	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	RIVER PLACE ON LAKE AUSTIN	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	ROLLINGWOOD	COLORADO	COLORADO RIVER RUN-OF-RIVER	377	0	0	0	0	0
K	SAN LEANNA	COLORADO	COLORADO RIVER RUN-OF-RIVER	100	0	0	0	0	0
K	SHADY HOLLOW MUD	COLORADO	COLORADO RIVER RUN-OF-RIVER	747	731	716	700	694	694
K	STEAM ELECTRIC POWER	COLORADO	COLORADO RIVER RUN-OF-RIVER	113	113	113	113	113	113
K	STEAM ELECTRIC POWER	COLORADO	COLORADO RIVER RUN-OF-RIVER	707	707	707	707	707	707

Projected Surface Water Supplies
TWDB 2012 State Water Plan Data

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
K	STEAM ELECTRIC POWER	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM	1,739	1,739	1,739	1,739	1,739	1,739
K	THE HILLS	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	TRAVIS COUNTY WCID #17	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	TRAVIS COUNTY WCID #18	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	TRAVIS COUNTY WCID #19	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	TRAVIS COUNTY WCID #20	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	WELLS BRANCH MUD	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	WEST LAKE HILLS	COLORADO	COLORADO RIVER RUN-OF-RIVER						
K	WEST TRAVIS COUNTY REGIONAL WS	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	WILLIAMSON-TRAVIS COUNTY MUD #1	COLORADO	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM						
K	WINDERMERE UTILITY COMPANY	COLORADO	COLORADO RIVER RUN-OF-RIVER						
	Sum of Projected Surface Water Supplies (acre-feet/year)			**287,687**	**286,132**	**277,118**	**263,891**	**254,337**	**244,503**

Projected Water Demands
TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

CALDWELL COUNTY

4.54 % (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
L	COUNTY-OTHER	COLORADO	1	1	1	1	1	1
L	MINING	COLORADO	0	0	0	0	0	0
L	IRRIGATION	COLORADO	1	1	1	0	0	0
L	LIVESTOCK	COLORADO	7	7	7	7	7	7
L	CREEDMOOR-MAHA WSC	COLORADO	136	177	213	250	287	325
L	MUSTANG RIDGE	COLORADO	122	160	194	228	262	296
L	POLONIA WSC	COLORADO						
L	CREEDMOOR-MAHA WSC	GUADALUPE	98	127	154	181	207	235
L	POLONIA WSC	GUADALUPE						
L	MARTINDALE	GUADALUPE						
L	MAXWELL WSC	GUADALUPE						
L	MARTINDALE WSC	GUADALUPE						
L	LOCKHART	GUADALUPE						
L	LULING	GUADALUPE						
L	COUNTY-OTHER	GUADALUPE	10	9	8	7	6	6
L	MANUFACTURING	GUADALUPE	1	1	1	1	1	1
L	MINING	GUADALUPE	0	0	0	0	0	0
L	IRRIGATION	GUADALUPE	47	41	37	33	29	26
L	LIVESTOCK	GUADALUPE	35	35	35	35	35	35
L	MUSTANG RIDGE	GUADALUPE	13	18	21	25	29	33
L	NIEDERWALD	GUADALUPE						
L	AQUA WSC	GUADALUPE						
L	COUNTY LINE WSC	GUADALUPE						
L	GOFORTH WSC	GUADALUPE	184	269	342	417	495	571
L	GONZALES COUNTY WSC	GUADALUPE						
	Sum of Projected Water Demands (acre-feet/year)		**655**	**846**	**1,014**	**1,185**	**1,359**	**1,536**

HAYS COUNTY

15.45 % (multiplier) except for Kyle which is 4.0%

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	LIVESTOCK	COLORADO	34	34	34	34	34	34

Projected Water Demands
TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	DRIPPING SPRINGS WSC	COLORADO						
K	MOUNTAIN CITY	COLORADO	118	116	116	115	115	115
K	HILL COUNTRY WSC	COLORADO						
K	BUDA	COLORADO	1,454	2,128	2,603	3,088	3,666	4,140
K	DRIPPING SPRINGS	COLORADO						
K	COUNTY-OTHER	COLORADO	519	751	959	1,170	1,433	1,640
K	MANUFACTURING	COLORADO	107	125	143	162	179	194
K	MINING	COLORADO	2	1	0	0	0	0
K	IRRIGATION	COLORADO	2	2	2	2	2	2
K	CIMARRON PARK WATER COMPANY	COLORADO	403	489	582	676	789	882
L	WOODCREEK UTILITIES INC	GUADALUPE						
L	CREEDMOOR-MAHA WSC	GUADALUPE	10	12	15	17	20	23
L	COUNTY-OTHER	GUADALUPE	223	254	287	321	365	399
L	CRYSTAL CLEAR WSC	GUADALUPE						
L	MOUNTAIN CITY	GUADALUPE	45	71	98	124	157	183
L	GOFORTH WSC	GUADALUPE	972	1,340	1,704	2,075	2,545	2,914
L	MANUFACTURING	GUADALUPE	33	38	44	50	55	60
L	STEAM ELECTRIC POWER	GUADALUPE	156	111	147	301	411	560
L	SAN MARCOS	GUADALUPE						
L	WIMBERLEY WSC	GUADALUPE						
L	WOODCREEK	GUADALUPE						
L	MAXWELL WSC	GUADALUPE						
L	PLUM CREEK WATER COMPANY	GUADALUPE	566	762	963	1,168	1,427	1,630
L	COUNTY LINE WSC	GUADALUPE						
L	NIEDERWALD	GUADALUPE	104	147	194	238	294	338
L	LIVESTOCK	GUADALUPE	43	43	43	43	43	43
L	IRRIGATION	GUADALUPE	55	54	54	53	53	52
L	MINING	GUADALUPE	22	23	24	25	25	25
L	KYLE	GUADALUPE	110	158	169	175	195	208
	Sum of Projected Water Demands (acre-feet/year)		**4,978**	**6,659**	**8,181**	**9,837**	**11,808**	**13,442**

Projected Water Demands
TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

TRAVIS COUNTY

11.46 % (multiplier)

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	AUSTIN	COLORADO	150,180	179,861	212,133	241,074	271,296	293,095
K	GOFORTH WSC	COLORADO	30	39	47	52	58	63
K	LIVESTOCK	COLORADO	77	77	77	77	77	77
K	SAN LEANNA	COLORADO	100	120	140	158	171	184
K	IRRIGATION	COLORADO	115	105	97	89	82	76
K	MINING	COLORADO	175	189	198	207	215	222
K	MANUFACTURING	COLORADO	2,636	3,242	4,413	5,785	6,613	7,409
K	STEAM ELECTRIC POWER	COLORADO	2,006	2,120	2,579	2,693	3,152	3,266
K	COUNTY-OTHER	COLORADO	956	993	906	876	911	994
K	JONESTOWN	COLORADO						
K	LAGO VISTA	COLORADO						
K	LAKEWAY	COLORADO						
K	MANOR	COLORADO						
K	PFLUGERVILLE	COLORADO						
K	ROLLINGWOOD	COLORADO	377	376	374	372	371	373
K	WEST LAKE HILLS	COLORADO						
K	JONESTOWN WSC	COLORADO						
K	LOST CREEK MUD	COLORADO						
K	NORTH AUSTIN MUD #1	COLORADO						
K	RIVER PLACE ON LAKE AUSTIN	COLORADO						
K	SHADY HOLLOW MUD	COLORADO	747	731	716	700	694	694
K	TRAVIS COUNTY WCID #17	COLORADO						
K	TRAVIS COUNTY WCID #18	COLORADO						
K	TRAVIS COUNTY WCID #19	COLORADO						
K	TRAVIS COUNTY WCID #20	COLORADO						
K	WEST TRAVIS COUNTY REGIONAL WS	COLORADO						
K	WILLIAMSON-TRAVIS COUNTY MUD #1	COLORADO						
K	THE HILLS	COLORADO						
K	AQUA WSC	COLORADO						
K	BARTON CREEK WEST WSC	COLORADO						

Projected Water Demands
TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	CREEDMOOR-MAHA WSC	COLORADO	612	717	820	884	951	1,030
K	CEDAR PARK	COLORADO						
K	BRIARCLIFF VILLAGE	COLORADO						
K	ROUND ROCK	COLORADO						
K	ELGIN	COLORADO						
K	BEE CAVE VILLAGE	COLORADO						
K	MUSTANG RIDGE	COLORADO	93	111	128	139	150	162
K	HILL COUNTRY WSC	COLORADO						
K	MANVILLE WSC	COLORADO						
K	NORTH TRAVIS COUNTY MUD #5	COLORADO						
K	LOOP 360 WSC	COLORADO						
K	WELLS BRANCH MUD	COLORADO						
K	WINDERMERE UTILITY COMPANY	COLORADO						
K	IRRIGATION	GUADALUPE	14	13	12	11	10	9
K	CREEDMOOR-MAHA WSC	GUADALUPE	16	19	21	23	25	27
K	COUNTY-OTHER	GUADALUPE	0	0	0	0	0	0
K	LIVESTOCK	GUADALUPE	3	3	3	3	3	3
K	MUSTANG RIDGE	GUADALUPE	25	30	34	37	40	43
	Sum of Projected Water Demands (acre-feet/year)		**158,162**	**188,746**	**222,698**	**253,180**	**284,819**	**307,727**

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

CALDWELL COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
L	AQUA WSC	GUADALUPE	-49	-121	-178	-240	-300	-362
L	COUNTY LINE WSC	GUADALUPE	137	33	-64	-160	-259	-354
L	COUNTY-OTHER	COLORADO	6	7	7	7	8	8
L	COUNTY-OTHER	GUADALUPE	494	507	531	554	572	586
L	CREEDMOOR-MAHA WSC	COLORADO	-61	-102	-138	-175	-212	-250
L	CREEDMOOR-MAHA WSC	GUADALUPE	-44	-73	-100	-127	-153	-181
L	GOFORTH WSC	GUADALUPE	59	-26	-99	-174	-252	-328
L	GONZALES COUNTY WSC	GUADALUPE	87	71	56	42	28	14
L	IRRIGATION	COLORADO	0	1	3	4	5	6
L	IRRIGATION	GUADALUPE	1	115	217	307	388	460
L	LIVESTOCK	COLORADO	0	0	0	0	0	0
L	LIVESTOCK	GUADALUPE	0	0	0	0	0	0
L	LOCKHART	GUADALUPE	322	-321	-856	-1,407	-1,952	-2,512
L	LULING	GUADALUPE	21	-122	-211	-296	-398	-506
L	MANUFACTURING	GUADALUPE	14	11	8	5	2	0
L	MARTINDALE	GUADALUPE	33	24	19	15	8	0
L	MARTINDALE WSC	GUADALUPE	-29	-40	-45	-49	-57	-66
L	MAXWELL WSC	GUADALUPE	264	89	-77	-229	-399	-564
L	MINING	COLORADO	3	2	2	1	1	1
L	MINING	GUADALUPE	2	2	1	1	0	0
L	MUSTANG RIDGE	COLORADO	-17	-55	-89	-123	-157	-191
L	MUSTANG RIDGE	GUADALUPE	-2	-7	-10	-14	-18	-22
L	NIEDERWALD	GUADALUPE	-8	-25	-43	-60	-77	-93
L	POLONIA WSC	COLORADO	219	153	96	37	-20	-80
L	POLONIA WSC	GUADALUPE	504	352	221	86	-46	-185
	Sum of Projected Water Supply Needs (acre-feet/year)		**-210**	**-892**	**-1,910**	**-3,054**	**-4,300**	**-5,694**

HAYS COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	BUDA	COLORADO	257	143	-332	-817	-1,395	-1,869

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	CIMARRON PARK WATER COMPANY	COLORADO	-150	-236	-329	-423	-536	-629
K	COUNTY-OTHER	COLORADO	760	-838	-2,072	-3,440	-5,144	-6,482
K	DRIPPING SPRINGS	COLORADO	-574	-1,350	-1,791	-2,239	-2,794	-3,230
K	DRIPPING SPRINGS WSC	COLORADO	452	299	140	-17	-213	-366
K	HILL COUNTRY WSC	COLORADO	0	0	0	0	0	0
K	IRRIGATION	COLORADO	42	42	42	42	41	41
K	LIVESTOCK	COLORADO	2	2	2	2	0	0
K	MANUFACTURING	COLORADO	-93	-211	-330	-450	-558	-657
K	MINING	COLORADO	0	6	10	12	10	10
K	MOUNTAIN CITY	COLORADO	-25	-23	-23	-22	-22	-22
L	COUNTY LINE WSC	GUADALUPE	3	-1,049	-1,369	-1,443	-1,662	-2,032
L	COUNTY-OTHER	GUADALUPE	1,829	1,629	1,418	1,196	912	689
L	CREEDMOOR-MAHA WSC	GUADALUPE	-3	-5	-8	-10	-13	-16
L	CRYSTAL CLEAR WSC	GUADALUPE	181	27	-140	-293	-499	-661
L	GOFORTH WSC	GUADALUPE	398	30	-334	-705	-1,175	-1,544
L	IRRIGATION	GUADALUPE	316	319	322	325	328	331
L	KYLE	GUADALUPE	764	-436	-713	-873	-1,370	-1,699
L	LIVESTOCK	GUADALUPE	0	0	0	0	0	0
L	MANUFACTURING	GUADALUPE	1,353	1,316	1,280	1,243	1,210	1,179
L	MAXWELL WSC	GUADALUPE	120	77	28	-17	-77	-125
L	MINING	GUADALUPE	-82	-91	-97	-101	-102	-103
L	MOUNTAIN CITY	GUADALUPE	4	-22	-49	-75	-108	-134
L	NIEDERWALD	GUADALUPE	-50	-93	-140	-184	-240	-284
L	PLUM CREEK WATER COMPANY	GUADALUPE	407	211	10	-195	-454	-657
L	SAN MARCOS	GUADALUPE	5,014	1,854	-1,319	-4,772	-8,507	-11,387
L	STEAM ELECTRIC POWER	GUADALUPE	5,151	5,442	5,211	4,211	3,497	2,533
L	WIMBERLEY WSC	GUADALUPE	-219	-440	-667	-885	-1,179	-1,409
L	WOODCREEK	GUADALUPE	-23	-92	-162	-229	-317	-387
L	WOODCREEK UTILITIES INC	GUADALUPE	-455	-852	-1,271	-1,681	-2,184	-2,580
	Sum of Projected Water Supply Needs (acre-feet/year)		**-1,674**	**-5,738**	**-11,146**	**-18,871**	**-28,549**	**-36,273**

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

TRAVIS COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	AQUA WSC	COLORADO	0	0	0	0	0	0
K	AUSTIN	COLORADO	127,060	96,245	53,787	10,208	-30,488	-62,963
K	BARTON CREEK WEST WSC	COLORADO	-53	-50	-47	-45	-43	-43
K	BEE CAVE VILLAGE	COLORADO	-936	-1,172	-1,406	-1,615	-1,768	-1,923
K	BRIARCLIFF VILLAGE	COLORADO	46	1	-45	-87	-117	-149
K	CEDAR PARK	COLORADO	0	0	0	0	0	0
K	COUNTY-OTHER	COLORADO	16,862	16,697	17,028	17,131	16,871	16,523
K	COUNTY-OTHER	GUADALUPE	0	0	0	0	0	0
K	CREEDMOOR-MAHA WSC	COLORADO	305	-431	-548	-632	-715	-807
K	CREEDMOOR-MAHA WSC	GUADALUPE	0	0	0	0	0	0
K	ELGIN	COLORADO	0	3	3	1	-1	-3
K	GOFORTH WSC	COLORADO	-11	-21	-30	-37	-43	-48
K	HILL COUNTRY WSC	COLORADO	0	0	0	0	0	0
K	IRRIGATION	COLORADO	39	131	214	290	345	409
K	IRRIGATION	GUADALUPE	0	0	0	0	0	0
K	JONESTOWN	COLORADO	-129	-233	-329	-416	-481	-554
K	JONESTOWN WSC	COLORADO	0	0	0	0	0	0
K	LAGO VISTA	COLORADO	4,240	3,798	3,358	2,964	2,670	2,376
K	LAKEWAY	COLORADO	-1,681	-2,613	-3,513	-4,338	-4,954	-5,572
K	LIVESTOCK	COLORADO	197	197	197	197	196	196
K	LIVESTOCK	GUADALUPE	8	8	8	8	8	8
K	LOOP 360 WSC	COLORADO	22	25	29	32	32	32
K	LOST CREEK MUD	COLORADO	0	0	0	0	0	0
K	MANOR	COLORADO	1,265	-940	-1,173	-1,390	-1,552	-1,717
K	MANUFACTURING	COLORADO	0	0	0	0	0	0
K	MANVILLE WSC	COLORADO	2,581	1,961	-831	-2,184	-2,584	-3,034
K	MINING	COLORADO	3,527	3,909	4,376	4,915	5,517	5,462
K	MUSTANG RIDGE	COLORADO	0	0	0	0	0	0
K	MUSTANG RIDGE	GUADALUPE	0	0	0	0	0	0
K	NORTH AUSTIN MUD #1	COLORADO	0	0	0	0	0	0
K	NORTH TRAVIS COUNTY MUD #5	COLORADO	0	0	0	0	0	0

Projected Water Supply Needs
TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
K	PFLUGERVILLE	COLORADO	3,299	1,996	442	140	-918	-1,981
K	RIVER PLACE ON LAKE AUSTIN	COLORADO	-570	-823	-823	-817	-817	-817
K	ROLLINGWOOD	COLORADO	0	-376	-374	-372	-371	-373
K	ROUND ROCK	COLORADO	-158	-339	-528	-669	-813	-957
K	SAN LEANNA	COLORADO	100	0	0	0	0	0
K	SHADY HOLLOW MUD	COLORADO	0	0	0	0	0	0
K	STEAM ELECTRIC POWER	COLORADO	4,830	3,830	-170	-1,170	-5,170	-6,170
K	THE HILLS	COLORADO	1,033	867	867	871	871	871
K	TRAVIS COUNTY WCID #17	COLORADO	4,642	3,602	3,023	2,364	2,015	1,577
K	TRAVIS COUNTY WCID #18	COLORADO	547	325	122	-4	-135	-283
K	TRAVIS COUNTY WCID #19	COLORADO	0	0	0	0	0	0
K	TRAVIS COUNTY WCID #20	COLORADO	673	675	678	679	680	680
K	WELLS BRANCH MUD	COLORADO	31	30	30	30	29	29
K	WEST LAKE HILLS	COLORADO	0	-1,833	-2,049	-2,178	-2,320	-2,471
K	WEST TRAVIS COUNTY REGIONAL WS	COLORADO	7,641	6,921	6,217	5,692	5,075	4,520
K	WILLIAMSON-TRAVIS COUNTY MUD #1	COLORADO	0	0	0	0	0	0
K	WINDERMERE UTILITY COMPANY	COLORADO	0	-2,222	-2,201	-2,180	-2,180	-2,180
	Sum of Projected Water Supply Needs (acre-feet/year)		**-3,538**	**-11,053**	**-14,067**	**-18,134**	**-55,470**	**-92,045**

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

CALDWELL COUNTY

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
AQUA WSC, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	13	0	0	0	0	0
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [CALDWELL]	403	403	403	403	403	403
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	0	0	0	0	6	19
COUNTY LINE WSC, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	285	285	285	285	285
LOCAL GROUNDWATER (TRINITY AQUIFER)	TRINITY AQUIFER [CALDWELL]	0	10	10	10	10	10
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	64	160	259	354
COUNTY-OTHER, GUADALUPE (L)							
FACILITIES EXPANSION	GUADALUPE RIVER RUN-OF-RIVER [CALDWELL]	0	0	0	0	0	0
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	21	37	36	31	28	29
CREEDMOOR-MAHA WSC, COLORADO (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	102	138	175	212	250
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	GUADALUPE RIVER RUN-OF-RIVER [CALHOUN]	61	0	0	0	0	0
CREEDMOOR-MAHA WSC, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	73	100	127	153	181
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	0	0	0	0	0	11
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	GUADALUPE RIVER RUN-OF-RIVER [CALHOUN]	44	0	0	0	0	0
GOFORTH WSC, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [GONZALES]	0	26	99	174	252	328

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
LOCKHART, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	123	0	0	0	0	0
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	1,120	1,120	1,120	1,120	1,120
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	403	1,210	1,613	2,016	2,823
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	0	0	28	103	195	333
LULING, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	53	0	0	0	0	0
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	1,680	1,680	1,680	1,680	1,680
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	403	403	403	403	807
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	70	90	108	117	148	192
MARTINDALE, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	6	0	0	0	0	0
MARTINDALE WSC, GUADALUPE (L)							
CRWA WELLS RANCH PROJECT PHASE II (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [GUADALUPE]	257	257	444	568	568	568
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	9	0	0	0	0	0
MAXWELL WSC, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	300	600	900	1,200	1,500
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	0	0	0	0	11	55
MUSTANG RIDGE, COLORADO (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [CALDWELL]	6	0	0	0	0	0
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	55	89	123	157	191
MUNICIPAL WATER CONSERVATION	CONSERVATION [CALDWELL]	10	26	48	74	98	116

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) / Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
		All values are in acre-feet/year					
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	CANYON LAKE/RESERVOIR [RESERVOIR]	17	0	0	0	0	0
MUSTANG RIDGE, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	7	10	14	18	22
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	CANYON LAKE/RESERVOIR [RESERVOIR]	2	0	0	0	0	0
NIEDERWALD, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	25	43	60	77	93
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	CANYON LAKE/RESERVOIR [RESERVOIR]	8	0	0	0	0	0
POLONIA WSC, COLORADO (L)							
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	0	0	0	48	97
POLONIA WSC, GUADALUPE (L)							
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	0	0	0	113	226
Sum of Projected Water Management Strategies (acre-feet/year)		**1,103**	**5,302**	**6,918**	**8,140**	**9,460**	**11,693**

HAYS COUNTY

WUG, Basin (RWPG) / Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
		All values are in acre-feet/year					
BUDA, COLORADO (K)							
DEVELOPMENT OF CARRIZO-WILCOX AQUIFER	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	1,687	1,687	1,687	1,687	1,687
DEVELOPMENT OF SALINE ZONE OF EDWARDS-BFZ AQUIFER	EDWARDS-BFZ AQUIFER [TRAVIS]	0	0	0	0	0	500
CIMARRON PARK WATER COMPANY, COLORADO (K)							
DEVELOPMENT OF SALINE ZONE OF EDWARDS-BFZ AQUIFER	EDWARDS-BFZ AQUIFER [TRAVIS]	0	0	250	350	500	600
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	109	109	109	109	109	109

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

All values are in acre-feet/year

WUG, Basin (RWPG) / Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
MUNICIPAL CONSERVATION	CONSERVATION [HAYS]	24	17	13	9	5	7
WATER ALLOCATION	EDWARDS-BFZ AQUIFER [HAYS]	17	110	0	0	0	0
COUNTY-OTHER, COLORADO (K)							
DEVELOPMENT OF SALINE ZONE OF EDWARDS-BFZ AQUIFER	EDWARDS-BFZ AQUIFER [TRAVIS]	0	250	2,500	2,500	5,000	6,000
PURCHASE WATER FROM COA	COLORADO RIVER RUN-OF-RIVER [TRAVIS]	1,100	1,100	1,100	1,100	1,100	1,100
DRIPPING SPRINGS, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	493	1,073	1,321	1,690	2,133	2,482
MUNICIPAL CONSERVATION	CONSERVATION [HAYS]	81	277	470	549	661	748
DRIPPING SPRINGS WSC, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	0	0	17	213	366
MANUFACTURING, COLORADO (K)							
DEVELOPMENT OF TRINITY AQUIFER	TRINITY AQUIFER [HAYS]	0	0	75	200	301	400
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	257	257	257	257	257	257
MOUNTAIN CITY, COLORADO (K)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	39	39	39	39	39	39
MUNICIPAL CONSERVATION	CONSERVATION [HAYS]	2	0	0	0	0	0
COUNTY LINE WSC, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	58	0	0	0	0	0
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	285	285	285	285	285
LOCAL GROUNDWATER (TRINITY AQUIFER)	TRINITY AQUIFER [CALDWELL]	0	1,119	1,442	1,603	1,926	2,410
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	43	110	112	67	85	119
COUNTY-OTHER, GUADALUPE (L)							
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	12	49	112	184

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
CREEDMOOR-MAHA WSC, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	5	8	10	13	16
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	GUADALUPE RIVER RUN-OF-RIVER [CALHOUN]	3	0	0	0	0	0
CRYSTAL CLEAR WSC, GUADALUPE (L)							
BRACKISH GROUNDWATER DESALINATION (WILCOX AQUIFER)	CARRIZO-WILCOX AQUIFER- BRACKISH [GUADALUPE]	0	0	130	130	259	259
BRACKISH GROUNDWATER DESALINATION (WILCOX AQUIFER)	CARRIZO-WILCOX AQUIFER- BRACKISH [WILSON]	0	0	206	206	1,469	1,469
CRWA WELLS RANCH PROJECT PHASE I	CARRIZO-WILCOX AQUIFER [GONZALES]	434	0	0	0	0	0
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	865	0	0	0	0
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	0	530	530	0	0
LOCAL GROUNDWATER CARRIZO-WILCOX AQUIFER (INCLUDES OVERDRAFTS)	CARRIZO-WILCOX AQUIFER [GUADALUPE]	0	0	140	293	499	661
GOFORTH WSC, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	0	300	300	300	300
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [GONZALES]	0	1,613	1,540	1,465	1,387	1,311
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	0	0	22	111
KYLE, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	137	0	0	0	0	0
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [GONZALES]	0	500	1,000	2,416	5,144	9,355
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	27	96	167	302	443
MAXWELL WSC, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	100	200	300	400	500
MINING, GUADALUPE (L)							
INDUSTRIAL, STEAM-ELECTRIC POWER GENERATION, AND MINING WATER CONSERVATION	CONSERVATION [HAYS]	82	91	97	101	102	103

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
MOUNTAIN CITY, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [CALDWELL]	0	150	150	150	150	150
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	1	3	6	10	16	22
NIEDERWALD, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	7	0	0	0	0	0
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	93	140	184	240	284
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	1	8	15	27	42
PURCHASE FROM WWP (GUADALUPE-BLANCO RIVER AUTHORITY)	CANYON LAKE/RESERVOIR [RESERVOIR]	50	0	0	0	0	0
PLUM CREEK WATER COMPANY, GUADALUPE (L)							
GBRA MID BASIN (SURFACE WATER)	GUADALUPE RIVER RUN-OF-RIVER [GONZALES]	0	0	0	195	454	657
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	0	0	12	54
SAN MARCOS, GUADALUPE (L)							
HAYS/CALDWELL PUA PROJECT (INCL. GONZALES CO.)	CARRIZO-WILCOX AQUIFER [GONZALES]	0	0	1,548	4,953	8,675	11,910
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	417	554	815	1,282	1,875	2,656
WIMBERLEY WSC, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	39	0	0	0	0	0
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	0	0	19	70
WIMBERLEY AND WOODCREEK WATER SUPPLY PROJECT	CANYON LAKE/RESERVOIR [RESERVOIR]	336	1,425	1,425	1,425	1,425	1,425
WOODCREEK, GUADALUPE (L)							
DROUGHT MANAGEMENT	DROUGHT MANAGEMENT [HAYS]	12	0	0	0	0	0
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	0	0	2	6	20	37
WIMBERLEY AND WOODCREEK WATER SUPPLY PROJECT	CANYON LAKE/RESERVOIR [RESERVOIR]	112	400	400	400	400	400
WOODCREEK UTILITIES INC, GUADALUPE (L)							
MUNICIPAL WATER CONSERVATION	CONSERVATION [HAYS]	56	177	337	455	619	771

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
WIMBERLEY AND WOODCREEK WATER SUPPLY PROJECT	CANYON LAKE/RESERVOIR [RESERVOIR]	672	2,655	2,655	2,655	2,655	2,655
Sum of Projected Water Management Strategies (acre-feet/year)		**4,581**	**15,092**	**21,405**	**28,159**	**40,897**	**52,954**

TRAVIS COUNTY

WUG, Basin (RWPG) All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
AUSTIN, COLORADO (K)							
COA CONSERVATION	CONSERVATION [TRAVIS]	11,030	18,795	24,036	25,385	30,401	36,370
COA DIRECT REUSE (MUNICIPAL & MANUFACTURING)	DIRECT REUSE [TRAVIS]	5,143	13,620	22,077	30,268	36,218	40,468
COA RETURN FLOWS	INDIRECT REUSE [TRAVIS]	27,188	24,954	25,692	33,549	33,263	39,528
DOWNSTREAM RETURN FLOWS	INDIRECT REUSE [TRAVIS]	0	0	238	950	1,781	2,375
LCRA CONTRACT REDUCTIONS	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM [RESERVOIR]	-27,188	-24,954	-28,020	-34,499	-35,044	-41,903
PURCHASE WATER FROM COA	COLORADO RIVER RUN-OF-RIVER [TRAVIS]	-1,100	-1,100	-1,100	-1,100	-1,100	-1,100
BARTON CREEK WEST WSC, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	37	68	97	123	147	163
PURCHASE WATER FROM WEST TRAVIS COUNTY REGIONAL WS	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM [RESERVOIR]	16	0	0	0	0	0
BEE CAVE VILLAGE, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	106	247	417	600	778	965
PURCHASE WATER FROM WEST TRAVIS COUNTY REGIONAL WS	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM [RESERVOIR]	830	925	989	1,015	990	958
BRIARCLIFF VILLAGE, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	0	0	21	47	74
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	16	39	61	66	70	75

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
CREEDMOOR-MAHA WSC, COLORADO (K)							
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	431	548	632	715	807
ELGIN, COLORADO (K)							
EXPANSION OF CARRIZO-WILCOX AQUIFER	CARRIZO-WILCOX AQUIFER [BASTROP]	0	0	0	0	1	3
GOFORTH WSC, COLORADO (K)							
WATER TRANSFER	CANYON LAKE/RESERVOIR [RESERVOIR]	11	21	30	37	43	48
JONESTOWN, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	129	233	329	416	481	554
LAKEWAY, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	1,285	1,675	1,934	2,041	2,041	2,041
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	396	938	1,579	2,297	3,017	3,765
MANOR, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	102	235	393	490	522	557
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	705	780	900	1,030	1,160
MANVILLE WSC, COLORADO (K)							
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	0	831	2,184	2,584	3,034
PFLUGERVILLE, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	0	0	0	3	995
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	541	748	810	844	915	986

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG) — All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
RIVER PLACE ON LAKE AUSTIN, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	438	528	392	268	156	55
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	132	295	431	549	661	762
ROLLINGWOOD, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	31	60	85	109	132	143
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	373	373	373	373	373
ROUND ROCK, COLORADO (K)							
HB 1437 FOR WILLIAMSON COUNTY	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	126	246	349	426	536	645
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	32	93	179	243	277	312
STEAM ELECTRIC POWER, COLORADO (K)							
COA DIRECT REUSE (STEAM ELECTRIC)	DIRECT REUSE [TRAVIS]	2,315	3,315	7,315	8,315	12,315	13,315
LCRA CONTRACT REDUCTIONS	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM [RESERVOIR]	0	-3,000	-5,000	0	0	0
TRAVIS COUNTY WCID #18, COLORADO (K)							
AMEND LCRA CONTRACT	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	0	0	4	135	283
WEST LAKE HILLS, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	139	303	495	677	870	1,074
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	1,833	2,049	2,178	2,320	2,471
WEST TRAVIS COUNTY REGIONAL WS, COLORADO (K)							
MUNICIPAL CONSERVATION	CONSERVATION [TRAVIS]	17	9	0	0	0	0
PURCHASE WATER FROM WEST TRAVIS COUNTY REGIONAL WS	HIGHLAND LAKES LAKE/RESERVOIR SYSTEM [RESERVOIR]	-846	-925	-989	-1,015	-990	-958

Projected Water Management Strategies
TWDB 2012 State Water Plan Data

WUG, Basin (RWPG)

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
WINDERMERE UTILITY COMPANY, COLORADO (K)							
NEW LCRA CONTRACTS	COLORADO RIVER COMBINED RUN-OF-RIVER - LCRA SUPPLY REALLOCATION [TRAVIS]	0	2,222	2,201	2,180	2,180	2,180
Sum of Projected Water Management Strategies (acre-feet/year)		**20,926**	**42,932**	**59,601**	**80,526**	**97,868**	**112,578**

APPENDIX IV

MODELED AVAILABLE GROUNDWATER ESTIMATES BY TWDB

APPENDIX IV

PART A

TO ACHIEVE APPLICABLE DFCS IN GMA 9

Trinity-Hill Country Aquifer

Texas Water Development Board

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April 18, 2012

Mr. Kirk Holland
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124-A Regal Row
Austin, TX 78748

Re: Modeled available groundwater estimates for the Trinity Aquifer and the Edwards Group of the Edwards-Trinity (Plateau) Aquifer in Groundwater Management Area 9

Dear Mr. Holland:

The Texas Water Code, Section 36.1084, Subsection (b), states that the Texas Water Development Board's (TWDB) Executive Administrator shall provide each groundwater conservation district and regional water planning group located wholly or partly in the groundwater management area with the modeled available groundwater in the management area based upon the desired future conditions adopted by the districts. This letter and the attached reports (GAM Run 10-049 MAG Version 2 and GAM Run 10-050 MAG Version 2) are in response to this directive.

As noted in the letter received by the TWDB on August 30, 2010, from Ronald Fieseler of the Blanco-Pedernales Groundwater Conservation District on behalf of Groundwater Management Area 9, desired future conditions were adopted for the Trinity Aquifer and the Edwards Group of the Edwards-Trinity (Plateau) Aquifer on July 26, 2010.

Modeled available groundwater is defined in the Texas Water Code, Section 36.001, Subsection (25), as "the amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition established under Section 36.108." This is different from "managed available groundwater," shown in the draft version of GAM Run 10-050 Version 2, which was a permitting value and accounted for the estimated use exempt from permitting. This change was made to reflect changes in statute by the 82nd Legislature, effective September 1, 2011.

The first version released of GAM Run 10-049 MAG included modeled available groundwater values for Kerr County, which was declared "not-relevant" for joint planning purposes by Groundwater Management Area 9. Since modeled available groundwater only applies to areas with a specified desired future condition, the second version of this report has been updated to depict modeled available groundwater in relevant counties only. For use in the regional water planning process, modeled available groundwater estimates have been reported by aquifer, county, river basin, regional water planning area, groundwater conservation district, and any other subdivision of the aquifer designated by the management area (if applicable).

We encourage open communication and coordination between groundwater conservation districts, regional water planning groups, and the TWDB to ensure that the modeled available groundwater reported in regional water plans and groundwater management plans are not in conflict. We estimated modeled available groundwater that would have to occur to achieve the desired future condition using the best available scientific tools. However, these estimates are based on assumptions of the magnitude and distribution of projected pumping in the aquifer. It is, therefore, important for groundwater conservation districts to monitor whether their management of pumping is achieving their desired future conditions. Districts are encouraged to continue to work with the TWDB to better define available groundwater as additional information may help better assess responses of the aquifer to pumping and its distribution now and in the future.

If you have any questions, please contact Ms. Rima Petrossian of my staff at 512-936-2420 or rima.petrossian@twdb.texas.gov for further information.

Sincerely,

Melanie Callahan

Melanie Callahan
Executive Administrator

Attachments: GAM Run 10-049 MAG Version 2
GAM Run 10-050 MAG Version 2

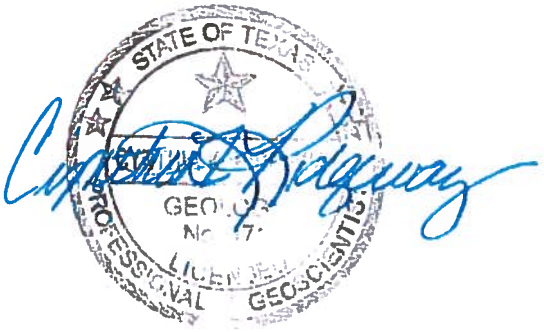
c w/att.: L'Oreal Stepney, Deputy Director, of Water, Texas Commission of Environmental Quality
Kellye Rila, Texas Commission of Environmental Quality
Kelly Mills, Texas Commission of Environmental Quality
John Ashworth, LBG-Guyton Associates
Jaime Burke, AECOM, Inc
Sam Vaugh, HDR Engineering
Raymond Buck, Upper Guadalupe River Authority
James Kowis, Lower Colorado River Authority
Suzanne Scott, San Antonio River Authority
Bill West, Guadalupe-Blanco River Authority
Robert E. Mace, Ph.D, P.G., Deputy Executive Administrator, Water Science and Conservation
Joe Reynolds, Legal Services
Larry French, P.G., Groundwater Resources
Cindy Ridgeway, P.G., Groundwater Resources
Rima Petrossian, P.G., Groundwater Resources
Radu Boghici, P.G. Groundwater Resources
David Meesey, Water Resources Planning and Information
Dan Hardin, Water Resources Planning
Matt Nelson, Water Resources Planning
Temple McKinnon, Water Resources Planning
Connie Townsend, Water Resources Planning
Wendy Barron, Water Resources Planning

GAM Run 10-050 MAG version 2

By Mohammad Masud Hassan, P.E.

Edited and finalized by Radu Boghici to reflect statutory changes effective September 1, 2011

Texas Water Development Board
Groundwater Availability Modeling Section
(512) 463-5808
March 30, 2012



Cynthia K. Ridgeway, the Manager of the Groundwater Availability Modeling Section is responsible for oversight of work performed by employees under her direct supervision. The seal appearing on this document was authorized by Cynthia K. Ridgeway, P.G. 471 on March 30, 2012

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EXECUTIVE SUMMARY:

The modeled available groundwater for the Trinity Aquifer as a result of the desired future condition adopted by the members of Groundwater Management Area 9 declines from approximately 93,000 acre-feet per year to approximately 90,500 acre-feet per year between 2010 and 2060. This is shown divided by county, regional water planning area, and river basin in Table 1 for use in the regional water planning process. Modeled available groundwater is summarized by county, regional water planning area, river basin, and groundwater conservation district in tables 2 though 5. The estimates were extracted from Scenario 6 of Groundwater Availability Modeling Task 10-005 (Hutchison, 2010), which meets the desired future condition adopted by the members of Groundwater Management Area 9.

REQUESTOR:

Mr. Ronald G. Fieseler of the Blanco Pedernales Groundwater Conservation District on behalf of Groundwater Management Area 9

DESCRIPTION OF REQUEST:

In a letter dated August 26, 2010 and received August 30, 2010, Mr. Ronald G. Fieseler provided the Texas Water Development Board (TWDB) with the desired future condition of the Trinity Aquifer adopted by the members of Groundwater Management Area 9. The desired future condition for the Trinity Aquifer in Groundwater Management Area 9, as described in Resolution No. 07-26-10-1, is:

"Hill Country Trinity Aquifer - allow for an increase in average drawdown of approximately 30 feet through 2060 consistent with "Scenario 6" in TWDB Draft GAM Task 10-005"

The TWDB has used this adopted desired future condition to estimate the modeled available groundwater for the Trinity Aquifer for each groundwater conservation district within Groundwater Management Area 9.

METHODS:

The TWDB previously completed several predictive groundwater availability model simulations of the Trinity Aquifer to assist the members of Groundwater Management Area 9 in developing a desired future condition. The location of Groundwater Management Area 9, the Trinity Aquifer, and the groundwater availability model cells that represent the aquifer are shown in Figure 1. As stated in Resolution No. 07-26-10-1, the management area considered Groundwater Availability Modeling (GAM) Task 10-005 (Hutchison, 2010) when developing a desired future condition for the Trinity Aquifer. Since the desired future condition above is met in Scenario 6 of GAM Task 10-005, the modeled available groundwater for Groundwater Management Area 9 presented here was taken directly from that simulation. Please note that in GAM Task 10-005 the pumping was presented as an average of all years (2010 to 2060). We have reported this pumping by decade in the results shown in tables 1-5. The modeled available groundwater was then divided by county, regional water planning area, river basin, and groundwater conservation district (Figure 2).

PARAMETERS AND ASSUMPTIONS:

The parameters and assumptions for the model run using the groundwater availability model for the Trinity Aquifer are described below:

- The results presented in this report are based on Scenario 6 of GAM Task 10-005 (Hutchison, 2010). See Hutchison (2010) for a full description of the methods, assumptions, and results of the model simulations.
- The recently updated groundwater availability model (version 2.01) for the Hill Country portion of the Trinity Aquifer developed by Jones and others (2009) was used for the simulations in GAM Task 10-005. See Mace and others (2000) and Jones and others (2009) for details on model construction, recharge, discharge, assumptions, and limitations.
- The model has four layers: Layer 1 represents the Edwards Group of the Edwards-Trinity (Plateau) Aquifer, Layer 2 represents the Upper Trinity Aquifer, Layer 3 represents the Middle Trinity Aquifer, and Layer 4 represents the Lower Trinity Aquifer. Each scenario in GAM Task 10-005 consisted of a series of 387 separate 50-year model simulations, each with a different recharge configuration. Though the pumping input to the model was the same for each of the 387 simulations, the pumping output differed depending on the occurrence of inactive (or dry) cells. The results below represent the average pumping for the year shown among the simulations comprising Scenario 6 in Hutchison (2010).

Modeled Available Groundwater and Permitting

As defined in Chapter 36 of the Texas Water Code, "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. This is distinct from "managed available groundwater", shown in the draft version of this report dated December 1, 2010, which was a permitting value, and accounted for the estimated use of the aquifer exempt from permitting.

Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors the districts must consider include annual precipitation and production patterns, the estimated amount of pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits. The estimated amount of pumping exempt from permitting, which the Texas Water Development Board is now required to develop after soliciting input from applicable groundwater conservation districts, will be provided in a separate report.

RESULTS:

The modeled available groundwater for the Trinity Aquifer in Groundwater Management Area 9 consistent with the desired future condition decreases from 93,052 acre-feet per year in 2010 to 90,503 acre-feet per year in 2060. The modeled available groundwater has been divided by county, regional water planning area, and river basin for each decade between 2010 and 2060 for use in the regional water planning process (Table 1).

The modeled available groundwater is also summarized by county, regional water planning area, river basin, and groundwater conservation district as shown in tables 2, 3, 4, and 5, respectively. In Table 5, note that modeled available groundwater is totaled for both groundwater conservation district areas and areas without groundwater conservation districts.

REFERENCES:

Hutchison, William R., 2010, GAM Task 10-005, Texas Water Development Board GAM Task 10-005 Report, 13 p.

Jones, I.C., Anaya, R. and Wade, S., 2009, Groundwater Availability Model for the Hill Country portion of the Trinity Aquifer System, Texas, Texas Water Development Board unpublished report,193 p.

Mace, R.E., Chowdhury, A.H., Anaya, R., and Way, S-C., 2000, Groundwater availability of the Trinity Aquifer, Hill Country Area, Texas—Numerical simulations through 2050: Texas Water Development Board Report 353, 119 p.

TABLE 1. MODELED AVAILABLE GROUNDWATER FOR THE TRINITY AQUIFER IN GROUNDWATER MANAGEMENT AREA 9 DIVIDED BY COUNTY, REGIONAL WATER PLANNING AREA, AND RIVER BASIN. RESULTS ARE IN ACRE-FEET PER YEAR.

County	Regional Water Planning Area	River Basin	Year					
			2010	2020	2030	2040	2050	2060
Bandera	J	Guadalupe	76	76	76	76	76	76
		Nueces	903	903	903	903	903	903
		San Antonio	6,305	6,305	6,305	6,305	6,305	6,305
Bexar	L	San Antonio	24,856	24,856	24,856	24,856	24,856	24,856
Blanco	K	Colorado	1,322	1,322	1,322	1,322	1,322	1,322
		Guadalupe	1,251	1,251	1,251	1,251	1,251	1,251
Comal	L	Guadalupe	6,906	6,906	6,906	6,906	6,906	6,906
		San Antonio	3,308	3,308	3,308	3,308	3,308	3,308
Hays	K	Colorado	4,721	4,710	4,707	4,706	4,706	4,706
	L	Guadalupe	4,410	4,410	4,410	4,410	4,410	4,410
Kendall	L	Colorado	135	135	135	135	135	135
		Guadalupe	6,028	6,028	6,028	6,028	6,028	6,028
		San Antonio	4,976	4,976	4,976	4,976	4,976	4,976
Kerr	J	Colorado	318	318	318	318	318	318
		Guadalupe	15,646	14,129	14,056	13,767	13,450	13,434
		Nueces	0	0	0	0	0	0
		San Antonio	471	471	471	471	471	471
Medina	L	Nueces	1,575	1,575	1,575	1,575	1,575	1,575
		San Antonio	925	925	925	925	925	925
Travis	K	Colorado	8,920	8,672	8,655	8,643	8,627	8,598
Total			**93,052**	**91,276**	**91,183**	**90,881**	**90,548**	**90,503**

TABLE 2: MODELED AVAILABLE GROUNDWATER FOR THE TRINITY AQUIFER SUMMARIZED BY COUNTY IN GROUNDWATER MANAGEMENT AREA 9 FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR.

County	Year					
	2010	2020	2030	2040	2050	2060
Bandera	7,284	7,284	7,284	7,284	7,284	7,284
Bexar	24,856	24,856	24,856	24,856	24,856	24,856
Blanco	2,573	2,573	2,573	2,573	2,573	2,573
Comal	10,214	10,214	10,214	10,214	10,214	10,214
Hays	9,131	9,120	9,117	9,116	9,116	9,116
Kendall	11,139	11,139	11,139	11,139	11,139	11,139
Kerr	16,435	14,918	14,845	14,556	14,239	14,223
Medina	2,500	2,500	2,500	2,500	2,500	2,500
Travis	8,920	8,672	8,655	8,643	8,627	8,598
Total	**93,052**	**91,276**	**91,183**	**90,881**	**90,548**	**90,503**

TABLE 3: MODELED AVAILABLE GROUNDWATER FOR THE TRINITY AQUIFER SUMMARIZED BY REGIONAL WATER PLANNING AREA IN GROUNDWATER MANAGEMENT AREA 9 FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR.

Regional Water Planning Area	Year					
	2010	2020	2030	2040	2050	2060
J	23,719	22,202	22,129	21,840	21,523	21,507
K	16,214	15,955	15,935	15,922	15,906	15,877
L	53,119	53,119	53,119	53,119	53,119	53,119
Total	**93,052**	**91,276**	**91,183**	**90,881**	**90,548**	**90,503**

TABLE 4: MODELED AVAILABLE GROUNDWATER FOR THE TRINITY AQUIFER SUMMARIZED BY RIVER BASIN IN GROUNDWATER MANAGEMENT AREA 9 FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR.

River Basin	Year					
	2010	2020	2030	2040	2050	2060
Colorado	15,416	15,157	15,137	15,124	15,108	15,079
Guadalupe	34,317	32,800	32,727	32,438	32,121	32,105
Nueces	2,478	2,478	2,478	2,478	2,478	2,478
San Antonio	40,841	40,841	40,841	40,841	40,841	40,841
Total	**93,052**	**91,276**	**91,183**	**90,881**	**90,548**	**90,503**

TABLE 5: MODELED AVAILABLE GROUNDWATER FOR THE TRINITY AQUIFER SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT (GCD) IN GROUNDWATER MANAGEMENT AREA 9 FOR EACH DECADE BETWEEN 2010 AND 2060. RESULTS ARE IN ACRE-FEET PER YEAR. RA REFERS TO RIVER AUTHORITY. GWD REFERS TO GROUNDWATER DISTRICT.

Groundwater Conservation District	Year					
	2010	2020	2030	2040	2050	2060
Bandera County RA & GWD	7,284	7,284	7,284	7,284	7,284	7,284
Blanco-Pedernales GCD	2,573	2,573	2,573	2,573	2,573	2,573
Cow Creek GCD	10,622	10,622	10,622	10,622	10,622	10,622
Hays Trinity GCD	9,109	9,098	9,095	9,094	9,094	9,094
Headwaters GCD	16,435	14,918	14,845	14,556	14,239	14,223
Medina County GCD	2,500	2,500	2,500	2,500	2,500	2,500
Trinity Glen Rose GCD	25,511	25,511	25,511	25,511	25,511	25,511
Total (district areas)	**74,034**	**72,506**	**72,430**	**72,140**	**71,823**	**71,807**
No District	19,018	18,770	18,753	18,741	18,725	18,696
Total (including non-district areas)	**93,052**	**91,276**	**91,183**	**90,881**	**90,548**	**90,503**

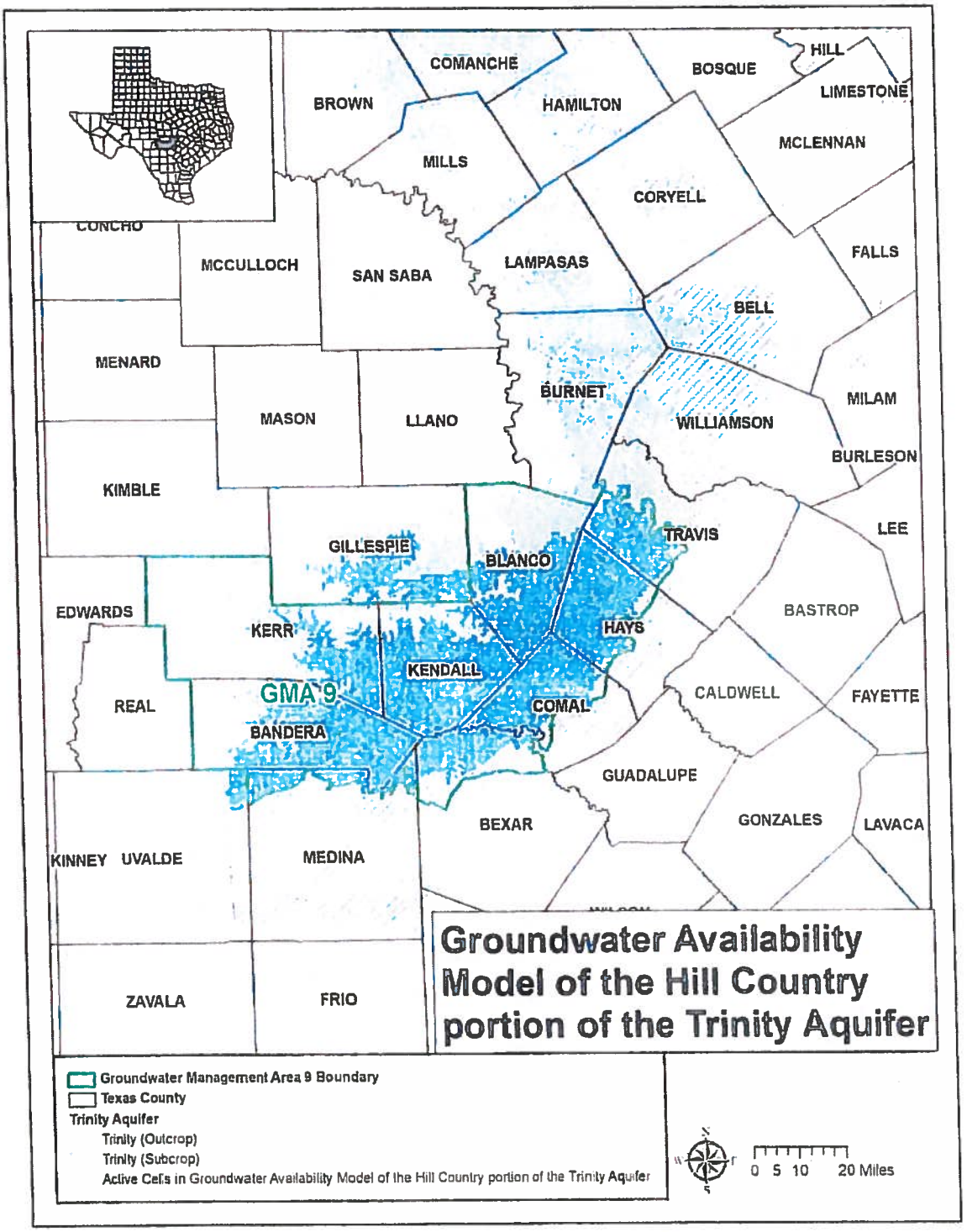

Figure 1: Map showing the areas covered by the groundwater availability model for the Trinity Aquifer.

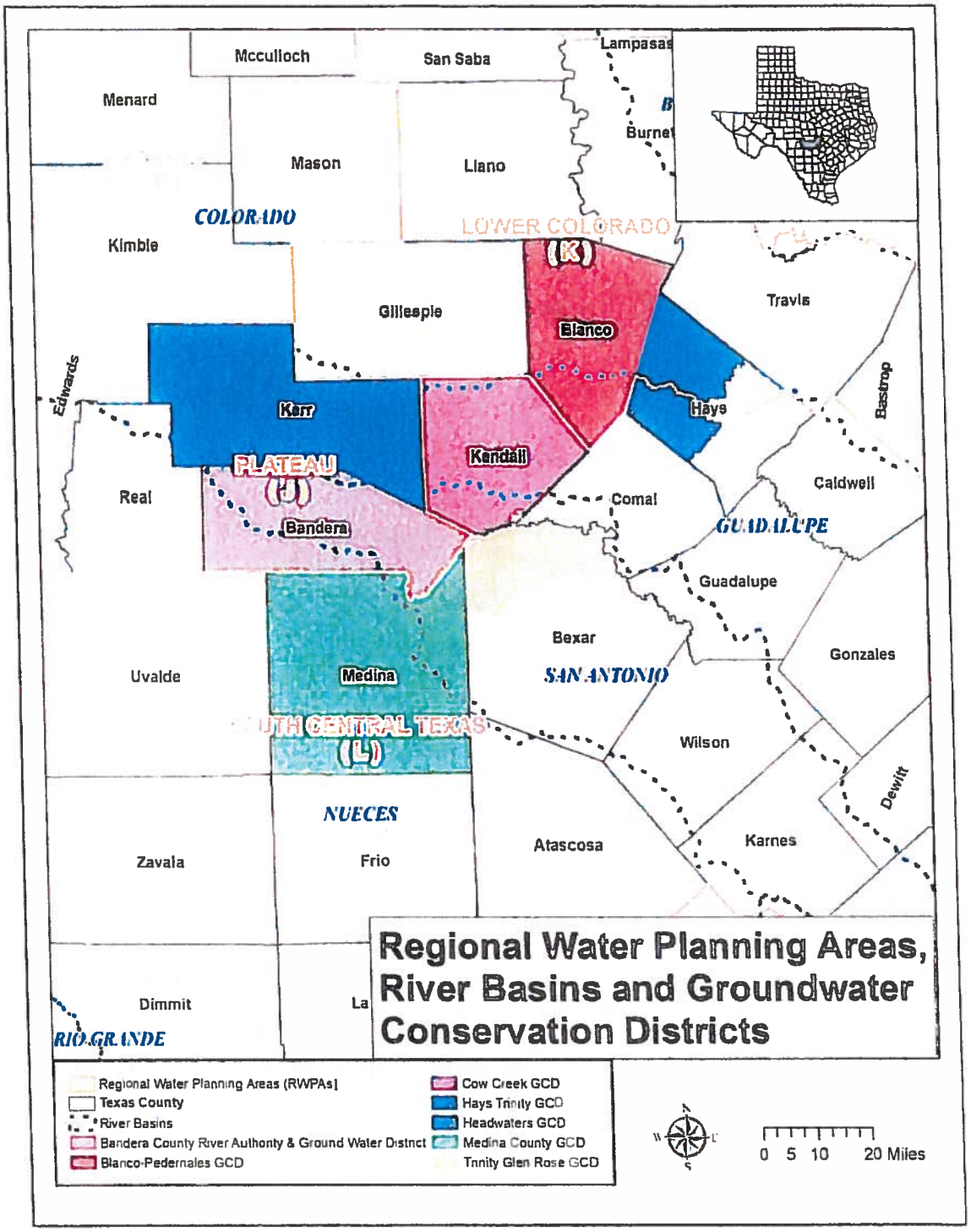

Figure 2: Map showing regional water planning areas (RWPAs), groundwater conservation districts (GCDs), counties, and river basins in Groundwater Management Area 9.

APPENDIX IV

PART B

TO ACHIEVE APPLICABLE DFCS IN GMA 10

Northern Subdivision, Edwards BFZ Aquifer

Northern Subdivision, Saline Edwards Aquifer

Trinity Aquifer

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.state.tx.us
Phone (512) 463-7847, Fax (512) 475-2053

December 9, 2011

Mr. Kirk Holland
General Manager
Barton Springs/Edwards Aquifer Conservation District
1124-A Regal Row
Austin, TX 78748

Re: Modeled available groundwater estimates for the freshwater and saline Edwards in the northern subdivision and Trinity aquifers in Groundwater Management Area 10

Dear Mr. Holland:

The Texas Water Code, Section 36.1084, Subsection (b), states that the Texas Water Development Board's (TWDB) Executive Administrator shall provide each groundwater conservation district and regional water planning group located wholly or partly in the groundwater management area with the modeled available groundwater in the management area based upon the desired future conditions adopted by the districts. This letter and the attached reports (GAM Run 10-059 MAG Version 2, GTA Aquifer Assessment 10-29 MAG, and GTA Aquifer Assessment 10-35 MAG) are in response to this directive.

As noted in the letter received by the TWDB on September 2, 2010, from Rick Illgner of the Edwards Aquifer Authority on behalf of Groundwater Management Area 10, desired future conditions were adopted for the freshwater and saline Edwards Aquifer in the northern subdivision of Groundwater Management Area 10 on August 4, 2010. The desired future condition for the Trinity Aquifer was adopted on August 23, 2010, as noted in the letter from Mr. Illgner received by TWDB on August 30, 2010.

Modeled available groundwater is defined in the Texas Water Code, Section 36.001, Subsection (25), as "the amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition established under Section 36.108." This is different from "managed available groundwater," shown in the draft version of these reports, which was a permitting value and accounted for the estimated use exempt from permitting. This change was made to reflect changes in statute by the 82nd Legislature, effective September 1, 2011. For use in the regional water planning process, modeled available groundwater estimates have been reported by aquifer, county, river basin, regional water planning area, groundwater conservation district, and any other subdivision of the aquifer designated by the management area (if applicable).

We encourage open communication and coordination between groundwater conservation districts, regional water planning groups, and the TWDB to ensure that the modeled available groundwater reported in regional water plans and groundwater management plans are not in conflict. We estimated modeled available groundwater that would have to occur to achieve the desired future condition using the

best available scientific tools. However, these estimates are based on assumptions of the magnitude and distribution of projected pumping in the aquifer. It is, therefore, important for groundwater conservation districts to monitor whether their management of pumping is achieving their desired future conditions. Districts are encouraged to continue to work with the TWDB to better define available groundwater as additional information may help better assess responses of the aquifer to pumping and its distribution now and in the future.

If you have any questions, please contact Ms. Rima Petrossian of my staff at 512-936-2420 or rima.petrossian@twdb.state.tx.us for further information.

Sincerely,

Melanie Callahan

Melanie Callahan
Interim Executive Administrator

Attachments: GAM Run 10-059 MAG Version 2
GTA Aquifer Assessment 10-29 MAG
GTA Aquifer Assessment 10-35 MAG

c w/atts.: L'Oreal Stepney, Deputy Director, Office of Water, Texas Commission of Environmental Quality
Kellye Rila, Texas Commission of Environmental Quality
Kelly Mills, Texas Commission of Environmental Quality
Raymond Buck, Upper Guadalupe River Authority
Rocky Freund, Nueces River Authority
James Kowis, Lower Colorado River Authority
Suzanne Scott, San Antonio River Authority
Bill West, Guadalupe-Blanco River Authority
John Ashworth, LBG-Guyton Associates
Jaime Burke, AECOM, Inc
Sam Vaugh, HDR Engineering
Robert E. Mace, Ph.D, P.G., Deputy Executive Administrator, Water Science and Conservation
Cindy Ridgeway, P.G., Groundwater Resources
Rima Petrossian, P.G., Groundwater Resources
Robert Bradley, P.G., Groundwater Resources
David Thorkildsen, P.G., Groundwater Resources
Sarah Backhouse, Groundwater Resources
Wade Oliver, Groundwater Resources
Dan Hardin, Water Resources Planning
Matt Nelson, Water Resources Planning
Temple McKinnon, Water Resources Planning
David Meesey, Water Resources Planning
Connie Townsend, Water Resources Planning
Wendy Barron, Water Resources Planning

GTA Aquifer Assessment 10-29 MAG

by David Thorkildsen, P.G. and Sarah Backhouse
Texas Water Development Board
Groundwater Technical Assistance Section
(512) 936-0871

David Thorkildsen, P.G. 705 authorized the seal appearing on this document on November 29, 2011.

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GTA Aquifer Assessment 10-29 MAG
Groundwater Management Area 10
Trinity Aquifer
Modeled Available Groundwater estimates
November 29, 2011

EXECUTIVE SUMMARY:

The modeled available groundwater for the Trinity Aquifer as a result of the desired future condition adopted by members of Groundwater Management Area 10 is approximately 59,746 acre-feet per year. This is divided by county, regional water planning area, and river basin in Table 2 for use in the regional water planning process. Modeled available groundwater is summarized by county, regional water planning area, river basin, and groundwater conservation district in tables 3 through 6. Pumping estimates, as well as parameters and assumptions to determine additional modeled available groundwater estimates were extracted from GTA Aquifer Assessment 10-06, which Groundwater Management Area 10 used as the basis for developing a desired future condition stating that "*except as otherwise provided herein: regional average well drawdown during average recharge conditions that does not exceed 25 feet; within the jurisdiction of Hays-Trinity GCD: regional average well drawdown during average recharge conditions of zero (0) feet; and in the Uvalde County part of GMA-10: regional average well drawdown during average recharge conditions of no more than twenty (20) feet*" and declaring "*the Trinity Aquifer in the part of GMA 10 that is in the Trinity-Glen Rose GCD as a non-relevant aquifer*".

REQUESTOR:

Mr. Rick Illgner of the Edwards Aquifer Authority acting on behalf of the member groundwater conservation districts of Groundwater Management Area 10.

DESCRIPTION OF REQUEST:

In a letter received August 30, 2010, Mr. Illgner provided the Texas Water Development Board (TWDB) with the desired future condition of the Trinity Aquifer adopted by the members of Groundwater Management Area 10. The desired future condition for the Trinity Aquifer, as described in Resolution No. 2010-10 and adopted August 23, 2010 by the groundwater conservation districts in Groundwater Management Area 10 is described below:

1) *except as otherwise provided herein: regional average well drawdown during average recharge conditions that does not exceed 25 feet (including exempt and non-exempt well use);*
2) *within the jurisdiction of Hays-Trinity GCD: regional average well drawdown during average recharge conditions of zero (0) feet (including exempt and non-exempt use);*
3) *in the Uvalde County part of GMA-10: regional average well drawdown during average recharge conditions of no more than twenty (20) feet (including exempt and non-exempt well use);*

4) *declare the Trinity Aquifer in the part of GMA 10 that is in the Trinity-Glen Rose GCD as a non-relevant aquifer*

In response to receiving the adopted desired future condition, TWDB has estimated the modeled available groundwater that achieves the above desired future condition for Groundwater Management Area 10.

METHODS:

Groundwater Management Area 10, located in South Central Texas, includes part of the Trinity Aquifer (Figure 1). At the request of Groundwater Management Area 10 the TWDB previously analyzed several water level decline scenarios for the Trinity Aquifer, documented in GTA Aquifer Assessment 10-06. One of the scenarios included the desired future condition of 25 feet of water level decline, and one included the desired future condition of 20 feet of water level decline. For these two scenarios the pumping results presented here for Groundwater Management Area 10 are taken directly from GTA Aquifer Assessment 10-06 with the exception of the area in the Hays Trinity Groundwater Conservation District (GCD). The assessment did not include a 0 foot water level decline scenario, therefore new calculations to determine modeled available groundwater estimates were completed for this area (Table 1)

To calculate modeled available groundwater estimates for the desired future condition of 0 feet of water level decline for the Hays Trinity GCD parameters and assumptions for the volumetric storage, recharge, inflow calculations, map areas, and areal extent were obtained from GTA Aquifer Assessment 10-06 (Thorkildsen and Backhouse, 2010). It is important to note that only 3 percent (6,363 acres) of the total Hays Trinity GCD area occurs in Groundwater Management Area 10.

To calculate change in aquifer storage for the Hays Trinity GCD based on the desired future condition, map areas were multiplied by the estimated aquifer storativity or specific yield and then by a uniform water level decline of 0 feet. These volumes were then divided by 50 years to obtain a yearly volume. In cases where unconfined and confined conditions existed, those were calculated separately.

Modeled available groundwater estimates are divided by county, regional water planning area, river basin, and groundwater conservation district. These areas are shown in Figure 2.

PARAMETERS AND ASSUMPTIONS:

- Parameters, assumptions, volumetric calculations, and areas were obtained from GTA Aquifer Assessment 10-06 (Thorkildsen and Backhouse, 2010).
- Water-level declines were estimated to be uniform across the aquifer.
- The Edwards Aquifer Authority is not included in this assessment because they are restricted by their enabling legislation to manage only the Edwards Aquifer.

MODELED AVAILABLE GROUNDWATER AND PERMITTING:

As defined in Chapter 36 of the Texas Water Code, "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. This is distinct from "managed available groundwater," shown in the draft version of this report dated January 10, 2011, which was a permitting value and accounted for the estimated use of the aquifer exempt from permitting. This change was made to reflect changes in statute by the 82nd Texas Legislature, effective September 1, 2011.

Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors districts must consider include annual precipitation and production patterns, the estimated amount of pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits. The estimated amount of pumping exempt from permitting, which the Texas Water Development Board is now required to develop after soliciting input from applicable groundwater conservation districts, will be provided in a separate report.

RESULTS:

The estimated modeled available groundwater for the Trinity Aquifer in Groundwater Management Area 10 consistent with the adopted desired future condition is approximately 59,746 acre-feet per year. The volumetric calculations to determine the estimates for Hays Trinity GCD are shown in Table 1. The relatively small totals reflect the small percentage (3%) of the total district area that occurs in Groundwater Management Area 10.

Table 2 shows the modeled available groundwater by decade divided by county, regional water planning area, and river basin for use in the regional water planning process. Modeled available groundwater estimates are also summarized by county, regional water planning area, river basin, and

groundwater conservation district and are shown in tables 3, 4, 5, and 6 respectively.

Table 1. Volumetric calculations estimating annual modeled available groundwater for the Trinity Aquifer in Hays Trinity GCD. Map areas and parameters were obtained from GTA Aquifer Assessment 10-06 (Thorkildsen and Backhouse, 2010).

GMA	Aquifer	County	GCD	Map Areas	Estimated storage coefficient	Areal extent (acres)	Desired total aquifer water level decline (feet)	Estimated total volume from water level decline (acre-feet)	Estimated annual volume from water level decline (acre-feet)	Estimated annual effective recharge (ac-ft/yr)	Estimated annual lateral inflow (ac-ft/yr)	Estimated annual total volume (ac-ft/yr)
10	Trinity	Hays	Hays Trinity Groundwater Conservation District	7	0.00001	994	0	0	0	0	39	39
				8	0.00001	4,342	0	0	0	0	80	80
				22	0.05	554	0	0	0	64	9	73
				23	0.05	473	0	0	0	57	9	66

GMA = groundwater management area ac-ft/yr = acre-feet per year

The formulas for this table are: storage coefficient * areal extent * desired total aquifer water level decline = estimated total volume from water level decline. Estimated total volume from water level decline/50 = estimated annual volume from water level decline. Then estimated annual volume from water level decline + estimated annual effective recharge + estimated annual lateral inflow = estimated annual total volume.

Table 2. Modeled available groundwater by decade for the Trinity Aquifer in Groundwater Management Area 10. Results are in acre-feet per year and are divided by county, regional water planning area, and river basin.

County	Regional Water Planning Area	River Basin	Year					
			2010	2020	2030	2040	2050	2060
Bexar	L	San Antonio	19,998	19,998	19,998	19,998	19,998	19,998
Caldwell	L	Guadalupe	0	0	0	0	0	0
Comal	L	Guadalupe	27,176	27,176	27,176	27,176	27,176	27,176
		San Antonio	2,108	2,108	2,108	2,108	2,108	2,108
Guadalupe	L	Guadalupe	0	0	0	0	0	0
		San Antonio	0	0	0	0	0	0
Hays	K	Colorado	955	955	955	955	955	955
	L	Guadalupe	2,860	2,860	2,860	2,860	2,860	2,860
Medina	L	Nueces	4,373	4,373	4,373	4,373	4,373	4,373
		San Antonio	996	996	996	996	996	996
Travis	K	Colorado	634	634	634	634	634	634
		Guadalupe	7	7	7	7	7	7
Uvalde	L	Nueces	639	639	639	639	639	639
Total			59,746	59,746	59,746	59,746	59,746	59,746

Table 3. Modeled available groundwater for the Trinity Aquifer summarized by county in Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

County	Year					
	2010	2020	2030	2040	2050	2060
Bexar	19,998	19,998	19,998	19,998	19,998	19,998
Caldwell	0	0	0	0	0	0
Comal	29,284	29,284	29,284	29,284	29,284	29,284
Guadalupe	0	0	0	0	0	0
Hays	3,815	3,815	3,815	3,815	3,815	3,815
Medina	5,369	5,369	5,369	5,369	5,369	5,369
Travis	641	641	641	641	641	641
Uvalde	639	639	639	639	639	639
Total	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**

Table 4. Modeled available groundwater for the Trinity Aquifer summarized by regional water planning area in Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

Regional Water Planning Area	Year					
	2010	2020	2030	2040	2050	2060
K	1,596	1,596	1,596	1,596	1,596	1,596
L	58,150	58,150	58,150	58,150	58,150	58,150
Total	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**

Table 5. Modeled available groundwater for the Trinity Aquifer summarized by river basin in Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

River Basin	Year					
	2010	2020	2030	2040	2050	2060
Colorado	1,589	1,589	1,589	1,589	1,589	1,589
Guadalupe	30,043	30,043	30,043	30,043	30,043	30,043
Nueces	5,012	5,012	5,012	5,012	5,012	5,012
San Antonio	23,102	23,102	23,102	23,102	23,102	23,102
Total	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**

Table 6. Modeled available groundwater for the Trinity Aquifer summarized by groundwater conservation district in Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

Groundwater Conservation District	Year					
	2010	2020	2030	2040	2050	2060
Barton Springs/Edwards Aquifer CD	1,288	1,288	1,288	1,288	1,288	1,288
Hays Trinity GCD	258	258	258	258	258	258
Medina County GCD	5,369	5,369	5,369	5,369	5,369	5,369
Plum Creek CD	238	238	238	238	238	238
Uvalde County UWCD	639	639	639	639	639	639
Total (excluding non-district areas)	**7,792**	**7,792**	**7,792**	**7,792**	**7,792**	**7,792**
No District	51,954	51,954	51,954	51,954	51,954	51,954
Total (including non-district areas)	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**	**59,746**

GCD = Groundwater Conservation District CD = Conservation District UWCD = Underground Water Conservation District

LIMITATIONS:

The water budget in this analysis was determined to be the best method to calculate estimates of modeled available groundwater, however this method has limitations and should be replaced with better tools, including groundwater models and additional data that are not currently available, whenever possible.

This analysis assumes homogeneous and isotropic aquifers; however, aquifer conditions may not be uniform. In addition, certain assumptions have been made regarding future precipitation, recharge, and streamflow in developing these pumping estimates. These assumptions need to be considered and compared to actual future data when evaluating achievement of the desired future condition.

Given these limitations, users of this information are cautioned that the modeled available groundwater numbers should not be considered a definitive, permanent description of the amount of groundwater that can be pumped to meet the adopted desired future condition. The TWDB makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor future groundwater pumping and water levels to know if they are achieving their desired future conditions. Because of the limitations and assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine these modeled available groundwater numbers given the reality of how the

aquifer responds to the actual amount and location of pumping now and in the future.

REFERENCES:

Thorkildsen and Backhouse, 2010, GTA Aquifer Assessment 10-06:Texas Water Development Board, GTA Aquifer Assessment 10-06 Report, 20 p.

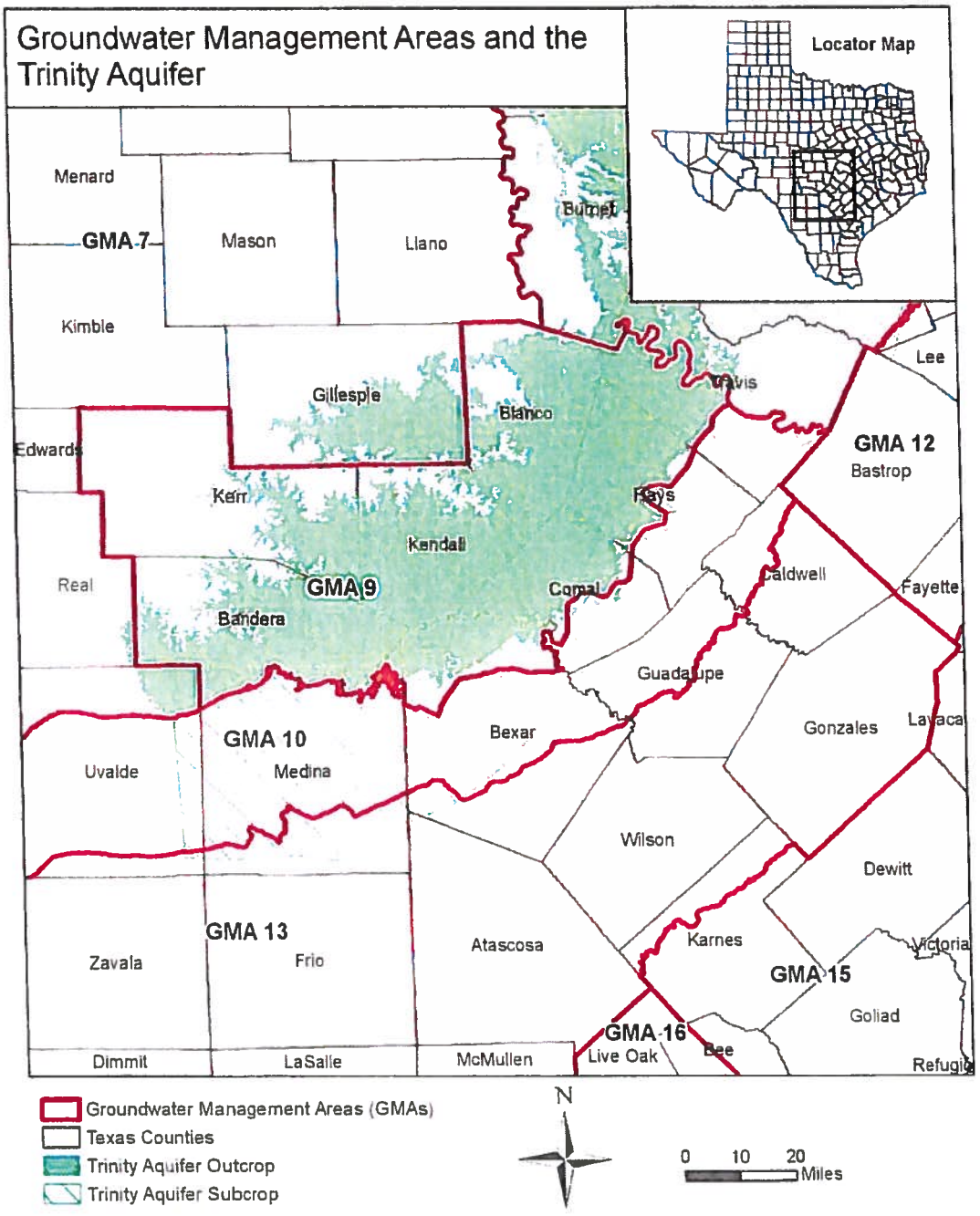

Figure 1. Map showing the areas covered by the Trinity Aquifer in and neighboring Groundwater Management Area 10.

GTA Aquifer Assessment 10-29 MAG
Groundwater Management Area 10
Trinity Aquifer
Modeled Available Groundwater estimates
November 29, 2011

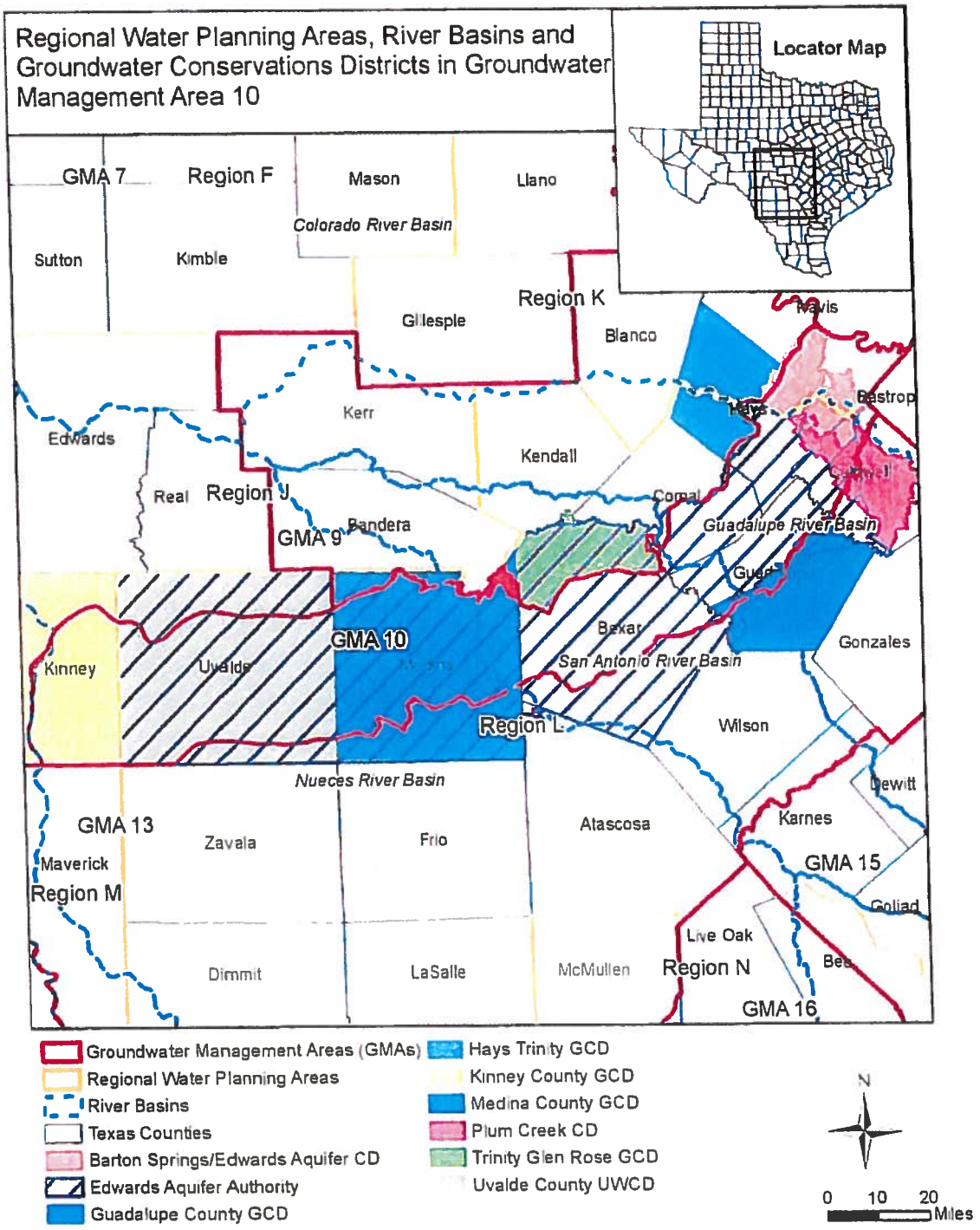

Figure 2. Map showing regional water planning areas, river basins, groundwater conservation districts and counties in and neighboring Groundwater Management Area 10. CD = Conservation District, GCD = Groundwater Conservation District, UWCD = Underground Water Conservation District

GTA Aquifer Assessment 10-35 MAG
Groundwater Management Area 10
Northern saline Edwards Aquifer
Modeled Available Groundwater estimates
November 20, 2011

GTA Aquifer Assessment 10-35 MAG

by Robert G. Bradley, P.G.
Texas Water Development Board
Groundwater Technical Assistance Section
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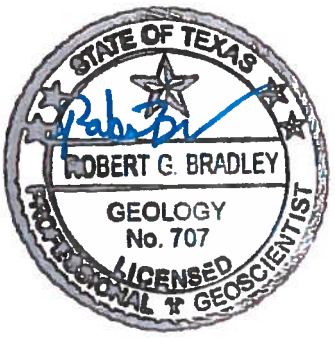

Robert G. Bradley, P.G. 707, authorized the seal appearing on this document on November 20, 2011.

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EXECUTIVE SUMMARY:

The estimated modeled available groundwater from the saline Edwards Aquifer in the "northern subdivision" of Groundwater Management Area (GMA) 10 that achieves the desired future condition adopted by members of Groundwater Management Area 10 is approximately 1,180 acre-feet per year and is summarized by county, regional water planning area, and river basin as shown in Table 3. Within this area, the estimated modeled available groundwater for the Barton Springs Edwards Aquifer Conservation District is approximately 523 acre-feet per year from 2010 to 2060 and the modeled available groundwater for the Plum Creek Conservation District is approximately 112 acre feet between 2010 and 2060.

REQUESTOR:

Mr. Rick Illgner of the Edwards Aquifer Authority acting on behalf of the member groundwater conservation districts of Groundwater Management Area 10.

DESCRIPTION OF REQUEST:

In a letter received September 2, 2010, Mr. Illgner provided the Texas Water Development Board (TWDB) with the desired future condition of the saline zone of Edwards Aquifer in the "northern subdivision" as adopted by the members of Groundwater Management Area 10. The term "northern subdivision" was designated by Groundwater Management Area 10 and is used in this report to describe this assessment area. The desired future condition for the saline Edwards Aquifer, as described in Resolution No. 2010-06 and adopted August 4, 2010 by the groundwater conservation districts in Groundwater Management Area 10 is described below:

- Well drawdown at the saline-freshwater interface (the so called Edwards "bad water line") in the northern subdivision of GMA 10 that averages no more than 5 feet and does not exceed a maximum of 25 feet at any one point on the interface.

In response to receiving the adopted desired future condition, TWDB has estimated the modeled available groundwater that achieves the above desired future condition for the northern area saline zone of the Edwards Aquifer in Groundwater Management Area 10.

METHODS:

Groundwater Management Area 10, located in South Central Texas, includes an areas designated by the GMA as the "northern subdivision" (Figure 1). This area includes all of the Edwards Aquifer in Groundwater Management Area 10 north of the Edwards Aquifer Authority. The saline zone of the Edwards Aquifer in this area has been determined to be relevant for joint planning purposes. There is no distinction between fresh and saline water from the aquifer within the jurisdiction of the Edwards Aquifer Authority.

The Theis equation (Theis, 1935) was used to simulate the desired future conditions on the saline-freshwater interface. Median values for transmissivity and storativity from Hunt and others (2010) were used to calculate the drawdown values.

The Barton Springs-Edwards Aquifer Conservation District established a 3-mile buffer from the saline-freshwater interface in the saline Edwards Aquifer (BSEAD, 2009), and this was honored in the estimation of the modeled available groundwater. It was assumed that no saline Edwards Aquifer wells would be pumping within the buffer zone and that this buffer zone would be applied to the Plum Creek Conservation District in order to achieve the desired future condition. It was assumed that if wells were located within the buffer zone it would result in greater drawdown at the saline-freshwater interface.

To show effects of pumping that averages no more than 5 feet the interface, a series of ten wells were assumed to be spaced one mile apart starting at the 3-mile buffer out to out to a distance of 12 miles. This maximum distance is approximately the distance where the Edwards Aquifer becomes too deep or too saline for use. Discharge volumes for each well that would result in a 5 feet drawdown at the saline-freshwater interface over a 50-year period were calculated iteratively in a Microsoft Excel worksheet (Table 1).

To determine the cumulative effect of pumping all of these wells upon a hypothetical monitoring well at the saline-freshwater interface, a drawdown superposition formula derived from the Theis equation (Briscoe, 1984, pp.574-575) was used to calculate a distance of a single hypothetical monitoring well that would represent the previous ten wells used in calculation of the discharge.

The formula is:

$$r = (r_1 * r_2 * \ldots r_n)^{1/n}$$

Where

r = distance of individual well from fresh water/ saline-freshwater interface

The product of the distances raised to the inverse number results in an equivalent distance of approximately 7 miles. Using the sum of the discharges of 1,506 gallons per minute (2,431 acre-feet per year) as the pumping rate, the estimated drawdown at the interface is 51.4 feet over 50 years (Table 2). Therefore, the maximum desired future condition, a maximum of 25 feet at any one point on the interface, is not honored.

Table 1. Results of pumping wells and resulting drawdowns upon a hypothetical monitoring well at the saline-freshwater interface to achieve the desired future conditions for the saline Edwards Aquifer.

Description	Distance (miles)	Discharge (gpm)	Discharge (AF/YR)	Drawdown at interface (feet)
Wells used to determine effects of pumping to create 5 feet drawdown at the saline-freshwater interface.	3	106	171	5.0
	4	116	187	5.0
	5	127	204	5.0
	6	136	220	5.0
	7	147	238	5.0
	8	156	252	5.0
	9	164	264	5.0
	10	175	283	5.0
	11	185	298	5.0
	12	194	313	5.0

gpm = gallons per minute AF/YR = acre-feet per year

Table 2. Results of the cumulative effect of pumping all ten wells (Table 1) upon a hypothetical monitoring well at the saline-freshwater interface.

Description	Distance (miles)	Discharge (gpm)	Discharge (AF/YR)	Drawdown at interface (feet)
Cumulative drawdown from wells in Table 1	7	1,506	2,431	51.4

gpm = gallons per minute AF/YR = acre-feet per year

The maximum desired future condition of 25 feet of drawdown was determined to be the constraining factor and was used to calculate the modeled available groundwater. The distance of 7 miles was used to literately calculate the discharge that would result in 25 feet of drawdown at the saline-freshwater interface over a 50-year period. The maximum desired future condition is achievable by using an estimated modeled available groundwater volume of 731 gallons per minute or 1,180 acre-feet per year (Table 3).

Table 3. Resulting drawdown upon a hypothetical monitoring well at the saline-freshwater interface to achieve the maximum desired future conditions for the saline Edwards Aquifer.

Description	Distance (miles)	Discharge (gpm)	Discharge (AF/YR)	Drawdown at interface (feet)
Well used to determine effects of pumping to create a maximum 25 feet drawdown at the saline-freshwater interface.	7	731	1,180	25.0

gpm = gallons per minute AF/YR = acre-feet per year

PARAMETERS AND ASSUMPTIONS:

- The Theis equation is used to determine drawdown at the saline-freshwater interface, which assumes that the aquifer is homogenous and has infinite areal extent; and all wells penetrate the aquifer fully and have an infinitesimal diameter.
- The entire saline Edwards Aquifer is under confined conditions.
- Pumping will only occur outside of the "buffer zone" as defined in Barton Springs/Edwards Aquifer Conservation District rules (BSEACD, 2009).
- The storage coefficient of the aquifer is estimated to be $7X10^{-4}$ (Hunt and others, 2010).
- The transmissivity of the aquifer is estimated to be 2,000 ft^2/day (converted from 15,000 gallons/day/ft from Hunt and others, 2010) and it is constant at all times and in all places within the aquifer.

- The aquifer area was calculated from the TWDB shapefile for the Trinity Aquifer, projected into the GAM projection (Anaya, 2001).
- Areas, in acres, were calculated within ArcGIS 9.2.
- The map area percentages were calculated by including all of the area covered by the saline Edwards Aquifer.
- Map areas were designated as Plum Creek Conservation District only where their jurisdiction does not overlap with the BSEACD.

MODELED AVAILABLE GROUNDWATER AND PERMITTING:

As defined in Chapter 36 of the Texas Water Code, "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. This is distinct from "managed available groundwater," shown in the draft version of this report dated April 18, 2011, which was a permitting value and accounted for the estimated use of the aquifer exempt from permitting. This change was made to reflect changes in statute by the 82nd Texas Legislature, effective September 1, 2011.

Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors districts must consider include annual precipitation and production patterns, the estimated amount of pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits.

The estimated amount of pumping exempt from permitting, which the Texas Water Development Board is now required to develop after soliciting input from applicable groundwater conservation districts, will be provided in a separate report.

RESULTS:

The estimated modeled available groundwater from the saline Edwards Aquifer within the "northern subdivision "of Groundwater Management Area 10 that achieves the adopted desired future condition is approximately 1,180 acre-feet per year.

The modeled available groundwater for the entire area was split by county, regional water planning area, river basin, and groundwater conservation district in order to apportion the total amount to each area. Table 2 shows the individual areas and the calculated modeled available groundwater for each split.

Table 4. Modeled available groundwater by county, regional water planning area, river basin, and groundwater conservation district (See Figure 1).

GMA	Aquifer	County	RWPA	Basin	GCD	Map Areas	Areal extent (acres)	Percent area	Estimated total pumping for study area (AC-FT/YR)	Estimated total pumping for each map area (AC-FT/YR)
10	Saline Edwards	Caldwell	L	Colorado	Barton Springs/Edwards Aquifer CD	1	3,905	2.39%	1,180	28
					N/A	2	5,022	3.08%	1,180	36
				Guadalupe	Barton Springs/Edwards Aquifer CD	3	12,433	7.62%	1,180	90
					N/A	4	2,005	1.23%	1,180	15
					Plum Creek CD	5	4,008	2.46%	1,180	29
		Hays	K	Colorado	Barton Springs/Edwards Aquifer CD	6	1,259	0.77%	1,180	9
			L	Guadalupe	Barton Springs/Edwards Aquifer CD	7	21,052	12.91%	1,180	152
					Plum Creek CD	8	11,470	7.03%	1,180	83
		Travis	K	Colorado	Barton Springs/Edwards Aquifer CD	9	28,378	17.40%	1,180	205
					N/A	10	68,243	41.84%	1,180	494
				Guadalupe	Barton Springs/Edwards Aquifer CD	11	5,336	3.27%	1,180	39
						Total	163,111	100.0%	n/a	1,180

GMA = groundwater management area GCD = groundwater conservation district RWPA = regional water planning area
ac-ft/yr = acre-feet per year CD = conservation district
Values calculated in this table are the estimated total pumping determined by the assessment and then multiplied by the percent area

Modeled available groundwater estimates are also summarized by county, regional water planning area, and river basin for each decade between 2010 and 2060 for use in the regional water planning process (Table 3). The modeled available groundwater estimates are also summarized by individual counties, regional water planning areas, river basins, and groundwater conservation districts (Tables 4-7).

Table 5. Estimated modeled available groundwater by decade for the saline Edwards Aquifer within the "northern subdivision" of Groundwater Management Area 10. Results are in acre-feet per year and are divided by county, regional water planning area, and river basin.

County	Regional Water Planning Area	River Basin	Year					
			2010	2020	2030	2040	2050	2060
Caldwell	L	Colorado	64	64	64	64	64	64
		Guadalupe	134	134	134	134	134	134
Hays	K	Colorado	9	9	9	9	9	9
	L	Guadalupe	235	235	235	235	235	235
Travis	K	Colorado	699	699	699	699	699	699
		Guadalupe	39	39	39	39	39	39
Total			1,180	1,180	1,180	1,180	1,180	1,180

Table 6. Estimated modeled available groundwater, by county, for the saline Edwards Aquifer within the "northern subdivision" of Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

County	Year					
	2010	2020	2030	2040	2050	2060
Caldwell	198	198	198	198	198	198
Hays	244	244	244	244	244	244
Travis	738	738	738	738	738	738
Total	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**

Table 7. Estimated modeled available groundwater, by regional water planning group, for the saline Edwards Aquifer within the "northern subdivision" of Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

Regional Water Planning Area	Year					
	2010	2020	2030	2040	2050	2060
K	747	747	747	747	747	747
L	433	433	433	433	433	433
Total	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**

Table 8. Estimated modeled available groundwater, by river basin, for the saline Edwards Aquifer within the "northern subdivision" of Groundwater Management Area 10 for each decade between 2010 and 2060. Results are in acre-feet per year.

River Basin	Year					
	2010	2020	2030	2040	2050	2060
Colorado	772	772	772	772	772	772
Guadalupe	408	408	408	408	408	408
Total	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**

Table 9. Estimates of modeled available groundwater for saline Edwards Aquifer within the "northern subdivision" of Groundwater Management Area for each decade between 2010 and 2060. Results are in acre-feet per year.

Groundwater Conservation District	Year					
	2010	2020	2030	2040	2050	2060
Barton Springs/Edwards Aquifer CD	523	523	523	523	523	523
Plum Creek CD	112	112	112	112	112	112
Total (excluding non-district areas)	**635**	**635**	**635**	**635**	**635**	**635**
No District	545	545	545	545	545	545
Total (including non-district areas)	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**	**1,180**

CD = Conservation District

LIMITATIONS:

The analytical method used was determined to be the best method to calculate estimates of modeled available groundwater; however, this method has limitations and should be replaced with better tools, including groundwater models and additional data that are not currently available, whenever possible.

This analysis assumes homogeneous and isotropic aquifers; however, aquifer conditions may not be uniform. However, it is understood that conditions for the saline Edwards Aquifer do not behave in a uniform manner. This assessment does not take in to account conduit flow and assumes only a matrix flow aquifer. Further, it assumes lateral inflow to the aquifer is equal to lateral outflow from the aquifer, and that future pumping will not alter this balance. In addition, certain assumptions have been made regarding future conditions, and these assumptions need to be considered and compared to actual future data when evaluating achievement of the desired future condition.

Given these limitations, users of this information are cautioned that the modeled available groundwater numbers should not be considered a definitive, permanent description of the amount of groundwater that can be pumped to meet the adopted desired future condition. The TWDB makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor future groundwater pumping and water levels to know if they are achieving their desired future conditions.

Because of the limitations and assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine these modeled available groundwater numbers given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future.

REFERENCES:

Anaya, R., 2001, GAM technical memo 01-01(rev a): Texas Water Development Board technical memorandum, 2 p.

Barton Springs / Edwards Aquifer Conservation District, 2009, Rules and bylaws of the Barton Springs / Edwards Aquifer Conservation District: Barton Springs/Edwards Aquifer Conservation District, 113p.

Briscoe, J., 1984, The optimal spacing of interfering wells: an analytic solution: Ground Water Volume 22, Number 5, pp.573-578.

Hunt, B.B., Smith, B.A., Kromann, J.,Wierman, D.A., and Mikels, J.K., 2010, Compilation of pumping tests in Travis and Hays counties, central Texas: Barton Springs/Edwards Aquifer Conservation District Data Series Report 2010-0701, 12p.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage: American Geophysical Union Transactions, volume. 16, pp. 519-524.

Thorkildsen D. and Backhouse S., 2010, GTA Aquifer Assessment 10-29: Texas Water Development Board, GTA Aquifer Assessment 10-29 Report, 11 p.

GTA Aquifer Assessment 10-35 MAG
Groundwater Management Area 10
Northern saline Edwards Aquifer
Modeled Available Groundwater estimates
November 20, 2011

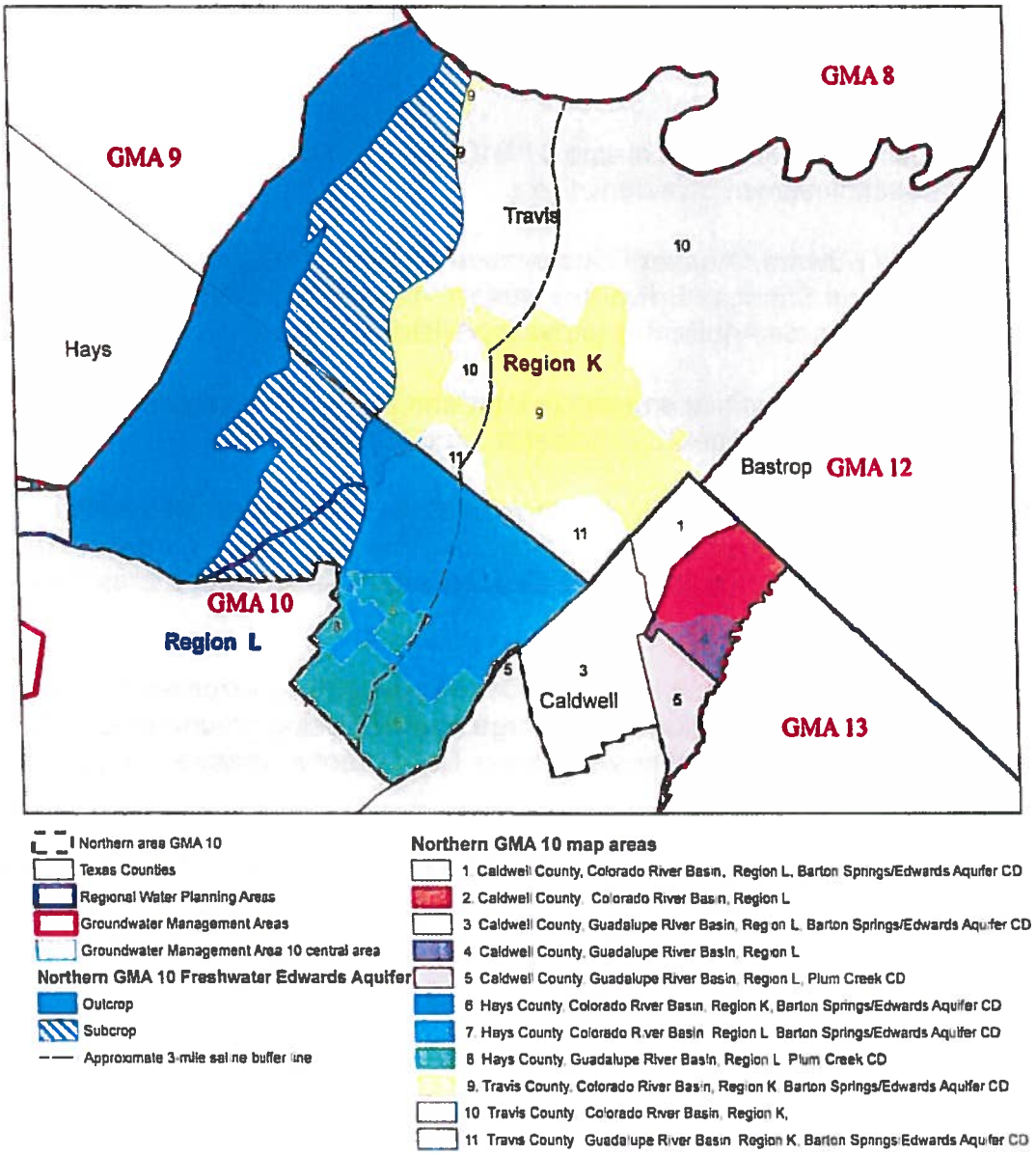


Figure 1. Map showing the areas used for estimating modeled available groundwater in the saline Edwards Aquifer in the "northern subdivision" of Groundwater Management Area 10.

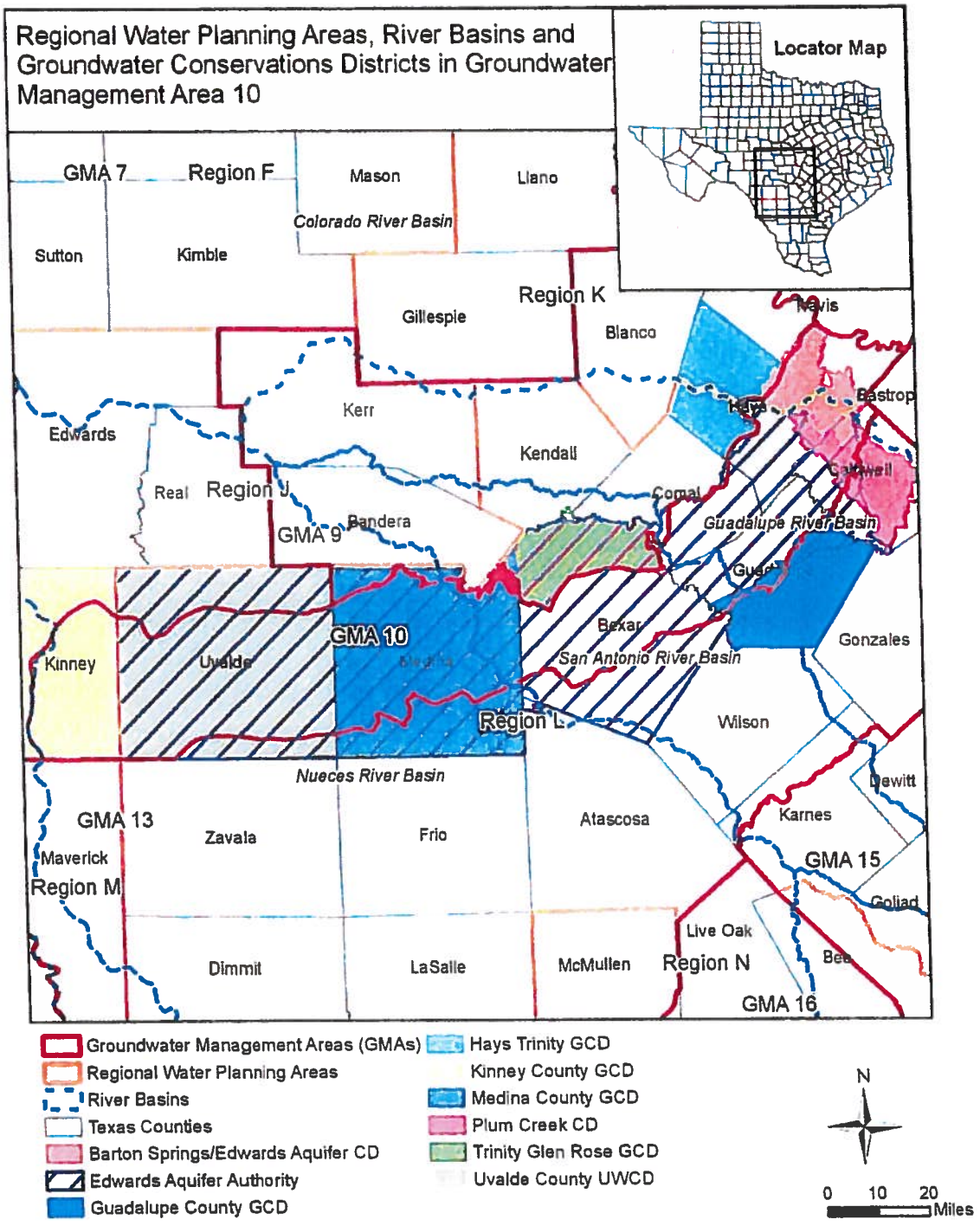


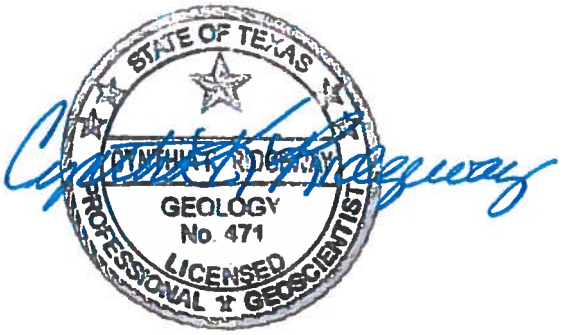
Figure 2. Map showing regional water planning areas, river basins, groundwater conservation districts and counties in Groundwater Management Area 10 (From Thorkildsen and Backhouse, 2010). CD = Conservation District, GCD = Groundwater Conservation District, UWCD = Underground Water Conservation District

GAM Run 10-059 MAG Version 2: Groundwater Management Area 10 Model Runs to Estimate Springflow under Assumed Future Pumping and Recharge Conditions for the Northern Subdivision of the Edwards (Balcones Fault Zone) Aquifer

by William R. Hutchison, Ph.D., P.E., P.G. and Wade Oliver[1]
Texas Water Development Board
Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-3132[1]

Edited and finalized by Marius Jigmond to reflect statutory changes effective September 1, 2011

December 7, 2011



Cynthia K. Ridgeway, the Manager of the Groundwater Availability Modeling Section and Interim Director of the Groundwater Resources Division, is responsible for oversight of work performed by employees under her direct supervision. The seal appearing on this document was authorized by Cynthia K. Ridgeway, P.G. 471 on December 7, 2011.

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by William R. Hutchison, Ph.D., P.E., P.G. and Wade Oliver[1]
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Groundwater Resources Division
Groundwater Availability Modeling Section
(512) 463-3132[1]

Edited and finalized by Marius Jigmond to reflect statutory changes effective September 1, 2011

December 7, 2011

EXECUTIVE SUMMARY:

Two desired future conditions were adopted by the members of Groundwater Management Area 10 for the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer - one for average recharge conditions and one for extreme drought conditions. The modeled available groundwater as a result of the desired future condition under average recharge conditions is approximately 11,557 acre-feet per year. This is shown by county, regional water planning area, and river basin as shown in Table 1. Of this pumping, 11,528 acre-feet per year is within Barton Springs/Edwards Aquifer Conservation District. These estimates were developed with a model run based on the methods used in GAM Run 09-019.

For extreme drought conditions, the modeled available groundwater of 3,765 acre-feet per year was estimated using a water balance approach based on information provided by the district supporting an approximate one-to-one relationship between springflow and pumping under low-flow conditions. This pumping is also summarized in Table 1 by county, regional water planning area, and river basin.

REQUESTOR:

Mr. Rick Illgner of the Edwards Aquifer Authority on behalf of Groundwater Management Area 10

DESCRIPTION OF REQUEST:

In a letter dated August 24, 2010 and received September 2, 2010, Mr. Rick Illgner provided the Texas Water Development Board (TWDB) with the desired future conditions of the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer adopted by the members of Groundwater Management Area (GMA) 10. The desired future conditions, as shown in Resolution No. 2010-02, are as follows:

> Springflow of Barton Springs during average recharge conditions shall be no less than 49.7 cubic feet per second (cfs) averaged over an 84-month (seven-year) period; and
>
> During extreme drought conditions, including those as severe as a recurrence of the 1950's drought of record, springflow of Barton Springs shall be no less than 6.5 cubic feet per second (cfs), averaged on a monthly basis.

In response to receiving the adopted desired future conditions, the Texas Water Development Board has estimated the modeled available groundwater for Groundwater Management Area 10 for the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer for both average recharge and extreme drought conditions.

METHODS:

The locations of Groundwater Management Area 10 and the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer are shown in Figure 1. The Texas Water Development Board previously completed several predictive groundwater model simulations of the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer to assist the members of Groundwater Management Area 10 in developing a desired future condition. These simulations are documented in Groundwater Availability Modeling (GAM) Run 09-019 (Hutchison and Hill, 2011). The specific annual pumping amounts simulated in the previous model runs included 3,847; 4,469; 5,437; 6,796; and 16,311 acre-feet per year. Relative frequencies of various springflows based on these pumping assumptions were then estimated over a wide range of recharge and initial condition assumptions. These model runs are referenced in the desired future condition resolution of Groundwater Management Area 10. However, the specified average pumping amount (16 cubic feet per second), average springflow (49.7 cubic feet per second), and the minimum drought

condition springflow (6.5 cubic feet per second) were not explicitly simulated in GAM Run 09-019 (Hutchison and Hill, 2011). As outlined in the resolution, the average springflow and pumping for average recharge conditions were estimated based on interpolation of the previous simulations. Therefore, part of the effort in this report was to confirm the average springflow and associated average pumping adopted in the desired future condition resolution with an additional set of model simulations similar to those presented in GAM Run 09-019.

As described below, the additional simulations confirmed that pumping of 11,557 acre-feet per year within Groundwater Management Area 10 (approximately 16 cubic feet per second) will result in an average springflow of 49.7 cubic feet per second. Though the series of 342 7-year simulations contained a wide range of recharge conditions, average springflows among the simulations correspond to average recharge conditions.

This pumping of 11,557 acre-feet per year for average recharge conditions was divided by county, regional water planning area, river basin, and groundwater conservation district (Figure 2). Note in Figure 2 that only the Barton Springs/Edwards Aquifer Conservation District and Edwards Aquifer Authority are shown. This is because these are the only two districts within Groundwater Management Area 10 that manage the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer.

The desired future condition statement also provides for a drought-condition desired future condition that was adopted after considering GAM Run 09-019 and the Barton Springs/Edwards Aquifer Conservation District's 2004 report titled "Sustainable Yield Study" (Smith and Hunt, 2004). As stated in the desired future condition resolution, pumping reductions during drought conditions are a management tool of the Barton Springs/Edwards Aquifer Conservation District. Neither the simulations in GAM Run 09-019 nor the additional model simulations completed as part of this report assumed reductions in pumping due to drought conditions. These simulations could not, therefore, be used to directly assess springflows under drought conditions given the management strategy of the district.

However, as summarized in Technical Note 2011-0707 provided by Barton Springs/Edwards Aquifer Conservation District on July 7, 2011 to the Texas Water Development Board, multiple numerical modeling studies support an approximate one-to-one relationship between springflow and pumping under low-flow conditions (Hunt and others, 2011). Given a total water budget estimated by the district of 11.7 cubic feet per second (8,470 acre-feet per year) available for discharge during extreme drought conditions (Hunt and others, 2011) and the minimum drought condition springflow of 6.5 cubic feet per second (4,705 acre-feet per year), the available pumping under extreme

drought conditions was estimated to be approximately 5.2 cubic feet per second (3,765 acre-feet per year). The modeled available groundwater for extreme drought conditions using this water balance approach, which is distinct from the approach used for average recharge conditions, is presented separately in the results section below.

PARAMETERS AND ASSUMPTIONS:

Modeled Approach for Average Recharge Conditions

- The model recalibrated to include the 1950s drought for the Barton Springs segment of the Edwards (Balcones Fault Zone) Aquifer was used for estimating modeled available groundwater during average recharge conditions (Hutchison and Hill, in preparation).

- Similar to GAM Run 09-019 (Hutchison and Hill, 2011), the simulations consisted of 342 7-year simulations extending from 1648 through 1995 based on a tree-ring dataset from Cleaveland (2006). Each 7-year simulation consisted of 84 monthly stress periods.

- Pumping of 11,557 acre-feet per year in Groundwater Management Area 10 was assumed and implemented by multiplying estimated 2002 pumping from the model by a factor of 2.13 in order to achieve the assumed pumping.

Water Balance Approach for Extreme Drought Conditions

- A water balance approach was used to estimate modeled available groundwater during extreme drought conditions based on information provided by Barton Springs/Edwards Aquifer Conservation District. See Hunt and others (2011) for additional details on the methods and assumptions for this approach.

- The total amount of water available for discharge by both springs and pumping during extreme drought conditions (11.7 cubic feet per second or 8,470 acre-feet per year) was estimated using information from the 1950's drought of record as described in Hunt and others (2011).

- The water balance approach described here does not contain information about the spatial distribution of pumping. For the purposes of regional water planning, the estimated total pumping available during extreme drought conditions was divided by county, regional water planning area, river basin, and groundwater conservation district based on the distribution of pumping in the modeled approach above.

Modeled Available Groundwater and Permitting

As defined in Chapter 36 of the Texas Water Code, "modeled available groundwater" is the estimated average amount of water that may be produced annually to achieve a desired future condition. This is distinct from "managed available groundwater," shown in the draft version of this report dated July 21, 2011, which was a permitting value and accounted for the estimated use of the aquifer exempt from permitting. This change was made to reflect changes in statute by the 82nd Texas Legislature, effective September 1, 2011.

Groundwater conservation districts are required to consider modeled available groundwater, along with several other factors, when issuing permits in order to manage groundwater production to achieve the desired future condition(s). The other factors districts must consider include annual precipitation and production patterns, the estimated amount of pumping exempt from permitting, existing permits, and a reasonable estimate of actual groundwater production under existing permits. The estimated amount of pumping exempt from permitting, which the Texas Water Development Board is now required to develop after soliciting input from applicable groundwater conservation districts, will be provided in a separate report.

RESULTS:

Results of the additional model simulations are summarized in Figures 3 and 4. Figure 3 presents the cumulative distribution of springflow for the entire set of simulations (342 7-year simulations), which totals 28,728 months. Note that springflows below 6.5 cubic feet per second occur less than 0.5 percent of the time even though simulated pumping was not reduced during drought conditions. Though the estimated pumping for extreme drought conditions presented below was derived using a separate water balance approach, the modeling results are consistent with the conclusion that the drought condition desired future condition can be met given the management practice of Barton Springs/Edwards Aquifer Conservation District to reduce pumping during drought.

Figure 4 presents the average monthly springflow for each of the 342 7-year simulations plotted against the average precipitation for the corresponding 7-year period. Note that the average springflow for all 342 7-year periods is 49.7 cubic feet per second. Further, note that at any particular precipitation condition, there is considerable variation in the average springflow. This expected variation will be an important consideration when the Barton Springs/Edwards Aquifer Conservation District compiles springflow data and compares them to the desired future condition.

Based on the analysis described here, the modeled available groundwater for average recharge conditions for the northern subdivision of the Edwards (Balcones Fault Zone) Aquifer in Groundwater Management Area 10 as a result of the desired future condition is 11,557 acre-feet per year. This has been divided by county, regional water planning area, and river basin for each decade between 2010 and 2060 for use in the regional water planning process (Table 1).

As described above, for extreme drought conditions the modeled available groundwater is 3,765 acre-feet per year. This represents approximately 32.6 percent of the modeled available groundwater under average conditions. Since the water budget approach used to develop this estimate does not contain information about the spatial distribution of pumping, the results were divided by county, regional water planning area, and river basin based on the distribution of pumping during average conditions. Specifically, the modeled available groundwater under average conditions was multiplied by 32.6 percent to yield the modeled available groundwater during extreme drought conditions in each area (Table 1).

The modeled available groundwater for both average recharge and extreme drought conditions is also summarized by county, regional water planning area, river basin, and groundwater conservation district as shown in tables 2, 3, 4, and 5, respectively. In Table 5, note that Barton Springs/Edwards Aquifer Conservation District is the only district relevant to the desired future conditions. This excludes the Edwards Aquifer Authority because the desired future condition and modeled available groundwater in this area was set by the Texas Legislature during the 80th Legislative Session.

LIMITATIONS:

The groundwater model used in completing this analysis is the best available scientific tool that can be used to meet the stated objective(s). To the extent that this analysis will be used for planning purposes and/or regulatory purposes related to pumping in the past and into the future, it is important to recognize the assumptions and limitations associated with the use of the results. In reviewing the use of models in environmental regulatory decision making, the National Research Council (2007) noted:

> "Models will always be constrained by computational limitations, assumptions, and knowledge gaps. They can best be viewed as tools to help inform decisions rather than as machines to generate truth or make decisions. Scientific advances will never make it possible to build a perfect model that accounts for every aspect of reality or to prove that a given model is correct in all respects for a particular regulatory application. These characteristics make evaluation of a regulatory model

more complex than solely a comparison of measurement data with model results."

A key aspect of using the groundwater model to evaluate the impacts of future pumping is the need to make assumptions about the location in the aquifer where future pumping will occur. As actual pumping changes in the future, it will be necessary to evaluate the amount of that pumping as well as its location in the context of the assumptions associated with this analysis. Evaluating the amount and location of future pumping is as important as evaluating the changes in groundwater levels, spring flows, and other metrics that describe the impacts of that pumping. This analysis does not assess the possible impacts of pumping such as reduced water quality or land surface subsidence.

In addition, certain assumptions have been made regarding future precipitation, recharge, and streamflow in evaluating the impacts of future pumping. Those assumptions also need to be considered and compared to actual future data.

Given these limitations, users of this information are cautioned that the results should not be considered a definitive, permanent prediction of the changes in groundwater storage, streamflow and spring flow. Because the application of the groundwater availability model was designed to address regional scale questions, the results are most effective on a regional scale. The TWDB makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.

It is important for groundwater conservation districts to monitor future groundwater pumping and overall conditions of the aquifer. Because of the limitations of the groundwater availability model and the assumptions in this analysis, it is important that the groundwater conservation districts work with the TWDB to refine this analysis in the future given the reality of how the aquifer responds to the actual amount and location of pumping now and in the future.

REFERENCES:

Cleaveland, M.K., 2006, Extended chronology of drought in the San Antonio area, revised report: University of Arkansas, 29 p. http://www.gbra.org/Documents/Reports/TreeRingStudy.pdf

Hunt, B.B., Smith, B.A., Holland, W.F., 2011, Technical Note 2011-0707: Information in Support of the Drought DFC and Drought MAG, Barton Springs Segment of the Edwards Aquifer, Barton Springs/Edwards Aquifer Conservation District, 5 p.

Hutchison, W.R. and Hill, M.E., Recalibration of the Edwards (Balcones Fault Zone) - Barton Springs Segment - Groundwater Flow Model, Texas Water Development Board, 115 p.

Hutchison, W.R. and Hill, M.E., 2011, GAM Run 09-019: Groundwater Model Runs to Estimate Monthly Average Discharge from Barton Springs under Alternative Pumping Scenarios and Alternative Initial Conditions, June 1, 2011, 29 p.

National Research Council, 2007, Models in Environmental Regulatory Decision Making. Committee on Models in the Regulatory Decision Process, National Academies Press, Washington D.C., 287 p.

Smith, B.A. and Hunt, B.B., 2004, Evaluation of Sustainable Yield of the Barton Springs Segment of the Edwards Aquifer, Hays and Travis Counties, Central Texas: Barton Springs/Edwards Aquifer Conservation District, 197 p.

TABLE 1: MODELED AVAILABLE GROUNDWATER FOR THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER IN GROUNDWATER MANAGEMENT AREA 10 FOR BOTH AVERAGE RECHARGE AND EXTREME DROUGHT CONDITIONS. RESULTS ARE IN ACRE-FEET PER YEAR AND ARE DIVIDED BY COUNTY, REGIONAL WATER PLANNING AREA, AND RIVER BASIN.

Recharge Condition	County	Region	Basin	2010	2020	2030	2040	2050	2060
Average	Hays	K	Colorado	7,037	7,037	7,037	7,037	7,037	7,037
Average	Hays	L	Guadalupe	942	942	942	942	942	942
Average	Travis	K	Colorado	3,578	3,578	3,578	3,578	3,578	3,578
Total for Average Recharge Conditions				**11,557**	**11,557**	**11,557**	**11,557**	**11,557**	**11,557**
Drought	Hays	K	Colorado	2,292	2,292	2,292	2,292	2,292	2,292
Drought	Hays	L	Guadalupe	307	307	307	307	307	307
Drought	Travis	K	Colorado	1,166	1,166	1,166	1,166	1,166	1,166
Total for Extreme Drought Recharge Conditions				**3,765**	**3,765**	**3,765**	**3,765**	**3,765**	**3,765**

TABLE 2: MODELED AVAILABLE GROUNDWATER FOR THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER SUMMARIZED BY COUNTY IN GROUNDWATER MANAGEMENT AREA 10 FOR EACH DECADE BETWEEN 2010 AND 2060 FOR BOTH AVERAGE RECHARGE AND EXTREME DROUGHT CONDITIONS. RESULTS ARE IN ACRE-FEET PER YEAR.

Recharge Condition	County	2010	2020	2030	2040	2050	2060
Average	Hays	7,979	7,979	7,979	7,979	7,979	7,979
Average	Travis	3,578	3,578	3,578	3,578	3,578	3,578
Total for Average Recharge Conditions		**11,557**	**11,557**	**11,557**	**11,557**	**11,557**	**11,557**
Drought	Hays	2,599	2,599	2,599	2,599	2,599	2,599
Drought	Travis	1,166	1,166	1,166	1,166	1,166	1,166
Total for Extreme Drought Recharge Conditions		**3,765**	**3,765**	**3,765**	**3,765**	**3,765**	**3,765**

TABLE 3: MODELED AVAILABLE GROUNDWATER FOR THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER SUMMARIZED BY REGIONAL WATER PLANNING AREA IN GROUNDWATER MANAGEMENT AREA 10 FOR EACH DECADE BETWEEN 2010 AND 2060 FOR BOTH AVERAGE RECHARGE AND EXTREME DROUGHT CONDITIONS. RESULTS ARE IN ACRE-FEET PER YEAR.

Recharge Condition	Region	2010	2020	2030	2040	2050	2060
Average	K	10,615	10,615	10,615	10,615	10,615	10,615
Average	L	942	942	942	942	942	942
Total for Average Recharge Conditions		**11,557**	**11,557**	**11,557**	**11,557**	**11,557**	**11,557**
Drought	K	3,458	3,458	3,458	3,458	3,458	3,458
Drought	L	307	307	307	307	307	307
Total for Extreme Drought Recharge Conditions		**3,765**	**3,765**	**3,765**	**3,765**	**3,765**	**3,765**

TABLE 4: MODELED AVAILABLE GROUNDWATER FOR THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER SUMMARIZED BY RIVER BASIN IN GROUNDWATER MANAGEMENT AREA 10 FOR EACH DECADE BETWEEN 2010 AND 2060 FOR BOTH AVERAGE RECHARGE AND EXTREME DROUGHT CONDITIONS. RESULTS ARE IN ACRE-FEET PER YEAR.

Recharge Condition	Basin	2010	2020	2030	2040	2050	2060
Average	Colorado	10,615	10,615	10,615	10,615	10,615	10,615
Average	Guadalupe	942	942	942	942	942	942
Total for Average Recharge Conditions		**11,557**	**11,557**	**11,557**	**11,557**	**11,557**	**11,557**
Drought	Colorado	3,458	3,458	3,458	3,458	3,458	3,458
Drought	Guadalupe	307	307	307	307	307	307
Total for Extreme Drought Recharge Conditions		**3,765**	**3,765**	**3,765**	**3,765**	**3,765**	**3,765**

TABLE 5: MODELED AVAILABLE GROUNDWATER FOR THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER SUMMARIZED BY GROUNDWATER CONSERVATION DISTRICT IN GROUNDWATER MANAGEMENT AREA 10 FOR EACH DECADE BETWEEN 2010 AND 2060 FOR BOTH AVERAGE RECHARGE AND EXTREME DROUGHT CONDITIONS. RESULTS ARE IN ACRE-FEET PER YEAR.

Recharge Condition	*Groundwater Conservation District*	*2010*	*2020*	*2030*	*2040*	*2050*	*2060*
Average	Barton Springs/Edwards Aquifer Conservation District	11,528	11,528	11,528	11,528	11,528	11,528
Average	Edwards Aquifer Authority and Non-District Areas	29	29	29	29	29	29
Total for Average Recharge Conditions		**11,557**	**11,557**	**11,557**	**11,557**	**11,557**	**11,557**
Drought	Barton Springs/Edwards Aquifer Conservation District	3,756	3,756	3,756	3,756	3,756	3,756
Drought	Edwards Aquifer Authority and Non-District Areas	9	9	9	9	9	9
Total for Extreme Drought Recharge Conditions		**3,765**	**3,765**	**3,765**	**3,765**	**3,765**	**3,765**

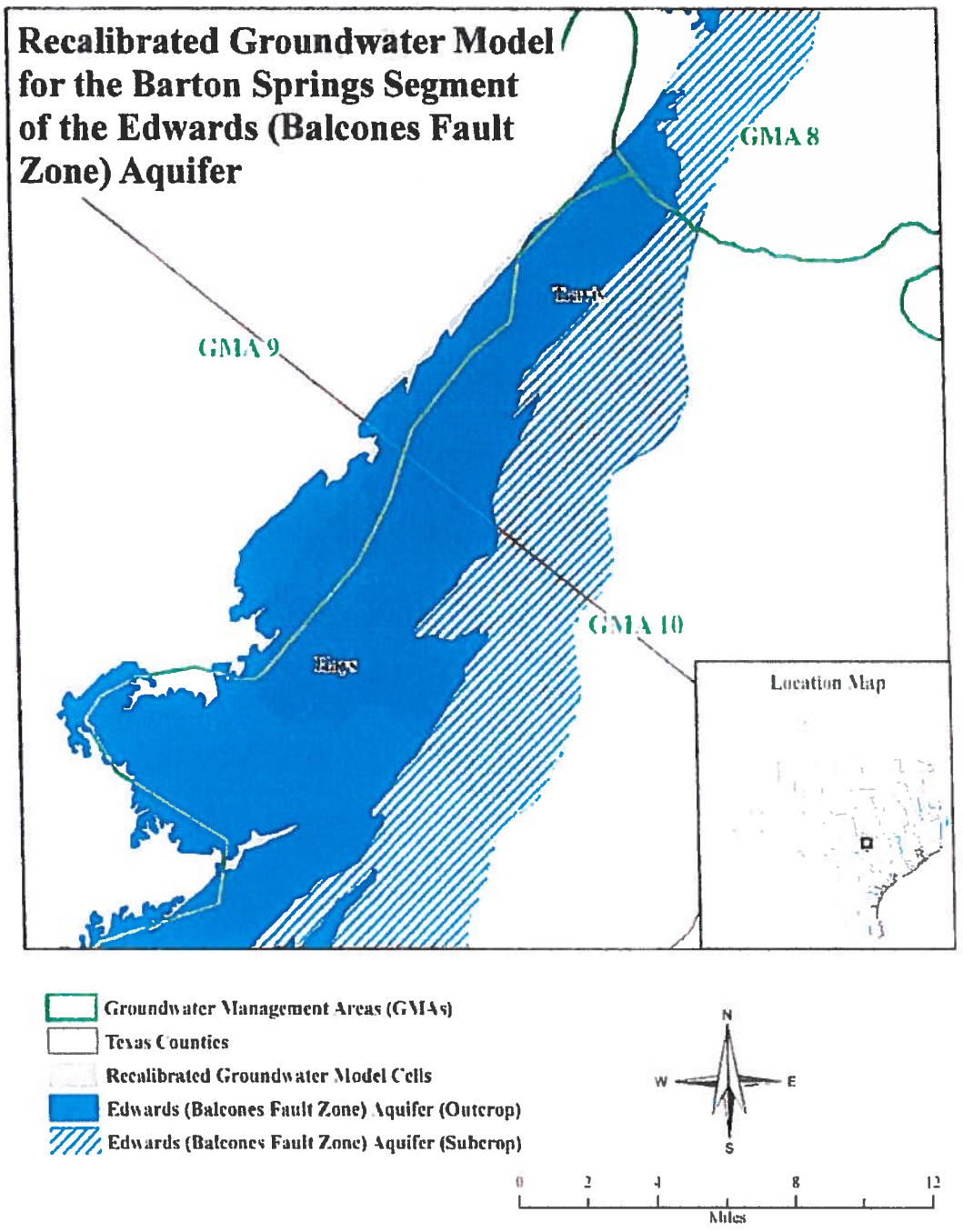

FIGURE 1. MAP SHOWING THE AREAS COVERED BY THE GROUNDWATER MODEL REPRESENTING THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER.

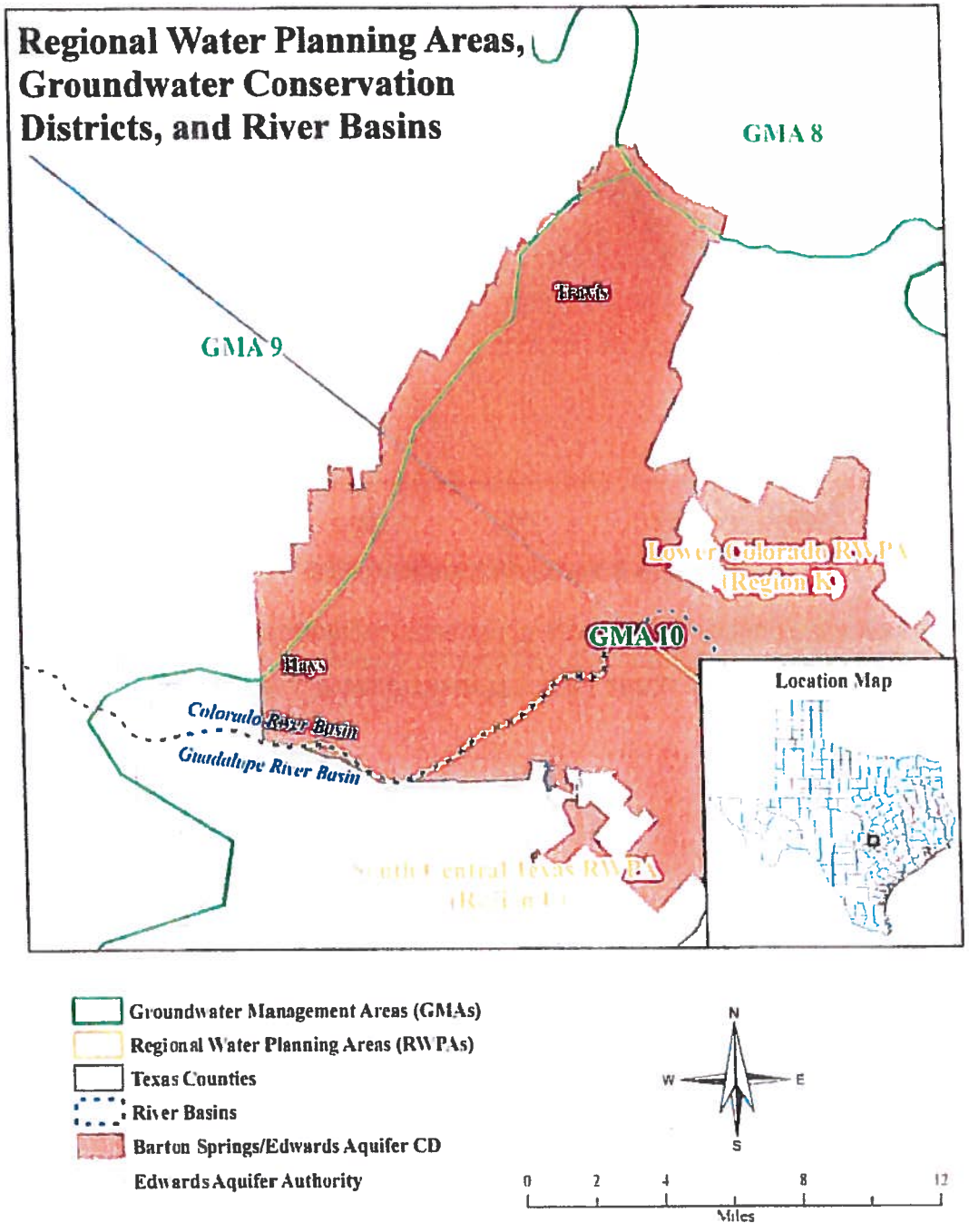

FIGURE 2. MAP SHOWING REGIONAL WATER PLANNING AREAS, GROUNDWATER CONSERVATION DISTRICTS, COUNTIES, AND RIVER BASINS IN GROUNDWATER MANAGEMENT AREA 10 RELEVANT TO THE NORTHERN SUBDIVISION OF THE EDWARDS (BALCONES FAULT ZONE) AQUIFER.

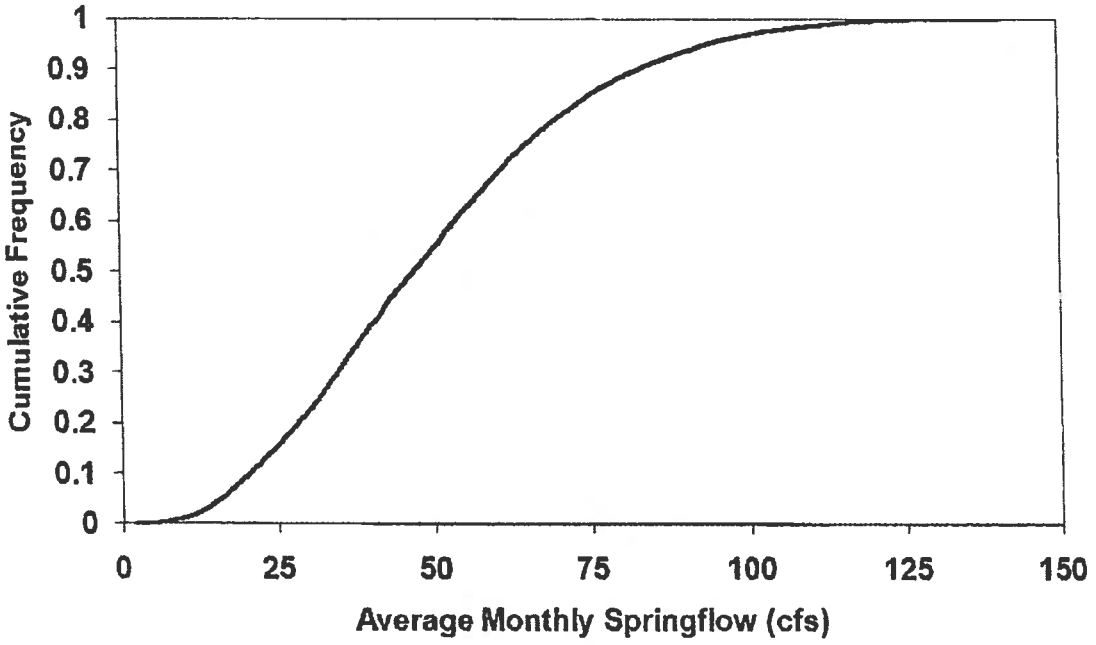

FIGURE 3. CUMULATIVE DISTRIBUTION OF AVERAGE MONTHLY SPRINGFLOW FOR BARTON SPRINGS BASED ON 342 7-YEAR SIMULATIONS WITH PUMPING AT 11,557 ACRE-FEET PER YEAR (16 CUBIC FEET PER SECOND) ASSUMING NO REDUCTIONS DURING DROUGHT.

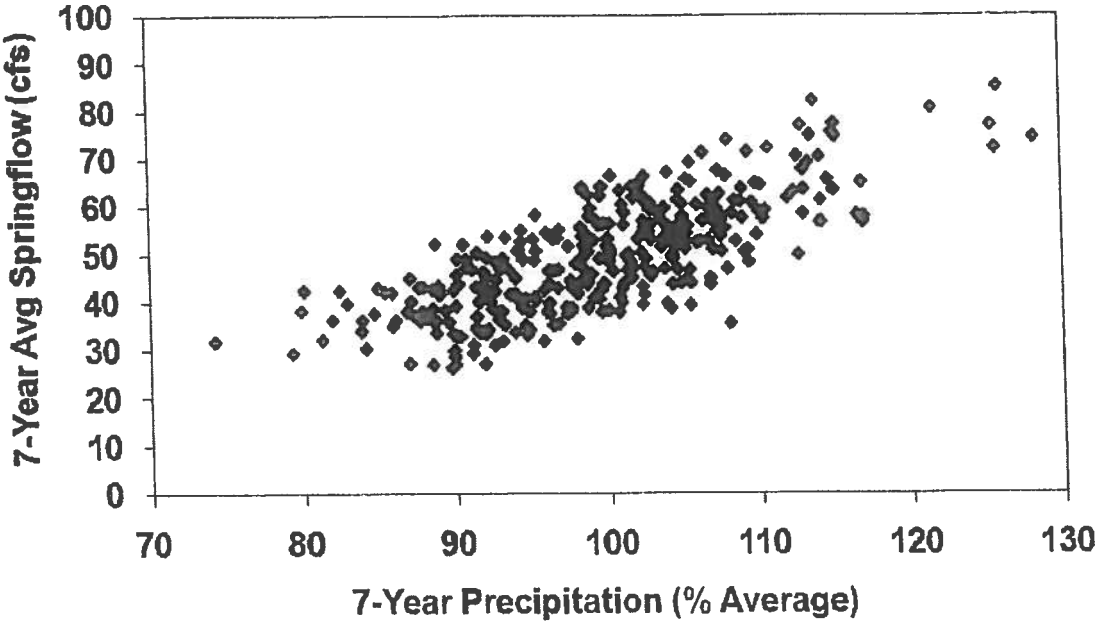

FIGURE 4. 7-YEAR PRECIPITATION VERSUS 7-YEAR AVERAGE SPRINGFLOW BASED ON 342 SIMULATIONS ASSUMING 11,557 ACRE-FEET OF ANNUAL PUMPING (16 CUBIC FEET PER SECOND).

APPENDIX V

NOTICE OF ADOPTED PLAN AVAILABILITY

Bandera County River Authority and Groundwater District
Blanco-Pedernales Groundwater Conservation District
Cow Creek Groundwater Conservation District
Hays Trinity Groundwater Conservation District
Headwaters Groundwater Conservation District
Medina County Groundwater Conservation District
Trinity Glen Rose Groundwater Conservation District

Edwards Aquifer Authority
Guadalupe County Groundwater Conservation District
Kinney County Groundwater Conservation District
Plum Creek Conservation District
Uvalde County Underground Water Conservation District

Lower Colorado Regional Water Planning Group
South Central Texas Regional Water Planning Group

Guadalupe-Blanco River Authority
Lower Colorado River Authority

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. David Mauk, General Manager
Bandera County River Authority and Groundwater District
P.O. Box 177
440 FM 3240
Bandera, TX 78003

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear David:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Bandera County River Authority and Groundwater District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming BCRAGD board meeting. I would also appreciate a reply to this notice that the Plan has been received by BCRAGD and that we thereby have provided an *opportunity* for BCRAGD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Ron Fieseler, General Manager
Blanco-Pedernales Groundwater Conservation District
601 West Main
P.O. Box 1516
Johnson City, Texas 78636-1516

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ron:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Blanco-Pedernales Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming BPGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by BPGCD and that we thereby have provided an *opportunity* for BPGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

Enclosure

1124 Regal Row · Austin, Texas 78748 · (512) 282-8441 · Fax: (512) 282-7016 · www.bseacd.org · e-mail: bseacd@bseacd.org

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Micah Voulgaris, General Manager
Cow Creek Groundwater Conservation District
201 E. San Antonio Ave., Ste 100
Boerne, Texas 78006

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Micah:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Cow Creek Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming CCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by CCGCD and that we thereby have provided an *opportunity* for CCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Rick Broun, General Manager
Hays Trinity Groundwater Conservation District
14101 Hwy 290 W. Bldg 100 Ste 212
Austin, TX 78737

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Rick:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Hays Trinity Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming HTGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by HTGCD and that we thereby have provided an *opportunity* for HTGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Gene Williams, General Manager
Headwaters Groundwater Conservation District
125 North Lehmann Drive
Kerrville, TX 78028

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Gene:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Headwaters Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming HGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by HGCD and that we thereby have provided an *opportunity* for HGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Luana Buckner, General Manager
Medina County Groundwater Conservation District
1613 Ave K
Hondo, TX 78861

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Luana:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Medina County Groundwater Conservation District, a fellow member of both GMA 9 and GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMAs 9 and 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming MCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by MCGCD and that we thereby have provided an *opportunity* for MCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)
Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. George Wissmann, General Manager
Trinity Glen Rose Groundwater Conservation District
6335 Camp Bullis Rd, Suite 25
San Antonio, TX 78257

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear George:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Trinity Glen Rose Groundwater Conservation District, a fellow member of GMA 9. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 9. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming TGRGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by TGRGCD and that we thereby have provided an *opportunity* for TGRGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Roland Ruiz, General Manager
Edwards Aquifer Authority
1615 N. St. Mary's Street
San Antonio, TX 78215

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Roland:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of the Edwards Aquifer Authority, a fellow member of both GMA 9 and GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMAs 9 and 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming EAA board meeting. I would also appreciate a reply to this notice that the Plan has been received by EAA and that we thereby have provided an *opportunity* for EAA, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Ron Fieseler, GMA 9 Committee Coordinator (without enclosure)
Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

1124 Regal Row · Austin, Texas 78748 · (512) 282-8441 · Fax: (512) 282-7016 · www.bseacd.org · e-mail: bseacd@bseacd.org

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Ron Naumann, General Manager
Guadalupe County Groundwater Conservation District
PO Box 1221
Seguin, Texas 78156

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ron:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Guadalupe County Groundwater Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming GCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by GCGCD and that we thereby have provided an *opportunity* for GCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

1124 Regal Row · Austin, Texas 78748 · (512) 282-8441 · Fax: (512) 282-7016 · www.bseacd.org · e-mail: bseacd@bseacd.org

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Ken Carver, General Manager
Kinney County Groundwater Conservation District
112 West Spring Street
Brackettville TX 78832

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Ken:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Kinney County Groundwater Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming KCGCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by KCGCD and that we thereby have provided an *opportunity* for KCGCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Johnie Halliburton, General Manager
Plum Creek Conservation District
1101 West San Antonio Street
PO Box 328
Lockhart, Texas 78644

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Johnie:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Plum Creek Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming PCCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by PCCD and that we thereby have provided an *opportunity* for PCCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Vic Hilderbran, General Manager
Uvalde County Underground Water Conservation District
200 East Nopal Street
Uvalde, TX 78801

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Vic:

Pursuant to Texas Water Code §36.108(b), Joint Planning in Management Area, the Barton Springs/Edwards Aquifer Conservation District (District) is providing notice of the availability of the revised District Management Plan (Plan) to the Board of Directors of Uvalde County Underground Water Conservation District, a fellow member of GMA 10. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan once approved both authorizes and guides the groundwater management programs and activities by the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

The Plan conforms in all material respects to the requisites of Texas Administrative Code §356.6. The groundwater supply projections contained in the Plan are consistent with the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies. The Plan's objectives and strategies, and the District's Rules that implement those strategies, are designed to achieve and maintain the applicable Desired Future Conditions for the District's regulated aquifers in GMA 10. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

As you know, when a GCD amends an existing or issues a new Management Plan, under TWC 36.108, each GCD in each GMA of which the GCD is a member must be notified and provided a copy of the revised Management Plan. Specifically, the board of each of the GCDs in those GMAs is statutorily charged with considering that plan individually and comparing it to other management plans of other GCDs in the GMA. Discretion is available in how each board accomplishes that assessment.

Accordingly, we are requesting that you disseminate notice of this Plan's availability to members of your board of directors so that your board and staff may offer any comments on this Plan, either individually or collectively as part of the agenda of some upcoming UCUWCD board meeting. I would also appreciate a reply to this notice that the Plan has been received by UCUWCD and that we thereby have provided an *opportunity* for UCUWCD, at its discretion, to review, provide comments, and use this Plan.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

cc: Mr. Rick Illgner, GMA 10 Committee Coordinator (without enclosure)

Enclosure

1124 Regal Row · Austin, Texas 78748 · (512) 282-8441 · Fax: (512) 282-7016 · www.bseacd.org · e-mail: bseacd@bseacd.org

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. John Burke, Chair
Lower Colorado Regional Water Planning Group
% John E Burke & Associates LLC
496 Shiloh Road
Bastrop, TX 78602

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear John:

Pursuant to Texas Water Code §36.1071 and Texas Administrative Code §356.6(a)(4), the Barton Springs/Edwards Aquifer Conservation District (District) is hereby providing notice of the availability of the revised District Management Plan (Plan) to the Lower Colorado Regional Water Planning Group (Region K). I am enclosing a hard copy of this Plan for your convenience; the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, by the individual GCDs in our two GMAs, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan authorizes and guides the groundwater management programs and activities of the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

We have used the TWDB-supplied information from the current State Water Plan in preparing this Plan, in particular the demand projections, surface-water supplies, water needs, and water management strategies applicable to WUGs in our jurisdictional area. The groundwater supply projections contained in the Plan similarly conform to the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies and which achieve the applicable Desired Future Conditions for aquifers that provide groundwater in Region K. Region K may reliably utilize the supplies that the District's objectives and strategies provide, as enumerated in this Plan, for its groundwater supply planning.

As you know, the District staff has actively participated in Region K planning activities for some time, previously as an alternate representative to Region K for groundwater conservation districts and now as the designated GMA 10 representative, who regularly apprises the GMA and the District of the status and activities of Region K. The District has been proactive in supporting the development of alternative water supplies in Region K, especially desalination and aquifer storage and recovery evaluations, and has reported on the status and issues associated with such development. We look forward to continuing and expanding that collaboration.

We would request that you disseminate notice of this Plan's availability to members of Region K for both their individual comments and their prospective use, as provided by statute. I would also appreciate a reply to this notice that the Plan has been received by Region K and distributed for use in its water planning activities. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide you an electronic link to the approved Plan, complete with all appendices.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

Enclosure

1124 Regal Row · Austin, Texas 78748 · (512) 282-8441 · Fax: (512) 282-7016 · www.bseacd.org · e-mail: bseacd@bseacd.org

Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Con Mims, Chair
South Central Texas Regional Water Planning Group
% Nueces River Authority
P O Box 349
Uvalde, TX 78801

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Con:

Pursuant to Texas Water Code §36.1071 and Texas Administrative Code §356.6(a)(4), the Barton Springs/Edwards Aquifer Conservation District (District) is hereby providing notice of the availability of the revised District Management Plan (Plan) to the South Central Texas Regional Water Planning Group (Region L). I am enclosing a hard copy of this Plan for your convenience; the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, by the individual GCDs in our two GMAs, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan authorizes and guides the groundwater management programs and activities of the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

We have used the TWDB-supplied information from the current State Water Plan in preparing this Plan, in particular the demand projections, surface-water supplies, water needs, and water management strategies applicable to WUGs in our jurisdictional area. The groundwater supply projections contained in the Plan similarly conform to the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies and which achieve the applicable Desired Future Conditions for aquifers that provide groundwater in Region L. Region L may reliably utilize the supplies that the District's objectives and strategies provide, as enumerated in this Plan, for its groundwater supply planning.

As you know, the District staff has actively participated in Region L planning activities for some time. The District has been proactive in discussing the development of alternative water supplies in Region L, especially desalination and aquifer storage and recovery evaluations. We look forward to continuing and expanding that collaboration.

We would request that you disseminate notice of this Plan's availability to members of Region L for both their individual comments and their prospective use, as provided by statute. I would also appreciate a reply to this notice that the Plan has been received by Region L and distributed for use in its water planning activities. On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide you an electronic link to the approved Plan, complete with all appendices.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

Enclosure

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Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Mr. Bill West, General Manager
Guadalupe-Blanco River Authority
933 East Court Street
Seguin, TX 78155

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Bill:

Pursuant to Texas Water Code §36.1071 and Texas Administrative Code §356.6(a)(4), the Barton Springs/Edwards Aquifer Conservation District (District) is hereby providing notice of the availability of the revised District Management Plan (Plan) to the Guadalupe-Blanco River Authority, as a surface-water management entity within our jurisdictional boundaries. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan authorizes and guides the groundwater management programs and activities of the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

We have used the TWDB-supplied information from the current State Water Plan in preparing this Plan, in particular its demand projections, surface-water supplies, water needs, and water management strategies applicable to WUGs in our jurisdictional area. The groundwater supply projections contained in the Plan similarly conform to the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies and which achieve the applicable Desired Future Conditions for aquifers that provide groundwater in our shared jurisdictional areas. GBRA may reliably utilize the groundwater supplies that the District's objectives and strategies provide, as enumerated in this Plan, for water supply planning and management.

On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

We are requesting that you disseminate this notice of the Plan's availability to appropriate staff and board members of GBRA for their individual comments and their prospective use. I would also appreciate a reply to this notice that the Plan has been received by GBRA and that we have thereby provided you an *opportunity*, at your discretion, for comment and use of this Plan in your water planning and management activities.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F Holland

W F (Kirk) Holland, P.G.
General Manager

Enclosure

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Barton Springs
Edwards Aquifer
CONSERVATION DISTRICT

By E-mail and USPS Mail

October 23, 2012

Ms. Becky Motal, General Manager
Lower Colorado River Authority
P.O. Box 220
Austin, TX 78767

Subject: New Management Plan Adopted by the Board of Directors of the Barton Springs/Edwards Aquifer Conservation District

Dear Becky:

Pursuant to Texas Water Code §36.1071 and Texas Administrative Code §356.6(a)(4), the Barton Springs/Edwards Aquifer Conservation District (District) is hereby providing notice of the availability of the revised District Management Plan (Plan) to the Lower Colorado River Authority, as a surface-water management entity within our jurisdictional boundaries. I am enclosing a hard copy of this Plan; for your convenience, the Plan is also available electronically on our website, at the following location:

The Body of the Plan and Appendices are located at
www.bseacd.org/about-us/governing-documents#Revisions

This Plan substantially revises the existing plan, dated August 2008, and it has now been adopted in a properly noticed meeting by Board resolution for review and comment by our two regional planning groups, our two river authorities, and the individual GCDs in our two GMAs, at their discretion, and ultimately by the TWDB for its overall approval. Until such approval is received, we consider this a proposed Plan. The Plan authorizes and guides the groundwater management programs and activities of the District for the ten-year period of 2012-2022; it will be considered for revision no later than October 2017.

We have used the TWDB-supplied information from the current State Water Plan in preparing this Plan, in particular its demand projections, surface-water supplies, water needs, and water management strategies applicable to WUGs in our jurisdictional area. The groundwater supply projections contained in the Plan similarly conform to the latest TWDB-supplied Modeled Available Groundwater estimates for our District, which utilize the best available data and analytical methodologies and which achieve the applicable Desired Future Conditions for aquifers that provide groundwater in our shared jurisdictional areas. LCRA may reliably utilize the groundwater supplies that the District's objectives and strategies provide, as enumerated in this Plan, for water supply planning and management.

On the basis of the TWDB's pre-review comments that have been incorporated, we anticipate no differences between the Plan provided here and the version that is officially approved by TWDB, except for the inclusion in the appendices of the required notices, such as this one, and their acknowledgments and other related communications. Once the Plan is approved by TWDB, I will notify you and provide an electronic link to the approved Plan, complete with all appendices.

We are requesting that you disseminate this notice of the Plan's availability to appropriate staff and board members of LCRA for their individual comments and their prospective use. I would also appreciate a reply to this notice that the Plan has been received by LCRA and that we have thereby provided you an *opportunity*, at your discretion, for comment and use of this Plan in your water planning and management activities.

Please let me know if you have any questions, comments, or concerns about the Plan or this notice process.

Sincerely,

W F (Kirk) Holland, P.G.
General Manager

Enclosure

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