COMAL TRINITY
GROUNDWATER CONSERVATION DISTRICT

Board of Directors

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Larry Jackson (11/5/2020)	Precinct 3
Jensie Madden	Precinct 4

District Staff

H.L. Saur, General Manager

Valerie Posladek, Admin

Comal Trinity GCD
PO BOX 664, Spring Branch Texas 78070
830-885-2130
www.comaltrinitygcd.com

This Annual Report for 2020 provides an overview of the accomplishments of the Comal Trinity Groundwater Conservation District (CTGCD) towards the Management Plan goals to the District Board of Directors and the public. The CTGCD Management Plan was approved by the Texas Water Development Board (TWDB) on April 25, 2018. The Plan set timelines varying from one to five years to achieve the management goals as outlined in the Management Plan.

DISTRICT MISSION

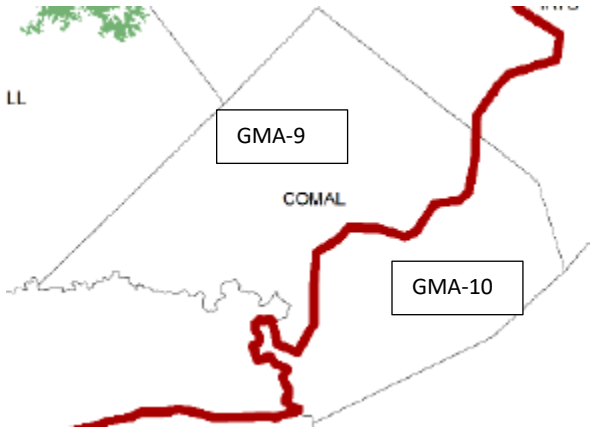
The Comal Trinity Groundwater Conservation District (CTGCD or District) was created under Chapter 36 of the Texas Water Code for the purpose of conserving, preserving, recharging, protecting, and preventing waste of groundwater from the Trinity Aquifer and its subdivisions within Comal County. The district will conduct administrative and technical activities and programs to achieve these purposes. The district will use the authority granted under its enabling legislation, HB2407, and TWC Chapter 36 and other state laws to conduct aquifer research, monitor water well drilling and production from non-exempt wells, collect and archive well water and aquifer data, issue authorizations for well drilling, modification, equipping, and plugging, promote the capping or plugging of abandoned wells, provide information and educational material to local property owners, interact with other governmental or organizational entities, and incorporate other groundwater-related activities that may help meet the purposes of the district.

GUIDING PRINCIPLES

The district recognizes that groundwater resources throughout this region are of vital importance to all citizens and that these resources must be managed effectively. The CTGCD Management Plan serves as a guideline for the district to ensure greater understanding of local aquifer conditions, development of groundwater management concepts and strategies, and subsequent implementation of appropriate groundwater management policies.

GENERAL DESCRIPTION OF THE DISTRICT

The Comal Trinity Groundwater Conservation District comprises the majority of Comal County, excluding a small portion of territory included within the boundaries of the Trinity Glen Rose Groundwater Conservation District. The District covers 559 square miles and resides in two Groundwater Management Areas (GMA-9 and GMA-10).



REPORT ON 2020 GROUNDWATER MANAGEMENT PLAN GOALS AND ACHIEVEMENTS

MANAGEMENT FOR EFFICIENT USE OF GROUNDWATER

The District Management Plan set a five-year timeline for implementing and maintaining a program of issuing well operating permits. While the District does not issue permits for water usage allocations for non-exempt wells, it maintains an authorization and registration program for *all* new water wells drilled in the District jurisdiction. The table, below, summarizes the wells authorized and completed in 2020.

Authorizations and Drilled Wells
January through December 2020

	Qty	Percent by Type
Authorizations		
a) Drilling of a new exempt domestic or livestock wells		
Domestic	119	
Livestock	4	
Total a)	123	73%
b) Drilling of a new non-exempt well producing < 25,000 gallons/day	8	5%
c) Drilling of a new non-exempt well producing > 24,999 gallons/day	3	2%
d) Plugging of an existing well *	8	5%
e) Test bore *	2	1%
f) Completion of test bore, recondition, rework, or altering a well < 25,000 gpd	1	1%
g) Completion of test bore, recondition, rework, or altering a well > 24,999 gpd	1	1%
h) Variance from rules *	22	13%
Total Authorizations	168	100%
2019 Well Authorizations completed in 2020	9	
2020 Well Authorizations approved but not completed	(19)	
Total Wells Drilled 2020	126	

* Omitted - not separate drillings

In addition to the permitting of new well drilling, the district has adopted rules that require the registration and monitoring of non-exempt water production within the district consistent with the district's Management Plan, the provisions of Chapter 36.113, and other pertinent sections of Chapter 36. Water usage data collection for identified non-exempt wells began January 1, 2016. Monitoring of acre-feet of water used as compared to the two GMA's Modeled Available Groundwater (MAG) occurs throughout the year and is reported to the Board on a quarterly and annual basis.

		GMA-9 Pumped	GMA-9 MAG Availability		GMA-10 Pumped	GMA-10 MAG Availability
1Q2020			10,076			29,284
	Gallons:	260,329,449			513,063,601	
	Acre-ft:	799	9,277		1,575	27,709
2Q2020						
	Gallons:	334,495,245			619,425,731	
	Acre-ft:	1,027	8,251		1,901	25,809
3Q2020						
	Gallons:	410,811,954			790,632,395	
	Acre-ft:	1,261	6,990		2,426	23,382
4Q2020						
	Gallons:	368,328,091			762,786,946	
	Acre-ft:	1,130	5,859		2,341	21,041
2020	Acre-ft:	4,217			8,243	

Fees are collected per district rules and rates as defined in those rules. The complete rules are available at www.ComalTrinityGCD.com. The production income is addressed in the annual financial report, included in Appendix A.

Strategies to Control and Prevent Waste of Groundwater

The District provides educational information in various ways within Comal County. In 2020, there were 9 articles published in local media, *The Front Porch News*. These articles are educational and informative about the Trinity aquifer, the state of groundwater in the District, rainwater harvesting, prevention of waste of groundwater and other related topics. The following articles were published in 2020 in *The Front Porch News*, authored by board member Dr. Larry Sunn:

January	Groundwater Facts
April	Kids Activities
May	Water Fun at Home
June	Bottled Water and Covid-19
July	Xeriscape
August	The CTGCD Encourages Harvesting Rainwater
October	Rainwater Harvesting FAQs
November	Why Harvest Rain?
December	Rainwater and Well Water Filtration

Public outreach and education are a focus for CTGCD and, typically, board members are active in attending and presenting materials and information at various events throughout the year. Pamphlets developed by the District are usually distributed at each event. Due to Covid-19, most of these activities were cancelled in 2020. Pamphlets are always available in the CTGCD office for the public. There were two events planned early in the year that the District was actively involved in.

- January 20, 2020 – Board Meeting: Dr. Steven Grainger's presentation on rainwater harvesting.
- Texas Well Owners Network "Well Educated" training was to be co-sponsored by CTGCD and scheduled for 3/24/2020. After much planning, this event was cancelled due to Covid-19 restrictions. During the planning stage, CTGCD sent a notification by email to all registered well owners with new wells in 2019 and to those listed on the Public Notices email distribution list.

Strategies to Prevent and Control Subsidence

While the Management Plan includes a goal to prevent and control subsidence, this issue has not been identified to occur in the Trinity Aquifer and Edwards Group of the Edwards-Trinity Plateau Aquifer formation. Appendix B cites support to CTGCD assertion that this Management Plan goal is not relevant to the district.

Strategies to Address conjunctive surface water management issues

Per the TWDB, "conjunctive use water management strategies combine multiple water sources, usually surface water and groundwater, to optimize the beneficial characteristics of each source, yielding additional firm water supplies". Opportunities for CTGCD to address conjunctive surface water include participation and attendance at the annual meetings of GMA-9 and GMA-10, and through monitoring groundwater levels in at least two wells in the Middle Trinity hydrologic unit within the district boundaries.

The GMA-9 meeting was held December 14, 2020 and attended by General Manager H.L. Saur, Board member David Heier, Board member Larry Hull, and Administrative Assistant Valerie Posladek. There were two GMA-10 meetings held and attended in GMA-10 (November 9 and December 8). Both were attended by David Heier, H.L. Saur, and Valerie Posladek.

In 2020, CTGCD greatly increased groundwater level monitoring capability. Ten Wellntel units have been installed and monitored directly by CTGCD in the district. As of February 10, 2020, CTGCD obtained access to 15 more Wellntel monitoring well data units in coordination with Barton Springs and Edwards Aquifer Authority. Seven of the 25 are in GMA-10 and 18 are in GMA-9. Quarterly reports of monitored wells and groundwater trends were presented by General Manager H.L. Saur during regular meetings of the board on February 10, 2020, June 15, 2020, August 17, 2020, and October 19, 2020.

Strategies to Address Drought Conditions

The district monitored and collected data quarterly from the Palmer Drought Severity Index and the information was reported to the Board at the quarterly board meetings. Additionally, precipitation patterns as reported by the National Weather Service were reported to the Board quarterly. For most of 2020, the district experienced mild to moderate drought conditions.

Strategies to Address Groundwater Conservation

The website maintained by CTGCD is an important source of information and links to groundwater conservation education. In 2020, there were 114 unique hits to the website in general, and 104 views of the conservation pages: 89 views of Rainwater Harvesting, 10 views of Water Conservation page, and 5 views of Preventing Waste. Rainwater harvesting is promoted strongly by the district, both in the pamphlet, news articles, and on the website.

Printed media, in the form of pamphlets and news articles (as described earlier) are also a part of CTGCD's commitment to groundwater conservation. The pamphlets (Appendix C) also address brush control to promote recharge and protect water quality and best practices regarding management of Ashe Juniper. Due to the ongoing Covid-19 pandemic, the district was unable to distribute pamphlets due to all events having been cancelled during the year. No formal presentations were possible, but the Board has worked with outside consultants to increase knowledge and potential sources of information for future presentations. Finally, recharge enhancement is a strategy to increase groundwater conservation and the district receptive to exploring these avenues, however, the General Manager reports that there have been no findings related to recharge enhancement in the district in 2020.

Addressing Desired Future Conditions (DFCs)

The district Management Plan calls for water level monitoring in the Trinity Aquifer. As discussed earlier, Wellntel equipment is installed and utilized in the district in 10 wells. The General Manager provides a report at each quarterly meeting of the Board on the trends in the wells monitored by the CTGCD. Comparisons with average drawdown and allowable drawdown from the DFC is not yet available as the monitored wells data period is not long enough for significant comparisons.

GROUNDWATER MANAGEMENT AREA JOINT PLANNING PROCESS

Every five years, the groundwater conservation districts in GMA 9 and GMA 10 shall consider groundwater availability models and other data for these management areas and shall establish desired future conditions for the relevant aquifers within the management areas. CTGCD falls into both GMAs, and has begun participation in this process, providing our share of the funding for a GMA-9 Explanatory Report for Desired Future Conditions, and participating in GMA meetings to work through the process. The participation will increase in 2021, and the final deadline for the process to be complete is January 5, 2022.

APPENDIX A – CTGCD 2020 FINANCIAL REPORTS

Comal Trinity Groundwater Conservation District
Profit & Loss
January through December 2020

		Jan - Dec 20
Income		
CTGCD Income		
Authorization Fee		
Boring a New Exempt Well		
Domestic Well	47,600.00	
Livestock Well	1,600.00	
Total Boring a New Exempt Well		49,200.00
Boring a New Nonexempt Well		
Greater than 25,000 GPD	4,500.00	
Less than 25000 GPD	3,200.00	
Total Boring a New Nonexempt Well		7,700.00
Completion of test bore		
Greater than 25,000 GPD	1,200.00	
Less than 25,000 GPD	300.00	
Total Completion of test bore		1,500.00
Plugging a well		2,800.00
Test Bore		600.00
Variance to a Rule request		6,600.00
Total Authorization Fee		68,400.00
Dividends & Interest		
TRB - Certificate of Deposit		1,033.46
GVTC		252.86
Texas Regional		6,086.65
Total Dividends & Interest		7,372.97
Late Fees and Fines		599.72
Production		245,859.50
Total CTGCD Income		322,232.19
Total Income		322,232.19
Gross Profit		322,232.19
Expense		
CTGCD Expenses		
Administrative Services		
Audit/Accounting		4,000.00
Computer & Expenses		582.76
Memberships and Subscriptions		1,080.00
Insurance/Bonds		1,724.84
Monitoring Equipment		1,036.00
Office Supplies		433.67
Postage and Delivery		83.60
Printing and Reproduction		46.60
Public Notices		472.00
Telephone and Internet		
Cell Phone	1,804.46	
Internet Charges	679.26	
Long Distance Charges	171.62	
Telephone Service Charge	549.21	
Total Telephone and Internet		3,204.55
Travel and Meals		27.00
USPS Box Rental		92.00
Website Hosting		179.46
Total Administrative Services		12,962.48
Operating Expense		
Contracted Labor		69,308.64
Comal County Escrow Account		60.00
Intralocal Agreement		1,369.50
Materials for Operation		230.00
Mileage		
Construction	5,568.83	
CTGCD Admin.	518.45	
Well Monitoring	113.29	
Mileage - Other	14.38	
Total Mileage		6,214.95
Total Operating Expense		77,183.09
Total CTGCD Expenses		90,145.57
Total Expense		90,145.57
Net Income		**232,086.62**

APPENDIX A – CTGCD 2020 BALANCE SHEET

Comal Trinity Groundwater Conservation District
Balance Sheet
As of December 31, 2020

	Dec 31, 20
ASSETS	
Current Assets	
Checking/Savings	
Checking - TRB 1356443	643,387.49
Total Checking/Savings	643,387.49
Accounts Receivable	
Accounts Receivable	68,350.35
Total Accounts Receivable	68,350.35
Total Current Assets	711,737.84
TOTAL ASSETS	**711,737.84**
LIABILITIES & EQUITY	
Equity	
Retained Earnings	479,651.22
Net Income	232,086.62
Total Equity	711,737.84
TOTAL LIABILITIES & EQUITY	**711,737.84**

APPENDIX B

The GMA-9 EXPLANATORY REPORT FOR DESIRED FUTURE CONDITIONS-MAJOR AND MINOR AQUIFERS published April 18, 2018

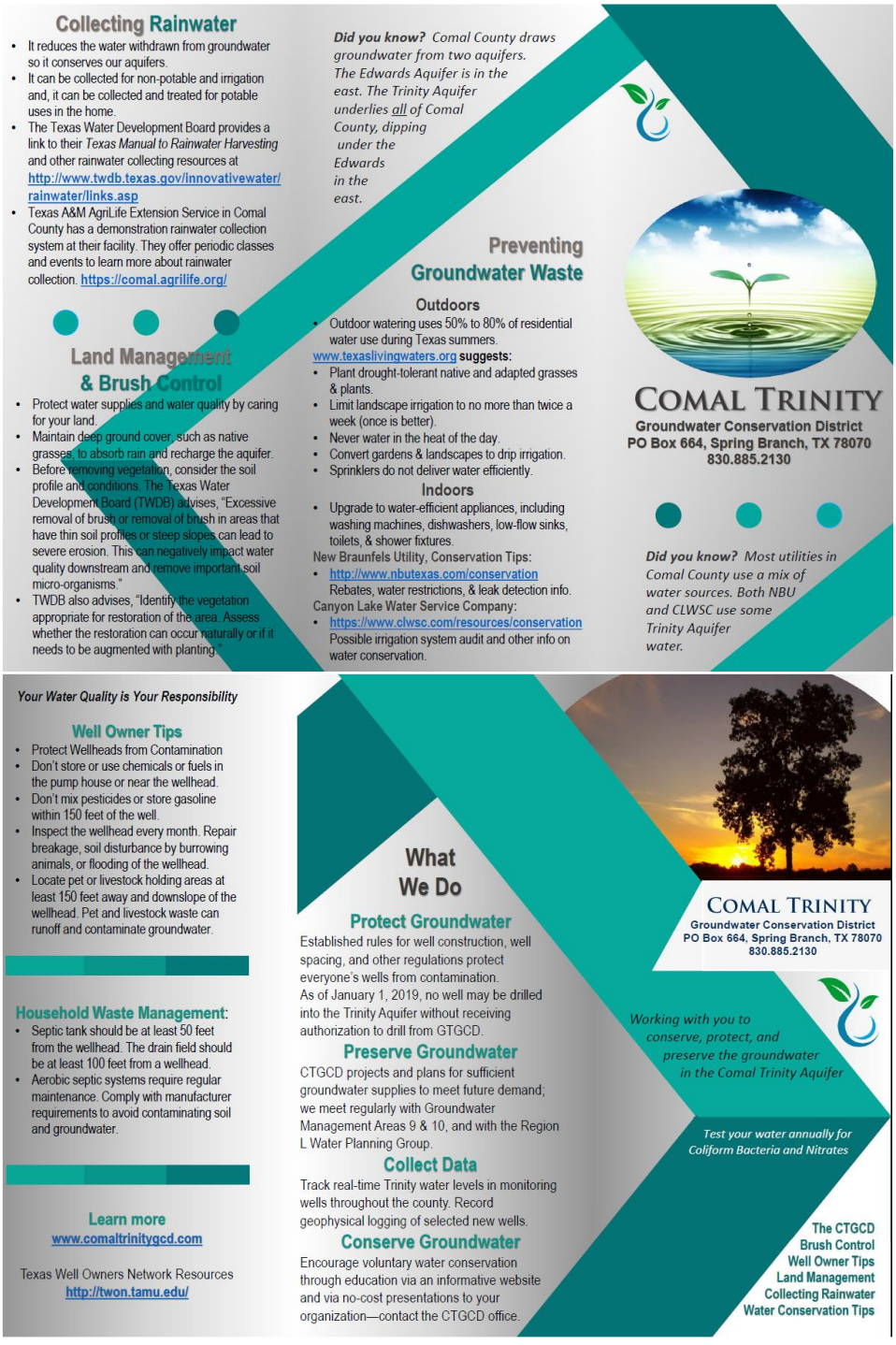
6.1.3.5.1 Trinity Aquifer and Edwards Group of the Edwards-Trinity (Plateau) Aquifer Formations and Subsidence Considerations

A study of water level changes since pre-development (around the 1880s) in the Woodbine, Paluxy and Trinity Aquifers in North Central Texas (Mace et al., 1994) considered whether extreme water level declines in these aquifers could have initiated subsidence. The study found that based on historical geodetic survey data, no detectable land subsidence had occurred in the region to the south of the Dallas – Ft. Worth area. Any subsidence that might have occurred would have been below the precision level of the geodetic survey data, which is 0.2 ft.

6.1.3.5.2 Impacts of Trinity and Edwards Group of the Edwards-Trinity (Plateau) Aquifer DFCs on Subsidence

The subsidence study considered water level declines ranging from 200 ft to 1,100 ft in the Trinity Aquifer and concluded that no measurable subsidence had occurred with such a significant decline in water levels. It is doubtful that a further decline of 30 ft would alter the results of this study. Although the study was not conducted within GMA-9, the study area was close enough in proximity to merit applicability to GMA-9, given that there are no known subsidence studies that have occurred within GMA-9.

APPENDIX C



Collecting Rainwater

- It reduces the water withdrawn from groundwater so it conserves our aquifers.
- It can be collected for non-potable and irrigation and, it can be collected and treated for potable uses in the home.
- The Texas Water Development Board provides a link to their *Texas Manual to Rainwater Harvesting* and other rainwater collecting resources at http://www.twdb.texas.gov/innovativewater/rainwater/links.asp
- Texas A&M AgriLife Extension Service in Comal County has a demonstration rainwater collection system at their facility. They offer periodic classes and events to learn more about rainwater collection. https://comal.agrilife.org/

Land Management & Brush Control

- Protect water supplies and water quality by caring for your land.
- Maintain deep ground cover, such as native grasses, to absorb rain and recharge the aquifer.
- Before removing vegetation, consider the soil profile and conditions. The Texas Water Development Board (TWDB) advises, "Excessive removal of brush or removal of brush in areas that have thin soil profiles or steep slopes can lead to severe erosion. This can negatively impact water quality downstream and remove important soil micro-organisms."
- TWDB also advises, "Identify the vegetation appropriate for restoration of the area. Assess whether the restoration can occur naturally or if it needs to be augmented with planting."

Did you know? *Comal County draws groundwater from two aquifers. The Edwards Aquifer is in the east. The Trinity Aquifer underlies all of Comal County, dipping under the Edwards in the east.*

Preventing Groundwater Waste

Outdoors

- Outdoor watering uses 50% to 80% of residential water use during Texas summers.

www.texaslivingwaters.org **suggests:**

- Plant drought-tolerant native and adapted grasses & plants.
- Limit landscape irrigation to no more than twice a week (once is better).
- Never water in the heat of the day.
- Convert gardens & landscapes to drip irrigation.
- Sprinklers do not deliver water efficiently.

Indoors

- Upgrade to water-efficient appliances, including washing machines, dishwashers, low-flow sinks, toilets, & shower fixtures.

New Braunfels Utility, Conservation Tips:

- http://www.nbutexas.com/conservation
  Rebates, water restrictions, & leak detection info.

Canyon Lake Water Service Company:

- https://www.clwsc.com/resources/conservation
  Possible irrigation system audit and other info on water conservation.

COMAL TRINITY

Groundwater Conservation District
PO Box 664, Spring Branch, TX 78070
830.885.2130

Did you know? *Most utilities in Comal County use a mix of water sources. Both NBU and CLWSC use some Trinity Aquifer water.*

Your Water Quality is Your Responsibility

Well Owner Tips

- Protect Wellheads from Contamination
- Don't store or use chemicals or fuels in the pump house or near the wellhead.
- Don't mix pesticides or store gasoline within 150 feet of the well.
- Inspect the wellhead every month. Repair breakage, soil disturbance by burrowing animals, or flooding of the wellhead.
- Locate pet or livestock holding areas at least 150 feet away and downslope of the wellhead. Pet and livestock waste can runoff and contaminate groundwater.

Household Waste Management:

- Septic tank should be at least 50 feet from the wellhead. The drain field should be at least 100 feet from a wellhead.
- Aerobic septic systems require regular maintenance. Comply with manufacturer requirements to avoid contaminating soil and groundwater.

Learn more

www.comaltrinitygcd.com

Texas Well Owners Network Resources
http://twon.tamu.edu/

What We Do

Protect Groundwater

Established rules for well construction, well spacing, and other regulations protect everyone's wells from contamination. As of January 1, 2019, no well may be drilled into the Trinity Aquifer without receiving authorization to drill from GTGCD.

Preserve Groundwater

CTGCD projects and plans for sufficient groundwater supplies to meet future demand; we meet regularly with Groundwater Management Areas 9 & 10, and with the Region L Water Planning Group.

Collect Data

Track real-time Trinity water levels in monitoring wells throughout the county. Record geophysical logging of selected new wells.

Conserve Groundwater

Encourage voluntary water conservation through education via an informative website and via no-cost presentations to your organization—contact the CTGCD office.

COMAL TRINITY

Groundwater Conservation District
PO Box 664, Spring Branch, TX 78070
830.885.2130

Working with you to conserve, protect, and preserve the groundwater in the Comal Trinity Aquifer

Test your water annually for Coliform Bacteria and Nitrates

The CTGCD
Brush Control
Well Owner Tips
Land Management
Collecting Rainwater
Water Conservation Tips

APPENDIX D – CTGCD SUMMARY OF MANAGEMENT PLAN OBJECTIVES AND ACHIEVEMENTS

Comal Trinity Groundwater Conservation District
2020 Groundwater Management Plan Goals and Achievements
Presented to the Board of Directors February 15, 2021 with Annual Report

Goal 1. Implement management strategies that will provide for the most efficient use of groundwater.	**Management Objective 1A**: Within five years of the adoption of this management plan, the district will implement and maintain a program of issuing well operating permits for non-exempt wells within the district	Performance Standard 1A: Upon implementation of operating permit issuance system, the number of well operating permit applications and the number of permits issued will be presented and discussed in the annual report to the district board of directors.	Approved authorizations in 2020: 119 Domestic, 4 Livestock, 8 Non-Exempt < 25,000 GPD, 3 Non-Exempt = or > 25,000 GPD, 8 Plugging, 2 Test Bores, 1 Rework of existing well. There were 22 variance requests. Nine authorized in 2019 were completed and registered in 2020. Well applications and permits issued are presented in the Annual Report to the Board (page 3).
	Management Objective 1B: Ongoing program of quarterly collection and record-keeping of actual meter readings from non-exempt wells to quantify Trinity groundwater withdrawal from non-exempt water wells within the district	Performance Standard 1B: Annual report submitted to the board of directors will record acre-ft of Trinity groundwater pumped by non-exempt wells during the preceding fiscal year	Year-to-date through third quarter, 2020, GMA-10 production was 6000 acre-feet of the 29,284 MAG, with 23,284 acre-feet unused. Production in GMA-9 was 1169.7 acre-feet of the 10,076 MAG, with 8906 acre-feet unused. Presented to the Board, 2020 Annual Report page 4.
Goal 2. Implement strategies that will control and prevent waste of groundwater.	**Management Objective 2A**: Each year the district will provide information on the importance of controlling and preventing waste of groundwater through one or more of the following methods: • Article provided to local media and/or community news • Distribution of water conservation literature at public meetings or events • Information on the district website • Maintain water conservation literature at the district office	Performance Standard 2A: Number of articles provided to local news media and/or newsletters, and number of water conservation literature handed out to the public will be provided in the annual report to the district board of directors.	Articles authored by Board Member Dr. Larry Sunn and published in Front Porch News: January 2020, April 2020, May 2020, June 2020, July 2020, August 2020, October 2020, November 2020, December 2020 Due to Covid-19 restrictions, there were no Pamphlet distributions at public events. Information is kept on ComalTrinityGCD.com website regarding conservation and rainwater harvesting, with additional links to outside sources of information. Presented to Board, 2020 Annual Report page 5.
Goal 3. Implement strategies that will control and prevent subsidence.	----	----	The rigid geologic framework of the region precludes subsidence from occurring. Therefore, this goal is not applicable to the operations of this district.

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Comal Trinity Groundwater Conservation District
2020 Groundwater Management Plan Goals and Achievements
Presented to the Board of Directors February 15, 2021 with Annual Report

Goal 4. Implement management strategies that will address conjunctive surface water management issues.	**Management Objective 4A**: The General Manager or one designated board member of the CTGCD will at least once per year attend and participate in GMA 9 and 10 activities. The district will participate in the regional water planning process by attending at least one meeting annually of the Region L planning group to encourage development of alternative water supplies.	Performance Standard 4A: Attendance of these meetings will be reported to the board of directors during regular board meetings.	Attendance at GMA-10 meeting on November 9, 2020 and December 8, 2020. Annual report by CTGCD representative/Board Member David Heier. Also in attendance, General Manager H.L. Saur, and Administrative Assistant, Valerie Posladek. Attendance and presentation of annual report to GMA-9 by H.L. Saur on December 14, 2020. Also attending were Directors David Heier, Larry Hull and Admin Assistant, Valerie Posladek. Due to Covid 19 restrictions, no one from CTGCD attended the Region L Planning Group. Information presented to Board, 2020 Annual Report page 6.
	Management Objective 4B: Within five years of the adoption of this management plan, 2 wells completed in the Middle Trinity will be designated and monitored by the District on at least a quarterly basis.	Performance Standard 4B: Upon designation of monitor wells, water levels will be provided to the board of directors on a quarterly basis.	Quarterly reports of monitored wells were presented by GM H.L. Saur during regular meetings of the board on February 10, 2020, June 15, 2020, August 17, 2020 and October 19, 2020. Ten Wellntel units have been installed and monitored directly by CTGCD. As of February 10, 2020 CTGCD has access to 15 more Wellntel monitoring well data units in coordination with Barton Springs and Edwards Aquifer Authority. Seven of the 25 are in GMA-10 and 18 are in GMA-9.
Goal 5. Implement strategies that will address natural resource issues which impact the use and availability of groundwater, or which are impacted by the use of groundwater.	----	----	The district is not currently aware of any natural resource issues which impact the Trinity Aquifer. Therefore, this goal is not applicable.
Goal 6. Implement strategies that will address drought conditions.	**Management Objective 6A**: The district will collect drought condition information on a, at minimum, quarterly basis related to Comal County and the surrounding region utilizing the Palmer Drought Severity Index.	Performance Standard 6A: Drought condition information will be summarized and discussed at least quarterly during district board meetings.	Quarterly reports of drought conditions utilizing U.S. Drought Monitor were presented by GM H.L. Saur during regular meetings of the board on February 10, 2020, June 15, 2020, August 17, 2020 and October 19, 2020.
	Management Objective 6B: Collect and provide information on precipitation patterns across Comal County as recorded by the National Weather Service on a quarterly basis.	Performance Standard 6B: Report precipitation conditions to the district board of directors during regular board meetings on an, at minimum, quarterly basis.	Quarterly reports of precipitation conditions utilizing Water.Weather.gov data were presented by GM H.L. Saur during regular meetings of the board on February 10, 2020, June 15, 2020, August 17, 2020 and October 19, 2020.

Comal Trinity Groundwater Conservation District
2020 Groundwater Management Plan Goals and Achievements
Presented to the Board of Directors February 15, 2021 with Annual Report

Goal 7. Conservation (Addressing conservation, recharge enhancement, rainwater harvesting, precipitation enhancement, or brush control, where appropriate and cost-effective.)	**Management Objective 7A**: Within one year of the adoption of this management plan, the district will maintain on the district's website information regarding the importance of groundwater conservation and water conservation methods.	Performance Standard 7A: Maintain a record of "hits" to conservation information on the website; include in annual report to the district board of directors.	There were 89 hits to Rainwater Harvesting, 10 hits to Water Conservation, and 5 hits to Controlling Water Waste. Information presented to Board, 2020 Annual Report page 6.
	Management Objective 7B: Within one year of the adoption of this management plan, the district will make available handouts containing water conservation information at public information events or other locations, such as district office.	Performance Standard 7B: Report the number of handouts provided and a list of events or other locations where provided in annual report to the district board of directors.	Due Covid-19 restrictions, there have been no events attended by CTGCD personnel. Educational brochure is available at the district office.
	Management Objective 7C: Within one year of the adoption of this management plan, the district will prepare a presentation describing the purpose of CTGCD and including information about water conservation for meetings of local organizations.	Performance Standard 7C: Report the number of presentations offered to local organizations in annual report to the district board of directors.	Due Covid-19 restrictions, there have been no presentations to the public at-large by CTGCD personnel.
	Management Objective 7D: The district will investigate potential recharge enhancement sites either natural or artificial	Performance Standard 7D: Annually, the General Manager will include a report to the board of directors on the district's findings related to recharge enhancement	In 2020, the General Manager reports that there have been no findings related to recharge enhancement in the district.
	Management Objective 7E: Within one year of the adoption of this management plan, the district will maintain on the district's website information on rainwater harvesting and links to resources.	Performance Standard 7E: Maintain a tally of "hits" to rainwater harvesting information on the website; provide this information in annual report to the district board of directors.	In 2020, there were 89 unique hits to Rainwater Harvesting. Information presented to Board, 2020 Annual Report page 6.
	----	----	The precipitation enhancement goal is not applicable to the district as this objective is not currently effective at this time.
	Management Objective 7F: Within one year of the adoption of this management plan, the district will acquire and provide handouts containing brush control information to promote recharge and protect water quality, to include best practices regarding management of ashe juniper, and provide the handouts at public information events or other locations.	Performance Standard 7F: Report the number of handouts provided and a list of events or other locations where provided in an annual report to the district board of directors.	Due Covid-19 restrictions, there have been no events attended by CTGCD personnel. Educational brochure is available at the district office.
Goal 8. Addressing Desired Future Conditions adopted under TWC 36.108	**Management Objective 8A**: Within five years of the adoption of this management plan, the district will begin to monitor the water level in the Trinity Aquifer on a quarterly basis to ensure the achievement of the DFC adopted GMA 9 and GMA 10.	Performance Standard 8A: The district will monitor the water level in at least one district-designated monitor well and compare with the average drawdown and allowable drawdown resulting from the DFC process. The data will be presented to the district board of directors in an annual report, reviewed by the district at least once every five years, and presented to GMA 9 and GMA 10 as required under TWC 36.108.	The district is currently monitoring 17 wells within the District. Water level reports are given to the Board of Directors on each CTGCD installed well monitor from beginning of year to the quarterly meeting date, as well as compared to the previous quarterly meeting date. Comparisons with average drawdown and allowable drawdown from the DFC is not yet available as the monitored wells data period is not long enough for significant comparisons. There are currently 3 District installed well monitored wells in GMA-10 and 7 in GMA-9.

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APPENDIX E

Comal Trinity Groundwater Conservation District Management Plan Revision Record

Date Adopted	Version/Resolution
March 19, 2018	Original Adoption, Board Resolution