

**GROUNDWATER  
MANAGEMENT  
AREA 8**

**JOINT PLANNING MEETING**

**Prairielands Groundwater Conservation District Office  
208 Kimberly Dr.  
Cleburne, Texas 76031**

**TUESDAY  
July 26, 2022  
10:00 AM**

**NOTICE OF MEETING  
GROUNDWATER MANAGEMENT AREA 8**

Notice is hereby given that the groundwater conservation districts located wholly or partially within Groundwater Management Area (GMA) 8, as designated by the Texas Water Development Board (TWDB), consisting of the Central Texas Groundwater Conservation District, Clearwater Underground Water Conservation District, Middle Trinity Groundwater Conservation District, North Texas Groundwater Conservation District, Northern Trinity Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, Prairielands Groundwater Conservation District, Red River Groundwater Conservation District, Saratoga Underground Water Conservation District, Southern Trinity Groundwater Conservation District, and Upper Trinity Groundwater Conservation District will hold a **Joint Planning meeting at 10:00 A.M. on July 26, 2022** at the **Prairielands Groundwater Conservation District Office** located at **208 Kimberly Dr., Cleburne, Texas 76031**. The meeting will be open to the public. The following items of business will be discussed and potentially acted upon:

1. Invocation.
2. Call meeting to order and establish quorum.
3. Welcome and introductions.
4. Public comment.
5. Consider and act upon approval of minutes from the November 4, 2021, GMA 8 meeting.
6. Consider and act upon election of Chair and Vice Chair for GMA 8.
7. Consider and act upon Resolution 2022-07-26-01 for Appreciation of Joe B. Cooper.
8. Consider and act upon approving GMA 8 Resolution 2022-07-26-02 adopting the amended Desired Future Conditions for relevant aquifers in GMA 8.
9. Consider and act upon the amended GMA 8 Explanatory Report, including consideration of comments received and corresponding revisions to the Explanatory Report, authorization for the administrative District to make any necessary non-substantive revisions, and submission of all required documentation to the Texas Water Development Board.
10. Consider and possibly act upon all matters incident and related to updating the Groundwater Availability Model for the Northern Trinity and Woodbine Aquifers, including the process for selecting a consultant to perform the modeling work.
11. TWDB presentation on the Brackish Resources Characterization of the Woodbine Aquifer
12. Updates from the TWDB
13. Discussion of possible agenda items and dates for next GMA 8 meeting.
14. Closing comments.

15. Adjourn.

Dated this 6th day of July 2022

Mitchell Sodek, Vice Chair  
Groundwater Management Area 8

*The above agenda schedules represent an estimate of the order for the indicated items and is subject to change at any time. These public meetings are available to all persons regardless of disability. If you require special assistance to attend the meeting, please call (855) 426-4433 at least 24 hours in advance of the meeting to coordinate any special physical access arrangements.*

*For questions regarding this notice, please contact Velma Starks at (855) 426-4433, at [ntqcd@northtexasqcd.org](mailto:ntqcd@northtexasqcd.org), or at 5100 Airport Drive, Denison, TX 75020.*

At any time during the meeting or work session and in compliance with the Texas Open Meetings Act, Chapter 551, Government Code, Vernon's Texas Codes, Annotated, the Groundwater Management Area 8 may meet in executive session on any of the above agenda items or other lawful items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gifts (§551.073); personnel matters (§551.074); and deliberation regarding security devices (§551.076). Any subject discussed in executive session may be subject to action during an open meeting.

ATTACHMENT 5

**Meeting of the  
Groundwater Management Area 8  
November 4, 2021**

**Minutes**

The Groundwater Management Area 8 (GMA 8) district representatives (referred to herein collectively as “the Committee” for easy reference), which consists of representatives from the Central Texas Groundwater Conservation District, Clearwater Underground Water Conservation District, Middle Trinity Groundwater Conservation District, North Texas Groundwater Conservation District, Northern Trinity Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, Prairielands Groundwater Conservation District, Red River Groundwater Conservation District, Saratoga Underground Water Conservation District, Southern Trinity Groundwater Conservation District, and Upper Trinity Groundwater Conservation District, held a **Joint Planning Meeting at 10:00 A.M. on Thursday, November 4, 2021**, at the **Prairielands Groundwater Conservation District Office** located at **208 Kimberly Dr., Cleburne, Texas 76031**.

Groundwater Conservation District Representatives Present:

Central Texas GCD: Mitchell Sodek	Prairielands GCD: Kathy Turner Jones
Clearwater UWCD: Dirk Aaron	Red River GCD: David Gattis
Middle Trinity GCD: Charles Ferguson	Saratoga UWCD: Gary Franklin
North Texas GCD: Joe Helmberger	Southern Trinity GCD: Scooter Radcliffe
Northern Trinity GCD: Corey Jones	Upper Trinity GCD: Doug Shaw
Post Oak Savannah GCD: Gary Westbrook	

Groundwater Conservation District Representatives Absent: None

**1. Invocation**

Gary Westbrook, Post Oak Savannah GCD, provided the invocation for the meeting.

**2. Call meeting to order and establish quorum**

Vice Chairman Mitchell Sodek, Central Texas GCD, established that a quorum was present and called the GMA 8 meeting to order at 10:03 a.m.

Vice Chairman Mitchell Sodek, Central Texas GCD, read a letter from GMA 8 Chairman Joe B. Cooper, Middle Trinity GCD, announcing his retirement as of October 7, 2021.

**3. Welcome and introductions.**

Vice Chairman Mitchell Sodek, Central Texas GCD, welcomed Jean Perez, TWDB, and James Beach, Advanced Groundwater Solutions, LLC, and Rohit Goswami, WSP, who were guests present at the meeting.

**4. Public Comments.**

No public comment.

**5. Consider and act upon approval of minutes from the October 27, 2020, GMA 8 meeting**

David Gattis, Red River GCD, made the motion to approve the October 27, 2020, GMA 8 meeting minutes. Kathy Jones, Prairielands GCD, seconded the motion. Motion passed unanimously.

**6. Consider and act upon comments and summary reports received from groundwater conservation district regarding the Proposed Desired Future Conditions.**

Vice Chair Mitchell Sodek, Central Texas GCD, asked each District Representative if their District had received comments. The only District that received comments was Central Texas GCD. Vice Chair Mitchell Sodek provided a summary of the comments that Central Texas GCD received. Central Texas GCD's Board voted to approve the proposed DFCs.

Dirk Aaron, Clearwater UWCD, made the motion to accept the report as presented. Scooter Radcliffe, Southern Trinity GCD seconded the motion. Motion passed unanimously.

**7. Consider and act upon approving GMA 8 Resolution 2021-01 adopting the Desired Future Conditions for relevant aquifers in GMA 8.**

Dirk Aaron, Clearwater UWCD, informed the representatives that the caption in Table 6 needed to be corrected from cubic feet to acre-feet. Dirk Aaron, Clearwater UWCD, made the motion to adopt the resolution with the correction to Table 6. David Gattis, Red River GCD, seconded the motion. Brief discussion was held. Motion passed unanimously.

**8. Consider and act upon the GMA 8 Explanatory Report, including consideration of comments received and corresponding revisions to the Explanatory Report, authorization for the administrative District to make any necessary non substantive revisions, and submission of all required documentation to the Texas Water Development Board.**

Rohit Goswami, WSP, and James Beach, Advanced Groundwater Solutions, reviewed the report with the District Representatives. David Gattis, Red River GCD, made the motion to accept as presented. Joe Helmberger, North Texas GCD, seconded the motion. Motion passed unanimously.

**9. Update from Texas Water Development Board staff.**

Jean Perez, TWDB, thanked the Districts for meeting deadline requesting comments. He stated that new GMA 8 maps are available. DFC guidance packet will require input from members. It will be emailed out next year.

**10. Discussion of possible agenda items and dates for next GMA 8 meeting.**

The next meeting will be in 2022. Email will be sent out to select a meeting date. A request was made to email the flow chart DFC Process and Schedule to members.

**11. Closing comments.**

Prairielands GCD was thanked for hosting the meeting. Brief discussion was held regarding other groups performing studies and models pertaining to underground water other than GMA 8. Consultant team thanked GMA 8 members. They will get Explanatory Report sent in on time.

**12. Adjourn**

Scooter Radcliffe, Southern Trinity GCD, made motion to adjourn. Dirk Aaron, Clearwater UWCD, seconded the motion. Vice Chairman Mitchell Sodek, Central Texas GCD, declared the meeting adjourned at 10:42 a.m.

The GMA 8 Committee unanimously approved the minutes on this \_\_\_\_\_ day of \_\_\_\_\_, 2022

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

\_\_\_\_\_  
Chairman

ATTACHMENT 7

RESOLUTION NO. 2022-07-26-01

GROUNDWATER MANAGEMENT AREA 8

A RESOLUTION BY THE GROUNDWATER MANAGEMENT AREA 8 RECOGNIZING

Joe B. Cooper

WHEREAS, the Groundwater Management Area 8 wishes to recognize

Joe B. Cooper

for helping to promote effective planning and utilization of water and other resources by faithfully participating in the activities of GMA-8.

NOW, THEREFORE, BE IT RESOLVED BY THE GROUNDWATER MANAGEMENT AREA 8 THAT: GMA-8 convey its sincere appreciation and gratitude to

Joe B. Cooper

for leadership provided to the GMA-8 and its member districts.

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_,  
the foregoing Resolution was passed and approved on this the \_\_\_\_\_ day of \_\_\_\_\_,  
2022 by the following vote:

AYE:

NAY:

ABSTAIN:

At a meeting of the Groundwater Management Area 8.

\_\_\_\_\_  
Chair

ATTACHMENT 8

RESOLUTION NO. 2022-07-26-02  
ADOPTING DESIRED FUTURE CONDITIONS  
FOR RELEVANT AQUIFERS IN GROUNDWATER MANAGEMENT AREA 8

THE STATE OF TEXAS	§
	§
GROUNDWATER MANAGEMENT AREA 8	§
	§
GROUNDWATER CONSERVATION DISTRICTS	§

**WHEREAS**, Section 36.108 of the Texas Water Code requires groundwater conservation districts located entirely or partially within a groundwater management area (“GMA”) designated by the Texas Water Development Board (“TWDB”) to adopt desired future conditions (“DFCs”) for the relevant aquifers located within the GMA;

**WHEREAS**, the groundwater conservation districts located entirely or partially within Groundwater Management Area 8 (“GMA 8”) as of the date of this resolution are as follows: Central Texas Groundwater Conservation District, Clearwater Underground Water Conservation District, Middle Trinity Groundwater Conservation District, North Texas Groundwater Conservation District, Northern Trinity Groundwater Conservation District, Post Oak Savannah Groundwater Conservation District, Prairielands Groundwater Conservation District, Red River Groundwater Conservation District, Saratoga Underground Water Conservation District, Southern Trinity Groundwater Conservation District, and Upper Trinity Groundwater Conservation District (collectively referenced hereinafter as “the GMA 8 Districts”);

**WHEREAS**, after consideration of multiple GAM runs and other data and information relevant to the development of DFCs as required by Sections 36.108(d)-(d-3) of the Texas Water Code, the representatives of the GMA 8 Districts voted to approve proposed DFCs for the relevant aquifers in GMA 8 at a public meeting held on October 27, 2020;

**WHEREAS**, pursuant to Section 36.108(d-3) of the Texas Water Code, the representatives of the GMA 8 Districts voted to adopt the DFCs for the relevant aquifers in GMA 8 at a public meeting held on November 4, 2021;

**WHEREAS**, the GMA 8 Districts also voted to approve the Explanatory Report as required by Section 36.108(d-3) at the November 4, 2021, GMA 8 meeting;

**WHEREAS**, during the TWDB’s administrative completeness review of the resolution and Explanatory Report pursuant to Sections 36.108(d-3)-(d-4) of the Texas Water Code, TWDB identified minor and substantive corrections needed to Attachment B of the “Resolution to Adopt Desired Future Conditions for Relevant Aquifers in Groundwater Management Area 8” and to the Explanatory Report adopted by the representatives of the GMA 8 Districts on November 4, 2021;

**WHEREAS**, the GMA 8 Districts find that certain revisions to the DFCs adopted at the November 4, 2021, GMA 8 meeting are necessary to make the minor and substantive corrections identified by the TWDB;

**WHEREAS**, the GMA 8 Districts find that all deadlines set forth in Section 36.108 of the Texas Water Code related to DFC proposal for adoption and final adoption of the DFCs by GMA 8 have been met;

**WHEREAS**, the GMA 8 Districts find that all prior actions taken and factors considered by the GMA 8 Districts related to this round of joint planning are each valid and support the revisions necessary to correct the DFCs in compliance with the statutory requirements;

**WHEREAS**, the corrections identified to the DFCs are considered to be suggested revisions to the proposed DFCs pursuant to Section 36.108(d-3) of the Texas Water Code;

**WHEREAS**, in order to finally adopt the revised DFCs, as required by Section 36.108(d-3) of the Texas Water Code, the representatives of the GMA 8 Districts convened for a meeting, which was duly noticed and open to the public, this day, July 26, 2022, at 10:00 a.m. at the Prairielands Groundwater Conservation District Office, to take up and consider the adoption of the DFCs for all relevant aquifers within GMA 8;

**WHEREAS**, of the eleven (11) GMA 8 Districts, the meeting this day was attended by duly appointed voting representatives from the following districts (as indicated):

- Central Texas Groundwater Conservation District
- Clearwater Underground Water Conservation District
- Middle Trinity Groundwater Conservation District
- North Texas Groundwater Conservation District
- Northern Trinity Groundwater Conservation District
- Post Oak Savannah Groundwater Conservation District
- Prairielands Groundwater Conservation District
- Red River Groundwater Conservation District
- Saratoga Underground Water Conservation District
- Southern Trinity Groundwater Conservation District
- Upper Trinity Groundwater Conservation District;

**WHEREAS**, the GMA 8 Districts find that the notice and meeting requirements to review, consider, and adopt DFCs for all relevant aquifers within GMA 8 have been and are satisfied, with a true and correct copy of each of the notices required under Section 36.108(e) of the Texas Water Code attached hereto in Attachment A and incorporated herein for all purposes;

**WHEREAS**, the GMA 8 Districts have documented in the Explanatory Report required under Section 36.108(d-3) of the Texas Water Code all consideration of the factors and criteria required for adopting DFCs under Section 36.108 of the Texas Water Code and necessary conforming changes have been made to the Explanatory Report as identified in TWDB's administrative completeness review; and

**WHEREAS**, the GMA 8 Districts find that the adoption of the DFCs provided herein are in each instance merited and necessary to support the management of groundwater resources

within the boundaries of the GMA 8 Districts in a manner consistent with the requirements of Chapter 36, Water Code.

**NOW, THEREFORE, BE IT RESOLVED BY THE REPRESENTATIVES OF THE GROUNDWATER CONSERVATION DISTRICTS WITHIN GROUNDWATER MANAGEMENT AREA 8:**

1. Each of the affirmations and recitals set forth above are true and correct and fully incorporated into this resolution.
2. No less than two-thirds (2/3) of the authorized voting representatives of the GMA 8 Districts hereby adopt the DFCs for the relevant aquifers within GMA 8 as those set forth in Attachment B to this resolution, which is fully incorporated herein. For purposes of all calculations related to the adopted DFCs that are conducted by the TWDB, the GMA 8 Districts assume the model results are consistent with the proposed DFCs if the average drawdowns calculated by the TWDB are within five percent (5%) or five feet (5'), whichever is larger, of the proposed DFC drawdown values.
3. The revisions to the DFCs identified in Attachment C to this resolution, which is fully incorporated herein, are those revisions identified under Section 36.108(d-3) of the Texas Water Code that are necessary in order for the district-wide and county-wide scale DFC values to align with the aquifer-wide DFC values as set forth in the model results.
4. The GMA 8 Districts and their agents and representatives, individually and collectively, are further authorized to take any and all actions necessary to implement this resolution, including but not limited to the additional actions required for adoption of the DFCs in accordance with Section 36.108 of the Texas Water Code.

AND IT IS SO ORDERED.

PASSED AND ADOPTED on this 26th day of July, 2022.

ATTEST:

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Central Texas Groundwater Conservation District

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Clearwater Underground Water Conservation District

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Middle Trinity Groundwater Conservation District

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North Texas Groundwater Conservation District

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Northern Trinity Groundwater Conservation District

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Post Oak Savannah Groundwater Conservation District

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Prairielands Groundwater Conservation District

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Red River Groundwater Conservation District

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Saratoga Underground Water Conservation District

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Southern Trinity Groundwater Conservation District

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Upper Trinity Groundwater Conservation District

# **ATTACHMENT A**

# **ATTACHMENT B**

**Attachment B: Desired Future Conditions (DFCs) adopted by District Representatives in GMA 8 for all relevant aquifers.**

**Table 1 – GMA 8 DFCs adopted at an aquifer-wide scale for Northern Trinity and Woodbine aquifers based on total average drawdown in feet (both unconfined and confined drawdown). Planning period from January 1, 2010 through December 31, 2080.**

<b>GMA 8 Adopted DFCs -Aquifer-Wide Scale</b>	
Woodbine	146
Paluxy	193
Glen Rose	148
Twin Mountain	345
Travis Peak	207
Hensell	148
Hosston	262
Antlers	193

**Table 2 – GMA 8 DFCs adopted at a GCD scale for Northern Trinity and Woodbine aquifers (except for Upper Trinity GCD, see below for Upper Trinity GCD) based on total average drawdown in feet (both unconfined and confined drawdown). Planning period from January 1, 2010 through December 31, 2080.**

<b>GMA 8 Adopted DFCs - GCD Scale</b>								
<b>GCD</b>	<b>Wood-bine</b>	<b>Paluxy</b>	<b>Glen Rose</b>	<b>Twin Mtn</b>	<b>Travis Peak</b>	<b>Hensell</b>	<b>Hosston</b>	<b>Antlers</b>
Central Texas GCD	—	—	2	—	19	7	21	—
Clearwater UWCD	—	17	83	—	333	145	375	—
Middle Trinity GCD	—	5	29	8	98	77	124	12
North Texas GCD	263	690	366	601	—	—	—	305
Northern Trinity GCD	6	105	163	348	—	—	—	177
Post Oak Savannah GCD	—	—	241	—	412	261	412	—
Prairielands GCD	44	44	142	170	323	201	364	—
Red River GCD	209	830	335	405	291	—	—	321
Saratoga UWCD	—	—	1	—	6	1	11	—
Southern Trinity GCD	6	41	148	—	504	242	582	—

**Table 3 – GMA 8 DFCs adopted for Upper Trinity GCD for Northern Trinity and Woodbine aquifers based on total average feet of drawdown, discretized based on outcrop and downdip extent. Planning period from January 1, 2010 through December 31, 2080.**

<b>GMA 8 Adopted DFCs – Upper Trinity GCD</b>		
<b>Antlers</b>	<b>Outcrop</b>	<b>47</b>
	<b>Downdip</b>	<b>154</b>
<b>Paluxy</b>	<b>Outcrop</b>	<b>6</b>
	<b>Downdip</b>	<b>2</b>
<b>Glen Rose</b>	<b>Outcrop</b>	<b>15</b>
	<b>Downdip</b>	<b>45</b>
<b>Twin Mtn</b>	<b>Outcrop</b>	<b>10</b>
	<b>Downdip</b>	<b>70</b>



**Table 4 – GMA 8 DFCs adopted at a county scale for Northern Trinity and Woodbine aquifers (except for Upper Trinity GCD counties, see Table 5 below for these counties) based on total average drawdown in feet (both unconfined and confined drawdown). Planning period from January 1, 2010 through December 31, 2080.**

<b>GMA 8 Adopted DFCs - County Scale</b>								
<b>County</b>	<b>Wood-bine</b>	<b>Paluxy</b>	<b>Glen Rose</b>	<b>Twin Mtn</b>	<b>Travis Peak</b>	<b>Hensell</b>	<b>Hosston</b>	<b>Antlers</b>
<b>Red River</b>	2	24	40	—	57	—	—	15
<b>Rockwall</b>	275	433	343	466	—	—	—	—
<b>Somervell</b>	—	4	4	50	64	17	120	—
<b>Tarrant</b>	6	105	163	348	—	—	—	177
<b>Taylor</b>	—	—	—	—	—	—	—	0
<b>Travis</b>	—	—	90	—	219	68	226	—
<b>Williamson</b>	—	—	78	—	220	89	225	—

**Table 5 – GMA 8 DFCs adopted at a county scale for Upper Trinity GCD counties for Northern Trinity and Woodbine aquifers based on total average drawdown in feet for outcrop and downdip areas. Planning period from January 1, 2010 through December 31, 2080.**

<b>GMA 8 Adopted DFCs - Upper Trinity GCD by county (O-Outcrop, D-Downdip)</b>				
<b>County</b>	<b>Antlers</b>	<b>Paluxy</b>	<b>Glen Rose</b>	<b>Twin Mtn</b>
<b>Hood -O</b>	—	6	9	13
<b>Hood-D</b>	—	—	39	72
<b>Montague-O</b>	40	—	—	—
<b>Montague-D</b>	—	—	—	—
<b>Parker-O</b>	42	6	20	7
<b>Parker-D</b>	—	2	50	68
<b>Wise-O</b>	60	—	—	—
<b>Wise-D</b>	154	—	—	—

**Table 6 – GMA 8 DFCs in acre-feet per month spring/stream flow adopted for the Edwards (BFZ) Aquifer. Planning period from January 1, 2010 through December 31, 2080. DFCs are in acre-feet per month spring/stream flow in Bell, Travis, and Williamson counties.**

<b>County</b>	<b>DFC</b>
Bell	Maintain at least 100 acre-feet per month of stream/spring flow in Salado Creek during a repeat of the drought of record
Travis	Maintain at least 42 acre-feet per month of aggregated stream/spring flow during a repeat of the drought of record
Williamson	Maintain at least 60 acre-feet per month of aggregated stream/spring flow during a repeat of the drought of record

**Table 7 – GMA 8 DFCs adopted at a county scale for the Llano Uplift Aquifers based on total average feet of drawdown. Planning period from January 1, 2010 through December 31, 2080.**

<b>County</b>	<b>Ellenburger-San Saba Aquifer</b>	<b>Hickory Aquifer</b>	<b>Marble Falls Aquifer</b>
Brown	3	3	3
Burnet	12	11	11
Lampasas	16	16	16
Mills	9	9	9

# ATTACHMENT C

**ATTACHMENT C – REVISIONS TO DFCs PROPOSED FOR ADOPTION**

**Woodbine Aquifer – GCD Scale**

<b>GCD</b>	<b>Proposed DFC (in feet)</b>	<b>Adopted DFC (in feet)</b>
North Texas GCD	123	263
Prairielands GCD	35	44

**Trinity Aquifer – County Scale**

<b>County</b>	<b>Glen Rose</b>	
	<b>Proposed DFC (in feet)</b>	<b>Adopted DFC (in feet)</b>
Travis	83	90

**Trinity Aquifer – GCD Scale**

<b>GCD</b>	<b>Glen Rose</b>		<b>Hensell</b>		<b>Hosston</b>	
	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>
Middle Trinity GCD	20	29	58	77	108	124

<b>GCD</b>	<b>Paluxy</b>		<b>Glen Rose</b>		<b>Twin Mountains</b>	
	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>
North Texas GCD	465	690	300	366	485	601

<b>GCD</b>	<b>Paluxy</b>	
	<b>DFC Proposed (in feet)</b>	<b>Adopted DFC (in feet)</b>
Saratoga UWCD	2	Not applicable (—)

“DFC Proposed” means the DFC proposed for adoption by resolution approved at the October 27, 2020, GMA 8 meeting.

“Adopted DFC” means the DFC adopted by resolution approved at the July 26, 2022, GMA 8 meeting.

ADJOURN