2021 ANNUAL REPORT

TO

MTGCD BOARD OF DIRECTORS

ON

ATTAINMENT OF MANAGEMENT PLAN OBJECTIVES

February 10th, 2022

MTGCD Board of Directors:

This is the 18th Annual Report to the Board of Directors of the Middle Trinity Groundwater Conservation District. Its purpose is to inform the Board of Directors about the degree to which the objectives of MTGCD'S Management Plan have been achieved.

The COVID pandemic continued to limit opportunities for large educational and informational groups to discuss the importance of groundwater conservation. However, loosening restrictions and school board/city hesitancy allowed for minor return to normal.

Regardless of the many impacts, MTGCD was successful in meeting all its Management Plan Objectives. I attribute this success to the hard work, flexibility, and dedication of the MTGCD staff and the support and guidance from the MTGCD Board of Directors. This report has been put together with the best of my ability.

Respectfully:

Patrick F. Wagner

A.1. Objective – Annually the District will require all new wells that are constructed within the boundaries of the District to be registered with the District pursuant to the District Rules.

A.1. Performance Standard – The number of wells registered by the District for each year will be included in the Annual Report submitted to the Board of Directors.

A.1. Performance Measurement – A total of 479 new wells have been registered with the District during the one year reporting period beginning January 1, 2021.

A.2. Objective – The District will annually require all water wells subject to the District's permitting requirements to be permitted pursuant to the District rules.

A.2. Performance Standard – The number of water wells permitted by the District for each year will be included in the Annual Report submitted to the Board of Directors of the District.

A.2. Performance Measurement – A total of 133 wells have been permitted by the District during the reporting period beginning January 1, 2021. None were Grandfather Permits.

A.3. Objective – The District will annually regulate the production of groundwater by maintaining a system of permitting which authorizes the use and production of groundwater within the boundaries of the District pursuant to the District Rules.

A.3. Performance Standard – The District will annually accept and process applications for the permitted use of groundwater in the District in accordance with the permitting system established by the District Rules. The number and type of applications made for the permitted use of groundwater in the District, and the number and type of permits issued by the District, will be included in the Annual Report given to the Board of Directors.

A.3. Performance Measurement – A total of 133 permit applications have been processed by the District since January 1, 2021. All were for operating permits. All permit applications received permits pursuant to the rules of the District.

A.4. Objective – The District will annually attempt to increase public awareness regarding the purpose, objectives and mission of the District.

A.4. Performance Standard – The District will provide at least two of the following on an annual basis: informal presentations to public service organizations or community groups; informal radio spots; or manned kiosks at public expositions.

A.4. Performance Measurement – During this reporting period, the District has provided presentations for:

1)	Keller Williams Realtor	Talk	1/15/21
2)	Clifton Rotary Club	Talk	3/18/21
3)	4H Project Wet Training	Talk	3/27/21
4)	Texas A&M Agrilife	Talk	5/19/21
5)	Erath County Master Gardeners	Talk	7/07/21
6)	Leadership Stephenville	Host	10/20/21
7)	Central Texas Dairy Day	Kiosk	12/21/21
8)	Texas Rural Living	Talk	12/16/21

An example of how each of the 8 presentations are documented for audit purposes follows.

Realtor Workshop

Keller Williams
January 15, 2021

Introduction

Please feel free to drop any questions in the chatbox or unmute at any time!

Have you attended one of our workshops before?

Do you currently use our map?

What are some common questions about wells, available water, septic, irrigation?

District Info

1. Benefits
2. FAQ
3. Explain different facts about the districts and differences
4. The map
5. Transition to website through link

Realtor HUB

1. Go through the links and explain
2. Realtor Notice
3. Useful Links
4. District Map

Services

1. Monitoring Wells
2. Well Water Quality Testing - Owner must request the water test
3. Well Capping and Plugging

4. Public Map

Public Map

Tie Rules in Here - Refer to the Rules Summary

1. Ask again who uses the map
2. Book Marks
3. TWDB Wells - Purple
4. TWDB Well Reports - Orange
5. County Lines
6. Rings
7. Use subdivision example & 2 acre example
8. Well registration, grandfathered wells, transfers, research, permits, new construction, replacements

Education

Rainwater Harvesting

Tax Exempt

Formula

Aquifer Terminology

- Rule of Capture
- Unconfined/Confined Aquifer
- Cone of Depression

The Ditch

4-H Water Ambassadors

TEXAS A&M AGRILIFE EXTENSION

Pecan Group Meeting
19 May 2021

- Introductions
- Crop conditions, scab casebearer, crop load
- April 16th Pecan meeting- topics and speakers ok?
- Joe Cooper and Johnny Wells MTGCD
- Lunch
- General Discussion
- Adjourn

"I used to have
a handle on life – but it broke."

Be sure to thank CECA for today's meal.

Erath County Master Gardeners Class
July 6-16, 2021
9:00-4:00 (working lunch)
A&M Research Center

Date	Morning: 9:00-12:30	Afternoon:12:30-4:00
July 6	Welcome and Orientation - County Agent Soils – Allan Deebler -NRCS	Turfgrass – Dr. Hennen Cummings
July 7	Entomology – Sonja Swiger	Ground water 101 – Stephanie Keith (Master Gardener)
July 8	Plant Structure – Jayla Frye Virtual Day – Note: we will have our monthly business meeting and include the new class members	Soils – Jack Mouer
July 9	Vegetable Gardening – Ken Stokes Herbs – Pam Littleton	Plant Pathology – Sheila Mcbride
July 10-11	weekend	
July 12	Landscaping – Jerry Parr (all day)	
July 13	Butterflies – Camille Eckersley	Tree Care, Disease, Pruning – Rene Burks
July 14	Earth Kind – Tim Harman	Earth Kind Research – Steve George
July 15	Reporting system and test review	Fieldtrip to Granbury Demonstration Gardens
July 16	We will meet at the Museum in the classroom. a.m. Rainwater Harvesting: p. m. Water Quality and Irrigation – Dotty Woodson	

Presentations subject to change.

Self wicking planting tubs:

Leon Slone - https://www.youtube.com/watch?v=k429cPlH6mM

Arms Family Homestead - https://www.youtube.com/watch?v=E8aE9nd8D4s

LEADERSHIP STEPHENVILLE

TECHNOLOGY, TRANSPORTATION, EDUCATION

October 20, 2021

7:30 – 8:15 AM **Breakfast / Leadership Discussion**
(Choices Clinic, 775 S. Harbin Dr.)

8:15 – 9:15 AM **NEHRING TECHNOLOGY** (presenting at Choices Clinic)
Kris Nehring, Owner *Class of 2010
1390 N. Harbin Dr., Stephenville TX 76401
(254) 434-4081, kris@nehring.com

Load CARR Bus at Choices Clinic, Travel to Huston Academy

9:30 – 10:15 AM **ERATH EXCELS! HUSTON ACADEMY**
Mike Scott, Superintendent (254) 965-8883, mscott@erath-excels.org *Class of 2000
Carol Taylor, Principal (254) 918-5024, ctaylor@erath-excels.org *Class of 2007
680 Peach Orchard Rd., Stephenville TX 76401, hustonacademy.com

Travel to MTGCD

10:30 – 11:30 AM **MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT (MTGCD)**
Stephanie Keith, Education & Public Relations Coordinator
(254) 965-6705, stephanie@middletrinitygcd.org
930 N. Wolfe Nursery Rd, Stephenville TX 76401, middletrinitygcd.org

Travel to City Hall at City Limits

11:45 – 1:00 PM **LUNCH** at Optimist Club (City Hall at City Limits, 1907 E. Washington)
Presentation by **Cyndi Smith, Erath County Emergency Management Coordinator**
(254) 965-1326, eratheoc@co.erath.tx.us

Travel to TxDOT

1:15– 2:00 PM **Texas Department of Transportation (TxDOT)**
Jason Medders, Maintenance Supervisor
2281 E. Washington, Stephenville, TX 76401
(254) 965-3511, jason.medders@txdot.gov

Travel to Ranger College

2:15 – 3:30 PM **RANGER COLLEGE ERATH COUNTY**
Dr. Matt Underwood, Senior Vice President–Brown & Erath Counties *Class of 2015
1835 W. Lingleville, Rd., Stephenville TX 76401
(254) 485-4469, munderwood@rangercollege.edu

Return to Choices Clinic

3:45 – 4:30 PM **TOTELCOM NETWORKS** (presenting at Choices Clinic)
Michael Prather, Vice President – Technology *Class of 2016
1189 W. South Loop, Stephenville, TX 76401
(254) 965-4323, michael.prather@totelcom.net

4:30 – 5:00 PM *Complete Evaluations / Thank You Notes / Wrap-up Discussion*

LEADERSHIP STEPHENVILLE

Agenda

10:15-10:25	Tour Office/Introductions
10:25-10:35	History of District: Johnny & Jerry
10:35-10:50	Services Provided by District- Well Registration/Transfer: Debbie Well Plugging/Water Quality: Johnny Website: Crystal
10:50-11:10	Education: Stephanie Ambassador Program Scholarships Workshops The Ditch
	Questions

B.1. Objective – At least once each year, the District will evaluate the District Rules to identify whether or not any amendments are needed to reduce the amount of waste of groundwater within the boundaries of the District.

B.1. Performance Standard – The District will include a discussion of the annual evaluation of the District Rules and the determination of whether any amendments to the Rules are needed to prevent the waste of groundwater in the Annual Report to the Board of Directors.

B.1. Performance Measurement – During the reporting period, at the regular stated meeting of March 4, 2021, a Rules Committee was formed consisting of 1 Board member from each county to review any possible Rule changes. On November 4, 2021 a public hearing or proposed Rules changes was held at the District office and at the regular stated meeting of November 4, 2021 the Board of Directors voted to adopt amendments to the District Rules. Copies of the agendas and official minutes of the Board Meeting and Hearing cited are available for viewing in the District Office.

B.2. Objective – The District will annually provide information to the public on eliminating and reducing wasteful practices in the use of groundwater by publishing information on groundwater waste reduction on the District's website at least once a year.

B.2. Performance Standard – A copy of the information on groundwater waste reduction will be provided on the District's website and the information published on the website will be included in the District's Annual Report to be provided to the Board of Directors.

B.2. Performance Measurement – Copies of the groundwater conservation information posted on the MTGCD website follows.

One Step at a Time

Middle Trinity Groundwater Conservation District (/blog?author=5a205d6d5e0ed8f1cf339b4c) · November 3, 2021 (/blog/onestepattime)

Often times when water conservation comes up in conversation we are referring to watering restrictions, turning off the sprinkler system, or the potential for yet another extended drought. What if we took a look into our lawns and landscaping features for a minute?

One small step to incorporating water conservation into landscape features is to plant for success. There are so many beautiful native species options that can significantly reduce a scape's water consumption by approximately 80%. Deeper root systems keep the plants thriving in the crazy Texas weather patterns.

Trading out thirsty turf grasses like Saint Augustine and Bermuda for native grass mixes like Thunder Turf can also lower lawn irrigation needs. Mulch is another helpful addition to beds. Just a minimum of 3" to 6" of organic mulch will help maintain moisture levels and reduce watering frequency.

Don't set it and forget it! Sprinkler systems have their benefits. Smart controllers, rain sensors, and even soil moisture meters can all aid in a conservative approach to landscape irrigation, but even with all that technology human involvement is still needed. It is important to closely monitor the landscape to ensure that water is actually needed. Checking the soil moisture level, sensors, controllers, and sprinkler heads on a regular basis will cut down on unnecessary watering.

Rainwater harvesting can also be incorporated into lawn irrigation systems. There are many system options that can be used to fit your needs and budget. Not sure where to start? Check out these sizing tools provided by the Texas Water Development Board here (https://www.twdb.texas.gov/innovativewater/rainwater/docs.asp#title-02).

Other Resources:

Texas Smart Scape (http://www.txsmartscape.com/design-tools/watering-conservation.php)

Native Plant Society of Texas (http://npsot.org/wp/)

Erath County Master Gardeners (https://www.facebook.com/ErathCoMasterGardeners)

Prairie Oaks Master Naturalists (https://www.facebook.com/PrairieOaksMasterNaturalist)

❤ 0 Likes

Newer Post
Notice of Permit Hearing and Board Meeting (/blog/2021/11/29/notice-of-permit-hearing-and-board-meeting)

Older Post
Notice of Permit Hearing and Board Meeting (/blog/2021/10/25/notice-of-permit-hearing-and-board-meeting)

CONTACT US (/CONTACT-US)

MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT, 930 NORTH WOLFE NURSERY ROAD, STEPHENVILLE, TX, 76401, UNITED STATES (254)965-6705

B.3. Objective - The District will require the plugging of at least one deteriorated or abandoned well identified by the District in accordance with the Texas Department of Licensing and Regulation, Water Well Drillers and Pump Installers Rules (16 Texas Administrative Code, Chapter 76).

B.3. Performance Standard – At least once each year, the District will produce a report that describes the activities of the District in plugging a deteriorated or abandoned water well identified by the District and the report will be included in the Annual report given to the Board of Directors of the District. If the District is not able to identify a deteriorated or abandoned well within its boundaries in a particular year, the District will include a discussion in the Annual Report that no deteriorated or abandoned well was identified in the District for the applicable year.

B.3. Performance Measurement – During the reporting period, the District identified and plugged thirty (34) water wells under the supervision of the well owners. Copies of the Well Plugging Report (TDLR FORM a004WWD) were provided to the well owners and copies sent to the Texas Department of Licensing and Regulation as required by Texas Administrative Code, Chapter 76. For illustrative purposes, a copy of one of the Plugging Reports is attached. All copies of the Plugging Reports are on file in the District Office as part of documentation of performance.

Texas Department of License and Regulation
Water Well Driller/Pump Installer Program
P.O. Box 12157 Austin, Texas 78711 (512)334-5540 FAX (512)463-8616
Email address: water.well@tdlr.texas.gov

This form must be completed and filed with the department within 30 days following the plugging of the well.

PLUGGING REPORT

A. WELL IDENTIFICATION AND LOCATION DATA

1) OWNER

Name	Address	City	State	Zip
Ronald Smith	13001 Pioneer Ave	Oakdale	CA	95361

2) WELL LOCATION

County	Physical Address	City	State	Zip
Comanche	2651 CR 343	Dublin	Tx	76446

3) Owner's Well No.	4) Lat. 31.978762	5) Long. -98.365272	Well Tracking#

6) Type of Well [X] Water [ ] Monitor [ ] Injection [ ] De-Watering [ ] Other:

Driller, Pump Installer, or Landowner performing the plugging operations must locate and identify the location of the well using a Global Positioning System (GPS) or Internet Mapping Website and provide the accurate Latitude and Longitude Coordinates in sections 4 and 5 above.

B) HISTORICAL DATA ON WELL TO BE PLUGGED (if available)

7) Driller: Unknown	License No.: N/A

8) Drilled N/A	9) Diameter of hole 3.5 Inches	10) Total depth of well 25 feet.

C. CURRENT PLUGGING DATA

11) Date well plugged: 10 / 5 / 2021

13) Name of Licensee or Well Owner performing the plugging: Owner

License No. N/A	Variance #

CASING AND CEMENTING DATA RELATIVE TO THE PLUGGING OPERATIONS.

CASING LEFT IN WELL

DIAMETER (inches)	FROM (feet)	TO (feet)
4	-25	-.5

CEMENT/BENTONITE PLUG(S) PLACES IN WELL

FROM (feet)	TO (feet)	SACKS
-25	-2	3 Bentonite
-2	+.5	1 Cement

12) REMOVE ALL REMOVEABLE CASING
Please check box beside the method of plugging used

- [ ] Tremie pipe cement from bottom to top.
- [ ] Tremie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet.
- [X] Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth, cement top 2 feet.
- [ ] Large diameter (36 inches or greater) well filled with clay material from top to bottom.
- [ ] Other describe in comments below

COMMENTS

Old well that had collapsed at ~~25~~ 2ft

D. VALIDATION OF INFORMATION INCLUDED IN FORM

I certify that I plugged this well (or the well was plugged under my supervision) and that all of the statements herein are true and correct. I understand that failure to complete items 1 through 14 will result in the report(s) being returned for completion and resubmitted.

Company or individual's Name (type or print)	Ronald Smith		
Address 13001 Pioneer Ave	City Oakdale	State CA	Zip 95361

Signature Licensed Driller/Pump Installer	/ / Date	Signature Apprentice or Unlicensed Assistant	/ / Date

TDLR FORM 004WWD 04/17 *White - TDLR* *Yellow - Owner* *Pink - Driller/Pump Installer*

Texas Department of License and Regulation

Water Well Driller/Pump Installer Program
P.O. Box 12157 Austin, Texas 78711 (512)334-5540 FAX (512)463-8616
Email address: water.well@tdlr.texas.gov

This form must be completed and filed with the department within 30 days following the plugging of the well.

PLUGGING REPORT

A. WELL IDENTIFICATION AND LOCATION DATA

1) OWNER

Name	Address	City	State	Zip
Huckabay ISD	200 CR 421	Stephenville	TX	76401

2) WELL LOCATION

County	Physical Address	City	State	Zip
Erath	200 CR 421	Stephenville	TX	76401

3) Owner's Well No.	4) Lat. 32.342169	5) Long. -98.300775	Well Tracking#

6) Type of Well [X] Water [ ] Monitor [ ] Injection [ ] De-Watering [ ] Other:

Driller, Pump Installer, or Landowner performing the plugging operations must locate and identify the location of the well using a Global Positioning System (GPS) or Internet Mapping Website and provide the accurate Latitude and Longitude Coordinates in sections 4 and 5 above.

B) HISTORICAL DATA ON WELL TO BE PLUGGED (if available)

7) Driller: Owner	License No.: N/A

8) Drilled N/A	9) Diameter of hole 4 Inches	10) Total depth of well 80 feet.

C. CURRENT PLUGGING DATA

11) Date well plugged: 8 / 26 / 2021

13) Name of Licensee or Well Owner performing the plugging: Owner

License No. N/A	Variance #

4) CASING AND CEMENTING DATA RELATIVE TO THE PLUGGING OPERATIONS.

CASING LEFT IN WELL

DIAMETER (inches)	FROM (feet)	TO (feet)
4	-80	+2

CEMENT/BENTONITE PLUG(S) PLACES IN WELL

FROM (feet)	TO (feet)	SACKS
-80	-6	9 Bentonite
-6	-2	1 Cement

12) REMOVE ALL REMOVEABLE CASING

Please check box beside the method of plugging used

- [ ] Tremie pipe cement from bottom to top.
- [ ] Tremie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet.
- [X] Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth, cement top 2 feet.
- [ ] Large diameter (36 inches or greater) well filled with clay material from top to bottom.
- [ ] Other describe in comments below

COMMENTS

Disinfected well with chlorine

D. VALIDATION OF INFORMATION INCLUDED IN FORM

I certify that I plugged this well (or the well was plugged under my supervision) and that all of the statements herein are true and correct. I understand that failure to complete items 1 through 14 will result in the report(s) being returned for completion and resubmitted.

Company or individual's Name (type or print)	Huckabay ISD			
Address 200 CR 421	City Stephenville	State TX	Zip 76401	

Signature Licensed Driller/Pump Installer	/ / Date	Signature Apprentice or Unlicensed Assistant	/ / Date

Wes Corzine
Principal

TDLR FORM 004WWD 04/17 *White - TDLR* *Yellow - Owner* *Pink - Driller/Pump Installer*

B.4. Objective – The District will provide at least one request each year to the Texas Railroad Commission which asks whether any new salt water or waste disposal wells have been permitted by the Texas Railroad commission to operate within the District within the most recent fiscal year.

B.4. Performance Standard – A copy of each request provided to the Texas Railroad Commission each year requesting information regarding the location of any new salt water or waste disposal wells permitted to operate within the District will be included in the Annual Report submitted to the Board of Directors of the District.

B.4. Performance Measurement – A copy of the letter that was submitted to the Texas Railroad Commission along with the Certified Mail Return Receipt follows.

mtgcd

Middle Trinity
Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, TX 76401
Phone: 254-965-6705 Fax: 254-965-6745
www.middletrinitygcd.org

October 27, 2021

Railroad Commission of Texas
Oil and Gas Division
Attn: David Hill
P.O. Box 12967
Austin, Texas 78711-2967

Dear David:

The purpose of this correspondence is to request the locations of any new (permitted since August of 2019) salt water or waste disposal injection wells within the boundaries of the Middle Trinity Groundwater Conservation District (MTGCD) and the results of integrity tests performed on these and all existing wells within the District since August of 2019. The MTGCD serves Bosque, Comanche, Coryell and Erath Counties and its boundaries are the county lines. It would be helpful if the well location data includes the GPS coordinates of each site. Additionally, we would like to have information regarding size, depth, date drilled and present status of the well (capped, plugged, ownership transferred to landowner, well owner's name, etc.).

The voters of Comanche and Erath Counties confirmed the Middle Trinity Groundwater Conservation District on May, 5, 2002. Voters in Bosque County affirmed annexation by the MTGCD on May 5, 2009, and voters in Coryell County affirmed annexation on November 3, 2009. The MTGCD is a political subdivision of the State and gets its statutory authority from Chapter 36 of the Texas Water Code. The purpose of the District is to preserve, conserve and protect the quality and quantity of the groundwater resources of Bosque, Comanche, Coryell and Erath Counties.

The Texas Water Development Board approved the MTGCD's Management Plan on February 6, 2020. Management objectives in the District's Management Plan include requesting the location of salt water and waste disposal injection wells drilled within the past year within the boundaries of the District and the results of integrity testing performed on all wells within the District by the Texas Railroad Commission.

The MTGCD appreciates the Texas Railroad Commission's cooperation in this matter. Please call me if you need any additional information regarding this request.

Sincerely,

Johnny Wells
General Manager
MTGCD
(254) 965-6705

Middle Trinity
Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, TX 76401
Phone: 254-965-6705 Fax: 254-965-6745
www.middletrinitygcd.org

7020 1290 0000 6171 5647

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

OFFICIAL USE

Certified Mail Fee	$3.75
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	$
☐ Return Receipt (electronic)	$
☐ Certified Mail Restricted Delivery	$
☐ Adult Signature Required	$
☐ Adult Signature Restricted Delivery	$0.00
Postage	$0.58
Total Postage and Fees	$7.33

0523
03

Postmark Here
STEPHENVILLE TX 76401
OCT 27 2021
10/27/2021

Sent To: Railroad Commission of Texas
Street and Apt. No., or PO Box No.: P.O. Box 12967
City, State, ZIP+4®: Austin, TX 78711-2967

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Middle Trinity
Groundwater Conservation District

930 Wolfe Nursery Rd.
Stephenville, TX 76401
Phone: 254-965-6705 Fax: 254-965-6745
www.middletrinitygcd.org

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Railroad Commission of Texas
Oil and Gas Division
P.O. Box 12967
Austin, TX 78711-2967

9590 9402 6543 1028 0062 34

2. Article Number *(Transfer from service label)*

7020 1290 0000 6171 5647

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from Item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
NOV 01 2021

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

B.5. Objective – The District will transmit at least one request each year to the Texas Railroad Commission which asks that the Commissioner provide a copy of the results of integrity test performed on salt water or waste water disposal injection wells permitted by the Texas Railroad commission to operate within the District.

B.5. Performance Standard – A copy of each request provided to the Texas Railroad Commission each year requesting the results of integrity testing performed on salt water or waste disposal injection wells permitted by the Texas Railroad Commission to operate within the District will be included in the Annual Report submitted to the Board of Directors of the District.

B.5. Performance Measurement – A copy of the letter that was submitted to the Texas Railroad Commission along with the Certified Mail Return Receipt follows.

mtgcd

Middle Trinity
Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, TX 76401
Phone: 254-965-6705 Fax: 254-965-6745
www.middletrinitygcd.org

October 27, 2021

Railroad Commission of Texas
Oil and Gas Division
Attn: David Hill
P.O. Box 12967
Austin, Texas 78711-2967

Dear David:

The purpose of this correspondence is to request the locations of any new (permitted since August of 2019) salt water or waste disposal injection wells within the boundaries of the Middle Trinity Groundwater Conservation District (MTGCD) and the results of integrity tests performed on these and all existing wells within the District since August of 2019. The MTGCD serves Bosque, Comanche, Coryell and Erath Counties and its boundaries are the county lines. It would be helpful if the well location data includes the GPS coordinates of each site. Additionally, we would like to have information regarding size, depth, date drilled and present status of the well (capped, plugged, ownership transferred to landowner, well owner's name, etc.).

The voters of Comanche and Erath Counties confirmed the Middle Trinity Groundwater Conservation District on May, 5, 2002. Voters in Bosque County affirmed annexation by the MTGCD on May 5, 2009, and voters in Coryell County affirmed annexation on November 3, 2009. The MTGCD is a political subdivision of the State and gets its statutory authority from Chapter 36 of the Texas Water Code. The purpose of the District is to preserve, conserve and protect the quality and quantity of the groundwater resources of Bosque, Comanche, Coryell and Erath Counties.

The Texas Water Development Board approved the MTGCD's Management Plan on February 6, 2020. Management objectives in the District's Management Plan include requesting the location of salt water and waste disposal injection wells drilled within the past year within the boundaries of the District and the results of integrity testing performed on all wells within the District by the Texas Railroad Commission.

The MTGCD appreciates the Texas Railroad Commission's cooperation in this matter. Please call me if you need any additional information regarding this request.

Sincerely,

Johnny Wells
General Manager
MTGCD
(254) 965-6705

RAILROAD COMMISSION OF TEXAS
OFFICE OF GENERAL COUNSEL

December 7, 2021

Johnny Wells
Middle Trinity Groundwater Conservation District
930 Wolfe Nursery Road
Stephenville, TC 76401

RE: Open Records Request filed November 10, 2021, concerning salt water or waste disposal injection wells within boundaries of MTGCD

Dear Mr. Wells,

Enclosed is the only information found to be responsive to your request.

I tried to email this information, but it bounced back as being too large for your email to accept.

Sincerely,

Karen Sanchez
Legal Assistant

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

PERMIT TO INJECT FLUID INTO A RESERVOIR PRODUCTIVE OF OIL AND GAS

PROJECT NO. F-21955

ARNOT OIL COMPANY, LLC
101 EAST WALKER SUITE 901
BRECKENRIDGE TX 76424

Authority is granted to inject into the well identified herein in accordance with Statewide Rule 46 of the Railroad Commission of Texas and based on the information contained in the application (Forms H-1 and H-1A) dated May 12, 2020 for the permitted interval of the MISSISSIPPIAN formation and subject to the following terms and special conditions:

SOLOMON (31430) LEASE
DOWNING (MISSISSIPPIAN REEF) FIELD
COMANCHE COUNTY
DISTRICT 7B

WELL IDENTIFICATION AND PERMIT PARAMETERS:

Well No.	API No.	UIC Number	Permitted Fluids	Top Interval (feet)	Bottom Interval (feet)	Maximum Liquid Daily Injection Volume (BBL/day)	Maximum Gas Daily Injection Volume (MCF/day)	Maximum Surface Injection Pressure for Liquid (PSIG)	Maximum Surface Injection Pressure for Gas (PSIG)
4	09331585	000123559	Salt Water	2,865	2,975	500		1,400	

SPECIAL CONDITIONS:

Well No.	API No.	Special Conditions
4	09331585	**1. For wells with long string casing set more than 100 feet below the permitted injection interval, the plug back depth shall be within 100 feet of the bottom of the permitted injection interval. For wells with open hole completions, the plug back depth shall be no deeper than the bottom of the permitted injection interval.** **2. (A) If the well is drill-deepened or re-entered past its current total depth of 2789 feet, a new drilling permit must be obtained pursuant to Statewide Rule 5(c).** **(B) If other formations, besides those identified on this permit, are encountered when drill-deepening or re-entering the well, the operator may not inject into those formations until the operator receives an amended injection permit that authorizes injection into those additional formations.**

STANDARD CONDITIONS:

1. Injection must be through tubing set on a packer.

2. The District Office must be notified 48 hours prior to:
   a. running tubing and setting packer;
   b. beginning any work over or remedial operation;
   c. conducting any required pressure tests or surveys.

3. The wellhead must be equipped with a pressure observation valve on the tubing and for each annulus.

4. Prior to beginning injection and subsequently after any work over, an annulus pressure test must be performed. The test pressure must equal the maximum authorized injection pressure or 500 psig, whichever is less, but must be at least 200 psig. The test must be performed and the results submitted in accordance with the instructions of Form H-5.

5. The injection pressure and injection volume must be monitored at least monthly and reported annually on Form H-10 to the Commission's Austin office.

6. Within 30 days after completion, conversion to disposal, or any work over which results in a change in well completion, a new Form W-2 or G-1 must be filed to show the current completion status of the well. The date of the disposal well permit and the permit number must be included on the new Form W-2 or G-1.

7. Written notice of intent to transfer the permit to another operator by filing Form P-4 must be submitted to the Commission at least 15 days prior to the date of the transfer.

8. A well herein authorized cannot be converted to a producing well and have an allowable assigned without filing an amended Form W-1 and receiving Commission approval.

9. Unless otherwise required by conditions of the permit, completion and operations of the well shall be in accordance with the information represented on the application (Forms H-1 and H-1A).

Note: This document will only be distributed electronically.

10. This permit will expire when the Form W-3, Plugging Record, is filed with the Commission. Furthermore, permits issued for wells to be drilled will expire three (3) years from the date of the permit unless drilling operations have commenced.

Provided further that, should it be determined that such injection fluid is not confined to the approved interval, then the permission given herein is suspended and the fluid injection operation must be stopped until the fluid migration from such interval is eliminated. Failure to comply with all of the conditions of this permit may result in the operator being referred to enforcement to consider assessment of administrative penalties and/or the cancellation of the permit.

APPROVED AND ISSUED ON July 10, 2020.

Scott Rosenquist

(for)

Sean Avitt, Manager
Injection-Storage Permits Unit

Note: This document will only be distributed electronically.

Middle Trinity
Groundwater Conservation District

930 Wolfe Nursery Rd.
Stephenville, TX 76401
Phone: 254-965-6705 Fax: 254-965-6745
www.middletrinitygcd.org

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Railroad Commission of Texas
Oil and Gas Division
P.O. Box 12967
Austin, TX 78711-2967

9590 9402 6543 1028 0062 34

2. Article Number *(Transfer from service label)*

7020 1290 0000 6171 5647

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from Item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
NOV 01 2021

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

C.1. Objective – Each year, the District will participate in the regional planning process by attending at least 25 percent of the Region G (Brazos G) Regional Planning Group Meetings to encourage the development of surface water supplies to meet the needs of water user groups in the District.

C.1. Performance Standard – The attendance of a District representative at the Region G Regional Water Planning Group meeting(s) will be noted in the Annual Report presented to the District Board of Directors and will provide the total number of meetings conducted by the Region G Regional Water Planning Group for that year and will indicate how many of the meetings were attended by the District.

C.1. Performance Measurement –The District (General Manager) is a voting member of the Brazos G Regional Planning Group Board of Directors and attended 1 of 5 Brazos G Regional Planning Group Meetings held in 2021. Also, district employee Johnny Wells attended 1 Brazos G Regional Planning Group meeting in June 2021, meeting the 25 percent threshold of the District. Audio meeting minutes are available at www.brazosgwater.org. Additionally, attendance may be verified with Jennifer White at the Brazos River Authority, 254-761-3158. Copies of meeting notes are also on file in the MTGCD office.

D.1. Objective – The District will monitor water quality on an annual basis within the District by obtaining water quality samples from at least one well in each of the counties in the District.

D.1. Performance Standard – The District's Annual Report will include a summary of the number of water quality samples obtained and the results of the water quality tests for each well sampled.

D.1. Performance Measurement – Between January 1, 2021 and December 31, 2021, the District conducted 53 water quality tests for well owners within the District.

Summary of test results:

TDS/salinity	six (6) showed excessive TDS/salinity. (two in Comanche, one in Erath, and three in Coryell)
E. coli	zero (0) showed positive for E. coli
Coliforms	one (1) showed positive for in Erath

An example of a water quality test report follows. Copies of all the water quality test reports are maintained in the District Office and are available for viewing.

Middle Trinity Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, TX 76401
254-965-6705
www.middletrinitygcd.org

Water Quality Report

Date: 11/15/21

Well Owner Name: Janelle Carmichael

Well Registration: 749B

Well Address: 818 CR 1125
Morgan, TX

State Registration:

Phone Number:

Registered Use: Domestic

Email:

Casing Type: PVC

Tests Results:

PH	NITRATE	NITRITE	H2S	TDS	E. COLI/COLIFORMS	HARDNESS	SALINITY
8.9	0	0	0	486	Negative for E. Coli	50	604

Maximum Contaminate Levels

Salinity 1000 ppm

PH 8.5

Nitrates 10 ppm

Nitrites 10 ppm

H2S 300 ppm

TDS 1000 ppm

Hardness No Standard Set

E.Coli/Coliforms Any Positive Result

Comments:

pH is a little high

Johnny Wells
Middle Trinity GCD Field Technician

Middle Trinity Groundwater Conservation District is not a certified lab

The findings of this lab are only preliminary. Any and all reportable conditions should be referred to an accredited lab for further investigation.
The Upper Leon River Water 254-879-2258
Texas Commission of Environmental Quality (TCEQ) 254-965-9200
Abilene Environmental Lab 325-676-6041

E.1. Objective – The District will monitor drought conditions in the Trinity Aquifer each year through the process established in the District's Drought Contingency Plan adopted by the District Board of Directors.

E.1. Performance Standard – The District's Annual Report will include a summary of the District's monitoring of drought conditions in the Trinity Aquifer and any implementation measures taken in accordance with the District's Drought Contingency Plan. The District will make an assessment of the status of drought and will prepare a quarterly briefing to the Board of Directors that includes a discussion of whether the District has declared any drought stages set forth in its Drought Contingency Plan for the previous quarter.

E.1. Performance Measurement –MTGCD's Droughtcast drought monitoring system is live on the District's website at www.middletrinitygcd.org. Droughtcast monitors rainfall and drought conditions using PDI (Precipitation Deficit Index).Ongoing daily rainfall is tracked by county and measured to determine the average percent of the expected annual rainfall that has occurred at any given point in time. The percent of annual average rainfall determines drought stage conditions. MTGCD declared no drought stages during 2021. Copies of the minutes of the board meetings depicting the Quarterly drought reports are attached.

MINUTES OF THE
PERMIT HEARING AND MEETING OF
THE BOARD OF DIRECTORS OF THE
MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT
HELD: January 7, 2021

THE STATE OF TEXAS
COUNTY OF ERATH

On this 7th day of January 2021 the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a PERMIT HEARING at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – President
Fred Parker - Secretary
Joe Altebaumer – Director
Charles Ferguson – Director
W.B. Maples – Director
Gary Kafer - Director
Barbara Domel – Vice-President
Jerry Hinshaw – Director
Robert Payne – Director
Frank Volleman – Director
Shane Tucker – Director

Member absent was Kenneth Bullington. Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Debbie Montgomery, and Stephanie Keith.

President Rodney Stephens called the hearing to order, declared a quorum present and that the hearing was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Hearing called to order by Rodney Stephens.

2. Roll Call of members was given by Debbie Montgomery.

3. Permit applications are ready for review. Joe Cooper stated that all operating permits were administratively complete and ready to be heard except for Chiraz Mansouri and Kevin Northcutt. Chiraz Mansouri did not provide all required information and Kevin Northcutt was not able to meet spacing requirements.

4. Motion was made by Joe Altebaumer and second by Fred Parker to approve all operating permits except for Chiraz Mansouri and Kevin Northcutt. All members present voted yes. All permits were approved, except for Chiraz Mansouri and Kevin Northcutt.

5. Motion to adjourn permit hearing made by Fred Parker. Second by Charles Ferguson. All members present voted yes.

6. Rodney Stephens adjourned the permit hearing.

THE STATE OF TEXAS
COUNTY OF ERATH

On this 7th day of January 2021, the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a STATED SESSION at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – President
Fred Parker – Secretary
Joe Altebaumer - Director
Charles Ferguson – Director
W.B. Maples – Director
Gary Kafer - Director
Barbara Domel – Vice-President
Jerry Hinshaw - Director
Robert Payne – Director
Frank Volleman – Director
Shane Tucker – Director

Member absent was Kenneth Bullington. Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Debbie Montgomery, and Stephanie Keith.

President Rodney Stephens called the meeting to order, declared a quorum present and that the meeting was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Meeting called to order by Rodney Stephens.

2. Invocation was given by Joe Altebaumer.

3. Roll Call of Members was given by Debbie Montgomery.

4. Pledge of allegiance was conducted.

5. Guests present were Sehrsha Glover and Sadie Berry, 4-H Water Ambassadors.

6. No public comments were received.

7. There was a review of the Minutes of the December 3rd , 2020 monthly Board Meeting. Robert Payne made a motion to approve the minutes, second by Fred Parker. All members present voted yes to accept the minutes.

8. Check Detail Report reviewed for dates 12/1/2020 through 12/31/2020, for check numbers 10774 through 10819, 10821 through 10824, and including electronic checks 123120, 123121, 123122, 202012, 202013, 202014, 20201215, and 20201216, and including voided transaction 11111. Check number 10775 was voided and paid online. Motion was made by W.B. Maples, second by Joe Altebaumer, to approve and ratify the payment of the bills. All members present voted yes.

9. Income/Expense Comparison was reviewed. 97.6 % of the budget has been expended.

10. There was a plaque presentation to MTGCD from Texas 4-H Water Ambassadors Sehrsha Glover and Sadie Berry in appreciation for 4-H Water Ambassador Sponsorship.

11. Office Manager Report was given by Debbie Montgomery and Crystal Eberhart. In addition to the permit applications, there were 26 exempt new well registrations and 2 replacements. W-2 forms for 2020 will be sent out this month to employees.

12. Field Tech report was given by Johnny Wells. One Erath County well was plugged in the month of December, and 8 water quality tests were completed, 4 in Erath County, 2 in Comanche County, 1 in Bosque County, and 1 in Coryell County. All tested negative for bacteria. Bosque County wells were monitored in December and Erath County wells will be monitored in January.

13. Education/Public Relations Report was given by Stephanie Keith.

14. Manager's Report was given by Joe Cooper.

15. Quarterly Investment Report was given by Joe Cooper. The average monthly interest rate on MTGCD's invested public funds for December 2020 is 0.0909 % for TexPool and 0.1431 % for TexPool Prime. MTGCD currently has a total of $3,452,453.17 invested at TexPool.

16. Quarterly Drought Report was given by Joe Cooper. The PDSI (Palmer Drought Severity Index) as of January, 2, 2021 for the North Central Texas region is 0.71, which translates to "near normal" conditions. The CMI (Crop Moisture Index) as of January 2, 2021 for the North Central Texas region is 0.47, which translates to "abnormally moist." The U.S. Seasonal Drought Outlook, according to the Climate Prediction Center of NOAA, as of December 17, 2020, with predictions valid through March 31, 2021, indicates that drought persists or is likely in MTGCD.

17. There was discussion on readopting the Public Funds Investment Policy. No changes were recommended. W.B. Maples made a motion to readopt the Public Funds Investment Policy. Second by Joe Altebaumer. All members present voted yes.

18. There was discussion on amending the existing RFQP terms to request services of a Pre-Construction Manager and Construction Manager at Risk. Barbara Domel made a motion to amend the existing terms to "At Risk." Second by Robert Payne. All members present voted yes.

19. There was discussion to identify the full scope of work of the Outdoor Learning Center Project to ensure accurate RFQ-P bidding and complete design documents. W.B. Maples made a motion to accept the full scope of work, not to exceed $2.2 million. Second by Jerry Hinshaw. All members present voted yes.

20. Jerry Hinshaw made a motion to table the Board retiring into Executive Session. Second by W.B. Maples. All members present voted yes.

21. The Board did not retire into Executive Session so therefore did not reconvene.

22. There was discussion on agenda items for the February Board Meeting. The Annual Management Plan report will be given, and contracts submitted by potential contractors will be reviewed. W.B. Maples suggested that there be a discussion on requiring well drillers to have bentonite or concrete all the way down to the top of the aquifer being screened.

23. Fred Parker moved to adjourn the meeting, second by Charles Ferguson. Meeting adjourned by Rodney Stephens.

MINUTES approved this 4th day of February 2021.

_____
Joe Altebaumer/Erath Co.

_____
Fred Parker/Erath Co.

_____
Jerry Hinshaw/ Erath Co.

_____
Shane Tucker /Comanche Co.

_____
Frank Volleman/Comanche Co.

_____
Rodney Stephens/Comanche Co.

_____
Charles E. Ferguson/ Bosque Co.

_____
Barbara Domel/Bosque Co.

_____
Robert Payne/Bosque Co.

_____
Gary Kafer/Coryell Co.

_____
Kenneth Bullington/Coryell Co.

_____
W.B. Maples/ Coryell Co.

MINUTES OF THE
PERMIT HEARING AND MEETING OF
THE BOARD OF DIRECTORS OF THE
MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT
HELD: April 1, 2021

THE STATE OF TEXAS
COUNTY OF ERATH

On this 1st day of April 2021 the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a PERMIT HEARING at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – President
Fred Parker - Secretary
Robert Payne – Director
Kenneth Bullington – Director
Barbara Domel – Vice-President
Jerry Hinshaw – Director
Shane Tucker – Director
Joe Altebaumer - Director

Members absent were Charles Ferguson, Frank Volleman, W.B. Maples, and Gary Kafer. Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Debbie Montgomery, and Stephanie Keith.

President Rodney Stephens called the hearing to order, declared a quorum present and that the hearing was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Hearing called to order by Rodney Stephens.

2. Roll Call of members was given by Debbie Montgomery.

3. Permit applications are ready for review. Joe Cooper stated that all operating permits were administratively complete and ready to be heard.

4. Motion was made by Jerry Hinshaw and second by Shane Tucker to approve all operating permits. All members present voted yes.

5. Motion to adjourn permit hearing made by Fred Parker. Second by Joe Altebaumer. All members present voted yes.

6. Rodney Stephens adjourned the permit hearing.

THE STATE OF TEXAS
COUNTY OF ERATH

On this 1st day of April 2021, the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a STATED SESSION at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – Director
Fred Parker – Secretary
Robert Payne – Director
Kenneth Bullington – Director
Barbara Domel – Vice-President
Jerry Hinshaw - Director
Shane Tucker – Director
Joe Altebaumer - Director

Members absent were Charles Ferguson, Frank Volleman, W.B. Maples, and Gary Kafer. Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Debbie Montgomery, and Stephanie Keith.

President Rodney Stephens called the meeting to order, declared a quorum present and that the meeting was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Meeting called to order by Rodney Stephens.

2. Invocation was given by Joe Altebaumer.

3. Roll Call of Members was given by Debbie Montgomery.

4. Pledge of allegiance was conducted.

5. No guests were present.

6. No public comments were received.

7. There was a review of the Minutes of the March 4th , 2021 monthly Board Meeting. Shane Tucker made a motion to approve the minutes, second by Jerry Hinshaw. All members present voted yes to accept the minutes.

8. Check Detail Report reviewed for dates 3/1/2021 through 3/31/2021, for check numbers 10912 through 10956, and including electronic checks 30121, 30122, 31521, 31522, 213103, and 3312021. Motion was made by Kenneth Bullington, second by Shane Tucker, to approve and ratify the payment of the bills. All members present voted yes.

9. Income/Expense Comparison was reviewed. As of the end of March, 19.0 % of the budget has been expended, and 9.0 % of The Ditch Project budget has been expended. 93.7 % of 2020 revenue has been collected.

10. Office Manager Report was given by Debbie Montgomery. In addition to the permit applications, there were 24 exempt new well registrations and 6 replacements. The MTGCD office will be closed Friday, April 2nd, for Good Friday.

11. Field Tech report was given by Johnny Wells. Four wells were plugged in March, 1 in Erath County and 3 in Comanche County. Seven water quality tests were completed, 3 in Erath County, 1 in Comanche County,and 3 in Coryell County. One Coryell well tested positive for bacteria, most likely due to the sampling port at the horse trough. One Coryell well was high in salinity. Coryell County wells were monitored in March and Bosque County wells will be monitored in April.

12. Education/Public Relations Report was given by Stephanie Keith.

13. Manager's Report was given by Joe Cooper.

14. Quarterly Investment Report was not able to be run due to the meeting being on the first business day of the month. Shane Tucker made a motion to table the report to next month, second by Joe Altebaumer. All members present voted yes. Quarterly Investment Report will be added to the May 2021 Board Meeting agenda.

15. Quarterly Drought Report was given by Joe Cooper. The PDSI (Palmer Drought Severity Index) as of March 27, 2021 for the North Central Texas region is -0.46, which translates to "near normal" conditions. The CMI (Crop Moisture Index) as of March 27, 2021 for the North Central Texas region is 0.00, which translates to "slightly dry / favorably moist." The Climate Prediction Center of NOAA U.S. Seasonal Drought Outlook on March 18, 2021, with predictions valid through June 30, 2021, indicates that drought development is likely in MTGCD.

16. Legislative Update was given by Joe Cooper.

17. Outdoor Learning Center update was given by Stephanie Keith.

18. The Rules Committee has not met yet so there was no update to give.

19. Jerry Hinshaw made a motion to table the Review / Discussion / Possible Approval of Preliminary Signage/Exhibits Theme Design to May. Second by Kenneth Bullington. All members present voted yes. This agenda item will be added to the May Board Meeting agenda.

20. Joe Altebaumer made a motion to table Discussion / Action to Address Expenditure Policy and Processes Regarding the Project. Second by Shane Tucker. All members present voted yes. This agenda item tabled.

21. Stephanie Keith went over criteria for the MTGCD essay contest for senior high school students. First place winners will receive a $1000 scholarship and second place winners will received a $875 scholarship, with two winners from each county. Scholarships will be paid directly to the university/college upon confirmation of enrollment in classes. The essay topic for 2021 is "Valuing Water." Barbara Domel made a motion to approved the Scholarship Program Criteria. Second by Kenneth Bullington. All members present voted yes.

22. There was discussion on changing MTGCD's telephone/internet provider service. A different provider service can provide better service for a lower monthly cost. Jerry Hinshaw made a motion to change providers, second by Joe Altebaumer. All members present voted yes.

23. Agenda items for the May Board Meeting were discussed. Items will include Quarterly Investment Report, project update, and participation and nomination for CAD board members.

23. Fred Parker moved to adjourn the meeting, second by Joe Altebaumer. Meeting adjourned by Rodney Stephens.

MINUTES approved this 6th day of May 2021.

_____

Joe Altebaumer/Erath Co.

_____

Fred Parker/Erath Co.

Jerry Hinshaw/ Erath Co.

Shane Tucker /Comanche Co.

Frank Volleman/Comanche Co.

Rodney Stephens/Comanche Co.

Charles E. Ferguson/ Bosque Co.

Barbara Domel/Bosque Co.

Robert Payne/Bosque Co.

Gary Kafer/Coryell Co.

Kenneth Bullington/Coryell Co.

W.B. Maples/ Coryell Co.

MINUTES OF THE
PERMIT HEARING AND MEETING OF
THE BOARD OF DIRECTORS OF THE
MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT
HELD: July 1, 2021

THE STATE OF TEXAS
COUNTY OF ERATH

On this 1st day of July 2021 the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a PERMIT HEARING at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – President
Fred Parker - Secretary
Robert Payne – Director
Kenneth Bullington – Director
Gary Kafer – Director
Frank Volleman – Director
Barbara Domel – Vice-President
Jerry Hinshaw – Director
Shane Tucker – Director
W.B. Maples – Director
Charles Ferguson – Director
Joe Altebaumer - Director

Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Stephanie Keith, and Debbie Montgomery.

President Rodney Stephens called the hearing to order, declared a quorum present and that the hearing was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Hearing called to order by Rodney Stephens.

2. Roll Call of members was given by Debbie Montgomery.

3. Permit applications are ready for review. Joe Cooper stated that all operating permits were administratively complete and ready to be heard. It was noted that the Gatesville Country Club permit application is for an existing well to increase pumpage.

4. Motion to adjourn permit hearing made by Fred Parker. Second by Charles Ferguson. All members present voted yes.

6. Rodney Stephens adjourned the permit hearing.

THE STATE OF TEXAS
COUNTY OF ERATH

On this 1st day of July 2021, the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a STATED SESSION at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – Director
Fred Parker – Secretary
Robert Payne – Director
Kenneth Bullington – Director
Gary Kafer – Director
Frank Volleman – Director
Barbara Domel – Vice-President
Jerry Hinshaw - Director
Shane Tucker – Director
W.B. Maples – Director
Charles Ferguson – Director
Joe Altebaumer - Director

Also present were Joe Cooper, Johnny Wells, Crystal Eberhart, Stephanie Keith, and Debbie Montgomery.

President Rodney Stephens called the meeting to order, declared a quorum present and that the meeting was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Meeting called to order by Rodney Stephens.

2. Invocation was given by Joe Altebaumer.

3. Roll Call of Members was given by Debbie Montgomery.

4. Pledge of Allegiance was conducted

5. Guests present included John Truitt and Kevin Biasiolli of Waldrop Construciton.

6. No public comments were received.

7. Frank Volleman made a motion to accept and approve all the permit applications reviewed at the permit hearing. Second by Jerry Hinshaw. All members present voted yes to approve the permit applications.

8. Annual Audit not able to be presented. W.B. Maples moved to table the audit presentation until next month's meeting, second by Kenneth Bullington. All members present voted yes.

9. There was discussion on the Budget Review and Guaranteed Maximum Price for the outdoor learning center construction per Waldrop Construction. Jerry Hinshaw made a motion to approve the Budget Review and Guaranteed Maximum Price. Second by Joe Altebaumer. All members present voted yes.

10. There was discussion on the Construction Contract between MTGCD and Waldrop Construction. Approval of the contract will be tabled to the August meeting as the contract is being reviewed by legal team.

11. There was discussion on providing Notice to Proceed to procure construction materials, suchs as steel and FSC lumber, due to inflation and availability. Jerry Hinshaw made a motion to provide Notice to Proceed to Waldrop Construction, second by Kenneth Bullington. All members present voted yes.

12. There was a review of the Minutes of the June 3rd , 2021 monthly Board Meeting. W.B. Maples moved to approve the minutes, second by Shane Tucker. All members present voted yes to accept the minutes.

13. Check Detail Report reviewed for dates 6/1/2021 through 6/30/2021, for check numbers 11076 through 11096 (11087 was voided), and including electronic checks 6152021 and 6152022. Motion was made by Kenneth Bullington, second by Joe Altebaumer, to approve and ratify the payment of the bills. All members present voted yes.

14. Income/Expense Comparison was reviewed. 37.4 % of the budget has been expended, and 23.6 % of The Ditch Project budget has been expended. 98.5 % of 2020 revenue has been collected.

15. Manager's Report was given by Joe Cooper

16. Office Manager Report was given by Crystal Eberhart and Debbie Montgomery. In addition to the 8 permit applications, there were 29 exempt new well registrations and 1 replacement.

17. Field Tech report was given by Johnny Wells. There were 3 wells were plugged in June, 1 in Erath County, 1 in Comanche County, and 1 in Bosque County. Five water quality tests were completed, 3 in Erath County, 1 in Comanche County, and 1 in Bosque County. The Bosque County well tested positive for bacteria. It was a new well and was disinfected and rechecked. Comanche County wells were monitored in June and Coryell County wells will be monitored in July.

18. Education/Public Relations Report / Outdoor Learning Center Update was given by Stephanie Keith.

19. There was discussion on renaming the outdoor learning center. Joe Altebaumer made a motion to rename it as "The Ditch Water Discovery Center." Second by Kenneth Bullington. All members present voted yes.

20. Quarterly Investment Report not able to be run until 3rd business day of the month. W.B. Maples moved to table the report until next meeting, second by Kenneth Bullington. All members present voted yes. Quarterly Investment Report will be presented at the August meeting.

21. Quarterly Drought Report given by Joe Cooper.

22. Rules Committee update given by Rodney Stephens. The legal team is reviewing suggestions, updates, and clarifications and more details will be discussed at next month's meeting.

23. Agenda items for the August Board Meeting were discussed. Possible items include the annual audit report, quarterly investment report, rules committee update, first look at budget, possible drilling of a water well, and contract with Waldrop Construction.

24. Fred Parker moved to adjourn the meeting, second by Charles Ferguson. Meeting adjourned by Rodney Stephens.

MINUTES approved this 5th day of August 2021.

_____
Joe Altebaumer/Erath Co.

_____
Fred Parker/Erath Co.

_____
Jerry Hinshaw/ Erath Co.

_____
Shane Tucker /Comanche Co.

_____
Frank Volleman/Comanche Co.

_____
Rodney Stephens/Comanche Co.

_____
Charles E. Ferguson/ Bosque Co.

_____
Barbara Domel/Bosque Co.

_____
Robert Payne/Bosque Co.

_____
Gary Kafer/Coryell Co.

_____
Kenneth Bullington/Coryell Co.

_____
W.B. Maples/ Coryell Co.

MINUTES OF THE
PERMIT HEARING AND MEETING OF
THE BOARD OF DIRECTORS OF THE
MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT
HELD: October 7, 2021

THE STATE OF TEXAS
COUNTY OF ERATH

On this 7th day of October 2021 the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a PERMIT HEARING at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – President
Fred Parker - Secretary
Shane Tucker – Director
Gary Kafer – Director
Frank Volleman – Director
Robert Payne – Director
Barbara Domel – Vice-President
Jerry Hinshaw – Director
Kenneth Bullington – Director
Charles Ferguson – Director
W.B. Maples – Director

Board member absent at roll call was Joe Altebaumer, but he arrived during the Permit Hearing. Also present were Johnny Wells, Crystal Eberhart, Stephanie Keith, and Debbie Montgomery.

President Rodney Stephens called the hearing to order, declared a quorum present and that the hearing was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Hearing called to order by Rodney Stephens.

2. Roll Call of members was given by Debbie Montgomery.

3. Permit applications are ready for review. Debbie Montgomery stated that all operating permits were administratively complete except for Andrew Kinser.

4. Motion to adjourn permit hearing made by Fred Parker. Second by Charles Ferguson. All members present voted yes.

6. Rodney Stephens adjourned the permit hearing.

THE STATE OF TEXAS
COUNTY OF ERATH

On this 7th day of October 2021, the Board of Directors of the Middle Trinity Groundwater Conservation District convened in a STATED SESSION at 930 N Wolfe Nursery Rd, Stephenville, Texas at 1:00 PM with the following members present:

Rodney Stephens – Director
Fred Parker – Secretary
Shane Tucker – Director
Gary Kafer – Director
Frank Volleman – Director
Robert Payne – Director
Barbara Domel – Vice-President
Jerry Hinshaw - Director
Kenneth Bullington – Director
Charles Ferguson – Director
W.B. Maples – Director
Joe Altebaumer - Director

No board members were absent. Also present were Johnny Wells, Crystal Eberhart, Stephanie Keith, and Debbie Montgomery.

President Rodney Stephens called the meeting to order, declared a quorum present and that the meeting was duly convened and ready to transact business.

Notice of the hearing was given, stating the time, place and purpose, all as required by Chapter 551 of the Government Code.

1. Meeting called to order by Rodney Stephens.

2. Invocation was given by Joe Altebaumer.

3. Roll Call of Members was given by Debbie Montgomery.

4. Pledge of Allegiance was conducted

5. Guests present were Mr. and Mrs. Andrew Kinser, Vince Daddio, and Paul Gaudette.

6. Andrew Kinser spoke to the board members to request an exception to the current spacing rules.

7. Frank Volleman made a motion to accept and approve all the permit applications reviewed at the permit hearing except for Andrew Kinser. Second by Kenneth Bullington. All members present voted yes to approve all except for Andrew Kinser.

8. At 1:33 PM, the Board retired into Executive Session pursuant to Section 551.071 of Texas Government Code – consultion concerning attorney client matters.

9. The Board reconvened at 3:02 PM.

10. There was a review of the Minutes of the September 2nd , 2021 monthly Board Meeting, the September 2nd , 2021 Tax Rate Hearing, and the September 14th , 2021 Special Called Meeting. Jerry Hinshaw moved to approve the minutes of all three meetings, second by Gary Kafer. All members present voted yes to accept the minutes.

11. Check Detail Report reviewed for dates 8/31/2021 through 9/30/2021, for check numbers 11201 through 11267 (11254 voided), and including electronic checks 9921, 83121, 83122, 83123, 93021, 93022, and 9092021. Motion was made by Fred Parker, second by Jerry Hinshaw, to approve and ratify the payment of the bills. All members present voted yes.

12. Income/Expense Comparison was reviewed. 59.7 % of the budget has been expended, and 13.7 % of the project budget has been expended.

13. Manager's Report was unavailable.

14. Office Manager Report was given by Crystal Eberhart and Debbie Montgomery. In addition to the permit applications, there were 30 exempt new well registrations and 1 replacement.

15. Field Tech report was given by Johnny Wells. One well was plugged in September, in Comanche County. Five water quality tests were completed: 3 in Erath County and 2 in Comanche County. All tested negative for bacteria. Erath County wells were monitored in September and Comanche County wells will be monitored in October.

16. Quarterly Investment Report was given by Jerry Hinshaw.

17. Quarterly Drought Report was given by Johnny Wells.

18. Education/PR Report/Outdoor Learning Center Update given by Stephanie Keith.

19. There was discussion on the construction of a groundwater well at The Ditch Water Discover Center. Charles Ferguson made a motion to not approve the construction of a well, second by W.B. Maples. All members present voted to not approve the construction of a groundwater well.

20. Frank Volleman moved to table the action on participation with establishment of a Habitat Conservation Plan for Karst Invertebrates until the November meeting. Second by Shane Tucker. All members present voted to table the discussion until more information is received.

21. Rodney Stephens went over the proposed rules revisions. Joe Altebaumer made a motion to schedule a Rules Change Public Hearing for next month, second by Frank Volleman. All members present voted yes. A public hearing will be set for November 4th, before the regular monthly Board Meeting.

22. Crystal Eberhart went over the TML Insurance renewal date being changed to January, when the new provider becomes effective. Jerry Hinshaw made a motion to approve the renewal date being changed from July to January, second by Joe Altebaumer. All members present voted yes.

23. Charles Ferguson made a motion to have the Board President contact the General Manager to request a letter of retirement from the General Manager. Second by Shane Tucker. All members present voted yes.

24. Barbara Domel made a motion to appoint Johnny Wells as the acting General Manager and to appoint Stephanie Keith as the acting Project Manager, with all financials to be approved by Fred Parker and Jerry Hinshaw. Second by Robert Payne. Nine members voted yes, two voted no, and one abstained from voting.

25. Agenda items for the November Board Meeting were discussed.

26. Fred Parker moved to adjourn the meeting, second by Charles Ferguson. Meeting adjourned by Rodney Stephens.

MINUTES approved this 4th day of November 2021.

_____
Joe Altebaumer/Erath Co.

_____
Fred Parker/Erath Co.

_____
Jerry Hinshaw/ Erath Co.

_____
Shane Tucker /Comanche Co.

_____
Frank Volleman/Comanche Co.

_____
Rodney Stephens/Comanche Co.

_____
Charles E. Ferguson/ Bosque Co.

_____
Barbara Domel/Bosque Co.

_____
Robert Payne/Bosque Co.

_____
Gary Kafer/Coryell Co.

_____
Kenneth Bullington/Coryell Co.

_____

E.2. Objective – The District will download the updated Palmer Drought Severity Index (PDSI) maps and review soil moisture index readings for the area within the District's boundaries on a quarterly basis.

E.2. Performance Standard – The District will review the PDSI maps and soil moisture index readings and will prepare a quarterly briefing to the Board of Directors that includes a discussion of the PDSI maps and soil moisture index readings. The downloaded PDSI maps and soil moisture index readings will be included with copies of the quarterly briefing in the District's Annual Report.

E.2. Performance Measurement – Four Quarterly Drought Reports were provided the MTGCD Board of Directors during 2021. Copies of the cover page for each Quarterly Drought Report provided to the MTGCD Board of Directors, that include the Palmer Drought Severity Index, soil moisture index and PDSI maps, are attached. Copies of the complete Quarterly Drought Reports are on file in the District office.

MTGCD Quarterly Drought Report
2021 (1st qtr. '21)

An assessment of the Palmer Drought Severity Index (PDSI), Crop Moisture Index and the Drought Probability Predictions by Texas Climatic Divisions follow:

Palmer Drought Severity Index:

The PDSI, as of March 27, 2021 for the North Central Texas region is -0.46, which translates to "near normal" conditions. The prior three quarters have been, near normal, near normal and near normal, respectively.

Crop Moisture Index:

The CMI, as of March 27, 2021 for the North Central Texas region is 0.00, which translates to "slightly dry / favorably moist".

Drought Probability Predictions:

The Climate Prediction Center of NOAA updated its U.S. Seasonal Drought Outlook on March 18, 2021 with predictions valid through June 30, 2021. The map indicates that drought development is likely in MTGCD.

MTGCD Quarterly Drought Report
2021 (2nd qtr. '21)

An assessment of the Palmer Drought Severity Index (PDSI), Crop Moisture Index and the Drought Probability Predictions by Texas Climatic Divisions follow:

Palmer Drought Severity Index:

> The PDSI, as of June 26, 2021 for the North Central Texas region is -0.28, which translates to "slightly dry/favorably moist" conditions. The prior three quarters have been, near normal, near normal and near normal, respectively.

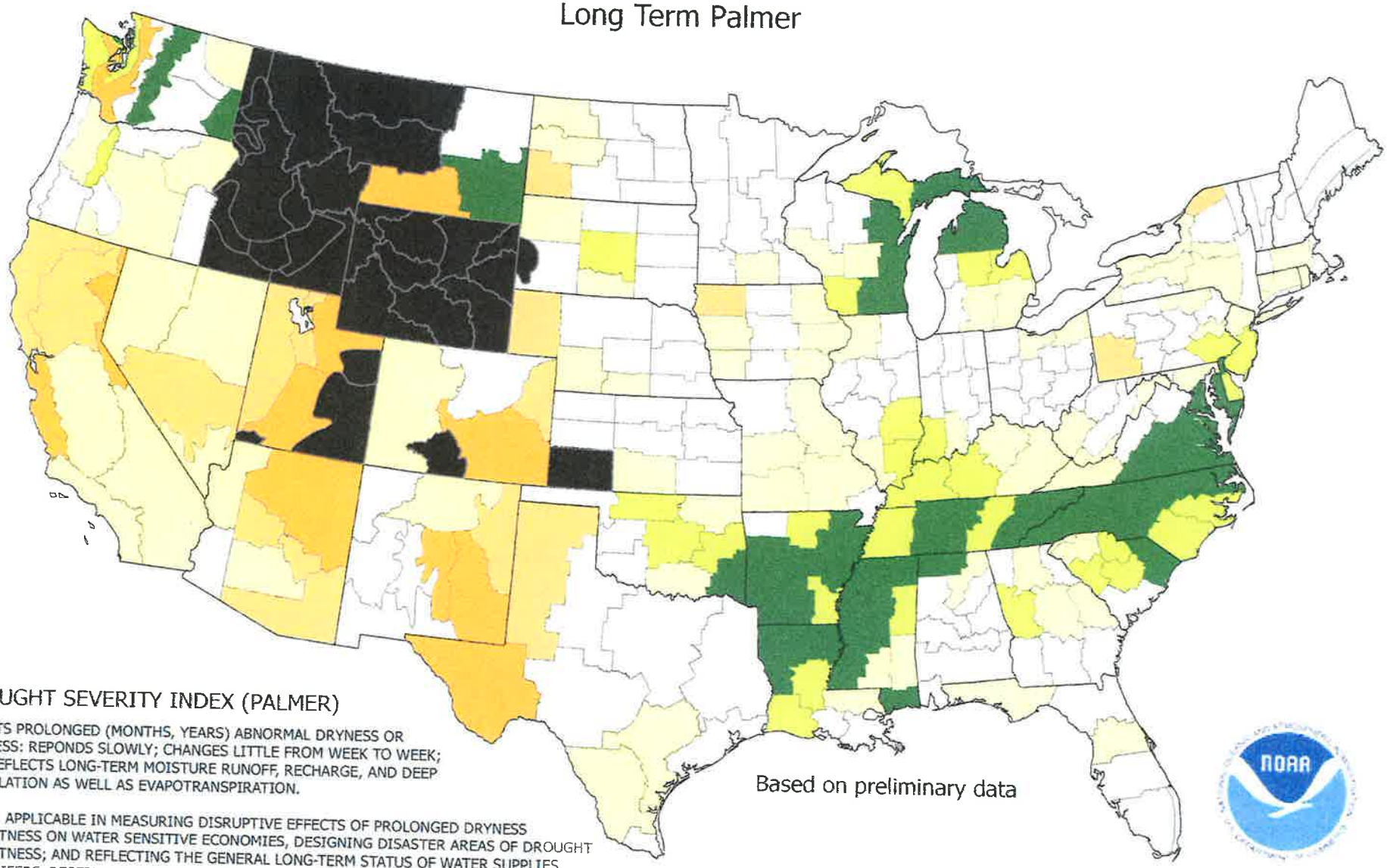
Crop Moisture Index:

> The CMI, as of June 26, 2021 for the North Central Texas region is -0.21, which translates to "near normal".

Drought Probability Predictions:

> The Climate Prediction Center of NOAA updated its U.S. Seasonal Drought Outlook on June 17, 2021 with predictions valid through September 30, 2021. The map indicates that drought development is unlikely in MTGCD.

Drought Severity Index by Division
Weekly Value for Period Ending Jan 02, 2021
Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

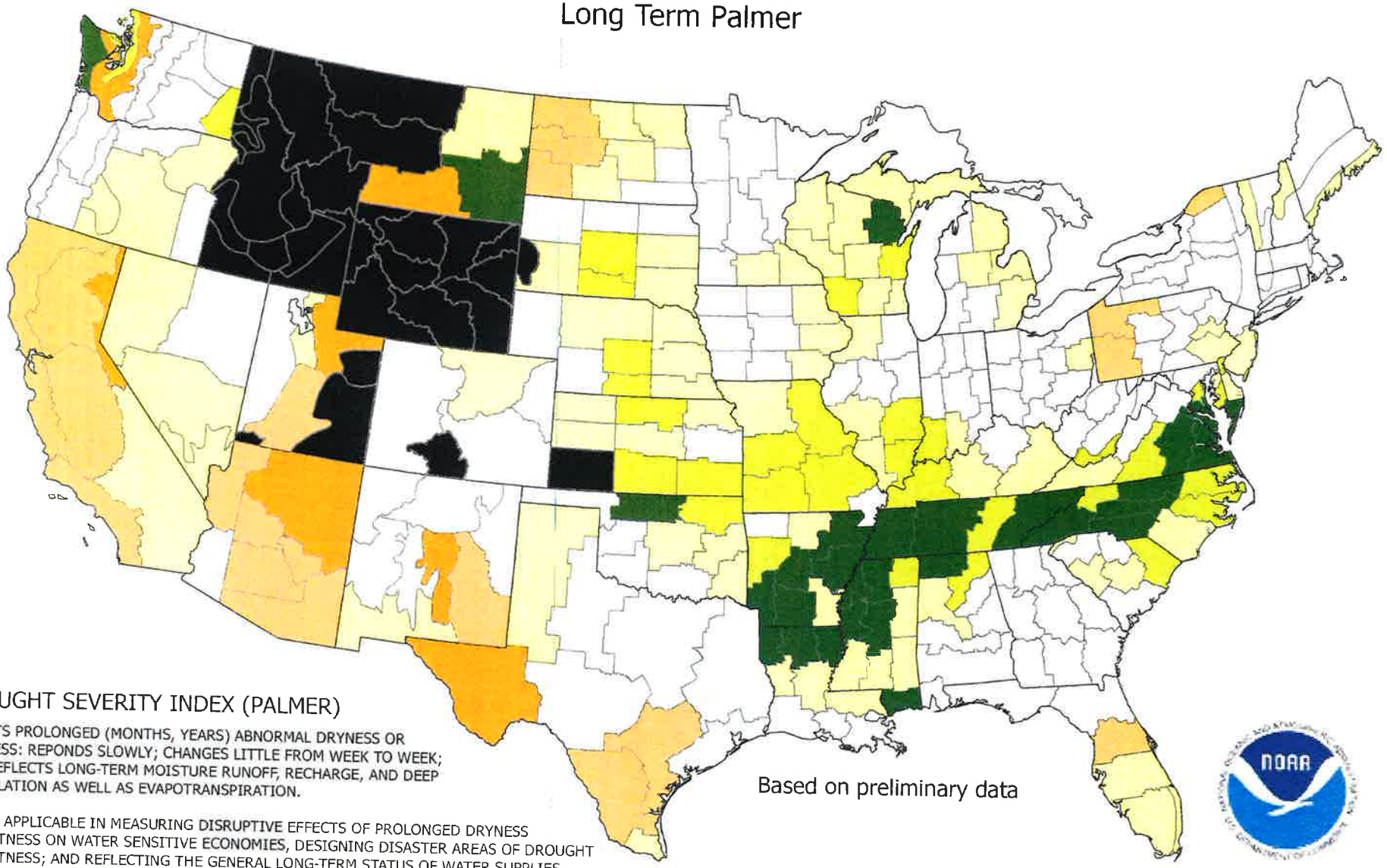
Based on preliminary data

NOAA

-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)
Missing/Incomplete

Apr. 2021

Drought Severity Index by Division
Weekly Value for Period Ending Mar 27, 2021
Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

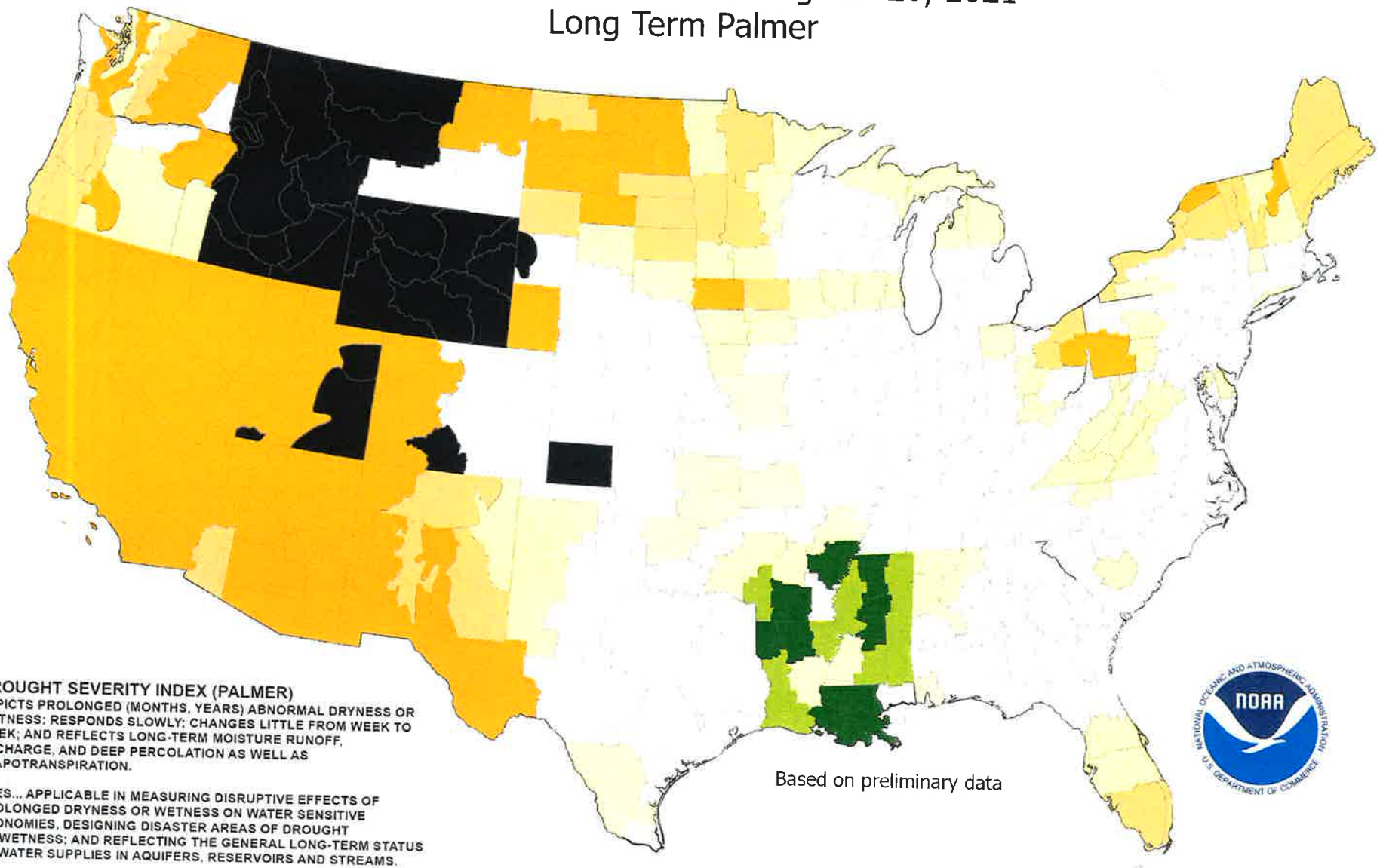
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data

- -4.0 or less (Extreme Drought)
- -3.0 to -3.9 (Severe Drought)
- -2.0 to -2.9 (Moderate Drought)
- --1.9 to +1.9 (Near Normal)
- +2.0 to +2.9 (Unusual Moist Spell)
- +3.0 to +3.9 (Very Moist Spell)
- +4.0 and above (Extremely Moist)
- Missing/Incomplete

July 2021

Drought Severity Index by Division
Weekly Value for Period Ending Jun 26, 2021
Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

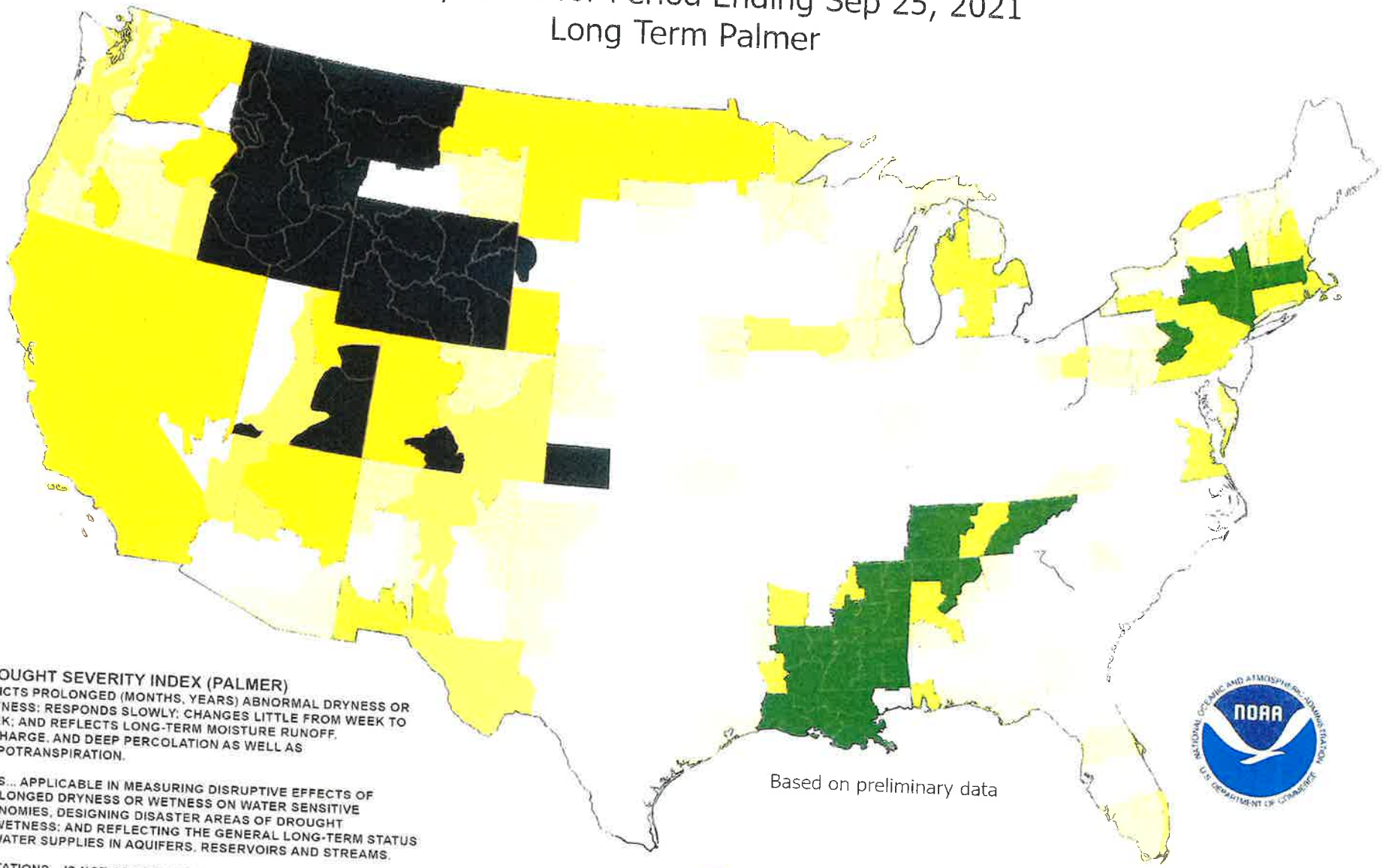
LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data

- -4.0 or less (Extreme Drought)
- -3.0 to -3.9 (Severe Drought)
- -2.0 to -2.9 (Moderate Drought)
- --1.9 to +1.9 (Near Normal)
- +2.0 to +2.9 (Unusual Moist Spell)
- +3.0 to +3.9 (Very Moist Spell)
- +4.0 and above (Extremely Moist)
- Missing/Incomplete

Oct 2021

Drought Severity Index by Division
Weekly Value for Period Ending Sep 25, 2021
Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data

- -4.0 or less (Extreme Drought)
- -3.0 to -3.9 (Severe Drought)
- -2.0 to -2.9 (Moderate Drought)
- --1.9 to +1.9 (Near Normal)
- +2.0 to +2.9 (Unusual Moist Spell)
- +3.0 to +3.9 (Very Moist Spell)
- +4.0 and above (Extremely Moist)
- Missing/Incomplete

F.1. Objective – The District will submit an article regarding water conservation for publication each year to at least one newspaper of general circulation in the District.

F.1. Performance Standard - A copy of the article submitted by the District for publication to a newspaper of general circulation in the District regarding water conservation will be included in the Annual Report given to the Board of Directors.

F.1. Performance Measurement – An article regarding water conservation was submitted by the District to the Clifton Record, a paper of general circulation in the District. A copy of the article, as it appeared in print, is included in this report.

Bosque County Today
THE CLIFTON RECORD Meridian Tribune
(254) 675-3336

Middle Trinity GCD talks well wellness with Rotary

By Ashley Barner Editor on Tuesday, March 30, 2021

From left, Rotary Club President Adam Willmann presented pins to Middle Trinity GCD guest speakers Stephanie Keith and Johnny Wells. Ashley Barner | Meridian Tribune

Middle Trinity Groundwater Conservation District recently spoke to the Bosque County Rotary Club about services they offer to protect and balance private groundwater interests through the conservation, preservation and protection of wells throughout the county. "We want you to have your water, but we also want you to be able to have your water for a long time and there's a lot of things that...

Meridian, TX 76665

Weather

F. 2. Objective – The District will present a pre-existing educational program for use in public or private schools in the District at least once each year to educate students on the importance of water conservation.

F. 2. Performance Standard – A description of the educational programs offered by the District for use in the public and private schools in the District will be included in the Annual Report to the Board of Directors each year.

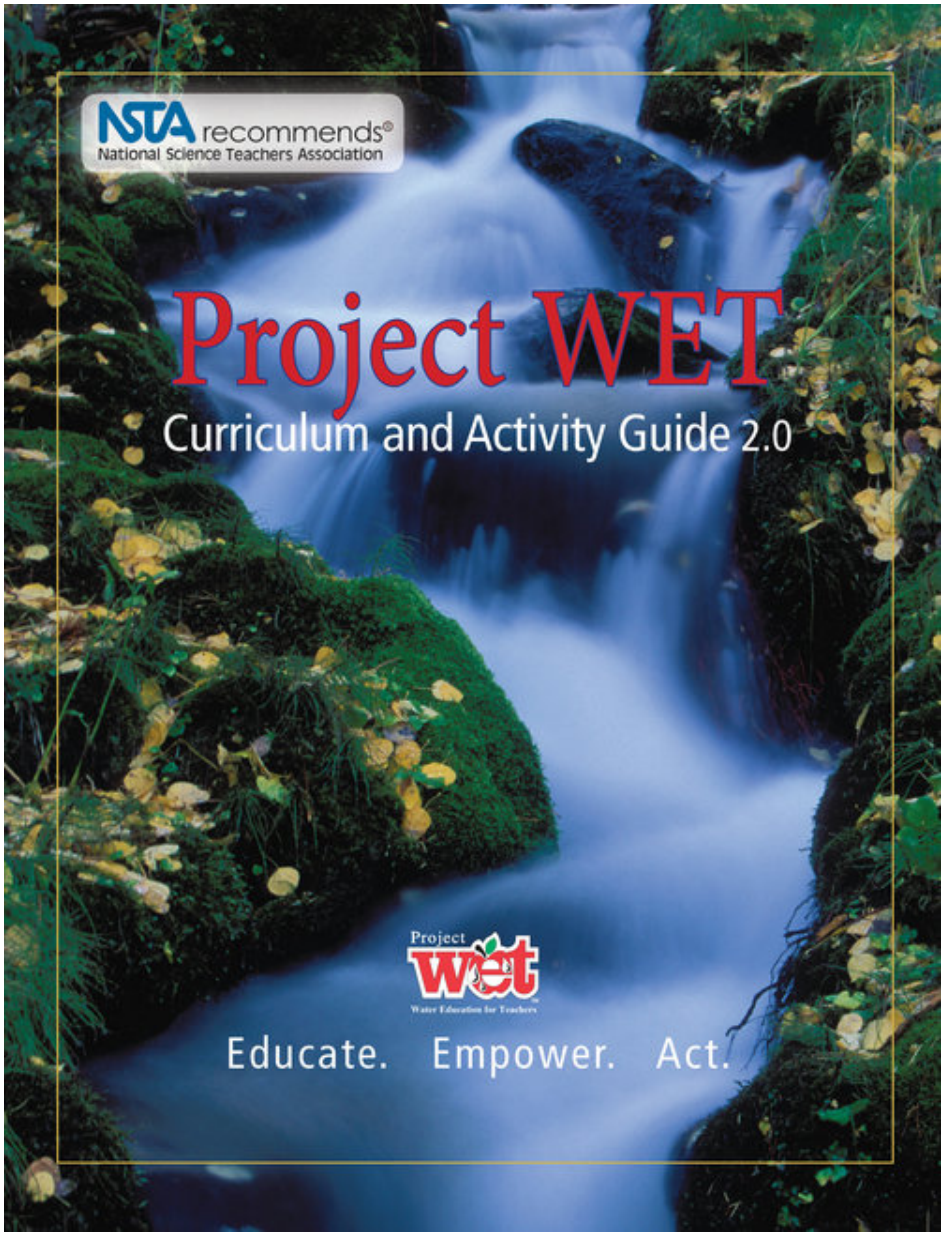
F. 2. Performance Measurement – MTGCD offered several pre-existing educational programs to all 25 of the ISDs within the District including, Project Wet, Getting Little Feet Wet. A description of the Programs and documentation of MTGCD's sponsorship in the form of email lists of offers, receipts for materials and District website posting of the offer for education programs is included.

Curriculum Resources

Project WET

Grades K-12

The Project WET Foundation offers a multitude of action-education resources that not only educate students about water, but empowers the learner by providing opportunities to develop skills through teamwork, decision making, and problem solving. The activity guide is



correlated to K-12 standards, Next Generation Science Standards, Texas Essential Knowledge and Skills, and STEM Education Coalition objectives. A 6 hour CPE investment is required to receive the guide and access to all Project WET resources.

Workshops are a comprehensive overview of the Project WET Foundation and hands-on exploration of the Guide 2.0. Attendees will receive full access to all resources and learn ways to implement the cross-curricular activities in their classrooms. Please contact **Stephanie Keith** (mailto:mtgcd4@centurylink.net) for more details!

www.projectwet.org (https://www.projectwet.org)

***Educators will receive TEA recognized CPE credit for the total 6 hours.**

MORE PROJECT WET INFO (/PROJECTWET)

Getting Little Feet Wet

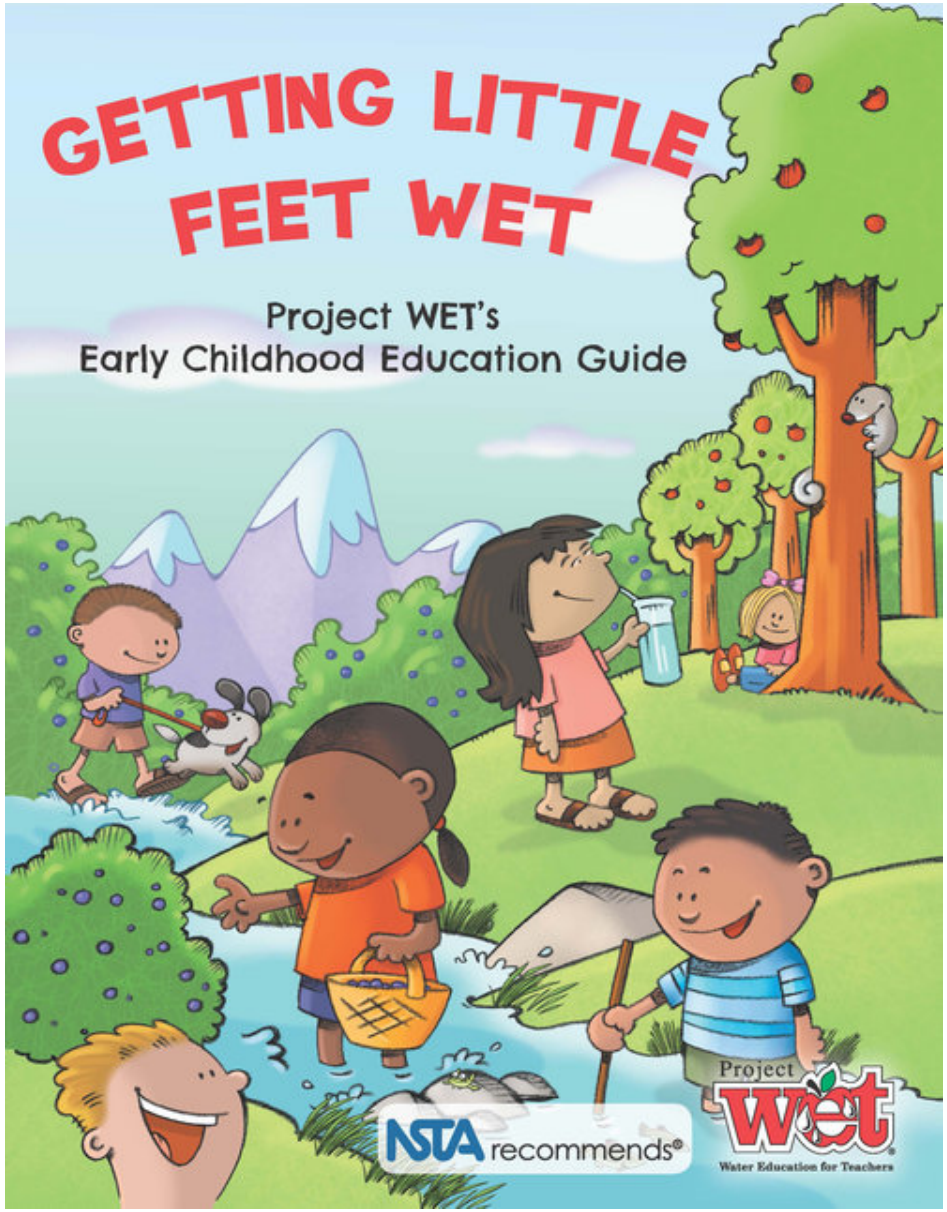
Grades: Pre-K through 2nd

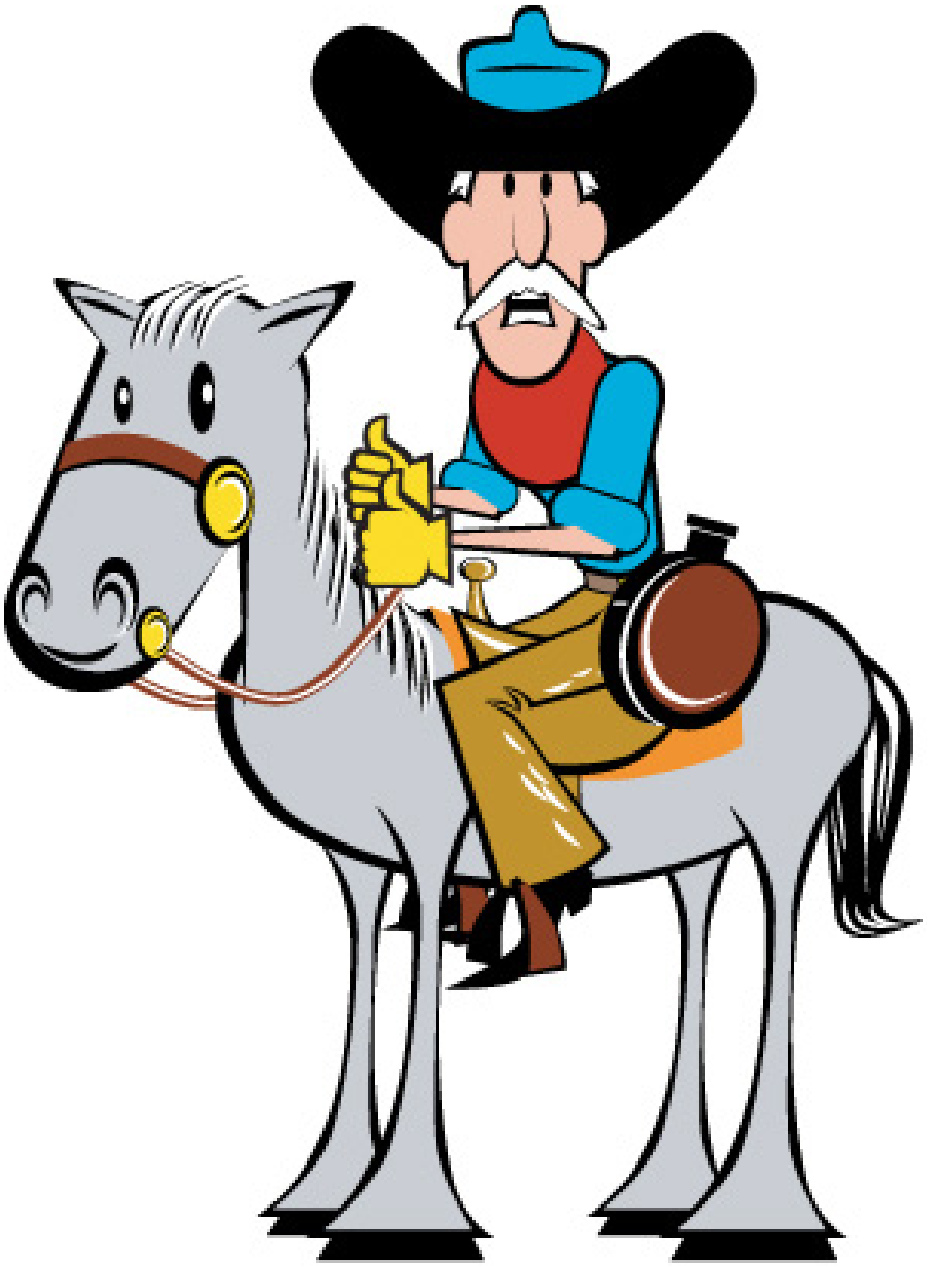
Getting Little Feet Wet can be partnered with the full *Project WET* curriculum and activity guide or used as a stand-alone resource. Every activity is hands-on and geared for younger audiences in grade levels Pre-K through 2nd. A 3 hour CPE investment is required to receive this Project WET resource. Contact Stephanie Keith (mailto:mtgcd4@centurylink.net) for more details.

(Image Credit: Project WET Foundation)

See what NSTA has to say...

(https://www.projectwet.org/media/news/national-science-teachers-association-recommends-project-wet-early-childhood-education)





Major Rivers

Grades: 3 - 5

Major Rivers is a seven lesson, supplemental resource that educates students about water resources, Texas Style! Students have the opportunity to explore the water cycle, Texas watersheds, river basins, and other water topics through hands-on experiments. Teachers within the District will be provided with a comprehensive guide and full color student workbooks free of charge.

Workshop available to earn CPE hours!

***Note** The District will order the resource upon request and has limited quantities on hand.

Spanish resources also available!

Texas Aquatic Science

texasaquaticscience.org (https://texasaquaticscience.org/)

Grades 6 - 12

Texas Aquatic Science curriculum is a TEKS based comprehensive resource that provides opportunities for students to explore water and aquatic life. Teachers can extend the exploration by scheduling a visit to Texas Aquatic Science Certified Field site located throughout the State of Texas.

Middle Trinity GCD just happens to be one of those sites! We offer water quality investigations, exploration of watershed uses, and invertebrate sampling.

TEXAS AQUATIC SCIENCE BROCHURE (HTTPS://TPWD.TEXAS.GOV/EDUCATION/RESOURCES/AQUATIC-SCIENCE/TAS-BROCHURE-PWD_BR_K0700_1935.PDF)

TAS CERTIFIED FIELD SITES (HTTPS://TPWD.TEXAS.GOV/EDUCATION/RESOURCES/AQUATIC-SCIENCE/TAS-BROCHURE-PWD_BR_K0700_1935.PDF)

CONTACT US (/CONTACT-US)

MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT, 930 NORTH WOLFE NURSERY ROAD, STEPHENVILLE, TX, 76401, UNITED STATES (254)965-6705

Project WET
4H Water Ambassador Educator Workshop
Presented By: Middle Trinity Groundwater Conservation District
3.27.2021

Agenda

9:00 AM	Welcome - Idea Pools
9:10 AM	Introduction - What is Project WET? Guide Review
9:20 AM	Silent Thunderstorm - Ambassador Led
9:30 AM	Non-Verbal Communication Discussion
9:55 AM	Blue Planet | A Drop in the Bucket Ambassador Led)
10:15 AM	Break
10:20 AM	Stormwater
10:50 AM	Rainy Day Hike
11:10 AM	Just Passing Thru
12:00 PM	Lunch
1:05 PM	Long Haul
1:25 PM	
1:45 PM	Evaluations, Login Help
2:00 PM	Dismiss

*What's in a square meter? - Pocket Microscopes

Project WET Foundation
PO Box 4230
Bozeman, MT 59772
Phone 866.337.5486

Invoice

Date	Invoice #
3/19/2021	18214

Bill To	Ship To
Middle Trinity Groundwater Conservation Stephanie Keith 930 Wolfe Nursery Rd. Stephenville, TX 76401 US	Stephanie Keith Middle Trinity Groundwater Conservation D 930 Wolfe Nursery Road Stephenville, TX 76401

S.O. No.	P.O. Number	Terms	Ship Date	Via
		Due upon receipt	3/19/2021	UPS Ground

Item Description	Quantity	Price Each	Amount
Project WET Curriculum and Activity Guide 2.0	30	24.00	720.00
UPS Ground Shipping & Handling	1	137.46	137.46
Tracking numbers 1ZVY05630355283654,1ZVY05630356406260,1ZVY05630356855070			

4H Water Ambassador Workshop
SR
3/27/2021

Total	
Amount in U.S. dollars	$857.46
Payments/Credits	$0.00
Balance Due	$857.46

All sales are final. Questions? Please call Customer Service at 1-406-585-2236 or 1-866-337-5486 or email sales@projectwet.org.

Valley Mills Elementary
5th Grade Water Day
April 16, 2021

Middle Trinity GCD

Station 1	**Enviroscape Demo** Luke Reed - 4H Water Ambassador
Station 2	**Geology** Debbie Montgomery
Station 3	Water Suprise Chelsea Dorward
Station 4	Hydration Station - Chris Coon
Station 5	Break - Restroom
Station 6	*How Much Water is in Your Pizza?* *Marc Arnold*
Station 7	Water Jeopardy - MTGCD
Station 8	**How Does a Well Work? - MTGCD**
Whole Group	**Wrap Up Relay**

Texas A&M AgriLife

Rotation 1	8:25 - 8:42
Rotation 2	8:44 - 9:02
Rotation 3	9:04 - 9:22
Rotation 4	9:24 - 9:42
Rotation 5	9:44 - 10:02
Rotation 6	10:04 - 10:22
Rotation 7	10:24 - 10:42
Rotation 8	10:44 - 11:02
Whole Group Relay	11:04 - 11:15

Project WET Sampler Workshop

Kopperl ISD

175 CR 1240

Kopperl, TX 76652

Instructors

Stephanie Keith, Middle Trinity Groundwater Conservation District
Melissa Mullins, Baylor University, CRASR

Agenda

1:30	Introductions - Blue Planet
1:45	What is Project WET?
2:00	Incredible Journey Relay?
2:20	Break
2:25	Break Out Groups
2:30	Pre-K - 5 {Stephanie} 6 - 12 {Melissa}
3:15	Wrap-Up - Debrief - Evaluations - Door Prize
3:30	End

project WET
WATER EDUCATION TODAY

mtged EDUCATION

PROJECT WET

Kopperl ISD August 12, 2021 Guide 2.0 Sampler Workshop

GRADE	NAME	EMAIL	MORE INFO
	Dawn Essex	dawn.essex@kopperlisd.org	
	Julie Holmes	julie.holmes@kopperlisd.org	
Elem.	Christy McFarland	christy.mcfarland@kopperlisd.org	
	Terri Dyan	terri.dyan@kopperlisd.org	
	[illegible]	[illegible]	
5-12	Gaylena Lewis	gaylena.lewis@kopperlisd.org	
1st	Kara Pearson	kara.pearson@kopperlisd.org	
3rd	Kera Bledsoe	kera.bledsoe@kopperlisd.org	
7-12	Ray Lee Henry	ray.henry@kopperlisd.org	
Custodian	Sherry Waller	sherry.waller@kopperlisd.org	
Sped	Wendy Allen	wendy.allen@kopperlisd.org	
Kinder	Tammy Moss	tammy.moss@kopperlisd.org	
4th	Debbie Beavers	debbie.beavers@kopperlisd.org	
2nd	Robyn Peeples	robyn.peeples@kopperlisd.org	
7,9-12	Josh Thayer	josh.thayer@kopperlisd.org	
5,6,8	Cody Harris	cody.harris@kopperlisd.org	
Principal	Brad Janek	brad.janek@kopperlisd.org	
Sped	Layna Philipp	layna.philipp@kopperlisd.org	
Counselor	Jody Janek		
PK	Danna Casey	danna.casey@kopperlisd.org	
9-12	Robin Flores	robin.flores@kopperlisd.org	
6-8, 11 ELA	Kallie Younger	kallie.younger@kopperlisd.org	

TEXAS WATER DEVELOPMENT BOARD

P.O Box 13231
1700 N. Congress Ave
Austin Texas 78711-3231

INVOICE

Bill To:
Middle Trinity Ground Water Conservation District
Attn: Stephanie Keith
930 Wolfe Nursery Road
Stephenville, Tx 76401
mtgcd4@centurylink.net

DATE:08/06/21

INVOICE # IR210060

DATE DUE: 09/06/2021

SERVICE PERIOD		AMOUNT
	ClassRoom Pack(Replacement Pack)-English	
	Includes 30 Workbooks and 30 home Leaflets per set ($25.00) 1	$25.00
	ClassRoom Pack(Replacement Pack)-Spanish $ 25.00 (0)	
	Includes 30 Workbooks and 30 home Leaflets per set	
	Total	$25.00
	Shipping	
	Taxs Exempt	
	TOTAL	$25.00

Make all checks payable to Texas Water Development Board
If you have any questions concerning this invoice, contact Tracy Hernandez 512 475-4839

Detach and mail stub with your payment

DATE: 08/06 2021
DATE DUE: 09/06/2021
INVOICE # IR210060
DESCRIPTION Major Rivers
AMOUNT $ 25.00

THANK YOU FOR YOUR BUSINESS!

Hopper ISD
Debbie Beavers
4th Grade Science

Stephanie Keith

From: Project WET Foundation Sales <sales@projectwet.org>
Sent: Tuesday, August 10, 2021 3:53 PM
To: Stephanie Keith
Subject: Invoice for your Project WET Foundation order

project WET
WATER EDUCATION TODAY

Stephanie Keith,

Thank you for your order from Project WET Foundation. You can check the status of your order by logging into your account. If you have questions about your order, you can email us at sales@projectwet.org.

Your Invoice #1000011219 for Order #1000010980

Billing Info

Stephanie Keith
Middle Trinity Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, Texas, 76401
United States
T: 2549656705

Shipping Info

Stephanie Keith
Middle Trinity Groundwater Conservation District
930 Wolfe Nursery Rd.
Stephenville, Texas, 76401
United States
T: 2549656705

Payment Method

Credit Card

Credit Card Type MasterCard
Credit Card Number xxxx-0341

Shipping Method

UPS - Ground

Items	Qty	Subtotal
The Water Cycle Poster SKU: M&P-Water-Cycle-Poster	1	$9.95

total on back →

Project WET Foundation
PO Box 4230
Bozeman, MT 59772
Phone 866.337.5486

Invoice

Date	Invoice #
7/29/2021	18642

Bill To	Ship To
Middle Trinity Groundwater Conservation Stephanie Keith 930 Wolfe Nursery Rd. Stephenville, TX 76401 US	Middle Trinity Groundwater Conservation Stephanie Keith 930 Wolfe Nursery Rd. Stephenville, TX 76401

S.O. No.	P.O. Number	Terms	Ship Date	Via
		Due upon receipt	7/29/2021	USPS

Item Description	Quantity	Price Each	Amount
Project WET Curriculum and Activity Guide 2.0	20	24.00	480.00
USPS Shipping & Handling	1	13.75	13.75

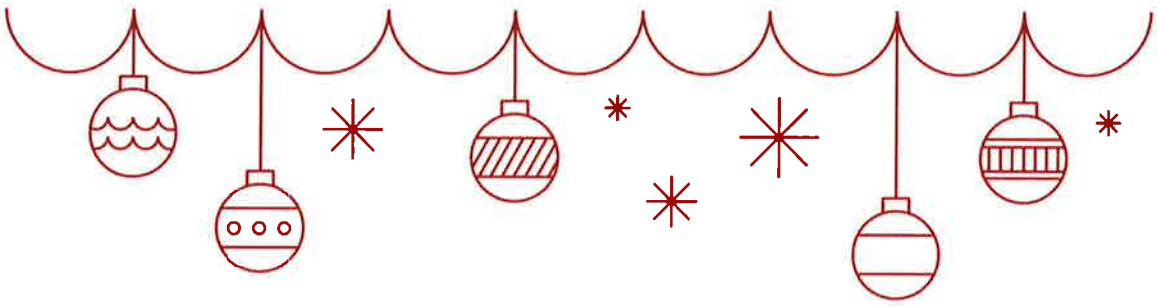
Hopperl ISD
Project WET Curriculum
Workshop

Total	
Amount in U.S. dollars	$493.75
Payments/Credits	$0.00
Balance Due	$493.75

All sales are final. Questions? Please call Customer Service at 1-406-585-2236 or 1-866-337-5486 or email sales@projectwet.org.

Stephanie Keith

From: Stephanie Keith <stephanie@middletrinitygcd.org>
Sent: Friday, December 24, 2021 8:27 AM
To: Stephanie Keith
Subject: [Test Email] Merry Christmas



Warmest thoughts and best wishes for a joyful holiday season.
We hope you have a fabulous holiday surrounded by family and friends,
and we wish you all the best for the new year!

Wishing you all the best,

Middle Trinity Groundwater Conservation District

MTGCD Info & Services

Education & Curriculum

BACK

Sent

erry Christmas!
December 24, 2021

Merry Christmas!

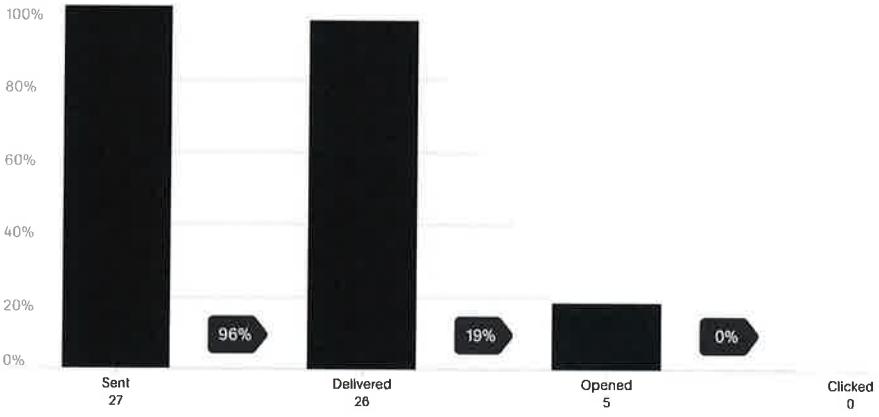
Sent on Dec 24 at 8:23am

Decorate

Recipient List	MTGCD Education
Unique Recipients	27
Sender Profile	Stephanie Keith

Apple Mail privacy update
Apple released a new privacy feature in iOS 15, which may affect the accuracy of your open rates.

LEARN MORE



Delivered	26 >
Opened	5 >
Unsubscribed	0

HOME

Profiles

All 27

SMART LISTS

Subscribers 26

Customers 0

Leads New 26

Donors 0

SAVED SEGMENTS

No segments yet. Create segments by using filters in Profiles.

Choose an email template and quickly draft a campaign.

CREATE CAMPAIGN

ce is waiting

cted 26 email subscribers. Send them a beautiful, on-brand email for free.

GET STARTED

More Filters SAVE SEGMENT

Search

	First Name	Last Name	Subscriber Since	Subscriber Source	Accepts Marketing
sd.org	Tiffany	Jones	Dec 24...	Manual — Im...	✓
	Wes	Corzine	Dec 24...	Manual — Im...	✓
iet	Candice	Rust	Dec 24...	Manual — Im...	✓
esbyisd.net	Sheila	McClinton	Dec 24...	Manual — Im...	✓
d.com	Robin	Eubanks	Dec 24...	Manual — Im...	✓
	Cheyenne	Cook	Dec 24...	Manual — Im...	✓
nfillsgapis...	Shana	Campbell	Dec 24...	Manual — Im...	✓
isd.org	Jennifer	Campbell	Dec 24...	Manual — Im...	✓
	Kenzie	King	Dec 24...	Manual — Im...	✓
utspringsi...	Christy	Halbert	Dec 24...	Manual — Im...	✓
	Joretta	Haas	Dec 24...	Manual — Im...	✓
	Jennifer	Pair	Dec 24...	Manual — Im...	✓
net	Lori	Womack	Dec 24...	Manual — Im...	✓
om	Michelle	Castillo	Dec 24...	Manual — Im...	✓
erlisd.org	Katrina	Adcock	Dec 24...	Manual — Im...	✓
ooroisd.net	Kendra	Byrom	Dec 24...	Manual — Im...	✓

2021 Curriculum Contact

Email	First	Last
nbassham@mmisd.us	Nancy	Lingle-Bassham
jpair@bdisd.net	Jennifer	Pair
kking@twisd.us	Kenzie	King
scsnewsline@gmail.com	Michelle	Castillo
chudson@lingleville.us	Cheryl	Hudson
wcorzine@hisd.us	Wes	Corzine
kelly.magin@sville.us	Kelly	Magin
twhite@dublinisd.us	Terri	White
lingram@comancheisd.net	Leanne	Ingram
crust@sidney.esc14.net	Candice	Rust
lwomack@deleonisd.net	Lori	Womack
bruedas@gustine.esc14.net	Brandy	Ruedas
shana.campbell@cranfillsgapisd.net	Shana	Campbell
juan.ramirez@morganisd.org	Juan	Ramirez
katrina.adcock@Kopperlisd.org	Katrina	Adcock
r_eubanks@iredell-isd.com	Robin	Eubanks
tiffany.jones@cliftonisd.org	Tiffany	Jones
christy.halbert@walnutspringsisd.net	Christy	Halbert
jleinhauser@meridianisd.org	Jaime	Leinhauser
j.haas@vmisd.net	Joretta	Haas
patti@ccisd.com	Patti	Thomas
crawleya@ccisd.com	Amanda	Crawley
jcampbell@gatesvilleisd.org	Jennifer	Campbell
bregister@gatesvilleisd.org	Bridget	Register
ccook@evantisd.org	Cheyenne	Cook
sheila.mcclinton@oglesbyisd.net	Sheila	McClinton
kendra.gustin@jonesboroisd.net	Kendra	Byrom

F.3. Objective – On an annual basis, the District will distribute an informational flier on water conservation during at least two public events that occur within the District's boundaries.

F.3. Performance Standard – The District's Annual Report will include a copy of the most recent informational flier on water conservation and will also include information on the public events where the flier was distributed.

F.3. Performance Measurement – A copy of the informational flier on water conservation is included. It was provided to the public at educational events and numerous public schools by the District's education coordinator.

MIDDLE TRINITY GROUNDWATER CONSERVATION DISTRICT

FAQ

What is a Groundwater Conservation District?

A groundwater conservation district (GCD) is a political subdivision that has the authority to regulate the spacing of water wells, the production from water wells, or both under the Texas Constitution, Article III, Section 52 or Article XVI, Section 59.

FUNDING

Tax-Based funding from residents within Bosque, Coryell, Erath, and Comanche Counties

BUDGET ALLOCATION

- Education Outreach
- Science & Research
- Operations
- Conservation
- Regional Planning

HOW MANY GCDS ARE IN TEXAS?

- Currently 98 GCDs
- 2 Subsidence Districts

How is a GCD Created?

There are two ways a GCD can be created:

1. Texas Legislature
2. Texas Commission on Environmental Quality Through a Local Petition Process

Who Keeps MTGCD in Check?

TCEQ will process, review, and facilitate landowner petitions for creating GCDs. TCEQ also evaluates legislative bills that create new or modifies existing GCDs. Each district is created within Priority Groundwater Management Areas (PGMAs). Alongside TCEQ, the Texas Water Development Board is required to approve all groundwater management plans to ensure the district is effectively managing their groundwater resources.

When Was MTGCD Created?

MTGCD was first created May 11, 2004. The first two counties to join the district were Erath and Comanche. Bosque County was the third to join the district, November 15, 2009. Coryell was the final county to join on June 15, 2010.

Establishing Rules

Middle Trinity Groundwater Conservation District established their rules according to Chapter 36 of the Texas Water Code.

Rule of Capture

Grants landowners a legal right to capture the water beneath their property without regard to effects on neighboring wells except in cases of waste or malice.

Benefits of Residing Within a GCD

- Free Well Water Quality Test/Year for Registered Well Owners
- Free Well Plugging/Capping
- Educational Programming
- Scholarship Program
- Ensure Proper Spacing Between Wells
- Aquifer & Well Monitoring

Middle Trinity Groundwater Conservation District
930 Wolfe Nursery Road
Stephenville, TX 76401
254-965-6705
www.middletrinitygcd.org

Serving

Bosque Comanche Coryell Erath

mtgcd

F.4. Objective – The District will provide information relating to recharge enhancement on the District web site at least once each year.

F.4. Performance Standard – The District's annual Report will include a copy of the information provided on the District web site related to recharge enhancement.

F.4. Performance Measurement – a copy of the information on recharge enhancement as it appeared on MTGCD's website during 2021 is included.

Notice of Permit Hearing and Board Meeting (/blog/2021/4/26/notice-of-permit-hearing-and-board-meeting)

Debbie Montgomery (/blog?author=5a43c4425ce350e83e80b441) · April 26, 2021 (/blog/2021/4/26/notice-of-permit-hearing-and-board-meeting)

The May MTGCD Permit Hearing and Board Meeting will be held on Thursday, May 6, 2021, at 1:00 PM. View a copy of the agenda here (/s/May-2021-Agenda.pdf).

Articles (/blog/category/Articles)

Rain Gardens for Recharge (/blog/raingardensforrecharge)

Middle Trinity Groundwater Conservation District (/blog?author=5a205d6d5e0ed8f1cf339b4c) · April 13, 2021 (/blog/raingardensforrecharge)

Aquifer recharge occurs when surface water, usually from precipitation, percolates down through the pore spaces found in the soil and rock profiles. Recharge can also occur from rivers, lakes, and can be natural or influenced by human activity.

Can we create recharge areas within our own backyards? The answer to that question is, absolutely! Rain gardens planted with native plant species are an excellent way to create beautiful recharge areas. Rain gardens slow runoff down so that it has a chance to filter through pore space within the earth. Deeply rooted native plant species also provide pathways for water to percolate through as they filter out pollutants. Natives also provide habitat and food for birds and a variety of pollinator species.

Below are links that have helpful tips for planning a new rain garden feature.

https://nemo.uconn.edu/raingardens/sizing.htm
(https://nemo.uconn.edu/raingardens/sizing.htm)

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/null/?cid=nrcs142p2_008528
(https://www.nrcs.usda.gov/wps/portal/nrcs/detail/null/?cid=nrcs142p2_008528)

https://tinkerscreek.org/rain-gardens/ (https://tinkerscreek.org/rain-gardens/)

Happy planting!

Full Header Image:
(https://www.nature.org/content/dam/tnc/nature/en/photos/Rain%20Garden2_TNC%20New%20Jersey.jpg#)https://www.nature.org/content/dam/tnc/nature/en/photos/Rain%20Garden2_TNC%20New%20Jersey.jpg#

F.5. Objective – The District will provide information on rainwater harvesting each year by offering new information about rainwater harvesting which has been posted on the District web site at least once each year.

F.5. Performance Standard – The District's Annual Report will provide a copy of the information on rainwater harvesting which has been posted on the District web site in the previous year.

F.5. Performance Measurement – a copy of the rainwater harvesting information posted to the MTGCD website during 2021 is included.

Notice of Permit Hearing and Board Meeting (/blog/2021/5/24/notice-of-permit-hearing-and-board-meeting)

Debbie Montgomery (/blog?author=5a43c4425ce350e83e80b441) · May 24, 2021 (/blog/2021/5/24/notice-of-permit-hearing-and-board-meeting)

The June MTGCD Permit Hearing and Board Meeting will be held on Thursday, June 3, 2021, at 1:00 PM. View a copy of the agenda here (/s/June-2021-Agenda.pdf).

From Buckets to Tanks... (/blog/frombucketstotanks)

Middle Trinity Groundwater Conservation District (/blog?author=5a205d6d5e0ed8f1cf339b4c) · May 21, 2021 (/blog/frombucketstotanks)

Whether rainwater is collected in a bucket or a large capacity storage tank, it is important to properly plan the design of any new rainwater collection system to ensure it will meet future needs. Taking the time to work through the below considerations can help establish the appropriate quantity of water needed and pinpoint the primary purpose of the system.

Pre-Design Considerations

1. **What will the water be used for?**

   This is an important one to start with because the use will determine the water quantity needed and tank size. Some uses would include irrigation, household water source, livestock watering, and flushing toilets.

2. **How much water can be collected?**

   Generally, every **inch** of rainfall that falls on 1,000 square feet of a collection surface will produce approximately 600 gallons of water. A good rule of thumb is to design the collection system to hold a 2" - 3" rain event.

3. **Space Availability**

   Space availability can often be a limiting factor and should be considered carefully before purchasing any equipment. Common spacing limitations can be attributed to already established landscaping, such as trees, pathways, water features, or fencing. Another consideration is the height of your house eaves when shopping for a tank. Are gutters present?

4. **Does the local municipality or groundwater district offer rebates?**

   Check your local water municipality or groundwater district for any rebate programs available. Any cost savings opportunities are helpful when installing a new system. Rainwater harvesting equipment may also be eligible for a tax exemption!

5. **Is your HOA or POA aware of the Texas Property Code Sec 202.007?**

   HOA's cannot ban rainwater harvesting systems, but they may limit the location of a tank.

So now that all of the sizing and purpose considerations have been established it is time to start finalizing the design detail!

1. **Proper Tank Sizing**

   Remember the general rule of thumb is to plan for a 2"-3" rain event. There are multiple rainwater collection calculators available if math just is not a strong point! If a 2,000 square foot roof will be the collection site the math would look something like this:

   1" of rainfall = 600 gallons per 1,000 square feet of covered space

   600 gallons x 2 = 1,200 gallons of rainwater per 1" of rainfall

   A suitable tank size that fits the rule of thumb would be:

   2" rainfall: 2,400-gallon tank

   3" rainfall: 3,600-gallon tank

2. Inlet Size and Overflow

Overflow will happen during a rainy year or with decreased water usage, it is best to plan ahead by sizing the overflow size to the inlet size. If you are working with a tank company this is a good time to bring in your specifications to ensure that proper sizing is done ahead of time. If the tank is 1,000 gallons or less more than likely collection will be from one downspout and a 3" inlet will work great unless the gutters are 6 inches. In that case, a 4-inch inlet would be a better option. Again, consulting with a system expert might save time, money, and headaches down the road!

3. Outlet Size

When determining the outlet size, consider the method of water withdrawal to aid in this decision. If using a garden hose a ¾" bulkhead connection will allow for a screw-in spigot.

4. To Pump or Not to Pump?

Pumps are handy but not necessary. If the system will be used to pump into a house or into an irrigation system a pump is necessary in order to pressurize and move the water. Pressurized systems will require backflow protection devices, especially within the city limits. A submersible sump pump is also a suitable pumping solution.

5. **Keeping the Tank Clean**

   Screens will be a tank's best friend when it comes to cleanliness. When leaves clog the gutters, the leaves will also clog the tank so invest in gutter screens. An additional basket on the tank can also help.

System Installation

1. **Choose the Base Wisely!**

   It is important to install the tank on a solid base. Believe it or not, water weighs about 8.3 pounds per gallon! A 2,500-gallon tank weighs over 10 tons when full! Some material options that will support the entire tank bottom are crushed granite, limestone blocks, pavers, and of course concrete. One other factor to consider is the height of the base to ensure easy access to spigots and attached hoses.

2. **Fitting Positioning**

   When positioning the overflow make sure not to place it above the outlet. Be sure to also position the outlet towards the bottom of the tank with enough room to remove or install a garden hose and turn the spigot on and off.

No rainwater collection system is the same. Careful planning, in the beginning, will save a headache later. Happy collecting!

F.6. Objective – The District will evaluate the State Brush Control Plan as it is revised from time to time at least once each year to determine whether projects within the District will increase the groundwater resources of the District.

F.6. Performance Standard – Upon review of a newly revised State Brush Control Plan, the District's Annual Report will include a copy of the most recent brush control information pertaining to the District.

F.6. Performance Measurement – A copy of the information on the State Brush Control Plan updated and posted to the MTGCD website during 2021 is included.

Cedars...The Good, The Bad, and The Ugly (/blog/cedars)

Middle Trinity Groundwater Conservation District (/blog?author=5a205d6d5e0ed8f1cf339b4c) · October 1, 2021 (/blog/cedars)

Looking across landscapes of cedar in this part of Texas usually leads to a negative perception of the native tree. Many times cedars are topics of discussion related to clearing methods, land management, water conservation, and the dreaded allergies. Many times these discussions lead to plans of complete land clearing to eradicate cedar populations, but are they really that bad?

Contrary to popular belief cedar trees are not actually water guzzlers. They are actually quite conservative and are considered to be a xeriscape plant. Its conservative nature can be attributed to its small wax-coated leaves that limit water transpiration. Even though the trees have a conservative transpiration rate it still requires plenty of water for survival. Large thickets have a big effect on water supplies. Another disadvantage to large cedar thickets is the dense coverage that prevents precipitation from ever reaching the ground before it evaporates. This can be positive or negative. In a positive sense, in steep areas, the trees prevent large amounts of erosion from occurring. Negatively, water never makes it to the ground which decreases the opportunity to recharge the aquifer. They are beneficial to wildlife, especially during the winter months!

There is more to brush control, specifically to controlling cedar populations. Cedar trees offer some benefits and studying the land will help determine what those benefits are and what management approach should be established. When considering clearing large amounts of cedar take the time to study browse lines, existing plant species, wildlife, slopes, and what is

the expected outcome. Proper brush control is just a small part of land stewardship practices. Here is a list of some of the many considerations that should be included in determining any future land management:

- Absorbing rainfall
- Reducing run-off
- Increasing base-flow
- Properly using prescribed fire
- Planned and managed grazing
- Appropriate management
- Erosion management
- Reseeding with natives
- Wildlife and habitat management plans
- Riparian management and restoration
- Springs and creek bank protection strategies
- Increasing bio-diversity
- Conserving rare species
- Appropriate estate planning
- Being a good neighbor
- Contributing to your community
- Conserving aquifer recharge areas
- Managing exotic flora and fauna species
- Investigating existing and new incentive programs

- Continuing education
- Focus on catching water rather than run-off

Study the land. Take the time. Establish goals with stewardship in mind.

http://texasconservation.org/resources/Read%20your%20Land%20WCI.pdf (http://texasconservation.org/resources/Read%20your%20Land%20WCI.pdf)

http://brp-journal.blogspot.com/2010/04/cedar-rebuttal.html (http://brp-journal.blogspot.com/2010/04/cedar-rebuttal.html)

Notice of Permit Hearing and Board Meeting (/blog/2021/9/27/notice-of-permit-hearing-and-board-meeting)

Crystal Eberhart (/blog?author=5a4e613d6f935edd34bfb097) · September 27, 2021 (/blog/2021/9/27/notice-of-permit-hearing-and-board-meeting)

NOTICE OF Public Hearing and District Board Meeting

G.1. Objective – The District will review and calculate its permit and well registration totals in light of the Desired Future Conditions of the groundwater resources within the boundaries of the District to assess whether the district is on target to meet the Desired Future Conditions estimates submitted to TWDB.

G.1. performance Standard – The District's Annual Report will include a discussion of the District's permit and well registration totals and will evaluate the District's progress in achieving the Desired Future Conditions of the groundwater resources within the boundaries of the District and whether the District is on track to maintain the Desired Future Conditions estimates over the 50 year planning period.

G.1. Performance Measurement – The District's Annual Report includes 2021 totals for well registrations and permits and a discussion of the District's progress and achievements in its efforts to meet its DFCs.

Discussion on MTGCD DFCs

2021 Well Registration and Permit Totals

The number of wells registered in 2021 increased from the number registered in 2020. During 2020, 417 wells were registered with the District, 104 of them requiring permits. By comparison, in 2021, 479 wells were registered with 133 requiring permits.

District Totals:

Total # of exempt wells		**22,658**
Total # of grandfather permits	**4,718**	
Total # of operating permits	**1,479**	
Total # of permits		**6,197**
Total # of wells registered in MTGCD		**28,855**

County Data:

Coryell County

Total # of wells registered – 2,760	**exempt – 2,626**	**GP - 112**	**OP –22**

Bosque County

Total # of wells registered – 3,977	**exempt – 3,527**	**GP - 387**	**OP – 63**

Comanche County

Total # of wells registered – 10,859	**exempt – 7,205**	**GP – 2,822**	**OP – 832**

Erath County

Total # of wells registered – 11,259	**exempt – 9,300**	**GP – 1,397**	**OP – 562**

AVERAGE WATER WELL LEVELS BY COUNTY

2021

Comanche (29 wells)****

Gains +49	Loses -3	+46 / 26 = -+1.7 feet average loss/well

Coryell (16 wells)**

Gains +18.4	Loses -28.1	-9.7/ 13 = -0.74 feet average gain/well

Erath (21 wells)***

Gains +23.5	Loses -23.6	+0.10 / 17 = +0.005 feet average gain/well

Bosque (19 wells)*

Gains +20.6	Loses -36.3	-15.7 / 13 = -1.2 feet average gain/well

* wells M-218 and M-220 are omitted because of pumping during measurement.

** wells M-20, M-60, and M-80 are omitted because they were pumping at time of measurement.

*** wells M-206, M-211, M-216, and M-219 are omitted because of pumping at time of measurement.

**** wells M-305, M-315, M-325, M-340, M-360 and M-370 are omitted because they were pumping at the time of measurement.

1/1/2021 – 12/31/2021

New Wells

220 **Erath**:

Drilled Exempt – 94

Drilled Non-Exempt – 37

Pending Exempt – 48

Pending Non-Exempt – 41

136 **Comanche**:

Drilled Exempt – 72

Drilled Non-Exempt – 12

Pending Exempt – 30

Pending Non-Exempt – 22

64 **Bosque**:

Drilled Exempt – 38

Drilled Non-Exempt – 17

Pending Exempt – 8

Pending Non-Exempt – 1

59 **Coryell**:

Drilled Exempt – 22

Drilled Non-Exempt – 2

Pending Exempt – 34

Pending Non-Exempt – 1

346 Exempt
+ 133 Permitted
479 Total New Wells 2021

G.2. Objective – The District will annually sample the water levels in at least five monitoring wells in each of the counties within the District and will determine the five-year water level averages based on the samples taken. The District will compare the five-year water level averages to the corresponding five-year increment of its Desired Future Conditions in order to track its progress in achieving the Desired Future Conditions.

G.2. Performance Standard – The District's Annual Report will include the water level samples taken each year for the purpose of measuring water levels to assess the District's progress towards achieving its Desired Future Conditions. Once the District has obtained water level samples for five consecutive years and is able to calculate water level averages over five-year periods thereafter, the District will include a discussion of its comparison of water level averages to the corresponding five-year increment of its Desired Future Conditions in order to track its progress in achieving it Desired Future Conditions.

G.2. Performance Measurement – The MTGCD is collecting water level measurements on a quarterly basis in 82 monitoring wells in the District. 21 wells are in Erath County, 29 wells are in Comanche County, 18 wells are in Bosque county and 16 wells are in Coryell County. The MTGCD has 13 years and 11 months of data on the Comanche and Erath County wells, nine years and 11 months of data on the Bosque County wells and 10 years and 11 months of data for the Coryell County wells. Water level samples collected by the District are maintained in a database and are available for viewing at MTGCDs office. Water level samples taken in 2021 follow, along with a discussion of the District's comparison of five-year water level averages to the five-year increment of its Desired Future Conditions in order to track its progress in achieving its DFCs.

DISCUSSION OF DISTRICT'S COMPARISON OF FIVE-YEAR WATER LEVEL AVERAGES

TO FIVE-YEAR INCREMENTS OF DFCS*

Comparison of an average of the District's last five years of water level measurements with five-year increments of the GMA-8 Desired Future Conditions (DFCs) for Comanche, Erath, Bosque and Coryell Counties clearly indicate that MTGCD is on target to achieve its DFCs.

County	5-yr avg. water level change	5-yr DFC increment (avg. of layers)
Comanche	**+0.710 ft. gain**	**-0.34 ft. drawdown**
Erath	**+0.105 ft. gain**	**-1.21 ft. drawdown**
Bosque	**-0.452 ft. loss**	**-11.04 ft. drawdown**
Coryell	**-0.178 ft. loss**	**- 6.32 ft. drawdown**

***Please refer to the following tables – "GMA-8 Desired Future Conditions for the N. Trinity Aquifer" and "5-year Average Water Levels by County" for supporting data.*

5 Year DFC Increment (Avg of Layers)

1. Add up the DFC's/Layer and divide by number of layers
2. Multiply result by 10% (0.1) to get 5 year increment

GMA-8 Desired Future Conditions for the N. Trinity Aquifer

Bosque County

- From estimated year 2010 conditions, the average drawdown of the Paluxy aquifer should not exceed approximately 6 feet after fifty years.
- From estimated year 2010 conditions, the average drawdown of the Glen Rose aquifer should not exceed approximately 49 feet after 50 years.
- From estimated year 2010 conditions, the average drawdown of the Travis Peak aquifer should not exceed approximately 167 feet after 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hensell aquifer should not exceed approximately 129 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hosston aquifer should not exceed approximately 201 feet in 50 years.

Comanche County

- From estimated year 2010 conditions, the average drawdown of the Glen Rose aquifer should not exceed approximately 1 foot in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Travis Peak aquifer should not exceed approximately 2 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hensell aquifer should not exceed approximately 2 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hosston aquifer Should not exceed approximately 3 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Antlers aquifer Should not exceed approximately 9 feet in 50 years.

Coryell County

- From estimated year 2010 conditions, the average drawdown of the Paluxy aquifer Should not exceed approximately 7 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Glen Rose aquifer Should not exceed approximately 14 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Travis Peak aquifer should not exceed approximately 99 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hensell aquifer Should not exceed approximately 66 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hosston aquifer should not exceed approximately 130 feet in 50 years.

(CONTINUED ON NEXT PAGE)

Erath County

- From estimated year 2010 conditions, the average drawdown of the Paluxy aquifer should not exceed approximately 1 foot in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Glen Rose aquifer should not exceed approximately 5 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Twin Mountains aquifer Should not exceed approximately 6 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown in the Travis Peak aquifer should not exceed approximately 19 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hensell aquifer should not exceed approximately 11 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Hosston aquifer should not exceed approximately 31 feet in 50 years.
- From estimated year 2010 conditions, the average drawdown of the Antlers aquifer should not exceed approximately 12 feet in 50 years.

5 YEAR AVERAGE WATER LEVELS BY COUNTY

Comanche County

2017	-1.7 average loss/well
2018	+1.39 average gain/well
2019	-0.30 average loss/well
2020	-0.38 average loss/well
2021	+1.7 average gain/well

+0.71/5 =+0.142 average 5 year gain/well

Coryell County

2017	-0.3 average loss/well
2018	+0.44 average gain/well
2019	-0.39 average loss/well
2020	+0.10 average gain/well
2021	-0.74 average loss/well

-0.89/5 = -0.178 average 5 year loss/well

Erath County

2017	-1.2 average loss/well
2018	+3.76 average gain/well
2019	-3.8 average loss/well
2020	+1.34 average gain/well
2021	+0.005 average gain/well

+0.105/5 = +0.021 average 5 year gain/well

Bosque County

2017	-2.6 average loss/well
2018	+0.58 average gain/well
2019	-1.31 average loss/well
2020	+2.27 average gain/well
2021	-1.2 average loss/well

-2.26/5 = -0.452 average 5 year loss/well

AVERAGE WATER LEVEL BY COUNTY

2021

COMANCHE COUNTY (29 Wells)*

Gains +49 Losses -3 +46/26 = +1.7 average gain per well

CORYELL COUNTY (16 Wells)**

Gains +18.4 Losses -28.1 -9.7/13 = -.74 average loss per well

ERATH COUNTY (21 Wells)***

Gains +23.5 Losses -23.6 +.1/17 = +.005 average gain per well

Bosque County (19 Wells)****

Gains +20.6 Losses -36.3 -15.7/13 = -1.2 average loss per well

*Wells M-218 and M-220 are omitted because of pumping at time of measurement

** Wells M-20, M-60 and M-80 are omitted because of pumping at time of measurement

***Wells M-206, M-211, M-216, and M-219 are omitted because of pumping at time of measurement

****Wells M-305,M-315,M-325,M-340,M-360,and M-370 are omitted because of pumping at time of measurement

AVERAGE WATER WELL LEVELS BY COUNTY

2020

Comanche (29 wells)****

gainers +26.8 losers -36.7 -9.9 / 26 = -0.38 feet average loss/well

Coryell (14 wells)**

gainers +26.7 losers -16.7 +10 / 10 = +0.10 feet average gain/well

Erath (21 wells)***

gainers +31.8 losers -10.4 +21.4 / 16 = +1.34 feet average gain/well

Bosque (18 wells)*

gainers +41.9 losers -19.2 +22.7 / 10 = +2.27 feet average gain/well

* wells M-305, M-315, M-325, M-340, M-360, M-370, M-385 and M390 are not included as they were pumping during measurement.

** wells M-20, M-60, M-70, and M-80 are omitted because they were pumping at time of reading.

*** wells M-204, M-205, M-216, M-219 and M-221 are omitted because they were pumping at time of reading.

**** wells M-217, M-220 and M-222 are omitted because they were pumping at the time of reading.

AVERAGE WATER WELL LEVELS BY COUNTY*

2019

Comanche (29 wells)

gainers +51.3 losers -60.2 -8.9 / 29 = -0.30 average loss/well

Coryell (13 wells)**

gainers +13.5 losers -17.4 -3.0 / 12 = -0.39 average loss/well

Erath (22)****

gainers +11.9 losers -81.1 -69.2 / 18 = -3.80 average loss / well

Bosque (19 wells)***

gainers +21.4 losers -39.7 -18.3 / 14 = -1.31 average loss / well

*data is compiled from water level readings filed under MTGCD Management Plan Objective G.2

**wells M-20, M-60 & M-70 were omitted because they were pumping when measured and their readings would erroneously skew data

***wells M-305, M-350, M-360, M-385 & M-390 were omitted because they were pumping when measured and their readings would erroneously skew data

****wells M-205, M-216, M-219 & M-221 were omitted because they were pumping when measured and their readings would erroneously skew the data

AVERAGE WATER WELL LEVELS BY COUNTY*

2018

Comanche (27 wells)

gainers +74.0 losers -36.5 +37.5 / 27 = +1.39 average gain/well

Coryell (12 wells)

gainers +20.3 losers -15.0 +5.3 / 12 = +0.44 average gain/well

Erath (22)

gainers +116.2 losers -33.5 +82.7 / 22 = +3.76 average gain / well

Bosque (16 wells)**

gainers +48.8 losers -39.6 +9.2 / 16 = +0.58 average gain / well

*data is compiled from water level readings filed under MTGCD Management Plan Objective G.2

**wells M-305 and M-350 were omitted because they were pumping when measured and their readings would erroneously skew data

AVERAGE WATER WELL LEVELS BY COUNTY*

2017

Comanche (27 wells)**

gainers +9.2 losers -53.1 -43.9 / 26 = -1.7 average loss/well

Coryell (14 wells)***

gainers +35.8 losers -39.5 -3.7 / 13 = -0.3 average loss/well

Erath (23)****

gainers +26.7 losers -53.4 -26.7 / 22 = -1.2 average loss / well

Bosque (18 wells)

gainers +19.1 losers -61.4 -42.3 / 16 = -2.6 average loss / well

*data is compiled from water level readings filed under MTGCD Management Plan Objective G.2

**well M-188 was omitted because it was pumping when measured and would erroneously skew data

***well M-20 was omitted because it was pumping when measured and would erroneously skew data

****well M-219 omitted because it was pumping when measured and would erroneously skew data

*****Wells M-305 & 390 omitted because pumping effects would erroneously skew data

DISCUSSION OF DISTRICT'S COMPARISON OF FIVE-YEAR WATER LEVEL AVERAGES

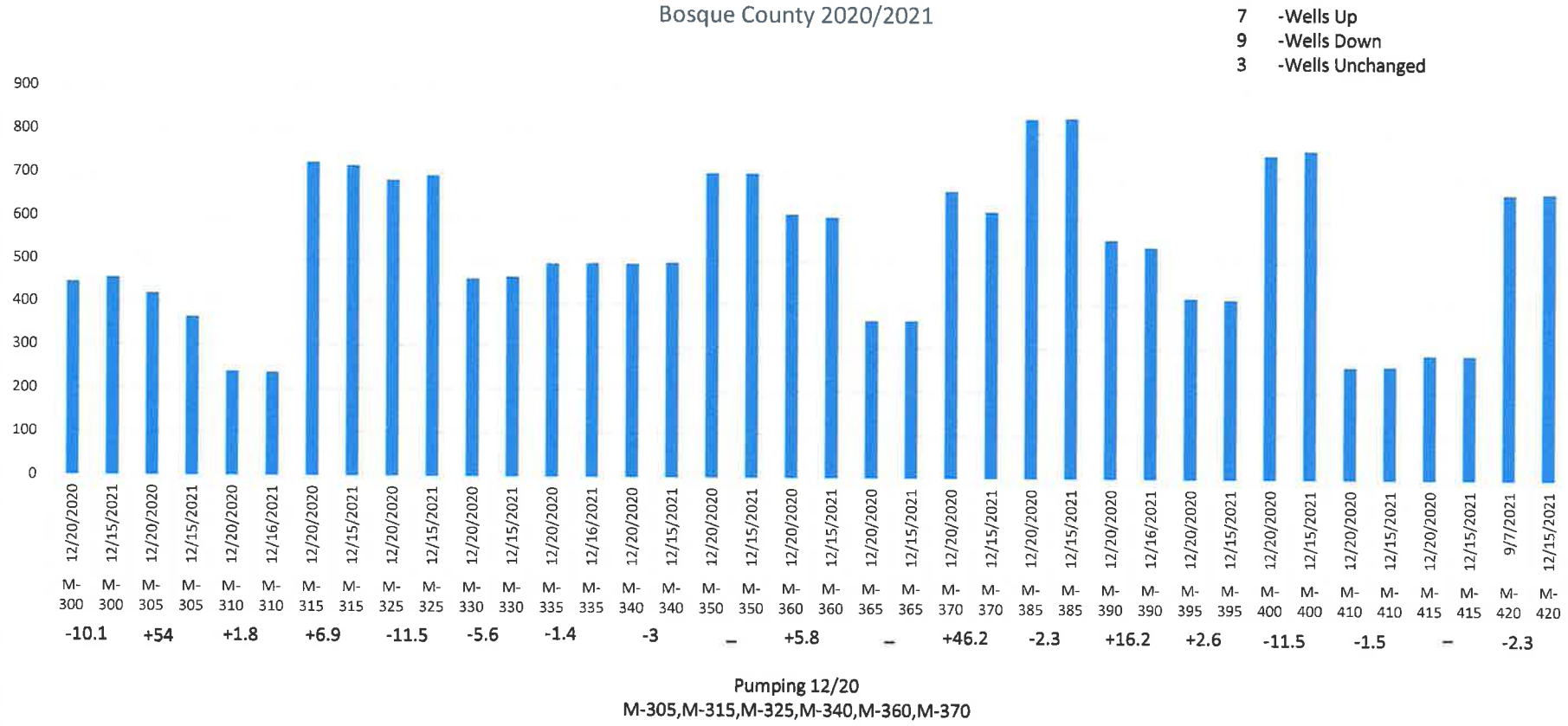
TO FIVE-YEAR INCREMENTS OF DFCs*

Comparison of the District's last five years of water level measurements with five-year increments of the GMA-8 Desired Future Conditions (DFCs) for Comanche, Erath, Bosque and Coryell Counties clearly indicate that MTGCD is currently on target to achieve its DFCs.

The five-year average water levels in Comanche and Erath Counties indicate an increase in water levels; therefore, the DFCs are being met.

The five-year average water levels in Bosque and Coryell Counties indicate a drop of 2.26 and 0.74 feet, respectively in sampled wells. The five-year DFC increment average of layers is 11.04 and 6.32 feet (Bosque and Coryell). Therefore, we conclude that the District is currently on target to meet the DFCs in Bosque and Coryell Counties.

Please refer to following tables "GMA-8 Desired Future Conditions for the N. Trinity Aquifer" and "5 Year Average Water Levels by County" for supporting data.



Pumping 12/20
M-305,M-315,M-325,M-340,M-360,M-370

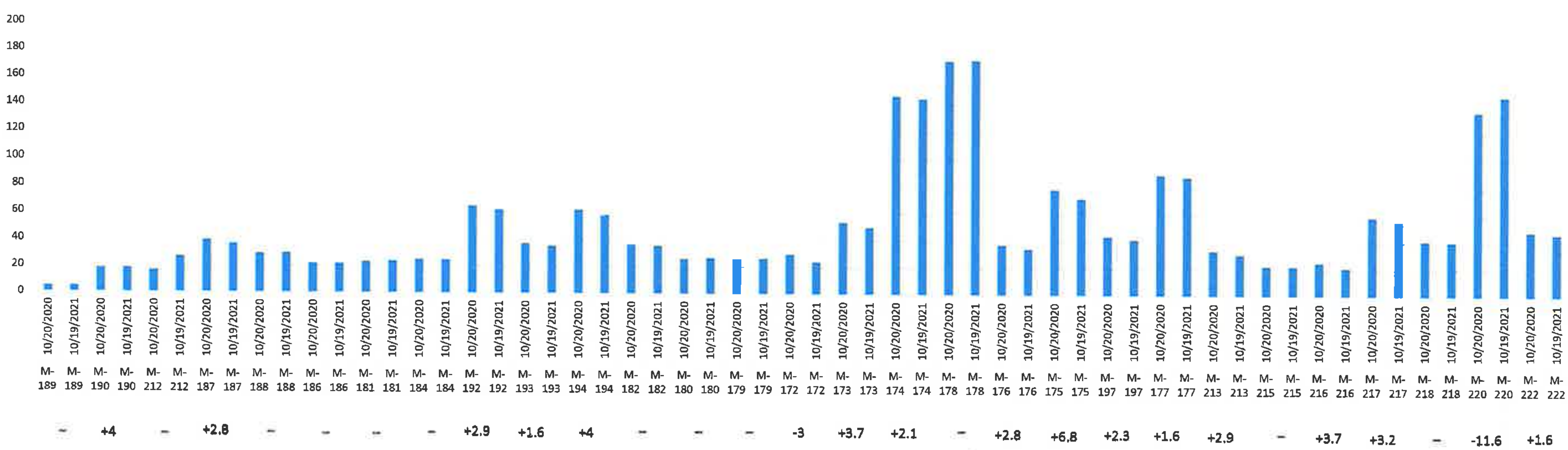
BOSQUE COUNTY 2021

M-300	4/21/2021	447.09	
M-300	8/10/2021	447.09	
M-300	12/15/2021	454.86	
M-305	4/21/2021	384.2	
M-305	8/21/2021	446.3	PUMPING
M-305	12/15/2021	364.4	
M-310	4/21/2021	240.2	
M-310	8/10/2021	248	
M-310	12/16/2021	237	
M-315	4/21/2021	715.2	
M-315	8/10/2021	722.1	PUMPING
M-315	12/15/2021	717.51	
M-325	4/21/2021	616.02	
M-325	8/10/2021	618.3	
M-325	12/15/2021	694.5	PUMPING
M-330	4/21/2021	459.4	
M-330	8/10/2021	460.5	
M-330	12/15/2021	460.6	
M-335	4/21/2021	492.8	
M-335	8/10/2021	493	
M-335	12/16/2021	494.4	
M-340	4/21/2021	499.8	PUMPING
M-340	8/10/2021	507	PUMPING
M-340	12/15/2021	496.2	
M-350	4/21/2021	701.4	
M-350	8/11/2021	747.6	PUMPING
M-350	12/15/2021	703.71	
M-360	4/21/2021	608.4	PUMPING
M-360	8/10/2021	608.4	PUMPING
M-360	12/15/2021	603.79	
M-365	4/21/2021	364.47	
M-365	8/11/2021	366.7	
M-365	12/15/2021	362.16	

M-370	4/21/2021	615.32	
M-370	8/10/2021	617.63	
M-370	12/15/2021	617.63	
M-385	4/21/2021	836.48	
M-385	8/11/2021	848.03	PUMPING
M-385	12/15/2021	834.17	
M-390	4/21/2021	548.1	
M-390	8/10/2021	638.19	PUMPING
M-390	12/16/2021	536.5	
M-395	4/21/2021	439	
M-395	8/10/2021	476.8	PUMPING
M-395	12/15/2021	414.4	
M-400	4/21/2021	753.01	
M-400	8/10/2021	753.01	
M-400	12/15/2021	762.25	
M-410	4/21/2021	260	
M-410	8/10/2021	260.3	
M-410	12/15/2021	261.8	
M-415	4/21/2021	287.6	
M-415	8/10/2021	286.8	
M-415	12/15/2021	286.5	
M-420	9/7/2021	661.4	
M-420	12/15/2021	663.71	

Comanche County 2020/2021

15 -Wells UP
2 -Wells Down
12 -Wells Unchanged



<u>Pumping 10/20</u>
M-218,M-220

<u>Pumping 12/21</u>
M-220

COMANCHE COUNTY 2021

M-189	10/20/2020	4.5
M-189	2/22/2021	2
M-189	6/21/2021	1
M-189	10/19/2021	4.5
M-190	10/20/2020	18
M-190	2/22/2021	18.6
M-190	6/21/2021	18
M-190	10/19/2021	18
M-212	10/20/2020	16.4
M-212	2/22/2021	22.2
M-212	6/21/2021	22.6
M-212	10/19/2021	26.5
M-187	10/20/2020	39
M-187	2/22/2021	36.5
M-187	6/21/2021	34.2
M-187	10/19/2021	36.2
M-188	10/20/2020	29
M-188	2/22/2021	28.1
M-188	6/21/2021	29
M-188	10/19/2021	29.5
M-186	10/20/2020	21.75
M-186	2/22/2021	18.4
M-186	6/21/2021	18.4
M-186	10/19/2021	21.6
M-181	10/20/2020	23
M-181	2/22/2021	23.9
M-181	6/21/2021	Inundated
M-181	10/19/2021	23.8
M-184	10/20/2020	25
M-184	2/22/2021	26
M-184	6/21/2021	25
M-184	10/19/2021	24.5
M-192	10/20/2020	64.5
M-192	2/22/2021	61.8
M-192	6/21/2021	61.5
M-192	10/19/2021	61.6

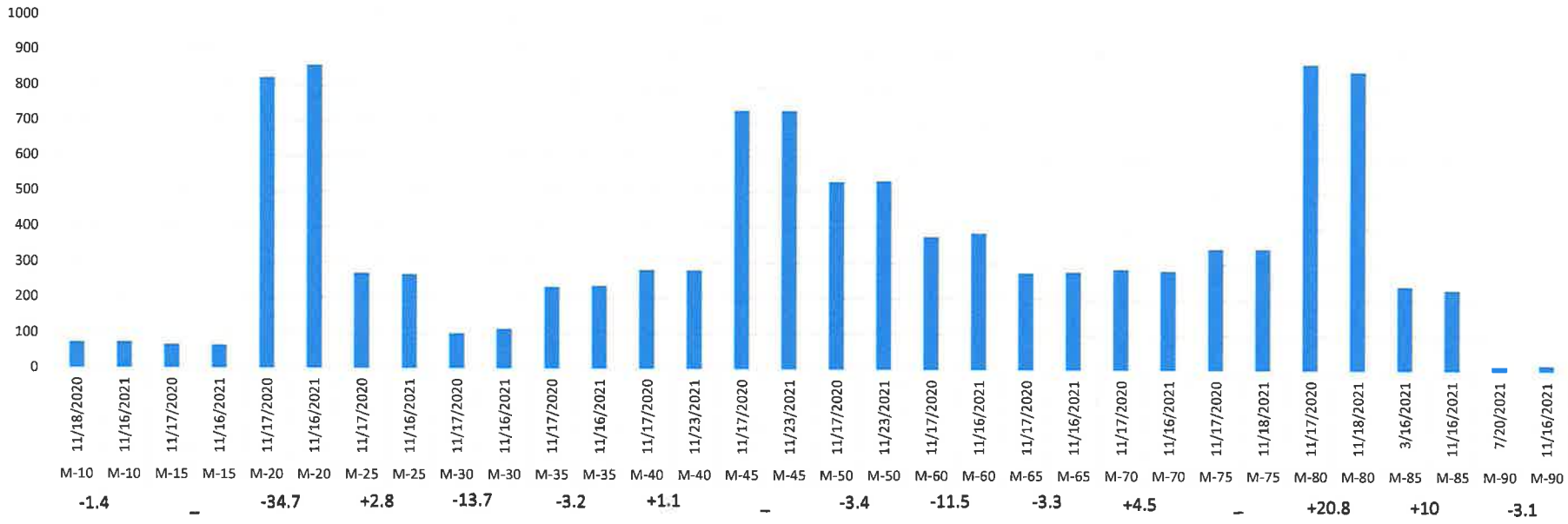
M-193	10/20/2020	37
M-193	2/22/2021	35
M-193	6/21/2021	31
M-193	10/19/2021	35.4
M-194	10/20/2020	62
M-194	2/22/2021	56
M-194	6/21/2021	54.6
M-194	10/19/2021	58
M-182	10/20/2020	36.3
M-182	2/22/2021	36.3
M-182	6/21/2021	36
M-182	10/19/2021	35.7
M-180	10/20/2020	26
M-180	2/22/2021	27
M-180	6/21/2021	25
M-180	10/19/2021	26.7
M-179	10/20/2020	25.9
M-179	2/22/2021	25.9
M-179	6/21/2021	24.5
M-179	10/19/2021	26.4
M-172	10/20/2020	29.4
M-172	2/22/2021	26.2
M-172	6/21/2021	14
M-172	10/19/2021	23.9
M-173	10/20/2020	53.3
M-173	2/22/2021	51.1
M-173	6/21/2021	49.6
M-173	10/19/2021	49.6
M-174	10/20/2020	146.7
M-174	2/22/2021	145.5
M-174	6/21/2021	142.9
M-174	10/19/2021	144.6
M-178	10/20/2020	173
M-178	2/22/2021	171.9
M-178	6/21/2021	173.8
M-178	10/19/2021	173.6
M-176	10/20/2020	37.2

M-176	2/22/2021	36.7	
M-176	6/21/2021	34.2	
M-176	10/19/2021	34.4	
M-175	10/20/2020	78.5	
M-175	2/22/2021	74.5	
M-175	6/21/2021	60.5	
M-175	10/19/2021	71.7	
M-197	10/20/2020	44	
M-197	2/22/2021	45.5	
M-197	6/21/2021	40.7	
M-197	10/19/2021	41.7	
M-177	10/20/2020	89.5	
M-177	2/22/2021	87.5	
M-177	6/21/2021	86.6	
M-177	10/19/2021	87.9	
M-213	10/20/2020	33.5	
M-213	2/22/2021	31.5	
M-213	6/21/2021	32	
M-213	10/19/2021	30.6	
M-215	10/20/2020	22.3	
M-215	2/22/2021	21.2	
M-215	6/21/2021	20.2	
M-215	10/19/2021	22.1	
M-216	10/20/2020	24.9	
M-216	2/22/2021	24	
M-216	6/21/2021	20.5	
M-216	10/19/2021	21.2	
M-217	10/20/2020	58.5	
M-217	2/22/2021	46	PUMPING
M-217	6/21/2021	46.9	
M-217	10/19/2021	55.3	
M-218	10/20/2020	41.2	PUMPING
M-218	2/22/2021	37.7	
M-218	6/18/2021	37.2	
M-218	10/19/2021	40.7	
M-220	10/20/2020	136	PUMPING
M-220	2/22/2021	114	PUMPING
M-220	6/18/2021	116.8	

M-220	10/19/2021	147.6	
M-222	10/20/2020	48.3	Pumping
M-222	2/22/2021	34	Pumping
M-222	6/18/2021	32	Pumping
M-222	10/19/2021	46.7	Pumping

CORYELL COUNTY 2020/2021

8 -Wells Up
8 -Wells Down
3 -Wells Unchanged



Pumping 11/20
M-60,M-80

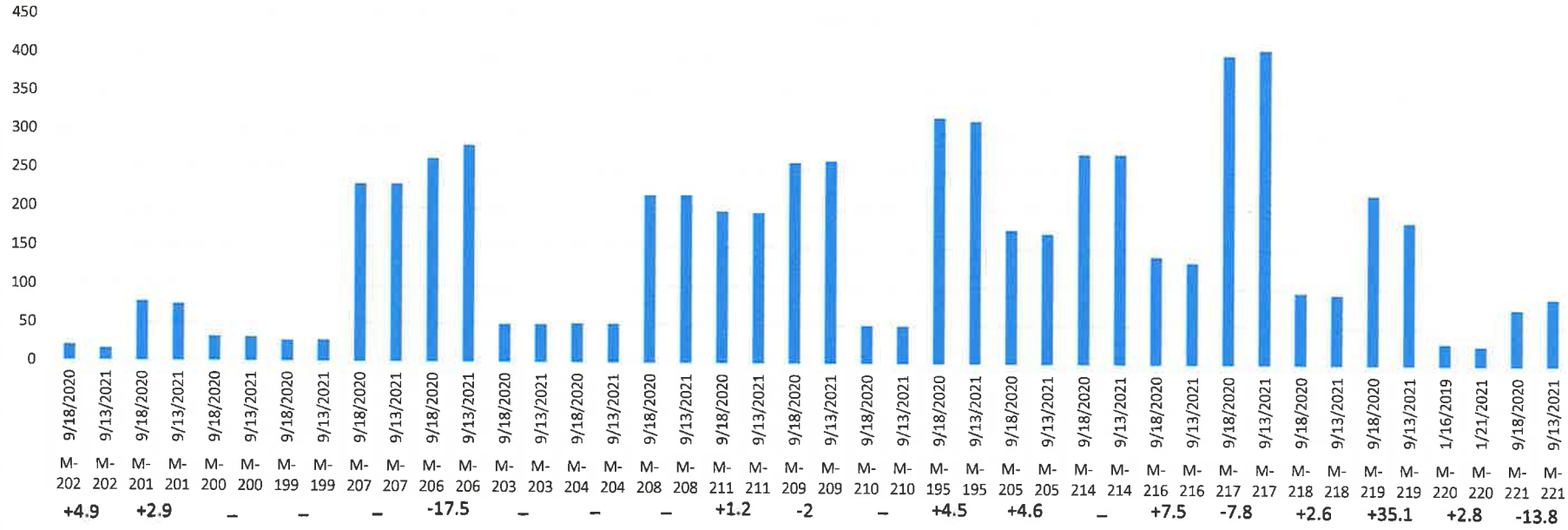
Pumping 11/21
M-20,M-60,M-80

M-10	11/18/2020	72.6	
M-10	3/16/2021	74.3	
M-10	7/20/2021	72.8	
M-10	11/16/2021	74	
M-15	11/17/2020	66.5	
M-15	3/16/2021	65.5	
M-15	7/20/2021	64	
M-15	11/16/2021	64.8	
M-20	11/17/2020	822.57	
M-20	3/16/2021	857.22	PUMPING
M-20	7/20/2021	813.33	
M-20	11/16/2021	857.22	PUMPING
M-25	11/17/2020	268.9	
M-25	3/16/2021	262.6	
M-25	7/20/2021	268.3	
M-25	11/16/2021	266.1	
M-30	11/17/2020	98.6	
M-30	3/16/2021	114.3	
M-30	7/20/2021	111.4	
M-30	11/16/2021	112.3	
M-35	11/17/2020	230.6	
M-35	3/16/2021	233.2	
M-35	7/20/2021	233.7	
M-35	11/16/2021	233.8	
M-40	11/17/2020	279.96	
M-40	3/16/2021	278.04	
M-40	7/20/2021	UAM	TWDB Recorder Down
M-40	11/23/2021	278.84	
M-45	11/17/2020	731.76	
M-45	3/16/2021	UAM	TWDB Recorder Down
M-45	7/20/2021	732.65	
M-45	11/23/2021	732.65	
M-50	11/17/2020	529.49	
M-50	3/16/2021	530.76	
M-50	7/20/2021	531.48	

M-50	11/23/2021	532.88	
M-60	11/17/2020	375.32	PUMPING
M-60	3/16/2021	396.11	PUMPING
M-60	7/20/2021	379.94	PUMPING
M-60	11/16/2021	386.87	PUMPING
M-65	11/17/2020	274.4	
M-65	3/16/2021	273.9	
M-65	7/20/2021	274.4	
M-65	11/16/2021	277.7	
M-70	11/17/2020	285.2	
M-70	3/16/2021	271.5	
M-70	7/20/2021	277.6	Pumping off&on
M-70	11/16/2021	280.7	
M-75	11/17/2020	342	
M-75	3/16/2021	341.2	
M-75	7/20/2021	342.7	
M-75	11/18/2021	342.7	
M-80	11/17/2020	867.66	PUMPING
M-80	3/16/2021	867.76	PUMPING
M-80	7/20/2021	863.04	PUMPING
M-80	11/18/2021	846.87	PUMPING
M-85	3/16/2021	237.1	
M-85	7/20/2020	230.3	
M-85	11/16/2021	227.1	
M-90	7/20/2021	13.4	
M-90	11/16/2021	16.5	

ERATH COUNTY 2020/2021

9 -Wells Up
4 -Wells Down
8 -Wells Unchanged



Pumping 9/20
M-206,M-216,M-219

Pumping 9/21
M-211,M-216

ERATH COUTY 2020/2021

M-202	9/18/2020	20.8	
M-202	1/21/2021	18.3	
M-202	5/21/2021	14.2	
M-202	9/13/2021	15.9	
M-201	9/18/2020	77.4	
M-201	1/21/2021	74.6	
M-201	5/21/2021	75.1	
M-201	9/13/2021	74.5	
M-200	9/18/2020	32.2	
M-200	1/21/2021	31.6	
M-200	5/21/2021	32.4	
M-200	9/13/2021	31.4	
M-199	9/18/2020	27.4	
M-199	1/21/2021	27	
M-199	5/21/2021	UAM	Muddy
M-199	9/13/2021	27.9	
M-207	9/18/2020	230.18	
M-207	1/21/2021	227.1	
M-207	5/21/2021	225.6	
M-207	9/13/2021	230.18	
M-206	9/18/2020	263.3	PUMPING
M-206	1/21/2021	240.9	
M-206	5/21/2021	235.6	
M-206	9/13/2021	280.8	
M-203	9/18/2020	49.2	
M-203	1/21/2021	49	
M-203	5/21/2021	48	
M-203	9/13/2021	49.3	
M-204	9/18/2020	51	
M-204	1/21/2021	53	
M-204	5/21/2021	46.8	
M-204	9/13/2021	50.3	
M-208	9/18/2020	217.4	
M-208	1/21/2021	217.6	
M-208	5/21/2021	217.2	

M-208	9/13/2021	217.6	
M-211	9/18/2020	197	
M-211	1/21/2021	197	
M-211	5/21/2021	195.5	
M-211	9/13/2021	195.8	PUMPING
M-209	9/18/2020	260.2	
M-209	1/21/2021	259	
M-209	5/21/2021	258.5	
M-209	9/13/2021	262.2	
M-210	9/18/2020	49.6	
M-210	1/21/2021	49.2	
M-210	5/21/2021	49.2	
M-210	9/13/2021	49	
M-195	9/18/2020	319.4	
M-195	1/21/2021	314.7	
M-195	5/21/2021	313.5	
M-195	9/13/2021	314.9	
M-205	9/18/2020	174.5	
M-205	1/21/2021	172	
M-205	5/21/2021	161.5	
M-205	9/13/2021	169.9	
M-214	9/18/2020	272.6	
M-214	1/21/2021	272.3	
M-214	5/21/2021	272.3	
M-214	9/13/2021	272.3	
M-216	9/18/2020	140.8	PUMPING
M-216	1/21/2021	93.1	
M-216	5/21/2021	131.8	PUMPING
M-216	9/13/2021	133.3	PUMPING
M-217	9/18/2020	402.4	
M-217	1/21/2021	389.6	
M-217	5/21/2021	388.4	
M-217	9/13/2021	410.2	
M-218	9/18/2020	94.7	
M-218	1/21/2021	95.5	
M-218	5/21/2021	91.7	
M-218	9/13/2021	92.1	

M-219	9/18/2020	221.1	PUMPING
M-219	1/21/2021	183.1	
M-219	5/21/2021	180.3	
M-219	9/13/2021	186	
M-220	1/16/2019	29	
M-220	5/17/2019	26.2	
M-220	9/17/2019	25.9	
M-220	1/21/2021	26.2	
M-221	9/18/2020	73.9	
M-221	1/21/2021	71	
M-221	5/21/2021	70.5	
M-221	9/13/2021	87.7	