

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT

PERMIT HEARING AND BOARD MEETING

Pilot Point ISD Administration Office
829 S. Harrison St.
Pilot Point, TX 76258

**TUESDAY
SEPTEMBER 9, 2025
10:00 AM**

NOTICE OF PUBLIC MEETING

OF THE
BOARD OF DIRECTORS
of the

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT

Tuesday, September 9, 2025, at 10:00 a.m.

MEETING LOCATION:

**Pilot Point ISD Administration Office
829 S. Harrison St.
Pilot Point, TX 76258**

Permit Hearing

The Permit Hearing will begin at 10:00 am.

Notice is hereby given that the Board of Directors of the North Texas Groundwater Conservation District ("District") will conduct a permit hearing on the following Production Permit Applications:

Agenda:

1. Call to Order; establish quorum; declare hearing open to the public; introduction of Board.
2. Public Comment on the Production Permit Applications (verbal comments limited to three (3) minutes each).
3. Review the Production Permit Applications of:

Requests for Rehearing/Contested Hearing/Reconsideration:

- a. **Applicant:** Prosper ISD; 605 E 7th Street, Prosper, TX 75075
Location of Well: 1550 N Legacy Dr., Prosper, TX 75078; Latitude: 33.253353°N, Longitude: 96.835146°W; About 890 east of N Legacy Dr and about 1,820 feet north of W Prosper Trl in Collin County.
Purpose of Use: Irrigation/Landscape
Requested Amount of Use: 8,125,368 gal/year
Production Capacity of Well(s): 175 gallons/minute
Aquifer: Trinity (Paluxy)
- b. **Applicant:** Ramble Investment, LP; 3000 Turtle Creek Blvd, Dallas, TX 75219
Location of Wells: Tract A Well 1: TBD, Celina, TX 75009; Latitude: 33.342019°N, Longitude: 96.759211°W; About 560 feet west CR 97 and about 2,380 feet north of CR 96 in Collin County; and **Tract A Well 2:** TBD, Celina, TX 75009; Latitude: 33.349439°N, Longitude: 96.766167°W; About 995 feet east of Preston Rd N and about 2,845 feet south of CR 99 in Collin County.
Purpose of Use: Construction; Landscape/Irrigation; Filling Pond(s)/Other Surface Impoundment
Requested Amount of Use: 65,156,269 gallons per year for 2025; 56,244,904 gallons per year for 2026; 83,501,247 gallons per year for 2027; 67,143,332 gallons per year for 2028; 102,236,754 gallons per year for 2029; 88,818,172 gallons per year for 2030; and 74,659,946 gallons per year after 2030
Production Capacity of Well(s): Tract A Well 1: 350 gallons/minute; and **Tract A Well 2:** 350 gallons/minute
Aquifer: Trinity (Antlers)

- c. **Applicant:** Ramble Investment, LP; 3000 Turtle Creek Blvd, Dallas, TX 75219
Location of Wells: **Tract C Well 1:** TBD, Celina, TX 75009; Latitude: 33.332258°N, Longitude: 96.734136°W; About 200 feet north of FM 455 and about 1,100 feet west of FM 455 in Collin County; **Tract C Well 2:** TBD, Celina, TX 75009; Latitude: 33.343000°N, Longitude: 96.737947°W; About 560 feet east of Willow Rd and about 550 south of CR 130 in Collin County.
Purpose of Use: Construction; Landscape/Irrigation; Filling Pond(s)/Other Surface Impoundment
Requested Amount of Use: 51,975,390 gallons per year for 2031; 33,709,237 gallons per year for 2032; 68,681,078 gallons per year for 2033; 57,325,821 gallons per year for 2034; 46,316,913 gallons per year for 2035; 54,482,861 gallons per year for 2036; 47,938,022 gallons per year for 2037; 46,316,913 gallons per year after 2037
Production Capacity of Well(s): **Tract C Well 1:** 350 gallons/minute; **Tract C Well 2:** 350 gallons/minute
Aquifer: Trinity (Antlers)

Permit Amendment

- d. **Applicant:** Argyle WSC; 825 W. FM 407, Argyle, TX 76226
Location of Wells: **Furst Ranch Well No. 1:** Furst Ranch, Argyle, TX 76226; Latitude: 33.073467 °N, Longitude: 97.190024°W; About 1,560 feet north of Smoot Ln and about 1,940 feet east of Hwy 377 in Denton County; **Furst Ranch Well No. 2:** Furst Ranch, Argyle, TX 76226; Latitude: 33.081455°N, Longitude: 97.194384°W; About 2.060 feet south of Keith Rd and about 2,090 feet east of Hwy 377 in Denton County.
Purpose of Use: Municipal/Public Water System
Requested Amount of Use: 130,086,000 gallons per year
Production Capacity of Well(s): **Furst Ranch Well No. 1:** 450 gallons/minute; **Well 2:** 450 gallons/minute
Aquifer: Trinity (Antlers)
Amendment: Addition of Furst Ranch Well No. 2; increase requested amount from 130,086,000 gal/year to 260,172,000 gal/year.

New Production Permits:

- e. **Applicant:** City of Celina; 142 N. Ohio, Celina, TX 75009
Location of Wells: Celina Road Pump Station Well: FM 428 & Celina Rd, Celina, TX 75009; Latitude: 33.309426°N, Longitude: 96.838254°W; About 750 feet north of Celina Road and about 3,212 feet east of County Road 54 in Denton County; Southeast Pump Station Well: County Road 90, Celina, TX 75009; Latitude: 33.308658°N, Longitude: 96.767323°W; About 815 feet north of Old Glendenning Road and about 2,360 feet west of Coit Parkway in Collin County.
Purpose of Use: Municipal/Public Water
Requested Amount of Use: 473,364,000 gal/year
Production Capacity of Well(s): Celina Road Pump Station Well: 900 gallons/minute; Southeast Pump Station Well: 900 gallons/minute
Aquifer: Trinity (Antlers)
- f. **Applicant:** Firefly Land Holdings I, LLC; 1321 Markum Gate Way, Ste 100, Fort Worth, TX 76126
Location of Well: PGA Parkway, Frisco, TX 75033; Latitude: 33.212330°N, Longitude: 96.827570°W; About 557 feet north of PGA Parkway and about 2,250 feet west of Dallas North Tlwy in Collin County.
Purpose of Use: Irrigation/Landscape; Filling a Pond or Other Surface Impoundment(s)
Requested Amount of Use: 5,500,000 gal/year
Production Capacity of Well(s): 120 gallons/minute
Aquifer: Woodbine

4. Consider and act upon the Request for Reconsideration of Production Permit Applications, including designation of parties and/or granting or denying the Production Permit Applications in whole or in part, as applicable.
5. Adjourn or continue permit hearing.

Board Meeting

The regular Board Meeting will begin upon adjournment of the above noticed Permit Hearing.

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

Agenda:

1. Pledge of Allegiance and Invocation.
2. Call to order, establish quorum, declare the meeting open to the public.
3. Public comment.
4. Consider and act upon approval of the minutes from the July 28, 2025, Board meeting.
5. Consider and act upon approval of invoices and reimbursements, Resolution No. 2025-09-09-01.
6. Receive reports from the following Committees*:
 - a. Budget and Finance Committee
 1. Receive Monthly Financial Information
7. Consider and act upon confirming execution of Engagement Letter for Audit Services for Fiscal Year ending December 31, 2025.
8. Consider action on electing a Vice President of the Board.
9. Update and possible action regarding the process for the development of Desired Future Conditions (DFCs).
 - a. Receive report of Run 4.1 and Run 4.2 for DFC Planning
 - b. Discussion and Possible action on production for additional runs
10. Discussion and possible action on draft of District’s Rules.
11. Consider and act upon compliance and enforcement activities for violations of District rules.
 - a. C. Miller Drilling
 - b. SoTex Water Well
12. General Manager’s Report: The General Manager will update the board on operational, educational and other activities of the District.
 - a. District’s Disposal/Injection Well Program
 - b. Well Registration Summary
13. Open forum / discussion of new business for future meeting agendas.
 - a. Discussion and Possible action on October Board Meeting
14. Adjourn public meeting.

* Reports from District standing committees will include a briefing by each committee for the Board on the activities of the committee, if any, since the last regular Board meeting.

The above agenda schedule represents 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 ntgcd@northtexasgcd.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 North Texas Groundwater Conservation District Board may meet in executive session on any of the above agenda items or other lawful items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gifts (§551.073); deliberation regarding personnel matters (§551.074); deliberation regarding security devices (§551.076); and deliberation regarding cybersecurity (§551.089). Any subject discussed in executive session may be subject to action.

ATTACHMENT 4

**MINUTES OF THE BOARD OF DIRECTORS' BOARD MEETING
NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT**

Monday, July 28, 2025, at 10:00 a.m.

**Pilot Point ISD Administration Office
829 S. Harrison St.
Pilot Point, TX 76258**

Please note for in-person attendance that the Board meeting location can only accommodate a limited number of attendees to comply with state requirements related to in-person gatherings. In the event in-person attendance exceeds any state or local requirements, the District may provide an option for virtual participation for any overflow attendees as necessary and authorized by law.

Members Present: Allen McDonald (participated remotely), Leon Klement, Everette Newland, Dylan Cyr, Les Westbrook, and Jimmy Arthur

Members Absent: Robert Todd

Staff: Paul Sigle, Kristi Krider, Kenneth Elliot, Kelley Carr, Allen Burks, Billie Jo Tiner, and Velma Starks

Visitors: Kristen Fancher, Law Offices of Kristen Fancher, PLLC

Permit Hearing and Consideration of Requests for Findings of Fact and Conclusions of Law and Reconsideration

Beginning at 10:00 am.

Agenda:

- Call to Order; establish quorum; declare hearing open to the public; introduction of Board.

Board President Jimmy Arthur President called the Permit Hearing and Consideration of Requests for Findings of Fact and Conclusions of Law and Reconsideration meeting to order at 10:02 a.m.

- Public Comment on the Production Permit Applications (verbal comments limited to three (3) minutes each).

No Public Comments

The Board convened in Executive Session at 10:04 a.m...

The Board reconvened in Regular Session at 10:47 a.m.

- Review the Production Permit Application of:
 - a. **Applicant:** Firefly Land Holdings I, LLC; 1321 Markum Gate Way, Ste 100, Ft Worth, TX 76126
Location of Well: PGA Parkway, Frisco, TX 75033; Latitude: 33.212330°N, Longitude: 96.827570°W; About 557 feet north of PGA Parkway and about 2,250 feet west of Dallas North Tlwy in Collin County.
Purpose of Use: Irrigation/Landscape; Filling a Pond or Other Surface Impoundment(s)

Requested Amount of Use: 5,500,000 gal/year
Production Capacity of Well(s): 120 gallons/minute
Aquifer: Woodbine

No action due to a spacing issue with the application.

- Consider and act upon the Production Permit Applications, including designation of parties and/or granting or denying the Production Permit Applications in whole or in part, as applicable.
- Consider and act upon requests for Findings of Fact and Conclusions of Law and Reconsideration received for the following applications:
 - a. **Applicant:** Prosper ISD; 605 E 7th Street, Prosper, TX 75075
Location of Well: 1550 N Legacy Dr., Prosper, TX 75078; Latitude: 33.253353°N, Longitude: 96.835146°W; About 890 east of N Legacy Dr and about 1,820 feet north of W Prosper Trl in Collin County.
Purpose of Use: Irrigation/Landscape
Requested Amount of Use: 8,125,368 gal/year
Production Capacity of Well(s): 175 gallons/minute
Aquifer: Trinity (Paluxy)

Board Member Dylan Cyr made a motion to approve Findings of Fact and Conclusions of Law and Reconsideration. Board Member Leon Klement seconded the motion. Motion passed unanimously.

- b. **Applicant:** Ramble Investment, LP; 3000 Turtle Creek Blvd, Dallas, TX 75219
Location of Wells: Tract A Well 1: TBD, Celina, TX 75009; Latitude: 33.342019°N, Longitude: 96.759211°W; About 560 feet west CR 97 and about 2,380 feet north of CR 96 in Collin County; and **Tract A Well 2:** TBD, Celina, TX 75009; Latitude: 33.349439°N, Longitude: 96.766167°W; About 995 feet east of Preston Rd N and about 2,845 feet south of CR 99 in Collin County.

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Requested Amount of Use: 65,156,269 gallons per year for 2025; 56,244,904 gallons per year for 2026; 83,501,247 gallons per year for 2027; 67,143,332 gallons per year for 2028; 102,236,754 gallons per year for 2029; 88,818,172 gallons per year for 2030; and 74,659,946 gallons per year after 2030
Production Capacity of Well(s): Tract A Well 1: 350 gallons/minute; and **Tract A Well 2:** 350gallons/minute
Aquifer: Trinity (Antlers)

Board Member Everett Newland made a motion for Ramble Investment, LP (b. and c.) to approve Findings of Fact and Conclusions of Law and Reconsideration. Board Member Les Westbrook seconded the motion. Motion passed unanimously.

- c. **Applicant:** Ramble Investment, LP; 3000 Turtle Creek Blvd, Dallas, TX 75219
Location of Wells: Tract C Well 1: TBD, Celina, TX 75009; Latitude: 33.332258°N, Longitude: 96.734136°W; About 200 feet north of FM 455 and about 1,100 feet west of FM 455 in Collin County; **Tract C Well 2:** TBD, Celina, TX 75009; Latitude: 33.343000°N, Longitude: 96.737947°W; About 560 feet east of Willow Rd and about 550 south of CR 130 in Collin County.

Purpose of Use: Construction; Landscape/Irrigation; Filling Pond(s)/Other Surface Impoundment **Requested Amount of Use:** 51,975,390 gallons per year for 2031; 33,709,237 gallons per year for 2032; 68,681,078 gallons per year for 2033; 57,325,821 gallons per year for 2034; 46,316,913 gallons per year for 2035; 54,482,861 gallons per year for 2036; 47,938,022 gallons per year for 2037; 46,316,913 gallons per year after 2037

Production Capacity of Well(s): Tract C Well 1: 350 gallons/minute; Tract C Well 2: 350 gallons/minute

Aquifer: Trinity (Antlers)

- Adjourn or continue hearing/meeting.

Board President Jimmy Arthur adjourned the Permit Hearing and Consideration of Requests for Findings of Fact and Conclusions of Law and Reconsideration meeting at 10:48 a.m.

Board Meeting

Agenda:

1. **Pledge of Allegiance and Invocation**

Board President Jimmy Arthur led the Pledge of Allegiance and Board Member Everette Newland provided the invocation.

2. **Call to order, establish quorum; declare meeting open to the public.**

Board Member Allen McDonald disconnected from remote attendance.

Board President Jimmy Arthur called the meeting to order at 10:49 a.m.

3. **Public Comment.**

No public comments

4. **Consider and act upon approval of the minutes of June 10, 2025, Board meeting.**

Board President Jimmy Arthur asked for approval of the minutes from the June 10, 2025, meeting. Board Member Leon Klement made a motion to approve the minutes. Board Member Dylan Cyr seconded the motion. Motion passed unanimously.

5. **Consider and act upon the 2024 Audit.**

Ariane Burke, Auditor, McClanahan and Holes, LLP reviewed the Audit with the Board. Board Member Leon Klement made a motion to accept the 2024 Audit. Board Member Dylan Cyr seconded the motion. Motion passed unanimously.

6. **Consider and act upon approval of invoices and reimbursements, Resolution No. 2025-07-15-01.**

- General Manager Paul Sigle reviewed the liabilities with the Board. Board Member Dylan Cyr made a motion to correct Resolution No. 2025-07-15-01 to 2025-07-28-01 and approve

Resolution No. 2025-07-28-01. Board Member Everette Newland seconded the motion. Motion passed unanimously

7. Receive reports from the following Committees*:
- a. Budget and Finance Committee
 - 1. Receive Monthly Financial Information

General Manager Paul Sigle reviewed the Financial Report with the Board. Discussion was held.

Board moved to item 7 b

- 2. Consider and act upon the 2026 Operating Budget and Adopt Rate Schedule

General Manager Paul Sigle provided information for the Board. Board Member Dylan Cyr made a motion to adopt the 2026 Operating Budget, to adopt the 2025 Amended Fee Schedule (effective August 1, 2025) and to adopt the 2026 Fee Schedule. Board Member Everette Newland seconded the motion. Motion passed unanimously.

- b. Investment Committee
 - 1. Receive Quarterly Investment Report

General Manager Paul Sigle reviewed the Quarterly Investment Report with the Board.

- c. Management Plan Committee
 - 1. Receive Quarterly Report

General Manager Paul Sigle reviewed the Quarterly Report with the Board.

8. Consider and act upon accepting the resignation of Greg Peters.

Board Member Leon Klement made a motion to accept the resignation of Greg Peters. Board Member Everette Newland seconded the motion. Motion passed unanimously.

9. Consider and act upon Resolution of Appreciation for Greg Peters.

Board Member Dylan Cyr made a motion to approve a Resolution of Appreciation for Greg Peters. Board Member Les Westbrook seconded the motion. Motion passed unanimously.

Board moved to Item 11

10. Discussion and possible action on draft of District's Rules amendments.

Suggestion was made to discuss draft of the District's Rules amendments at the September meeting.

11. Consider and act upon the appointment of a representative for GMA 8 Committee.

Discussion was held. Board Member Everett Newland made a motion to appoint General Manager Paul Sigle as representative and Board Member Dylan Cyr as an alternate. Board Member Les Westbrook seconded the motion. Motion passed unanimously.

12. Discussion and possible action on an Interlocal Agreement with Denton County for assistance with review of Groundwater Availability Certification for plating process.

General Manager Paul Sigle provided information for the Board. Discussion was held. Board Member Dylan Cyr made a motion to accept an Interlocal Agreement with Denton County for assistance with review of Groundwater Availability Certification for plating process. Board Member Leon Klement seconded the motion. Motion passed unanimously.

13. Update and possible action regarding the process for the development of Desired Future Conditions (DFCs).
a. Receive report on Drawdown and meeting DFCs.

General Manager Paul Sigle provided a presentation on Drawdown and meeting DFCs. The presentation will be sent to the board. Discussion was held. No action taken

14. Consider and act upon compliance and enforcement activities for violations of District rules.

No actions

15. General Manager's Report: The General Manager will update the board on operational, educational and other activities of the District.
a. District's Disposal/Injection Well Program
No update
b. Well Registration Summary

General Manager Paul Sigle reviewed the well registration summary with the Board. Twenty-six wells were registered in June.

Board returned to Item 7 number2.

Board convened in Executive Session at 11:30 a.m.

Board reconvened in Regular Session at 11:58 a.m.

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

17. Adjourn public meeting

Board President Jimmy Arthur declared the meeting adjourned at 11:59 a.m.

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Recording Secretary

Secretary-Treasurer

ATTACHMENT 5

RESOLUTION NO. 2025-09-09-1

**A RESOLUTION BY THE BOARD OF DIRECTORS OF THE NORTH TEXAS GROUNDWATER
CONSERVATION DISTRICT AUTHORIZING PAYMENT OF ACCRUED LIABILITIES FOR THE MONTH
OF JULY AND AUGUST**

The following liabilities are hereby presented for payment:

<u>Administrative Services</u>	<u>Amount</u>
GTUA - July 2025	37,884.93
GTUA - August 2025	23,176.30
<u>Audit</u>	
McClanahan and Holmes - Auditing for year ending 12/31/2024	10,450.00
<u>Consultant</u>	
Advanced Groundwater Solutions - Hydro-Geo service through June	5,579.75
Advanced Groundwater Solutions - Hydro-Geo service through July	17,300.75
Advanced Groundwater Solutions - Hydro-Geo service through July	13,776.50
<u>Direct Costs</u>	
Awards Unlimited - Dirk Aaron - GMA 8	112.44
NexTraq - July	33.60
NexTraq - July	36.95
NexTraq - August	70.55
LRE Water LLC - June (software maintenance)	559.00
Grayson County Tax Assessor - Registration 2022 Ford	7.50
Grayson County Tax Assessor - Registration 2019 Ford	7.50
Germaine Designs - Logo	52.00
<u>Equipment</u>	
GTUA - Eno Scientific (well injection monitoring equipment)	55,976.33
<u>Insurance</u>	
Bayless-Hall Blanton Insurance - Bond renewal 25-26	330.00
TWCA Risk Management Fund - Liability amendment 25-26	34.00
<u>Legal</u>	
Kristen Francher - services through May and June 2025	5,040.00
Kristen Francher - services through July and August 2025	10,360.00
<u>Legal-Injection</u>	
Stacey Reese Law - Teleconference	68.00
SledgeLaw Group - 6/30/2025	607.00
<u>Legal-Legislative</u>	
Lloyd Gosselink Attorney at Law - 11/30/2024	2,995.50
Lloyd Gosselink Attorney at Law - 4/30/2025	6,000.00
Lloyd Gosselink Attorney at Law - 6/30/2025	6,000.00

Meetings & Conferences

Pilot Point ISD - Meeting Room 75.00

Refunds

City of Lindsay - overpayment refund 168.82

Well Injection Monitoring

Statewide Plat Service - May and June 100.00

GRAND TOTAL: \$ 186,442.42

On motion of _____ and seconded by _____ the foregoing Resolution was passed and approved on this, the 9th day of September, 2025 by the following vote:

AYE:

NAY:

President

Secretary/Treasurer

1000 AM
DECEMBER 17 2023
JANUARY

DECEMBER 17 2023
2101 1000 AM

ATTACHMENT 6 a. - i.

DECEMBER 17 2023 AND NOVEMBER 17 2023

DISTRICT
CONSERVATION
CROOKDALE
BED STAIR

NORTH TEXAS GROUNDWATER

Balance Sheet

As of August 31, 2025

ASSETS

Current Assets

Checking/Savings

10001 Checking Account	369,245.12
10005 Cash-Index Account	20,222.21
10008 Cash - Tex Star	101,325.76
10009 NexBank MM	2,037,057.87
10010 Investment	2,666,802.89
10025 Accounts Receivable	97,565.17
10030 A/R Well Applications	-2,563.60
10033 A/R Penalties	-200.00
10035 A/R GMA8 Members	3,473.07
10070 A/R Liens	14,000.00
12001 Prepaid Expenses	5,666.00

TOTAL ASSETS	<u>5,312,594.49</u>
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LIABILITIES & EQUITY

Liabilities

Current Liabilities

Accounts Payable

23100 Accounts Payable	33,296.30
23150 Well Drillers Deposits	43,950.00

Total Liabilities	77,246.30
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Equity

35100 Retained Earnings	5,178,858.47
Net Income	56,489.72

Total Equity	<u>5,235,348.19</u>
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TOTAL LIABILITIES & EQUITY	<u>5,312,594.49</u>
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NORTH TEXAS GROUNDWATER
Profit Loss Budget vs. Actual
August 31, 2025

	TOTAL				
	Aug 2025	1 mo. Budget	YTD Actual	Total Budget	% of Budget remaining
Ordinary Income/Expense					
Income					
46003 - Registration Fees	11,600.00	3,333.33	47,900.00	40,000.00	-19.75%
46004 - Well Driller Fees	0.00	0.00	-7,250.00	0.00	0.0%
46005 - PRODUCTION FEES	0.00	0.00	382,927.44	980,000.00	60.93%
46006 Income GMA8	0.00	0.00	39,730.70	90,909.00	56.3%
46007 - Penalties	1,500.00	0.00	1,000.00	0.00	0.0%
46008 - Online Pay Fees	435.00	83.33	1,471.92	1,000.00	-47.19%
46010 - Hydro Report	2,500.00		2,500.00		
46015 Late Fees	0.00	0.00	14,276.30	0.00	0.0%
Total Income	16,035.00	3,416.67	482,556.36	1,111,909.00	56.6%
Gross Profit	16,035.00	3,416.67	482,556.36	1,111,909.00	56.6%
Expense					
77010 ADMINISTRATIVE					
77013 Admin-Secretarial	799.00	916.67	7,082.50	11,000.00	35.61%
77014 Admin-Project Coordinator	336.50	0.00	2,115.50	0.00	0.0%
77015 Admin-GM	5,520.00	5,000.00	41,324.00	60,000.00	31.13%
77016 Admin-Clerical	2,824.00	2,500.00	26,880.00	30,000.00	10.4%
77040 ADMIN-MILEAGE	599.41	250.00	2,289.55	3,000.00	23.68%
77025 ACCOUNTING	1,156.50	2,750.00	21,667.00	33,000.00	34.34%
77027 AUDITING	0.00	0.00	10,450.00	10,450.00	0.0%
77030 ADVERTISING	0.00	333.33	311.69	4,000.00	92.21%
77035 BAD DEBT	0.00	0.00	-15,749.00	0.00	0.0%
77050 BANKING FEES	328.05	166.67	1,365.70	2,000.00	31.72%
77100 GMA8 MODELING	0.00	8,333.33	0.00	100,000.00	100.0%
77150 CONSULTING-HYDROGEO SVC	36,657.00	16,666.67	113,720.72	200,000.00	43.14%
77325 DIRECT COSTS-REIMB	638.62	500.00	8,038.80	6,000.00	-33.98%
77450 DUES & SUBSCRIPTION	0.00	650.00	5,000.00	7,800.00	35.9%
77480 EQUIPMENT	0.00	166.67	958.50	2,000.00	52.08%
77485 Equipment Database	0.00	4,166.67	17,646.44	50,000.00	64.71%
77500 FEES-GMA8	584.20	166.67	1,180.55	2,000.00	40.97%
77550 FIELD TECH	5,299.00	10,416.67	79,094.00	125,000.00	36.72%
77560 Field Permitting/Geologis	4,394.00	5,416.67	45,063.00	65,000.00	30.67%
77650 FUEL/MAINTENANCE	0.00	416.67	1,265.29	5,000.00	74.69%
77800 INJECTION WELL MONITORING	0.00	58.33	350.50	700.00	49.93%
77810 INSURANCE & BONDING	330.00	583.33	3,421.50	7,000.00	51.12%
77970 LEGAL					
77975 Legal-Injection	607.00	833.33	9,716.50	10,000.00	2.84%
77980 Legal-Legislation	6,000.00	3,000.00	39,019.54	36,000.00	-8.39%
77970 LEGAL - Other	10,428.00	2,500.00	28,148.00	30,000.00	6.17%
78010 MEETINGS & CONFERENCES	560.95	625.00	4,419.62	7,500.00	41.07%
78310 Rent	430.00	430.00	3,440.00	5,160.00	33.33%
78600-SOFTWARE MAINT	0.00	250.00	964.12	3,000.00	67.86%
78610 TELEPHONE	224.61	316.67	2,229.56	3,800.00	41.33%
78780 Well Monitoring/Testing	0.00	6,666.67	56,023.23	80,000.00	29.97%
Total Expense	77,716.84	74,080.00	517,436.81	899,410.00	42.47%
Other Income/Expense					
Other Income					
46100 INTEREST INC	0.00	6,250.00	91,370.17	75,000.00	-21.83%
Total Other Income	0.00	6,250.00	45,658.00	75,000.00	
Net Other Income	0.00	6,250.00	45,658.00	75,000.00	
Net Income	-61,681.84	-64,413.33	56,489.72	287,499.00	

ATTACHMENT 7



McCLANAHAN
AND
HOLMES, LLP
Certified Public Accountants

George H. Struve, CPA
Debra J. Wilder, CPA
Tiffany A. Kavanaugh, CPA
April J. Hatfield, CPA
Brittany L. Martin, CPA

Steven W. Mohundro, CPA,
of Counsel

228 Sixth St. SE
Paris, TX 75460
903-784-4316
Fax 903-784-4310

304 W. Chestnut
Denison, TX 75020
903-465-6070
Fax 903-465-6093

1400 W. Russell
Bonham, TX 75418
903-583-5574
Fax 903-583-9453

Bonham, Texas
August 12, 2025

Members of Management and Board
North Texas Groundwater Conservation District

We are pleased to confirm our understanding of the services we are to provide North Texas Groundwater Conservation District (the District) for the year ended December 31, 2025.

Audit Scope and Objectives

We will audit the financial statements of the governmental activities and each major fund, and the disclosures, which collectively comprise the basic financial statements of the District as of and for the year ended December 31, 2025. Accounting standards generally accepted in the United States of America (GAAP) provide for certain required supplementary information (RSI), such as management's discussion and analysis (MD&A), to supplement the District's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the District's RSI in accordance with auditing standards generally accepted in the United States of America (GAAS). These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient appropriate evidence to express an opinion or provide any assurance. The following RSI is required by GAAP and will be subjected to certain limited procedures, but will not be audited:

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

In connection with our audit of the basic financial statements, we will read the following other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

1. Comparative Balance Sheet – General Fund
2. Comparative Statement of Revenues, Expenditures, and Changes in Fund Balance – General Fund

The objectives of our audit are to obtain reasonable assurance as to whether the financial statements as a whole are free from material misstatement, whether due to fraud or error; issue an auditors' report that includes our opinion about whether your financial statements are fairly presented, in all material respects, in conformity with GAAP. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. Misstatements, including omissions, can arise from fraud or error and are considered material if there is a substantial

likelihood that, individually or in the aggregate, they would influence the judgment of a reasonable user made based on the financial statements.

The objectives also include reporting on internal control over financial reporting and compliance with provisions of laws, regulations, contracts, and award agreements, noncompliance with which could have a material effect on the financial statements in accordance with *Government Auditing Standards*.

Auditors' Responsibilities for the Audit of the Financial Statements

We will conduct our audit in accordance with GAAS and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and will include tests of your accounting records of North Texas Groundwater Conservation District and other procedures we consider necessary to enable us to express such opinions. As part of an audit in accordance with GAAS and *Government Auditing Standards*, we exercise professional judgment and maintain professional skepticism throughout the audit.

We will evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management. We will also evaluate the overall presentation of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation. We will plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the government or to acts by management or employees acting on behalf of the government. Because the determination of waste and abuse is subjective, *Government Auditing Standards* do not expect auditors to perform specific procedures to detect waste or abuse in financial audits nor do they expect auditors to provide reasonable assurance of detecting waste or abuse.

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

We will also conclude, based on the audit evidence obtained, whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the government's ability to continue as a going concern for a reasonable period of time.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts and direct confirmation of receivables and certain assets and liabilities by correspondence with selected customers, creditors, and financial institutions. We will also request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry.

We have identified the following significant risks of material misstatement as part of our audit planning:

- 1) Management Override of Controls
- 2) Improper Revenue Recognition Due to Fraud

Our audit of financial statements does not relieve you of your responsibilities.

Audit Procedures – Internal Control

We will obtain an understanding of the government and its environment, including the system of internal control, sufficient to identify and assess the risks of material misstatement of the financial statements, whether due to error or fraud, and to design and perform audit procedures responsive to those risks and obtain evidence that is sufficient and appropriate to provide a basis for our opinions. Tests of controls may be performed to test the effectiveness of certain controls that we consider relevant to preventing and detecting errors and fraud that are material to the financial statements and to preventing and detecting misstatements resulting from illegal acts and other noncompliance matters that have a direct and material effect on the financial statements. Our tests, if performed, will be less in scope than would be necessary to render an opinion on internal control and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to *Government Auditing Standards*. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentation, or the override of internal control. An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. Accordingly, we will express no such opinion. However, during the audit, we will communicate to management and those charged with governance internal control related matters that are required to be communicated under AICPA professional standards and *Government Auditing Standards*.

Audit Procedures – Compliance

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

Responsibilities of Management for the Financial Statements

Our audit will be conducted on the basis that you acknowledge and understand your responsibility for designing, implementing, establishing, and maintaining effective internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, and for evaluating and monitoring ongoing activities to help ensure that appropriate goals and objectives are met; following laws and regulations; and ensuring that management and financial information is reliable and properly reported. Management is also responsible for implementing systems designed to achieve compliance with applicable laws, regulations, contracts, and grant agreements. You are also responsible for the selection and application of accounting principles, for the preparation and fair presentation of the financial statements and all accompanying information in conformity with accounting principles generally accepted in the United States of America, and for compliance with applicable laws and regulations and the provisions of contracts and grant agreements.

Management is responsible for making drafts of financial statements, all financial records, and related information available to us and for the accuracy and completeness of that information (including information from outside of the general and subsidiary ledgers); and for the evaluation of whether there are any conditions or events, considered in the aggregate, that raise substantial doubt about the government's ability to continue as a going concern for the 12 months after the financial statements date or shortly thereafter (for example, within an additional three months if currently known). You are also responsible for providing us with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, such as records, documentation, identification of all related parties and all related-party relationships and transactions, and other matters; (2) additional information that we may request for the purpose of the audit; and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence. At the conclusion of our audit, we will require certain written representations from you about your responsibilities for the financial statements; compliance with laws, regulations, contracts, and grant agreements; and other responsibilities required by GAAS and *Government Auditing Standards*.

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

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

Management is responsible for establishing and maintaining a process for tracking the status of audit findings and recommendations. Management is also responsible for identifying and providing report copies of previous financial audits, attestation engagements, performance audits, or other studies related to the objectives discussed in the Audit Scope and Objectives section of this letter. This responsibility includes relaying to us corrective actions taken to address significant findings and recommendations resulting from those audits, attestation engagements, performance audits, or other studies. You are also responsible for providing management's views on our current findings, conclusions, and recommendations, as well as your planned corrective actions, for the report, and for the timing and format for providing that information.

Other Services

We will also assist in preparing the financial statements and related notes of the District in conformity with accounting principles generally accepted in the United States of America based on information provided by you. These nonaudit services do not constitute an audit under *Government Auditing Standards* and such services will not be conducted in accordance with *Government Auditing Standards*.

We will perform the services in accordance with applicable professional standards. The other services are limited to the financial statement services previously defined. We, in our sole professional judgment, reserve the right to refuse to perform any procedure or take any action that could be construed as assuming management responsibilities.

You agree to assume all management responsibilities relating to the financial statements and related notes and any other nonaudit services we provide. You will be required to acknowledge in the management representation letter our assistance with preparation of the financial statements and related notes and that you have reviewed and approved the financial statements and related notes prior to their issuance and have accepted responsibility for them. Further, you agree to oversee the nonaudit services by designating an individual, preferably from senior management, with suitable skill, knowledge, or experience; evaluate the adequacy and results of those services; and accept responsibility for them.

Engagement Administration, Fees, and Other

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

We will provide copies of our reports to the District; however, management is responsible for distribution of the reports and the financial statements. Unless restricted by law or regulation, or containing privileged and confidential information, copies of our reports are to be made available for public inspection.

The audit documentation for this engagement is the property of McClanahan and Holmes, LLP and constitutes confidential information. However, subject to applicable laws and regulations, audit documentation and appropriate individuals will be made available upon request and in a timely manner to an oversight agency or its designee, a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. We will notify you of any such request. If requested, access to such audit documentation will be provided under the supervision of McClanahan and Holmes, LLP personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the aforementioned parties. These parties may intend or decide to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or any additional period requested by regulators. If we are aware that a federal awarding agency or auditee is contesting an audit finding, we will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.

April J. Hatfield, CPA, is the engagement partner and is responsible for supervising the engagement and signing the reports or authorizing another individual to sign them. We expect to begin our audit in approximately April 2026 and to issue our reports no later than June 2026, unless extenuating circumstances occur.

Our fee for these services will be at our standard hourly rates plus out-of-pocket costs except that we agree that our gross fee, including expenses will not exceed \$11,100. Our standard hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. Our invoice for these fees will be rendered upon completion of the audit and is payable on presentation. The above fee is based on anticipated cooperation from your personnel and the assumption that unexpected circumstances will not be encountered during the audit. If significant additional time is necessary based upon unexpected circumstances caused by North Texas Groundwater Conservation District, we will discuss it with you and submit a new fee estimate that must be agreed on by both parties before we incur the additional costs.

Reporting

We will issue a written report upon completion of our audit of the District's financial statements. Our report will be addressed to management and those charged with governance of North Texas Groundwater Conservation District. Circumstances may arise in which our report may differ from its expected form and content based on the results of our audit. Depending on the nature of these circumstances, it may be necessary for us to modify our opinions, add a separate section, or add an emphasis-of-matter or other-matter paragraph to our auditors' report, or if necessary, withdraw from this engagement. If our opinions are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or issue reports, or we may withdraw from this engagement.

We will also provide a report (that does not include an opinion) on internal control related to the financial statements and compliance with the provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a material effect on the financial statements as required by *Government Auditing Standards*. The report on internal control and on compliance and other matters will state (1) that the purpose of the report is solely to describe the scope of testing of internal control and compliance, and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control on compliance, and (2) that the report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. The report will also state that the report is not suitable for any other purpose. If during our audit we become aware that the District is subject to an audit requirement that is not encompassed in the terms of this engagement, we will communicate to management and those charged with governance that an audit in accordance with U.S. generally accepted auditing standards and the standards for financial audits contained in *Government Auditing Standards* may not satisfy the relevant legal, regulatory, or contractual requirements.

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

Sincerely,

McClanahan and Holmes, LLP
Certified Public Accountants

August 12, 2025

RESPONSE:

This letter correctly sets forth the understanding of North Texas Groundwater Conservation District.

Management Signature: _____

Title: _____

Date: _____

Governance Signature: _____

Title: _____

Date: _____

Briscoe, Burke & Grigsby LLP

CERTIFIED PUBLIC ACCOUNTANTS

Report on the Firm's System of Quality Control

August 5, 2024

To the Partners of McClanahan & Holmes, LLP
and the Peer Review Committee of the Texas Society of CPAs

We have reviewed the system of quality control for the accounting and auditing practice of McClanahan & Holmes, LLP (the firm) in effect for the year ended March 31, 2024. Our peer review was conducted in accordance with the Standards for Performing and Reporting on Peer Reviews established by the Peer Review Board of the American Institute of Certified Public Accountants (Standards).

A summary of the nature, objectives, scope, limitations of, and the procedures performed in a System Review as described in the Standards may be found at www.aicpa.org/prsummary. The summary also includes an explanation of how engagements identified as not performed or reported in conformity with applicable professional standards, if any, are evaluated by a peer reviewer to determine a peer review rating.

Firm's Responsibility

The firm is responsible for designing and complying with a system of quality control to provide the firm with reasonable assurance of performing and reporting in conformity with the requirements of applicable professional standards in all material respects. The firm is also responsible for evaluating actions to promptly remediate engagements deemed as not performed or reported on in conformity with the requirements of applicable professional standards, when appropriate, and for remediating weaknesses in its system of quality control, if any.

Peer Reviewer's Responsibility

Our responsibility is to express an opinion on the design of and compliance with the firm's system of quality control based on our review.

Required Selections and Considerations

Engagements selected for review included an engagement performed under *Government Auditing Standards*, including a compliance audit under the Single Audit Act.

As a part of our peer review, we considered reviews by regulatory entities as communicated by the firm, if applicable, in determining the nature and extent of our procedures.

Opinion

In our opinion, the system of quality control for the accounting and auditing practice of McClanahan & Holmes, LLP in effect for the year ended March 31, 2024, has been suitably designed and complied with to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Firms can receive a rating of *pass*, *pass with deficiency(ies)*, or *fail*. McClanahan & Holmes, LLP has received a peer review rating of *pass*.

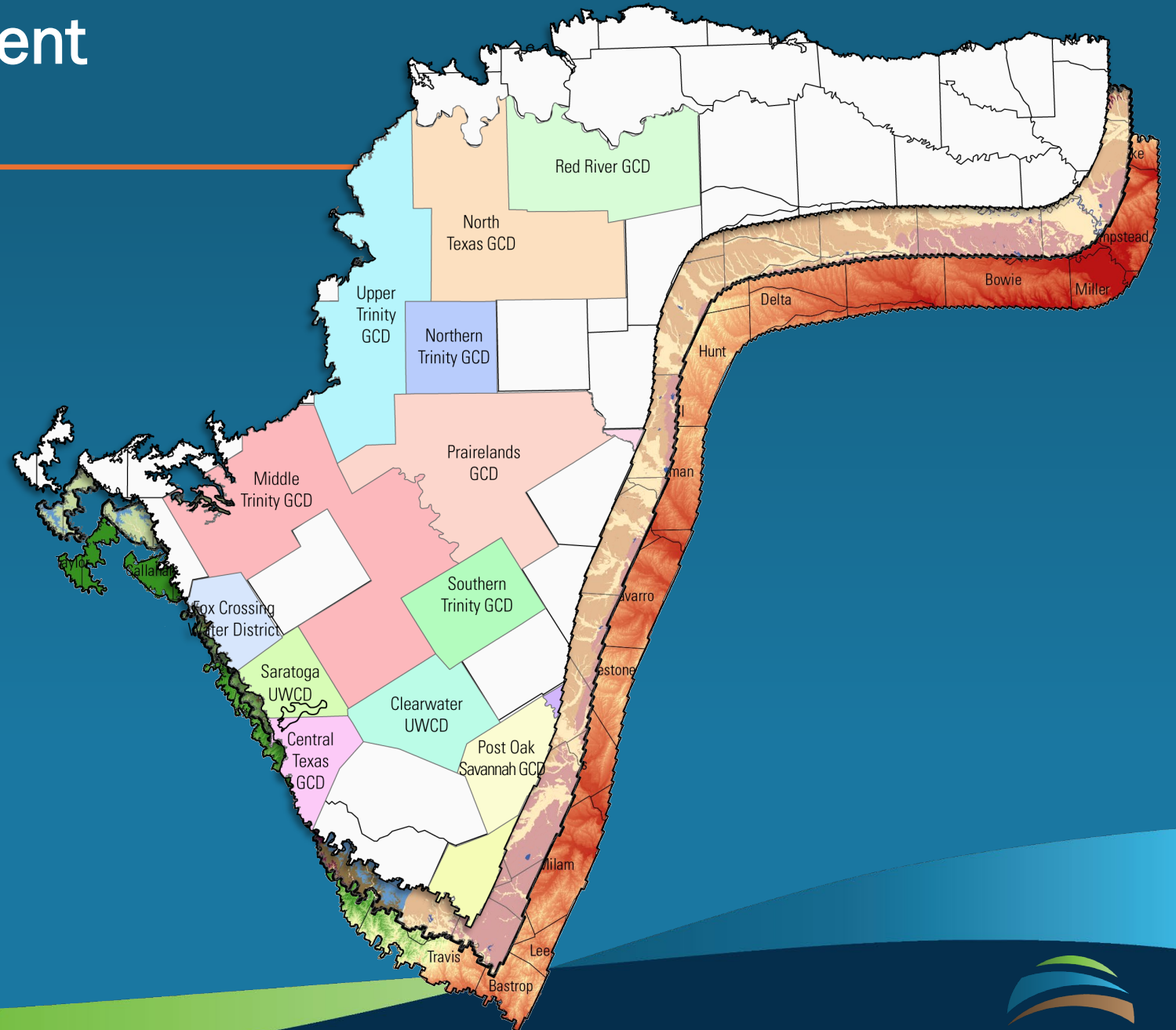


Certified Public Accountants

Members American Institute of Certified Public Accountants
4120 East 51st Street Suite 100 Tulsa, Oklahoma 74135-3633 (918) 749-8337

ATTACHMENT 9 a.

Groundwater Management Area 8 Joint Planning



John Ellis, P.G.
August 29th, 2025

Timeline

[illegible]

Run 4-1 Water Use

Run 4-1 Groundwater Use Inputs

- NTGCD, RRGCD use Run 11 water use volumes, NTGAM use locations
- MTGCD use (also NTGAM use locations):
 - Bosque, Coryell: 90% of Run 11
 - Erath, Commanche: Run 11
- Saratoga use: Average of last 3 years in the model (2018–2020)
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	1,993	2,342	2,691	3,039	3,388	3,737	4,086
Clearwater UWCD	Bell	33,344	33,344	33,344	33,345	33,345	33,345	33,345
Middle Trinity GCD	Bosque	7,892	7,892	7,892	7,892	7,892	7,892	7,892
	Comanche	12,007	12,007	12,007	12,007	12,007	12,007	12,007
	Coryell	4,045	4,045	4,045	4,045	4,045	4,045	4,045
	Erath	20,546	20,546	20,546	20,546	20,546	20,546	20,546
North Texas GCD	Collin	10,049	10,049	10,049	10,049	10,049	10,049	10,049
	Cooke	11,322	11,322	11,322	11,322	11,322	11,322	11,322
	Denton	33,700	33,700	33,700	33,700	33,700	33,700	33,700
Northern Trinity GCD	Tarrant	11,214	15,847	16,381	17,064	17,748	18,431	19,115
Prairielands GCD	Ellis	11,930	16,796	22,521	22,523	22,528	22,534	22,540
	Hill	4,868	10,663	11,630	11,523	11,624	11,617	11,634
	Johnson	8,583	11,909	10,615	10,968	11,380	12,115	12,115
	Somervell	1,613	1,074	1,074	1,074	1,074	1,074	1,074
Red River GCD	Fannin	7,012	7,012	7,012	7,012	7,012	7,012	7,012
	Grayson	18,242	18,242	18,242	18,242	18,242	18,242	18,242
Saratoga UWCD	Lampasas	1,145	1,145	1,145	1,145	1,145	1,145	1,145
Southern Trinity GCD	McLennan	13,661	17,889	17,889	17,889	17,889	17,889	17,889
Upper Trinity GCD	Hood	10,358	13,196	15,323	16,742	17,451	17,877	18,160
	Montague	1,483	1,902	2,216	2,426	2,531	2,594	2,636
	Parker	8,748	15,405	20,635	23,375	24,745	25,567	26,115
	Wise	6,429	12,184	16,864	19,016	20,092	20,738	21,168

Run 4-1 Water Use

Run 4-1 Groundwater Use Inputs

- Non-District areas shown at right
- Very large amount of use in Williamson County
- Less than 10,000 acre feet per year in other non-District areas
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Non-District Counties	Brown	745	745	745	745	745	745	745
	Callahan	1,168	1,168	1,168	1,168	1,168	1,168	1,168
	Dallas	3,535	3,535	3,535	3,535	3,535	3,535	3,535
	Delta	74	74	74	74	74	74	74
	Eastland	3,201	3,201	3,201	3,201	3,201	3,201	3,201
	Falls	8,582	8,582	8,582	8,582	8,582	8,582	8,582
	Hamilton	2,363	2,363	2,363	2,363	2,363	2,363	2,363
	Hunt	491	491	491	491	491	491	491
	Jack	22	22	22	22	22	22	22
	Kaufman	53	53	53	53	53	53	53
	Lamar	328	328	328	328	328	328	328
	Mills	1,547	1,547	1,547	1,547	1,547	1,547	1,547
	Navarro	119	119	119	119	119	119	119
	Taylor	47	47	47	47	47	47	47
	Travis	7,811	7,811	7,811	7,811	7,811	7,811	7,811
	Williamson	62,119	62,120	62,120	62,121	62,122	62,123	62,124

Run 4-1 Water Use

Run 4-1 Groundwater Use Outputs

- NTGCD, RRGCD use Run 11 water use volumes, NTGAM use locations
- MTGCD use (also NTGAM use locations):
 - Bosque, Coryell: 90% of Run 11
 - Erath, Commanche: Run 11
- Saratoga use: Average of last 3 years in the model (2018–2020)
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	1,993	2,342	2,691	3,039	3,388	3,719	4,045
Clearwater UWCD	Bell	33,316	33,051	32,859	32,767	32,706	32,662	32,631
Middle Trinity GCD	Bosque	7,892	7,892	7,892	7,892	7,892	7,892	7,892
	Comanche	12,007	12,007	12,007	12,007	12,007	12,007	12,007
	Coryell	4,045	4,045	4,045	4,045	4,045	4,045	4,045
	Erath	20,546	20,546	20,545	20,482	20,451	20,432	20,419
North Texas GCD	Collin	10,049	10,049	10,049	10,049	10,027	10,018	10,010
	Cooke	10,948	9,811	9,492	9,334	9,224	9,138	9,064
	Denton	33,700	32,855	32,367	31,900	31,565	31,311	31,108
Northern Trinity GCD	Tarrant	11,213	15,652	15,623	15,589	15,675	15,625	15,626
Prairielands GCD	Ellis	11,930	16,796	22,521	22,523	22,497	22,453	22,410
	Hill	4,867	10,663	11,630	11,523	11,624	11,617	11,634
	Johnson	8,478	11,830	10,518	10,861	11,262	11,984	11,976
	Somervell	1,610	1,074	1,074	1,074	1,074	1,074	1,074
Red River GCD	Fannin	6,999	6,999	6,998	6,998	6,998	6,997	6,997
	Grayson	17,438	16,964	16,898	16,856	16,820	16,789	16,760
Saratoga UWCD	Lampasas	1,145	1,145	1,145	1,145	1,145	1,145	1,145
Southern Trinity GCD	McLennan	13,661	17,280	16,914	16,745	16,619	16,534	16,468
Upper Trinity GCD	Hood	9,394	12,208	14,163	15,191	15,671	15,932	16,091
	Montague	1,482	1,901	2,215	2,425	2,529	2,592	2,634
	Parker	8,748	15,378	20,530	23,157	24,444	25,186	25,669
	Wise	6,429	12,184	16,864	19,016	20,026	20,638	21,036

Run 4-1 Water Use

Run 4-1 Groundwater Use Outputs

- Non-District areas shown at right
- Very large amount of use in Williamson County
- Less than 10,000 acre feet per year in other non-District areas
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Non-District Counties	Brown	745	745	745	745	745	745	745
	Callahan	1,168	1,168	1,168	1,168	1,168	1,168	1,168
	Dallas	3,535	3,535	3,535	3,535	3,535	3,535	3,535
	Delta	74	74	74	74	74	74	74
	Eastland	3,201	3,201	3,201	3,201	3,201	3,201	3,201
	Falls	8,582	8,582	8,582	8,582	8,582	8,582	8,582
	Hamilton	2,363	2,363	2,363	2,363	2,363	2,363	2,363
	Hunt	491	491	491	491	491	491	491
	Jack	22	22	22	22	22	22	22
	Kaufman	53	53	53	53	53	53	53
	Lamar	328	328	328	328	328	328	328
	Mills	1,547	1,547	1,547	1,547	1,547	1,547	1,547
	Navarro	119	119	119	119	119	119	119
	Taylor	47	47	47	47	47	47	47
	Travis	5,238	5,431	5,596	5,715	5,795	5,848	5,886
	Williamson	62,119	60,245	60,092	60,036	60,007	59,990	59,978

Run 4-1 Water Use

Run 4-1 Groundwater Use Difference

- NTGCD, RRGCD use Run 11 water use volumes, NTGAM use locations
- MTGCD use (also NTGAM use locations):
 - Bosque, Coryell: 90% of Run 11
 - Erath, Commanche: Run 11
- Saratoga use: Average of last 3 years in the model (2018–2020)
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	0	0	0	0	0	18	41
Clearwater UWCD	Bell	28	293	485	578	639	683	714
Middle Trinity GCD	Bosque	0	0	0	0	0	0	0
	Comanche	0	0	0	0	0	0	0
	Coryell	0	0	0	0	0	0	0
	Erath	0	0	1	64	95	114	127
North Texas GCD	Collin	0	0	0	0	22	31	39
	Cooke	374	1,511	1,830	1,988	2,098	2,184	2,258
	Denton	0	845	1,333	1,800	2,135	2,389	2,592
Northern Trinity GCD	Tarrant	1	195	757	1,475	2,073	2,806	3,488
Prairielands GCD	Ellis	0	0	0	0	30	81	130
	Hill	1	0	0	0	0	0	0
	Johnson	105	79	96	106	118	131	138
	Somervell	2	0	0	0	0	0	0
Red River GCD	Fannin	13	13	14	14	14	15	15
	Grayson	804	1,278	1,344	1,386	1,422	1,453	1,482
Saratoga UWCD	Lampasas	0	0	0	0	0	0	0
Southern Trinity GCD	McLennan	0	609	975	1,144	1,270	1,355	1,421
Upper Trinity GCD	Hood	964	988	1,161	1,550	1,780	1,944	2,069
	Montague	1	1	1	2	2	2	2
	Parker	0	27	106	218	301	381	446
	Wise	0	0	0	0	66	99	132

Run 4-1 Water Use

Run 4-1 Groundwater Use Difference

- NTGCD, RRGCD use Run 11 water use volumes, NTGAM use locations
- MTGCD use (also NTGAM use locations):
 - Bosque, Coryell: 90% of Run 11
 - Erath, Commanche: Run 11
- Saratoga use: Average of last 3 years in the model (2018–2020)
- Bell Co/Williamson Co provided by Mike Keester
- Post Oak: No use

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Non-District Counties	Brown	0	0	0	0	0	0	0
	Callahan	0	0	0	0	0	0	0
	Dallas	0	0	0	0	0	0	0
	Delta	0	0	0	0	0	0	0
	Eastland	0	0	0	0	0	0	0
	Falls	0	0	0	0	0	0	0
	Hamilton	0	0	0	0	0	0	0
	Hunt	0	0	0	0	0	0	0
	Jack	0	0	0	0	0	0	0
	Kaufman	0	0	0	0	0	0	0
	Lamar	0	0	0	0	0	0	0
	Mills	0	0	0	0	0	0	0
	Navarro	0	0	0	0	0	0	0
	Taylor	0	0	0	0	0	0	0
	Travis	2,572	2,379	2,214	2,096	2,016	1,962	1,924
	Williamson	0	1,875	2,028	2,086	2,115	2,133	2,146

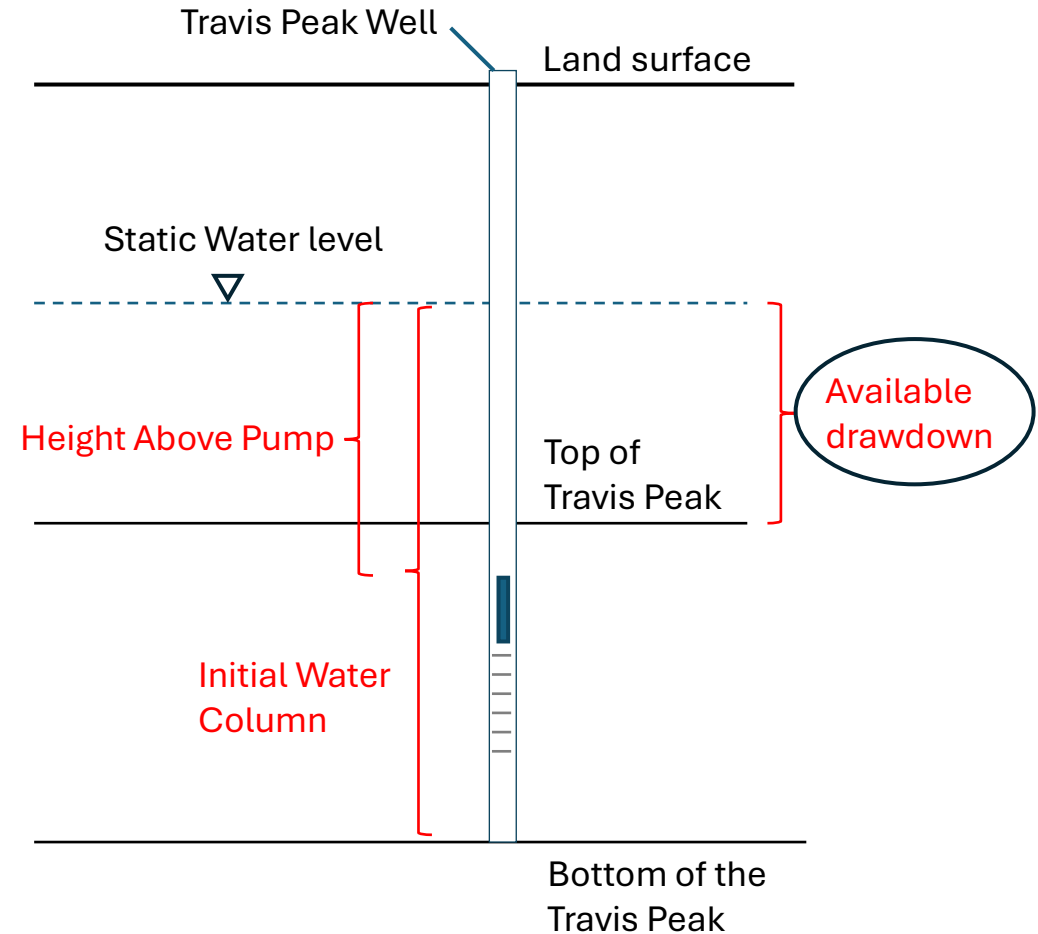
Available Drawdown

Available drawdown is the difference between the static water level and some defined **critical limit**.

In our analysis, we used the top of the confined aquifer.

Critical Limit	Impact
Top of the Aquifer	Transmissivity decreases and yields decline.
Pump Setting	Pump starts to suck air, leading to loss of prime.
Bottom of the Aquifer	Yield is zero; no more water can be pumped.

Example of available drawdown
(confined aquifer)



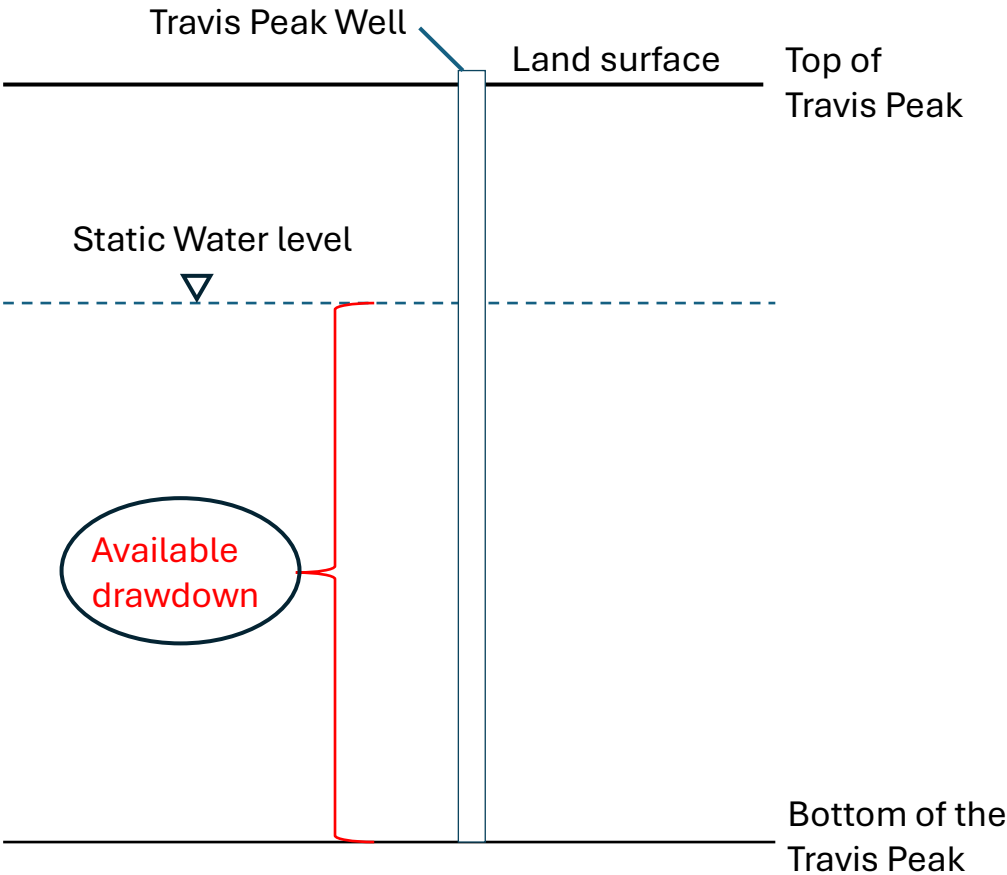
Available Drawdown

Available drawdown is the difference between the static water level and some defined **critical limit**.

In our analysis, we used the bottom of the unconfined aquifer since the pump location and screens can vary.

Critical Limit	Impact
Top of the Aquifer	Transmissivity decreases and yields decline.
Pump Setting	Pump starts to suck air, leading to loss of prime.
Bottom of the Aquifer	Yield is zero; no more water can be pumped.

Example of available drawdown (unconfined aquifer)

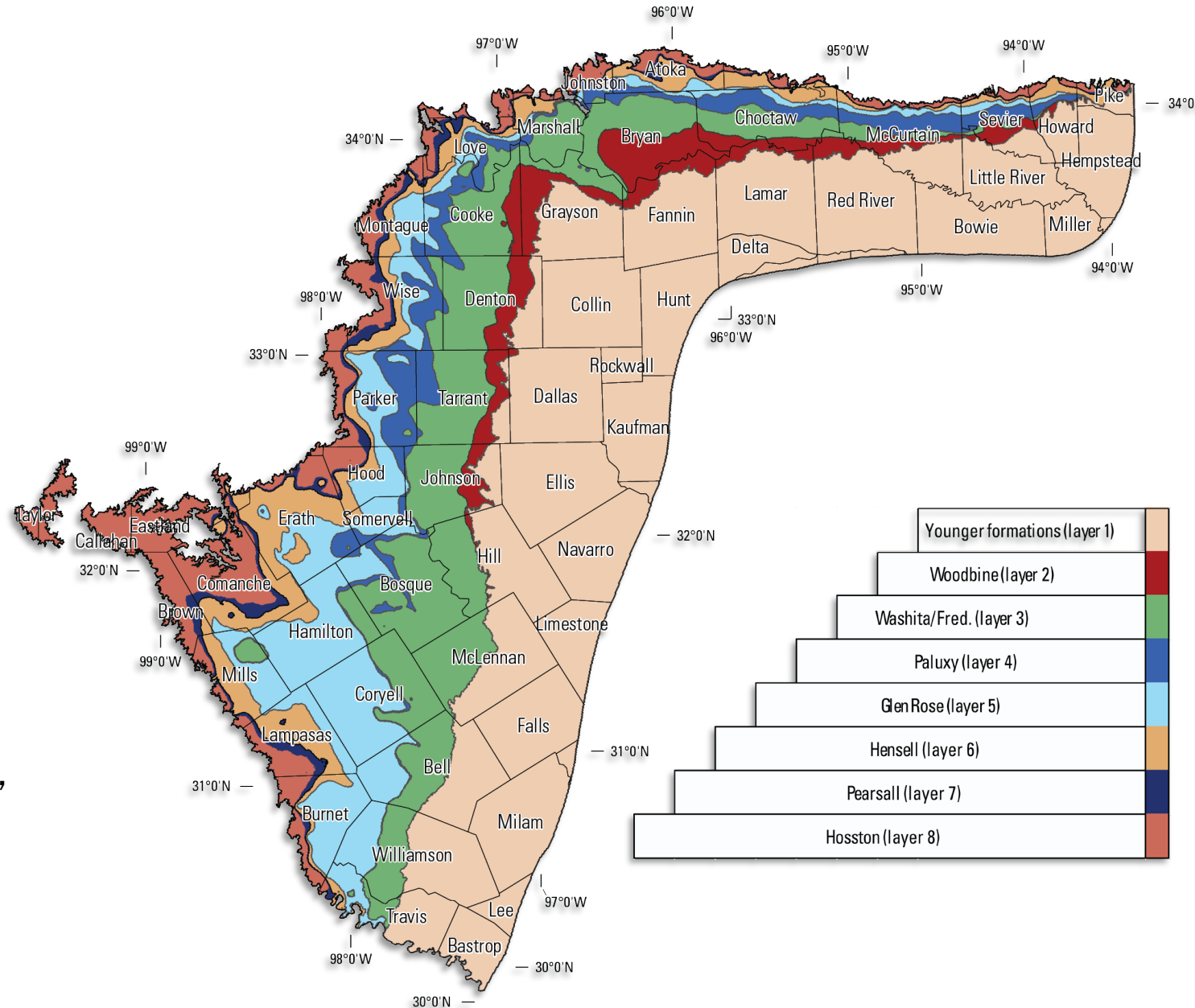


Another approach: Median available drawdown

Configuration

Hydrogeologic Units

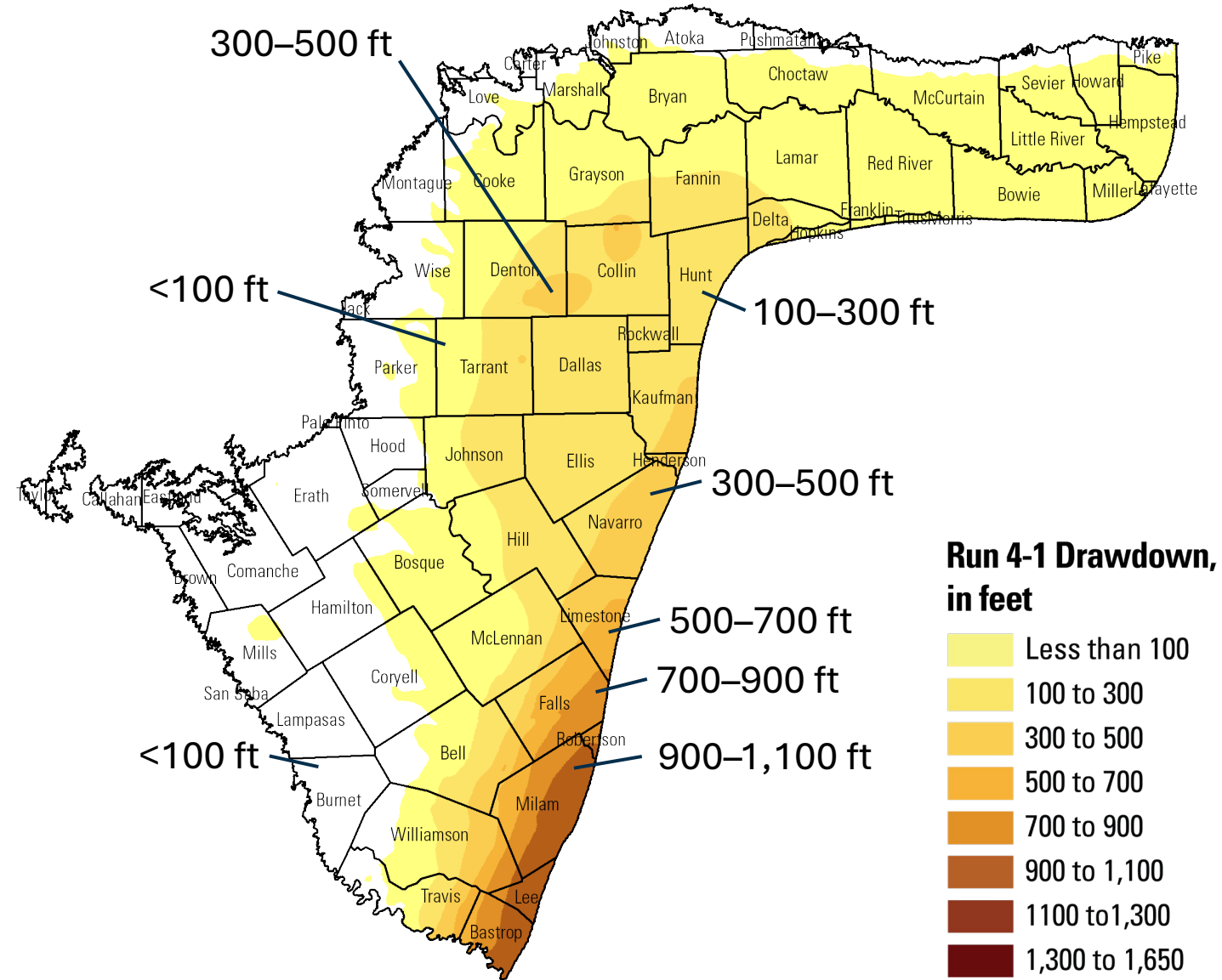
- **Layer 1:** Surficial units/younger formations
- **Layer 2:** Woodbine
- **Layer 3:** Washita/Fredericksburg
- **Layer 4:** Paluxy
- **Layer 5:** Glen Rose
- **Layer 6:** Hensell
- **Layer 7:** Pearsall
- **Layer 8:** Hosston
- Not all parts of the outcrop area are in unconfined conditions.
- A lot of the outcrop area is the Washita/Fredericksburg and the Glen Rose, which are confining units in much of the study area.



Run 4-1 Drawdown

Paluxy (Layer 4) Drawdown

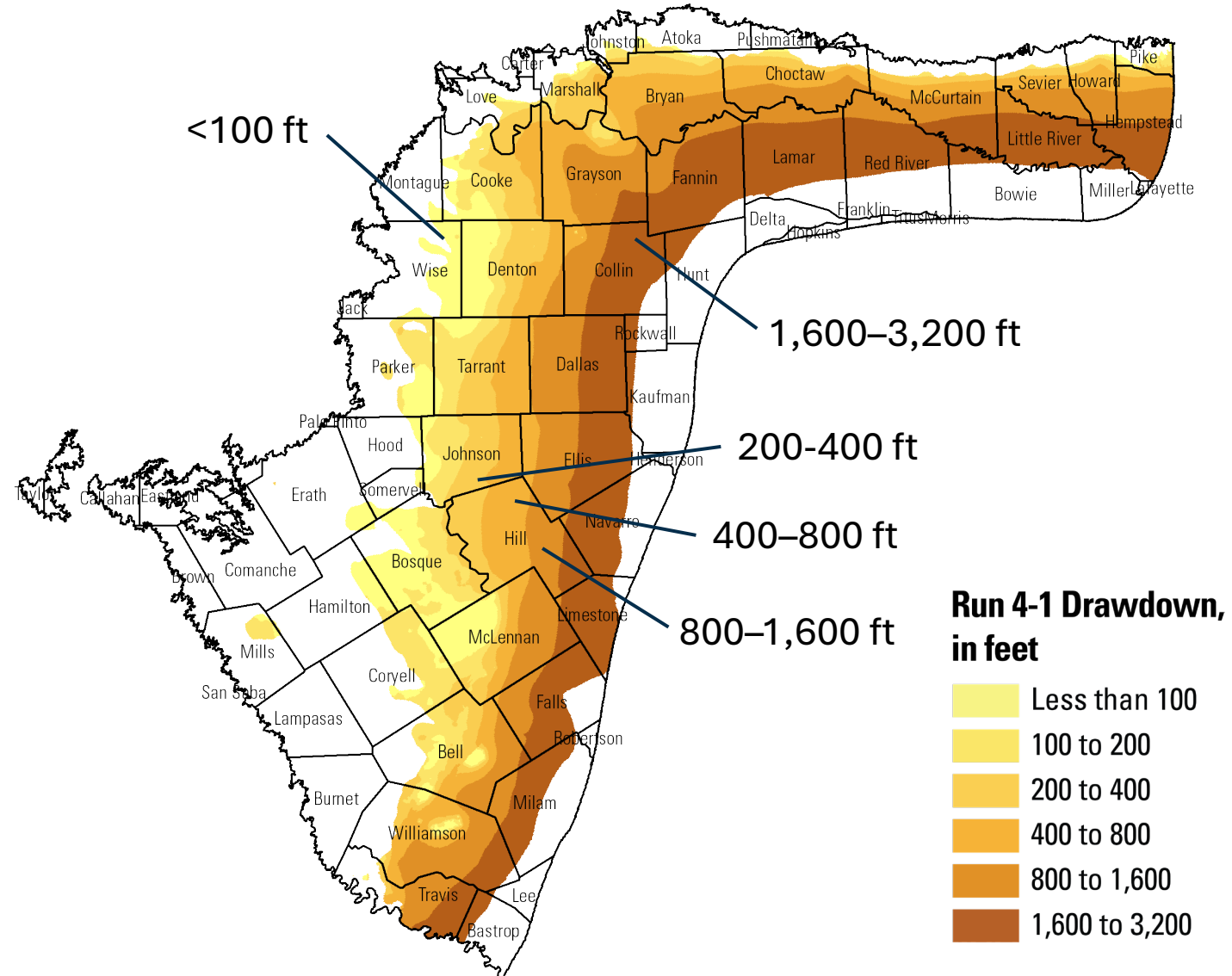
- Drawdown 2020–2080 from Run 4-1
- Mean drawdown: 166 feet
- Median drawdown: 69.1 feet



Run 4-1 Drawdown

Paluxy (Layer 4) Available Drawdown

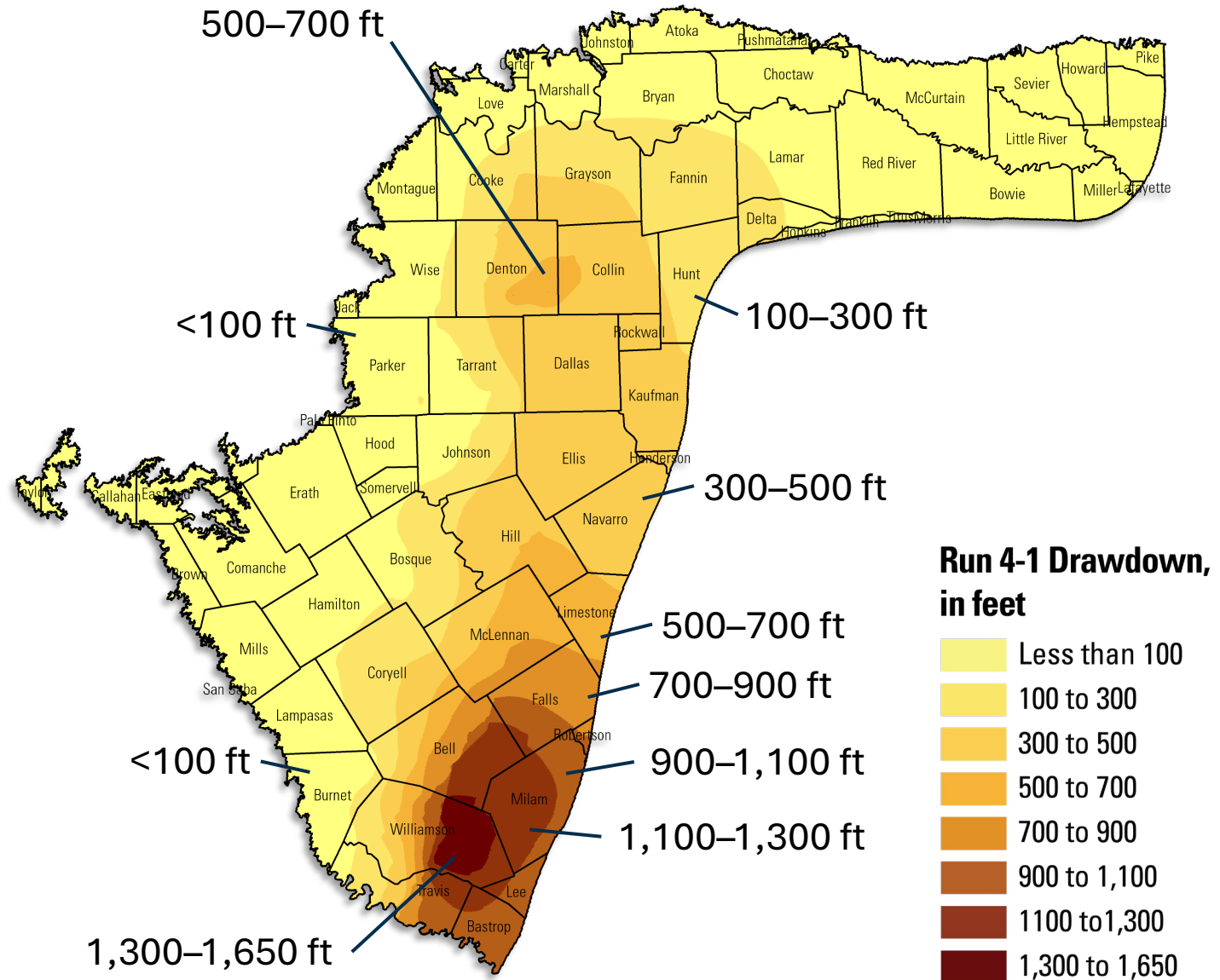
- 2080 water level – top of Paluxy
- Mean available drawdown: 1,157 feet
- Median available drawdown: 875 feet
- Most areas of the model have between 100 and 400 feet of available drawdown



Run 4-1 Drawdown

Hosston (Layer 8) Drawdown

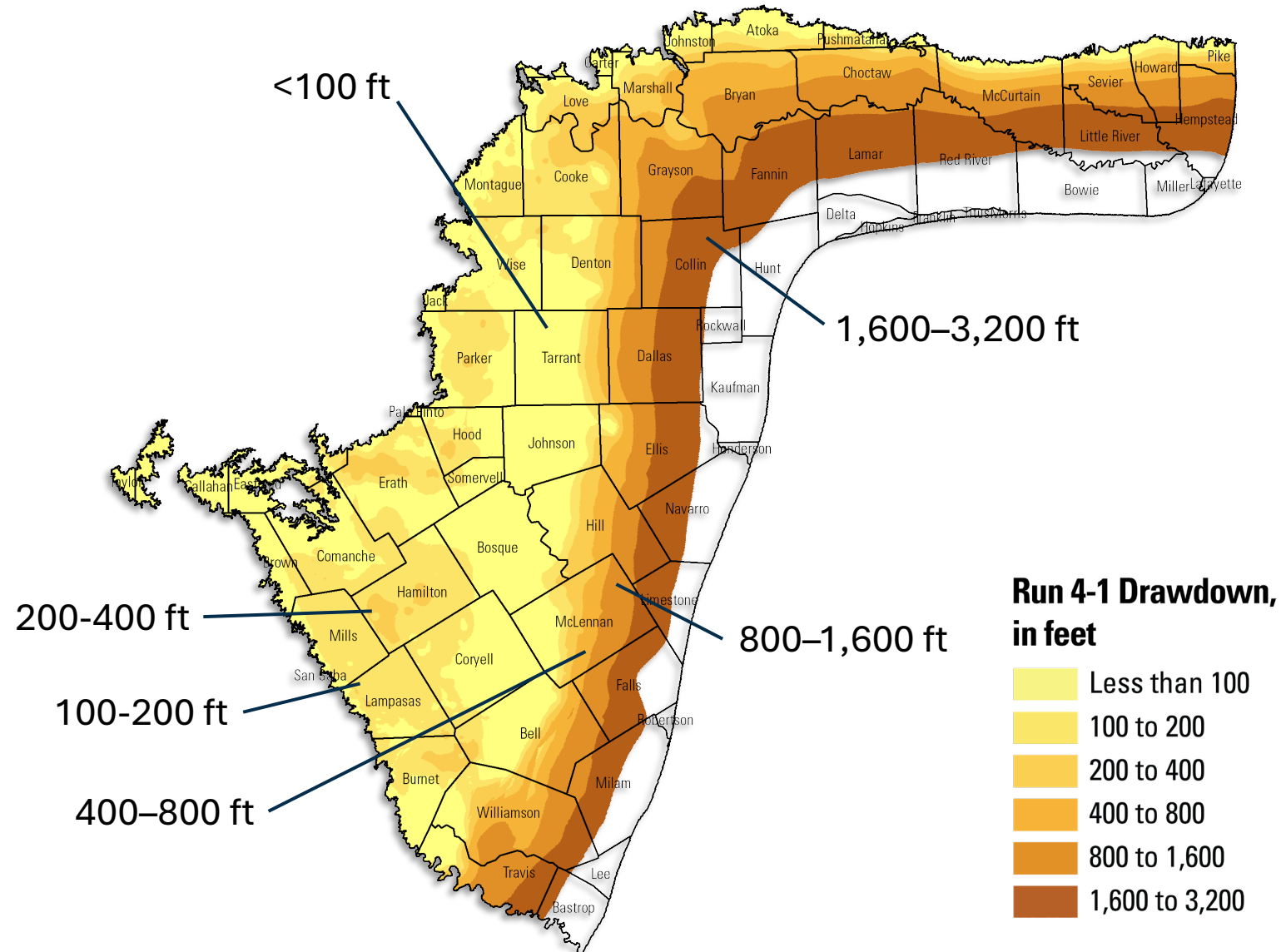
- Drawdown 2020–2080 from Run 4-1
- Mean drawdown: 248 feet
- Median drawdown: 99.8 feet



Run 4-1 Drawdown

Hosston (Layer 8) Available Drawdown

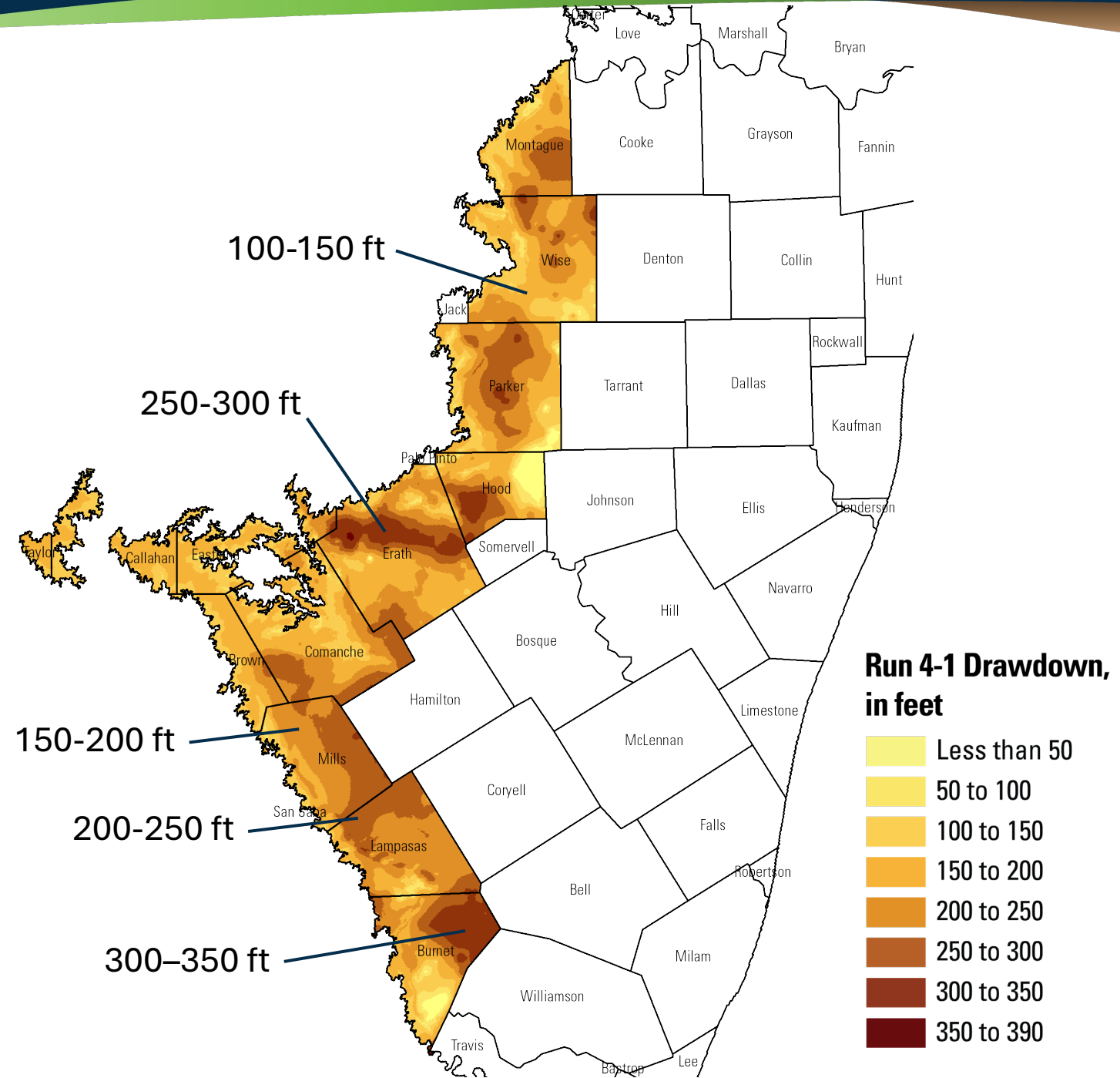
- 2080 water level – top of Hosston
- Mean available drawdown: 1,307 feet
- Median available drawdown: 486 feet
- Most areas in the central part of the aquifer system have less than 100 feet of available drawdown
- Most downdip areas not shown on the map—no Hosston water use



Run 4-1 Drawdown

Hosston (Layer 8) Available Drawdown—Outcrop area

- 2080 water level – bottom of Hosston
- Mean available drawdown: 1,307 feet
- Median available drawdown: 486 feet
- Alternate method: median available drawdown vs bottom of layer



Run 4.1: Allowable Drawdown

GCD	County	Aquifer	Location*	Desired Future Condition (in feet)								Adopded DFCs
				2020	2030	2040	2050	2060	2070	2080	Run 11 (previous round)	
North Texas GCD	Collin	Antlers	both	77.73	267.25	320.19	357.18	383.59	403.56	419.22	583.45	596
		Glen Rose	both	5.65	88.86	168.65	236.57	293.11	339.46	377.51	365.79	366
		Paluxy	both	11.93	105.42	169.46	216.34	250.48	275.41	293.9	704.77	729
		Twin Mountains	both	76.9	241.17	298.23	338.45	364.79	383.51	397.33	559.87	560
		Woodbine	both	18.02	142.62	201.73	233.6	251.87	263.7	271.71	481.8	482
	Cooke	Antlers	both	19.22	64.07	73.48	79.91	85.09	89.45	93.2	178.36	191
		Woodbine	both	0.05	0.31	0.48	0.6	0.7	0.78	0.84	2.66	2
	Denton	Antlers	both	69.5	177.98	200.91	215.15	224.88	232.3	238.32	404.5	416
		Glen Rose	both	9.18	89.92	155.42	208.15	250.5	284.86	313.53	367.03	367
		Paluxy	both	30.1	158.72	217.54	251.57	274.04	289.35	300.33	697.53	558
		Twin Mountains	both	201.84	387.09	428.81	455.2	470.7	481.69	490.03	742.97	752
		Woodbine	both	0.14	3.61	5.74	7.13	8.13	8.85	9.35	20.38	22

*The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the aquifer system.

Run 4.1: Available Drawdown

GCD	County	Aquifer	Drawdown Type	Location***	Available Drawdown (in feet)							Percent Available Drawdown					
					Initial	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
North Texas GCD	Collin	Antlers	Available Drawdown*	subcrop	931	855	810	773	744	721	704	92%	87%	83%	80%	77%	76%
		Glen Rose		subcrop	2,025	1,936	1,856	1,788	1,732	1,685	1,647	96%	92%	88%	86%	83%	81%
		Paluxy		subcrop	1,695	1,590	1,526	1,479	1,445	1,420	1,401	94%	90%	87%	85%	84%	83%
		Twin Mountains		subcrop	2,488	2,271	2,207	2,159	2,124	2,098	2,077	91%	89%	87%	85%	84%	83%
		Woodbine		subcrop	497	354	295	263	245	233	225	71%	59%	53%	49%	47%	45%
	Cooke	Antlers	Available Drawdown*	subcrop	141	151	148	143	138	134	130	107%	105%	101%	98%	95%	93%
		Woodbine	Saturated Thickness**	outcrop	86	86	86	86	85	85	85	100%	99%	99%	99%	99%	99%
	Denton	Antlers	Available Drawdown*	subcrop	228	196	171	156	145	137	131	86%	75%	68%	64%	60%	58%
		Glen Rose		subcrop	771	681	615	562	520	486	457	88%	80%	73%	67%	63%	59%
		Paluxy		subcrop	525	366	307	273	251	235	224	70%	59%	52%	48%	45%	43%
		Twin Mountains		subcrop	1,066	805	754	722	700	683	670	76%	71%	68%	66%	64%	63%
		Woodbine		subcrop	107	99	95	92	90	89	88	93%	89%	86%	85%	83%	82%
		Woodbine	Saturated Thickness**	outcrop	162	161	160	160	159	158	158	100%	99%	99%	98%	98%	97%

*Available Drawdown is defined as the water level minus the top of the respective formation

**Saturated Thickness is defined as the water level minus the bottom of the respective formation

***The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the aquifer

Run 4.1: Model Available Groundwater

GCD	County	Aquifer	Location*	MAG (Run 4-1, in acre-feet per year; AFY)							MAG from Run 11 (previous round, in AFY)					
				2020	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
North Texas GCD	Collin	Antlers	both	1,962	1,962	1,962	1,962	1,940	1,931	1,923	1,962	1,962	1,962	1,962	1,962	1,962
		Glen Rose	both	83	83	83	83	83	83	83	83	83	83	83	83	83
		Paluxy	both	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548
		Twin Mountains	both	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202	2,202
		Woodbine	both	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254	4,254
	Cooke	Antlers	both	10,148	9,011	8,692	8,534	8,424	8,338	8,264	10,522	10,522	10,522	10,522	10,522	10,522
		Woodbine	both	800	800	800	800	800	800	800	800	800	800	800	800	800
	Denton	Antlers	both	16,557	16,353	16,055	15,844	15,676	15,544	15,438	16,557	16,557	16,557	16,557	16,557	16,557
		Glen Rose	both	339	339	339	339	339	339	339	339	339	339	339	339	339
		Paluxy	both	4,823	4,823	4,751	4,665	4,611	4,571	4,538	4,823	4,823	4,823	4,823	4,823	4,823
		Twin Mountains	both	8,372	7,731	7,616	7,447	7,334	7,253	7,190	8,372	8,372	8,372	8,372	8,372	8,372
		Woodbine	both	3,609	3,608	3,606	3,605	3,604	3,604	3,603	3,609	3,609	3,609	3,609	3,609	3,609

*The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the aquifer system.

Run 4-2 Water Use

Run 4-2 Groundwater Use Inputs

- Uses 2024 rates repeated through 2080
- No increase in groundwater use during the simulation
- Few issues with use rates reduced during the simulation

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	1,694	1,694	1,694	1,694	1,694	1,694	1,694
Clearwater UWCD	Bell	10,094	10,094	10,094	10,094	10,094	10,094	10,094
Middle Trinity GCD	Bosque	5,376	5,376	5,376	5,376	5,376	5,376	5,376
	Comanche	24,596	24,596	24,596	24,596	24,596	24,596	24,596
	Coryell	2,128	2,128	2,128	2,128	2,128	2,128	2,128
	Erath	18,806	18,806	18,806	18,806	18,806	18,806	18,806
North Texas GCD	Collin	10,445	10,445	10,445	10,445	10,445	10,445	10,445
	Cooke	6,514	6,514	6,514	6,514	6,514	6,514	6,514
	Denton	19,911	19,911	19,911	19,911	19,911	19,911	19,911
Northern Trinity GCD	Tarrant	11,251	11,251	11,251	11,251	11,251	11,251	11,251
Prairielands GCD	Ellis	9,779	9,779	9,779	9,779	9,779	9,779	9,779
	Hill	4,110	4,110	4,110	4,110	4,110	4,110	4,110
	Johnson	5,578	5,578	5,578	5,578	5,578	5,578	5,578
	Somervell	1,074	1,074	1,074	1,074	1,074	1,074	1,074
Red River GCD	Fannin	5,110	5,110	5,110	5,110	5,110	5,110	5,110
	Grayson	16,977	16,977	16,977	16,977	16,977	16,977	16,977
Saratoga UWCD	Lampasas	1,145	1,145	1,145	1,145	1,145	1,145	1,145
Southern Trinity GCD	McLennan	20,635	20,635	20,635	20,635	20,635	20,635	20,635
Upper Trinity GCD	Hood	10,358	10,588	10,588	10,588	10,588	10,588	10,588
	Montague	1,483	1,649	1,649	1,649	1,649	1,649	1,649
	Parker	8,748	10,973	10,973	10,973	10,973	10,973	10,973
	Wise	6,429	8,228	8,228	8,228	8,228	8,228	8,228

Run 4-2 Water Use

Run 4-2 Groundwater Use Outputs

- Uses 2024 rates repeated through 2080
- No increase in groundwater use during the simulation
- Few issues with use rates reduced during the simulation

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	1,694	1,694	1,694	1,694	1,694	1,694	1,694
Clearwater UWCD	Bell	10,094	10,094	10,094	10,094	10,094	10,094	10,094
Middle Trinity GCD	Bosque	5,375	5,375	5,375	5,375	5,375	5,375	5,375
	Comanche	24,596	24,596	24,596	24,596	24,596	24,596	24,596
	Coryell	2,127	2,127	2,127	2,127	2,127	2,127	2,127
	Erath	18,806	18,788	18,768	18,764	18,762	18,761	18,761
North Texas GCD	Collin	10,445	10,445	10,445	10,445	10,445	10,445	10,445
	Cooke	6,514	6,287	6,231	6,206	6,191	6,179	6,169
	Denton	19,911	19,866	19,843	19,812	19,777	19,742	19,719
Northern Trinity GCD	Tarrant	11,250	11,248	11,244	11,229	11,213	11,202	11,193
Prairielands GCD	Ellis	9,779	9,779	9,779	9,779	9,779	9,779	9,779
	Hill	4,110	4,110	4,110	4,110	4,110	4,110	4,110
	Johnson	5,514	5,523	5,525	5,525	5,524	5,524	5,523
	Somervell	1,074	1,074	1,074	1,074	1,074	1,074	1,074
Red River GCD	Fannin	5,099	5,099	5,098	5,098	5,098	5,098	5,097
	Grayson	16,308	16,165	16,126	16,092	16,063	16,038	16,014
Saratoga UWCD	Lampasas	1,145	1,145	1,145	1,145	1,145	1,145	1,145
Southern Trinity GCD	McLennan	20,635	20,184	20,060	19,996	19,951	19,920	19,896
Upper Trinity GCD	Hood	9,394	9,695	9,738	9,770	9,802	9,835	9,869
	Montague	1,482	1,648	1,648	1,648	1,648	1,648	1,648
	Parker	8,748	10,967	10,957	10,951	10,947	10,945	10,943
	Wise	6,429	8,228	8,228	8,228	8,228	8,228	8,228

Run 4-2 Water Use

Run 4-2 Groundwater Use Outputs

- Uses 2024 rates repeated through 2080
- No increase in groundwater use during the simulation
- Few issues with use rates reduced during the simulation

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Non-District Counties	Brown	745	745	745	745	745	745	745
	Callahan	1,168	1,168	1,168	1,168	1,168	1,168	1,168
	Dallas	3,535	3,535	3,535	3,535	3,535	3,535	3,535
	Delta	74	74	74	74	74	74	74
	Eastland	3,201	3,201	3,201	3,201	3,201	3,201	3,201
	Falls	8,582	8,582	8,582	8,582	8,582	8,582	8,582
	Hamilton	2,363	2,363	2,363	2,363	2,363	2,363	2,363
	Hunt	491	491	491	491	491	491	491
	Jack	22	22	22	22	22	22	22
	Kaufman	53	53	53	53	53	53	53
	Lamar	328	328	328	328	328	328	328
	Mills	1,547	1,547	1,547	1,547	1,547	1,547	1,547
	Navarro	119	119	119	119	119	119	119
	Taylor	47	47	47	47	47	47	47
	Travis	5,238	5,432	5,598	5,719	5,804	5,864	5,908
	Williamson	18,678	18,676	18,673	18,670	18,668	18,666	18,664

Run 4-2 Water Use

Run 4-2 Groundwater Use Differences

- Uses 2024 rates repeated through 2080
- No increase in groundwater use during the simulation
- Few issues with use rates reduced during the simulation

All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Central Texas GCD	Burnet	0	0	0	0	0	0	0
Clearwater UWCD	Bell	0	0	0	0	0	0	0
Middle Trinity GCD	Bosque	1	1	1	1	1	1	1
	Comanche	0	0	0	0	0	0	0
	Coryell	1	1	1	1	1	1	1
	Erath	0	18	38	42	44	45	45
North Texas GCD	Collin	0	0	0	0	0	0	0
	Cooke	0	227	284	308	323	335	345
	Denton	0	45	68	99	135	170	192
Northern Trinity GCD	Tarrant	1	3	7	22	38	49	58
Prairielands GCD	Ellis	0	0	0	0	0	0	0
	Hill	0	0	0	0	0	0	0
	Johnson	64	55	53	53	54	54	55
	Somervell	0	0	0	0	0	0	0
Red River GCD	Fannin	11	11	12	12	12	12	13
	Grayson	669	812	851	885	914	939	963
Saratoga UWCD	Lampasas	0	0	0	0	0	0	0
Southern Trinity GCD	McLennan	0	451	575	640	684	716	739
Upper Trinity GCD	Hood	964	893	850	818	787	753	719
	Montague	1	1	1	1	1	1	1
	Parker	0	6	16	23	26	28	30
	Wise	0	0	0	0	0	0	0

Run 4-2 Water Use

Run 4-2 Groundwater Use Differences

- Uses 2024 rates repeated through 2080
- No increase in groundwater use during the simulation
- Few issues with use rates reduced during the simulation

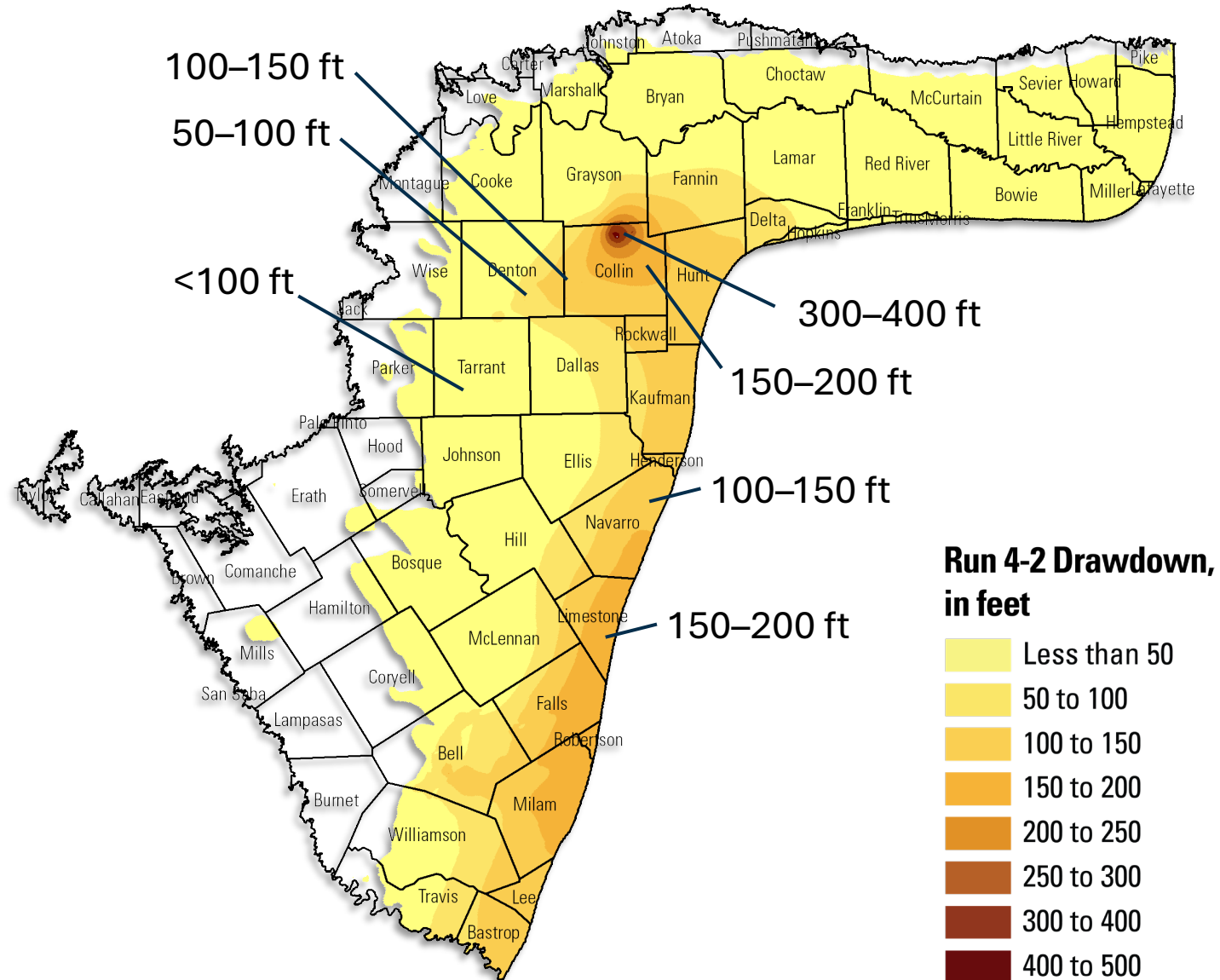
All values in acre feet per year

GCD	County	2020	2030	2040	2050	2060	2070	2080
Non-District Counties	Brown	0	0	0	0	0	0	0
	Callahan	0	0	0	0	0	0	0
	Dallas	0	0	0	0	0	0	0
	Delta	0	0	0	0	0	0	0
	Eastland	0	0	0	0	0	0	0
	Falls	0	0	0	0	0	0	0
	Hamilton	0	0	0	0	0	0	0
	Hunt	0	0	0	0	0	0	0
	Jack	0	0	0	0	0	0	0
	Kaufman	0	0	0	0	0	0	0
	Lamar	0	0	0	0	0	0	0
	Mills	0	0	0	0	0	0	0
	Navarro	0	0	0	0	0	0	0
	Taylor	0	0	0	0	0	0	0
	Travis	2,572	2,379	2,213	2,091	2,007	1,947	1,902
	Williamson	6	8	11	14	16	18	20

Run 4-2 Drawdown

Paluxy (Layer 4) Drawdown

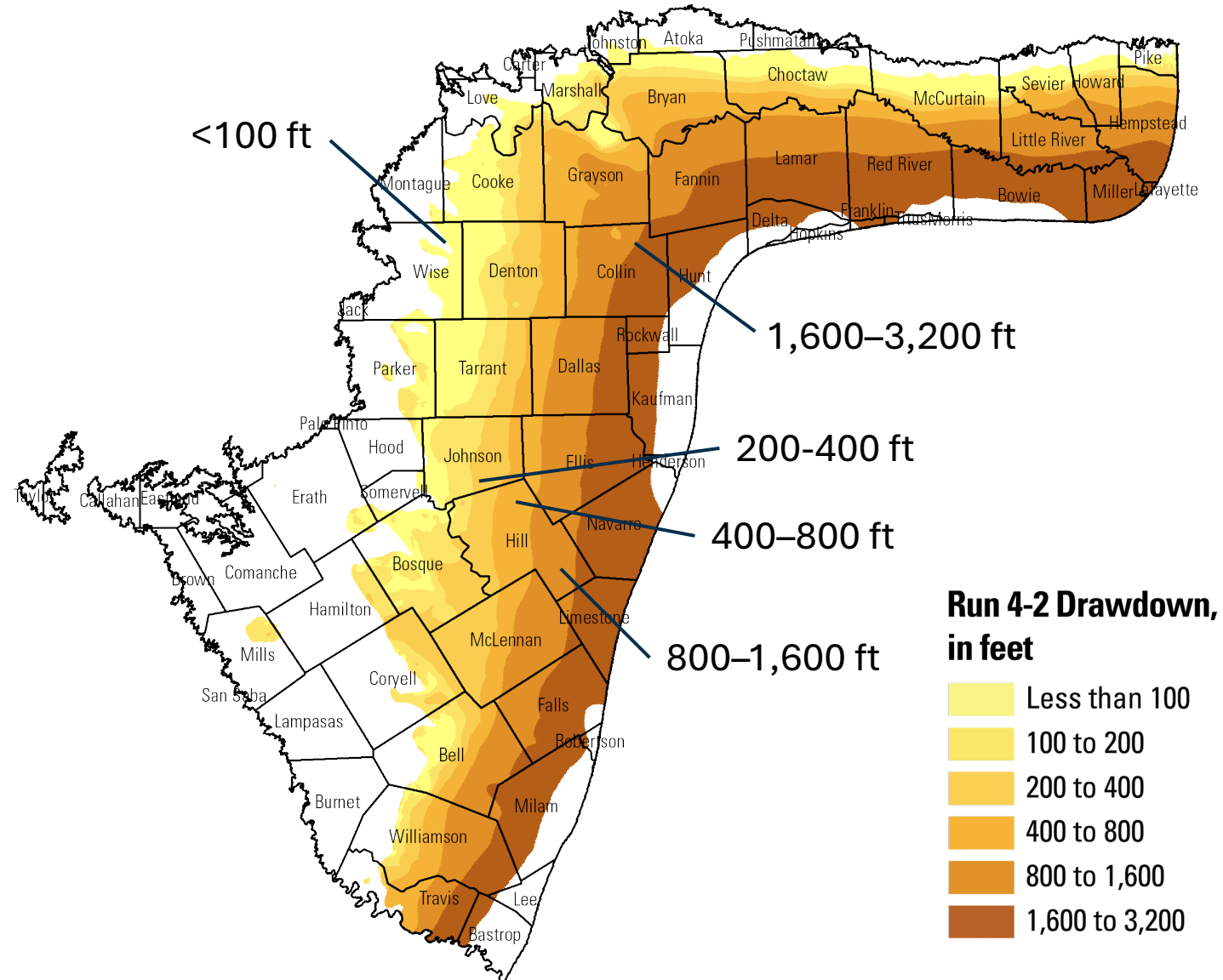
- Drawdown 2020–2080 from Run 4-2
- Mean drawdown: 45.0 feet
- Median drawdown: 17.1 feet



Run 4-2 Drawdown

Paluxy (Layer 4) Available Drawdown

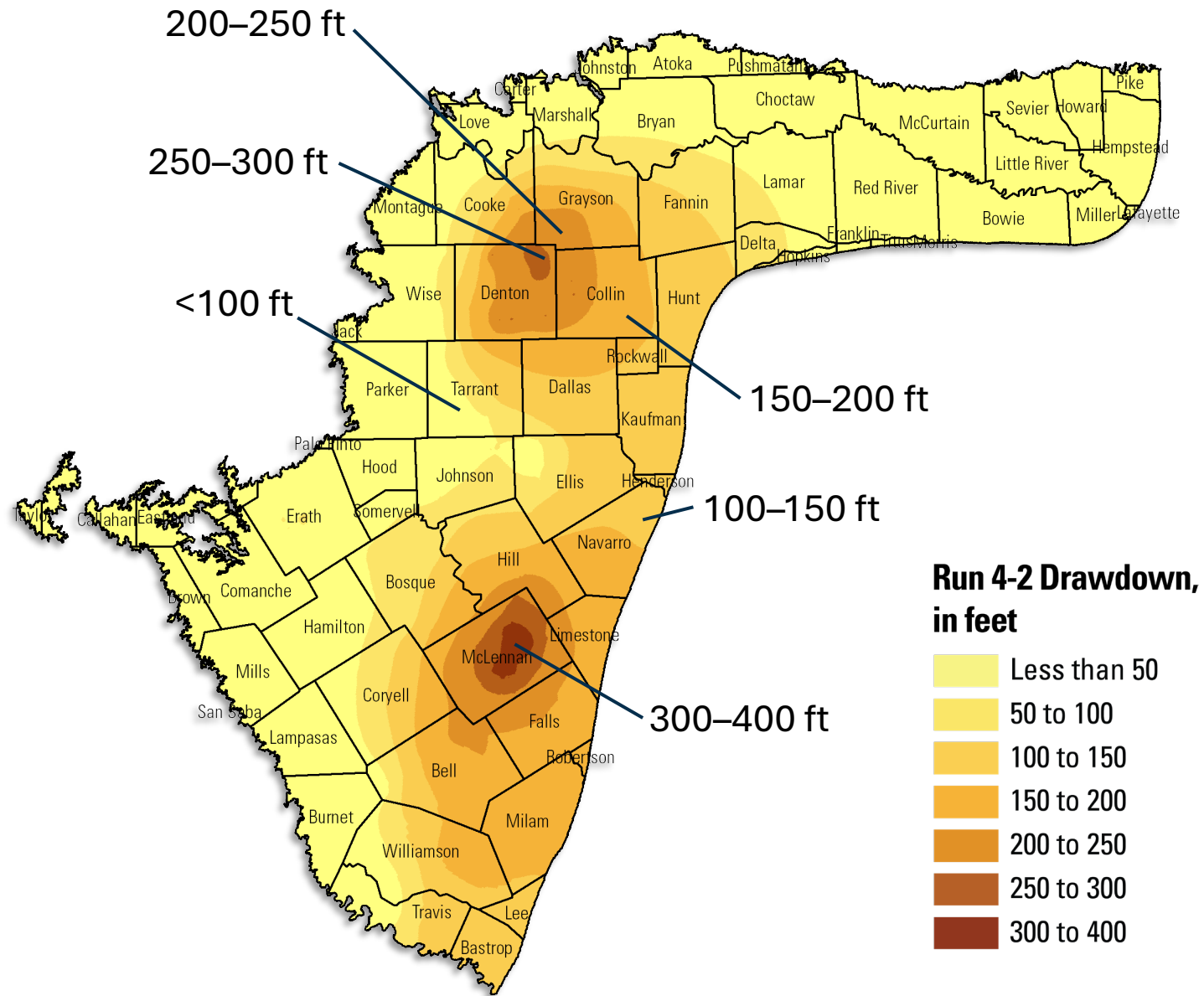
- 2080 water level – top of Paluxy
- Mean available drawdown: 1,278 feet
- Median available drawdown: 955 feet
- Most areas of the model have between 100 and 400 feet of available drawdown
- Most downdip areas not shown on the map—no Paluxy water use



Run 4-2 Drawdown

Hosston (Layer 8) Drawdown

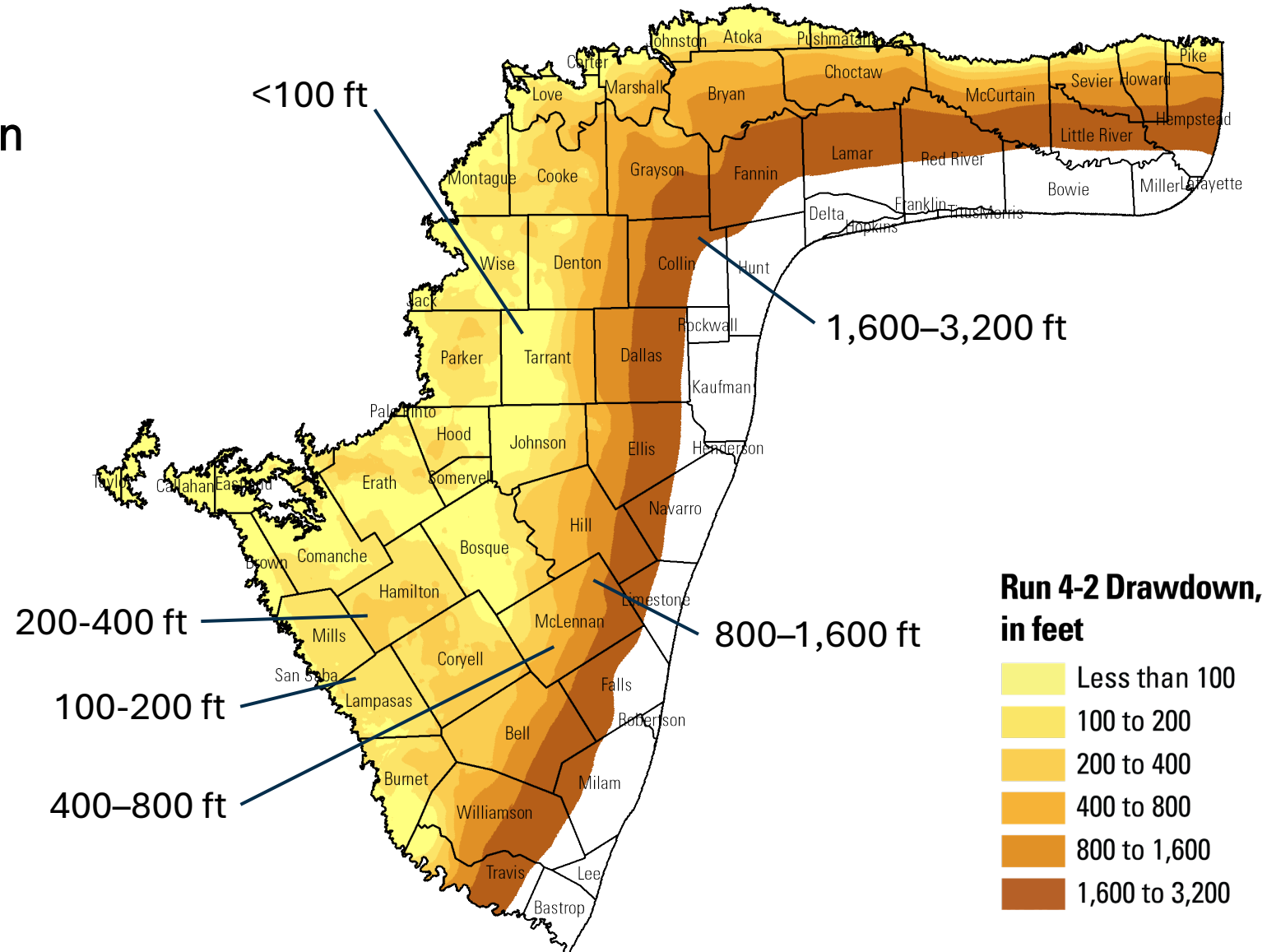
- Drawdown 2020–2080 from Run 4-2
- Mean drawdown: 75.5 feet
- Median drawdown: 47.15 feet



Run 4-2 Drawdown

Hosston (Layer 8) Available Drawdown

- 2080 water level – top of Hosston
- Mean available drawdown: 1,479 feet
- Median available drawdown: 665 feet



Run 4.2: Allowable Drawdown

GCD	County	Aquifer	Location*	Desired Future Condition (in feet)							
				2020	2030	2040	2050	2060	2070	2080	Run 11 (previous round)
North Texas GCD	Collin	Antlers	both	38.35	144.5	176.78	198.25	214.68	227.74	238.34	583.45
		Glen Rose	both	3.7	60.38	114.71	159.9	197.23	228.24	254.19	365.79
		Paluxy	both	13.91	77.62	105.8	125.72	141.22	153.5	163.32	704.77
		Twin Mountains	both	27.94	108.23	137.85	157.34	171.49	182.06	190.15	559.87
		Woodbine	both	29.19	194.9	247.99	271.76	284.82	292.86	298.25	481.8
	Cooke	Antlers	both	7.8	37.18	44.52	49.4	53.41	56.86	59.9	178.36
		Woodbine	both	0.05	0.26	0.39	0.49	0.56	0.62	0.67	2.66
	Denton	Antlers	both	33.22	101.24	115.25	124.18	131.14	136.82	141.61	404.5
		Glen Rose	both	1.72	28.15	57.12	83.34	106.43	126.68	144.53	367.03
		Paluxy	both	7.95	37.77	52.39	63.43	72.37	79.69	85.69	697.53
		Twin Mountains	both	58.93	155.98	179.48	193.65	203.74	211.28	217.08	742.97
		Woodbine	both	-1.61	0.21	1.99	2.76	3.23	3.55	3.76	20.38

*The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the aquifer system.

Run 4.2: Available Drawdown

GCD	County	Aquifer	Drawdown Type	Location***	Available Drawdown (in feet)							Percent Available Drawdown						
					Initial	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080	
North Texas GCD	Collin	Antlers	Available Drawdown*	subcrop	931	877	857	841	828	817	807	94%	92%	90%	89%	88%	87%	
		Glen Rose		subcrop	2,025	1,964	1,910	1,865	1,827	1,796	1,771	97%	94%	92%	90%	89%	87%	
		Paluxy		subcrop	1,695	1,618	1,589	1,569	1,554	1,542	1,532	95%	94%	93%	92%	91%	90%	
		Twin Mountains		subcrop	2,488	2,366	2,327	2,300	2,279	2,262	2,248	95%	94%	92%	92%	91%	90%	
		Woodbine		subcrop	497	302	249	225	212	204	199	61%	50%	45%	43%	41%	40%	
	Cooke	Antlers	Available Drawdown*	subcrop	141	153	154	152	150	148	146	109%	109%	108%	106%	105%	104%	
		Woodbine	Saturated Thickness**	outcrop	86	86	86	86	86	86	86	100%	100%	99%	99%	99%	99%	
	Denton	Antlers	Available Drawdown*	subcrop	228	224	219	214	209	205	202	98%	96%	94%	92%	90%	89%	
		Glen Rose		subcrop	771	742	713	687	664	644	626	96%	93%	89%	86%	84%	81%	
		Paluxy		subcrop	525	487	472	461	452	445	439	93%	90%	88%	86%	85%	84%	
		Twin Mountains		subcrop	1,066	926	898	883	871	861	853	87%	84%	83%	82%	81%	80%	
		Woodbine		subcrop	107	106	102	101	100	99	98	100%	96%	94%	93%	93%	92%	
		Woodbine	Saturated Thickness**	outcrop	162	162	162	162	162	162	162	100%	100%	100%	100%	100%	100%	

*Available Drawdown is defined as the water level minus the top of the respective formation

**Saturated Thickness is defined as the water level minus the bottom of the respective formation

***The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the

Run 4.2: Model Available Groundwater

GCD	County	Aquifer	Location*	MAG (Run 4-2, in acre-feet per year; AFY)							MAG from Run 11 (previous round, in AFY)					
				2020	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
North Texas GCD	Collin	Antlers	both	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,962	1,962	1,962	1,962	1,962	1,962
		Glen Rose	both	23	23	23	23	23	23	23	83	83	83	83	83	83
		Paluxy	both	2,054	2,054	2,054	2,054	2,054	2,054	2,054	1,548	1,548	1,548	1,548	1,548	1,548
		Twin Mountains	both	1,248	1,248	1,248	1,248	1,248	1,248	1,248	2,202	2,202	2,202	2,202	2,202	2,202
		Woodbine	both	5,977	5,977	5,977	5,977	5,977	5,977	5,977	4,254	4,254	4,254	4,254	4,254	4,254
	Cooke	Antlers	both	6,284	6,057	6,001	5,976	5,961	5,949	5,939	10,522	10,522	10,522	10,522	10,522	10,522
		Woodbine	both	230	230	230	230	230	230	230	800	800	800	800	800	800
	Denton	Antlers	both	14,284	14,239	14,216	14,184	14,149	14,114	14,092	16,557	16,557	16,557	16,557	16,557	16,557
		Glen Rose	both	147	147	147	147	147	147	147	339	339	339	339	339	339
		Paluxy	both	2,381	2,381	2,381	2,381	2,381	2,381	2,381	4,823	4,823	4,823	4,823	4,823	4,823
		Twin Mountains	both	3,099	3,099	3,099	3,099	3,099	3,099	3,099	8,372	8,372	8,372	8,372	8,372	8,372
		Woodbine	both	0	0	0	0	0	0	0	3,609	3,609	3,609	3,609	3,609	3,609

*The "outcrop" designation is applicable for counties where an aquifer unit outcrops at land surface, generally for counties along the western part of the aquifer system.

Recommended Next Steps

- Tech committee meeting—further discuss Run 4-1 and Run 4-2 results
- Consider additional Run Request and Funding

CHANGING THE NAME OF A COMPANY

SECTION 10.1

ARTICLE 10

ARTICLE 10.1

SECTION 10.1

ARTICLE 10

SECTION 10.1

ATTACHMENT 12 b.

ARTICLE 10.1

SECTION 10.1

ARTICLE 10

SECTION 10.1

ARTICLE 10

SECTION 10.1

ARTICLE 10

SECTION 10.1

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT

Well Registration Summary

(as of 7/31/2025)

Well Type	Collin	Cooke	Denton	Total NTGCD	New Registrations July 2025
Domestic	103	818	1236	2157	19
Public Water System	44	79	259	382	2
Irrigation	112	9	239	360	0
Surface Impoundment	71	22	157	251	3
Livestock	7	101	77	185	0
Oil / Gas	1	5	64	70	0
Agriculture	12	18	55	85	1
Commercial	9	11	59	79	1
Golf Course Irrigation	15	2	21	38	0
Industrial / Manufacturing	12	7	12	32	1
*Other	6	5	8	19	0
Monitoring	0	5	6	11	0
TOTALS	392	1082	2193	3669	27

NOTE: Plugged wells have been excluded

*Examples of "Other" uses: Closed Loop Geothermal, Construction, and Fire Suppression

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT

Well Registration Summary

(as of 8/31/2025)

Well Type	Collin	Cooke	Denton	Total NTGCD	New Registrations August 2025
Domestic	103	828	1252	2183	26
Public Water System	44	79	264	387	5
Irrigation	112	9	242	363	3
Surface Impoundment	71	22	161	255	4
Livestock	7	101	78	186	1
Oil / Gas	1	5	64	70	0
Agriculture	12	18	55	85	0
Commercial	9	11	59	79	0
Golf Course Irrigation	15	2	21	38	0
Industrial / Manufacturing	12	7	12	32	0
*Other	6	5	8	19	0
Monitoring	0	5	6	11	0
TOTALS	392	1092	2222	3708	39

NOTE: Plugged wells have been excluded

*Examples of "Other" uses: Closed Loop Geothermal, Construction, and Fire Suppression

ADJOURN