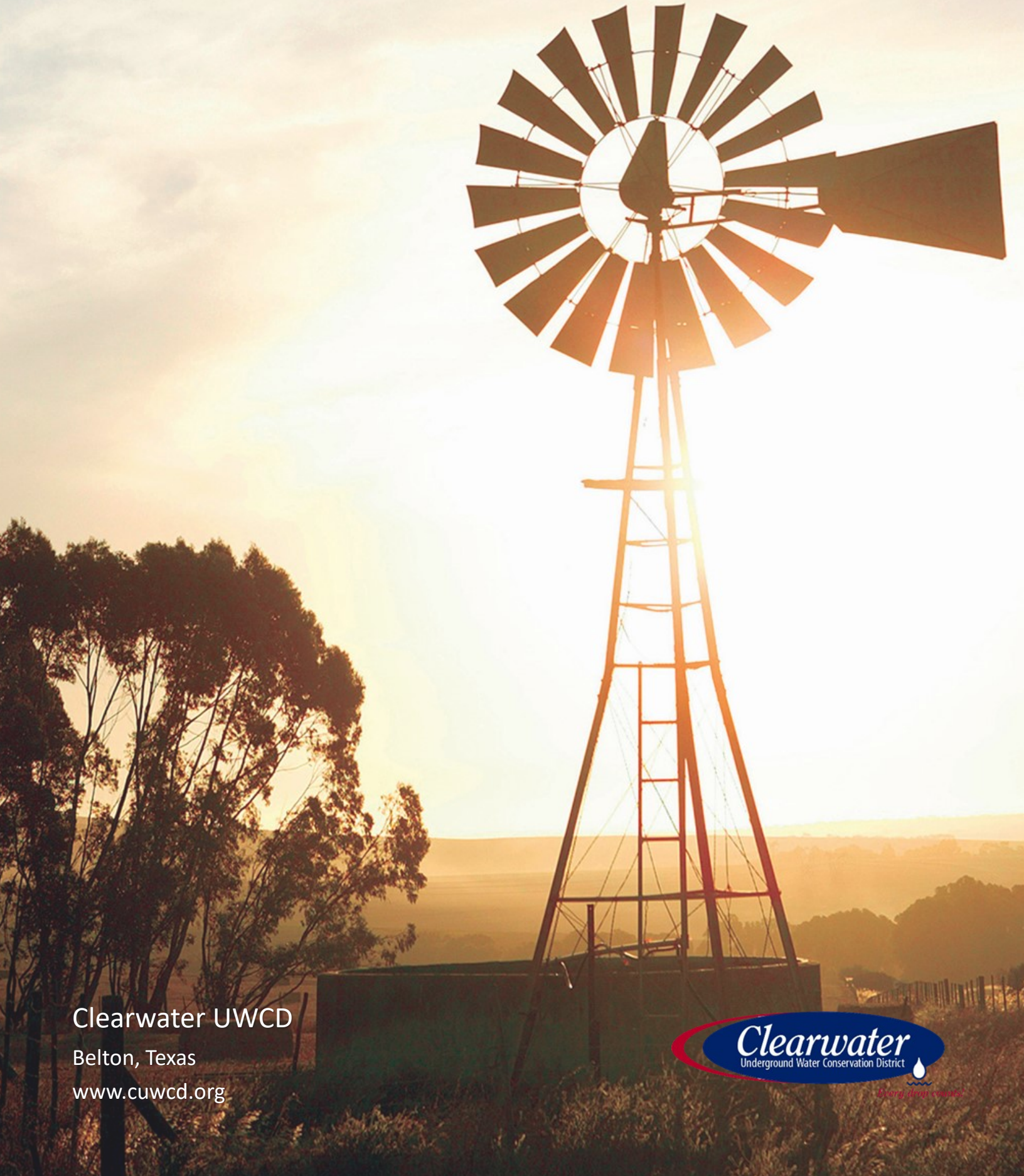
2023 ANNUAL REPORT



Clearwater UWCD

Belton, Texas

www.cuwcd.org

Clearwater
Underground Water Conservation District
Every drop counts.



District Mission Statement

Develop and implement an efficient, economical, and environmentally sound groundwater management program to protect and enhance the water resources of the District.

Clearwater Underground Water Conservation District

Annual Report - Fiscal Year 2023

The Annual Report for Fiscal Year 2023 (FY23) is presented to the Directors of the Clearwater Underground Water Conservation District (CUWCD or District) by May of the following Fiscal Year (May 2024). This report summarizes the activities and accomplishments of the District during FY23 focusing on administrative tasks, management plan requirements, and miscellaneous activities. Most activities are based on the District's fiscal year; however, information dealing with well registration, permitting, and production are based on the 2023 calendar year.

2022-2023 Board of Directors



Gary Young	Leland Gersbach	Jim Brown	Jody Williams	Scott Brooks
Precinct 2	Precinct 1	At-Large	Precinct 3	Precinct 4

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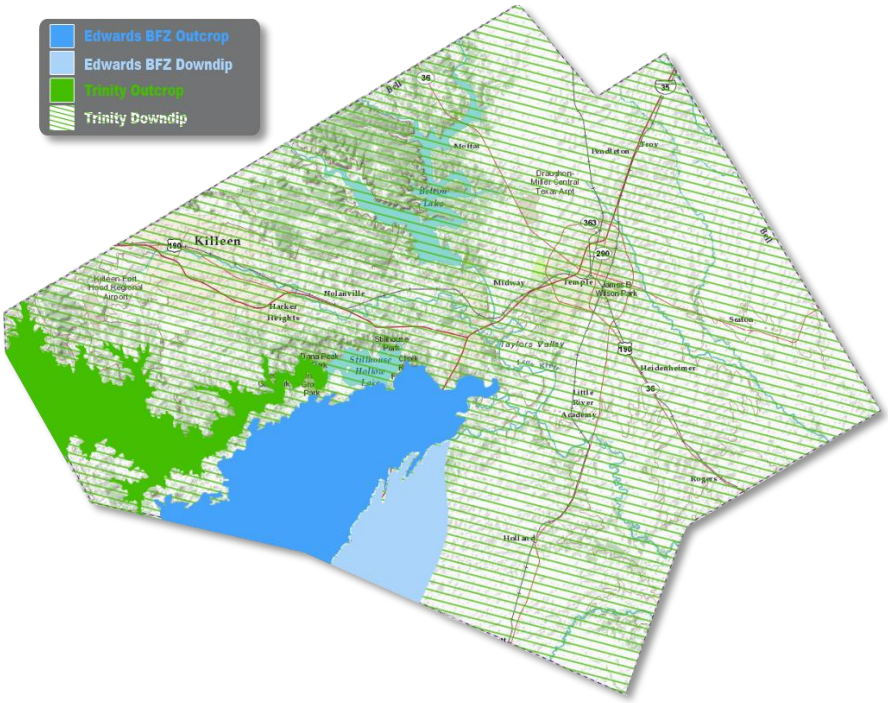
1. Introduction

The Clearwater Underground Water Conservation District was created by the State legislature in 1989 to manage the groundwater resources of Bell County. The District was approved by the voters of Bell County in August 1999 and opened its doors for business in February 2002. Clearwater's fiscal year runs from October 1st through September 30th. This report summarizes the accomplishments and activities of the District during FY23; but reflects registration, permitting, and production figures for the 2023 calendar year.

The District manages the groundwater resources from two major aquifers: The Trinity and The Edwards (BFZ) in Bell County, TX. The Trinity aquifer underlies all of Bell County and is below the Edwards (BFZ), while the Edwards (BFZ) is located in just the southern part of the county.



The Trinity aquifer is comprised of three water bearing layers within the boundaries of Bell County. These layers are the Upper Trinity (Glen Rose), Middle Trinity (Hensell), and Lower Trinity (Hosston). Other water bearing formations in Bell County are Alluvium, Austin Chalk, Buda, Edwards Equivalent, Kemp, Lake Waco, Ozan, and Pecan Gap.

2. Administrative Tasks

Administrative tasks include internal administrative activities necessary for a groundwater district to function effectively. Groundwater Management Plan requirements include the required tasks and activities identified in the District's Groundwater Management Plan. Miscellaneous activities include other activities and programs that have been an integral part of the District but are not required by the Groundwater Management Plan.

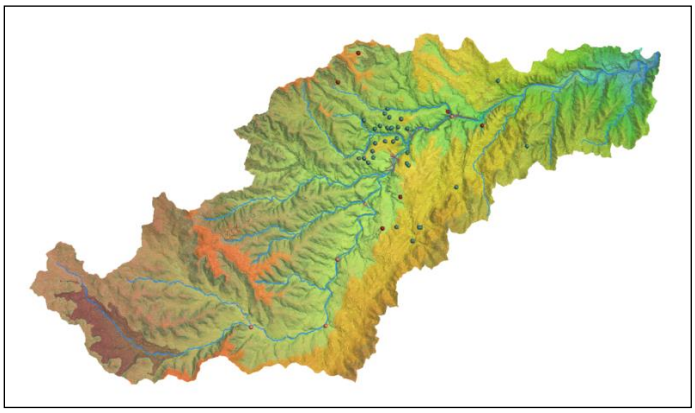
A. Contracts / Agreements

1. Technical Consulting Services

LRE Water, LLC / Advanced Groundwater Solutions, LLC / R.W. Harden & Associates

Since FY19, Clearwater UWCD has maintained a professional services contract with LRE Water, LLC , which provides administrative and technical reviews of drilling and operating permits and investigative analysis of aquifer conditions and well construction complaints. This professional services contract has continued in FY20, FY21, and FY22. In April 2021, the Board of Directors voted to transition to a professional services contract with Advanced Groundwater Solutions, LLC for representation of the District in GMA 8. The professional services contract continued in FY22 and FY23. On January 1, 2022, the District extended a professional services contract to Mike Keester, P.G. with R.W. Harden & Associates. This professional services contract continued in FY23.

LRE Water, LLC



Salado Creek Watershed from Bell County 3D Groundwater Model

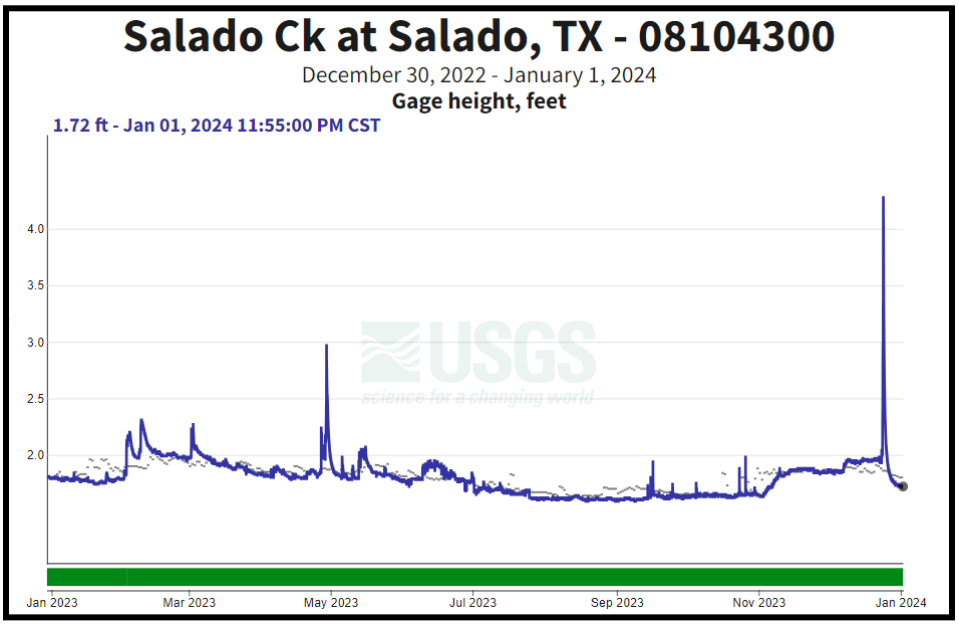
In September 2021, the District began working with LRE Water, LLC to develop a new data management system. This system went live in January 2022. This GIS platform allows the District web-based access to the entire database of wells that has been compiled through the years. All well information is available online to staff as well as the public. Some of the information available includes well latitude and longitude, along with ground level elevation of the well head and total depth of well. LRE Water, LLC continues technical support and hosting of the District's online GIS website.

Allan R. Standen, LLC developed our 3D model in 2014 and continued the model updates through 2022. The District was notified in September 2022 of the pending acquisition of Allan R. Standen, LLC by LRE Water, LLC. The District 3D model is now being updated and maintained by LRE Water, LLC.

The 3D model updates included the addition of new geophysical and well drilling logs from throughout the county. Updating our model on an annual basis allows for a more accurate analysis and use of this tool by district staff, consulting hydrogeologists, and landowners for well development and prognosis of the aquifer depths prior to drilling. The tool also continues to assist the district in source aquifer determination of newly drilled wells.

U. S. Geological Survey, Texas Water Science Survey

During the spring of 2013, the USGS gauging system was installed in the Salado Creek, and the process of analyzing the data and recalibrating the system began. Throughout 2023, the system was continuously fine-tuned to ensure the accuracy of the data collected. This gauging system and relationship with the USGS have proved to be an important step forward in monitoring spring flow, both now and well into the future. The image below shows the 2023 streamflow data taken by the gauging system in Salado Creek. The live data can be found online on our website: http://www.cuwcd.org/salado-creek-gauges/



Baylor University, Department of Geology

Clearwater UWCD continues to contract with the Department of Geology at Baylor University to conduct research projects. These research projects have provided a deeper understanding of the Northern Segment of the Edwards BFZ Aquifer. An enhanced scientific understanding of the Northern Segment of the Edwards BFZ Aquifer provides insight to CUWCD and community stakeholders, as well as support collaboration between the district and community in future decision-making processes that will be impacted by the Endangered Species Act.

In FY19, the District jointly contracted with Wellntel and Baylor University to deploy a groundwater-level monitoring network in the District to complement ongoing monitoring in the Middle Trinity aquifer. The goal of this program is to gain experience in how the Wellntel technology works and to become familiar with the data management and analytical capabilities, and to demonstrate how the instrumentation of private wells pumping in the Middle Trinity aquifer can provide insight into the stress experienced by the aquifer, over and above what is being seen by dedicated monitoring wells. This joint effort continued in FY20, FY21, FY22, and FY23.

In FY23, the District contracted with Baylor University to study the springs and reservoir effects in northern Bell County. This is a 2 year project expected to end in December 2024.

The studies the District has funded can be found on our website: http://www.cuwcd.org/aquifer-science/edwards-bfz-aquifer/

2. Legal Services

The District requests legal consulting services on an as-needed basis and utilizes Lloyd Gosselink Rochelle & Townsend, P.C. (LGRT) for consultation. LGRT was the District's sole advisor during FY23 which included the following issues:

- Research and guidance on permitting issues, spacing issues, rule interpretation, public hearing notices, meeting cancellation notices, conservation easements and topics allowed for discussion in closed session.
- Representation of groundwater districts at Texas Water Conservation Association Groundwater Sub-Committee on Desired Future Conditions.

3. Other Services

Clearwater UWCD Funding of Reimbursable Task Order on behalf of the former Bell County Adaptive Management Coalition

The Board entered into an interlocal agreement beginning in fiscal year 2012 that continued into fiscal year 2021. CUWCD, the Bell County Commissioners Court, Village of Salado, Salado Water Supply Corporation, Temple Area Builders Association and Billie Hanks, Jr. have collectively contributed $639,210.60 since 2012 to evaluate current science and to develop new science regarding the Edwards (BFZ) aquifer and the Salado Salamander habitat. Total expenditures for FY12 – FY21 are $615,903.07 leaving a balance of $23,307.53 to fund the FY22 studies. Funding has continued since 2015 by reimbursable task order to fund Pete Diaz's work on specie assessment. The District defends the position that regulating mechanisms are in place (by CUWCD) on spring flow to protect the specie. The efforts for 2023 will no longer be covered by Clearwater as the team is pursuing grant funds for continuation.

BelCor RHCP

The BelCor RHCP currently is working with ICF, for the development of a two-county regional habitat conservation plan (RHCP). In FY22, the entities entered into an interlocal agreement to pursue a section 6 grant from USFWS & TPWD. The entities named Dirk Aaron as project manager as approved by the Board of Directors. The entities are Bell County, Coryell County, Clearwater UWCD, Brazos River Authority, Middle Trinity GCD, Cities of Belton, Temple, Harker Heights, Killeen, Copperas Cove, Salado, and Gatesville. Since January 2022, CUWCD has contributed $42,022.50 to the BelCor RHCP.

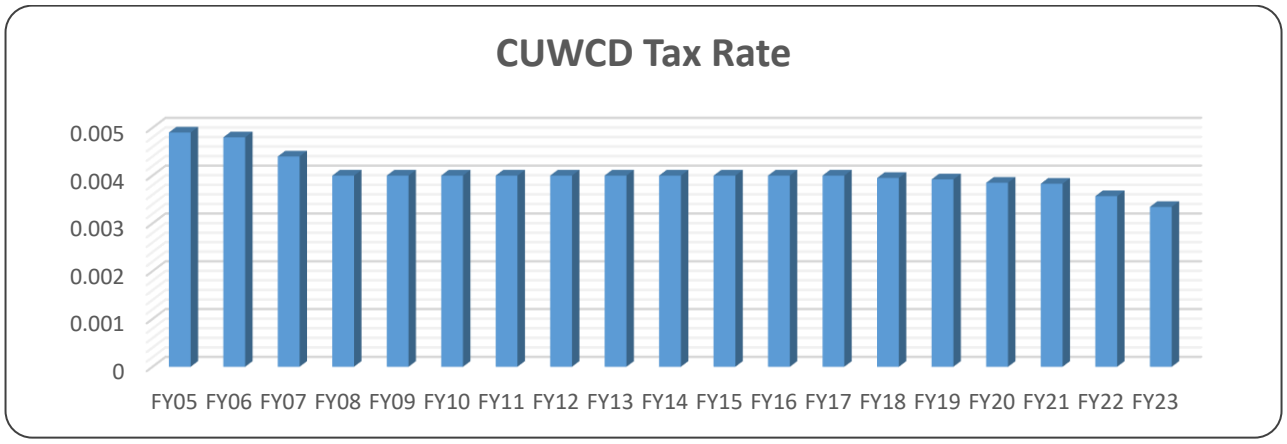
Ludwick, Montgomery & Stapp, P.C.

An annual audit of the District's finances is required by Chapter 36.153 of the Texas Water Code to determine the financial condition of the district. Ludwick, Montgomery & Stapp, P.C., Certified Public Accountants located in Temple, Texas provides the annual financial audit for the District. For more information, see section "B.2 Financial Audit" later in this report.

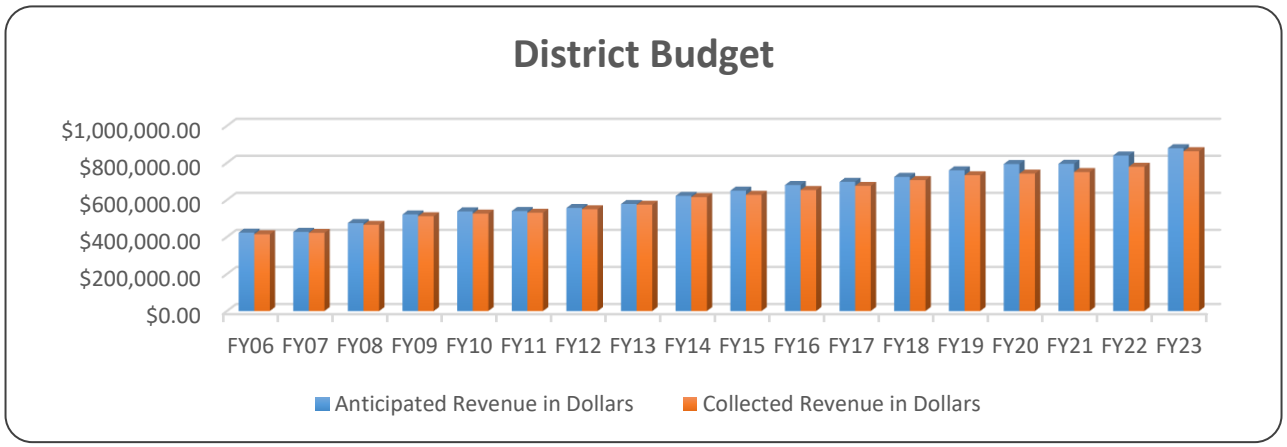
B. Financial Items

1. Budget and Tax Rate

The adopted tax rate for FY23 was $0.002708/$100 valuation. The Board voted to lower the tax rate for the eighth consecutive year. Since the inception of the District, the Board has consistently lowered or kept the same tax rate since it began assessing taxes. Three workshops (June, July, and August) were held in 2022 to develop an operating budget for the upcoming fiscal year (FY23) and to set the corresponding ad valorem tax rate.



The original budget for FY23 was $879,078.00, actual income collected was $862,675.25. The District moved an additional $50,000 from the reserve fund for the ASR project. The adjusted income for FY23 was $912,675.25. The total expenditures for FY23 were $835,973.51. The gross return to fund balance was $76,701.74 with a less reserve fund (ASR) of $50,000.00 and a net return to fund balance of $26,701.74.



The approved budget for FY23, along with the schedule of revenues and expenditures is attached as Appendix A.
Online: http://www.cuwcd.org/public-records/cuwcd-budget/

2. Financial Audit

An annual audit of the District's finances is required by Chapter 36.153 of the Texas Water Code to determine the financial condition of the District. Ludwick, Montgomery & Stapp, P.C., Certified Public Accountant, located in Temple, Texas provided the 2023 annual financial audit for the

District. The audit began immediately at the closing of FY23 on September 30, 2023, and they concluded their audit and submitted their findings to the District in February 2024.

See Appendix B for FY23 Financial Audit.
Online: http://www.cuwcd.org/public-records/audits/

C. Miscellaneous Policies / Issues

1. District Rule Amendments

The Board of Directors amended the District Rules in October 2023 in accordance with Chapter 36 requiring public notice, a public hearing, and Board approval. The Board of Directors voted to amend the rules based on scientific evidence that validated a need for such changes in aquifer management, policy and application.

See our website for complete rules: http://www.cuwcd.org/regulatory-program/district-rules/

2. Bylaws Revised

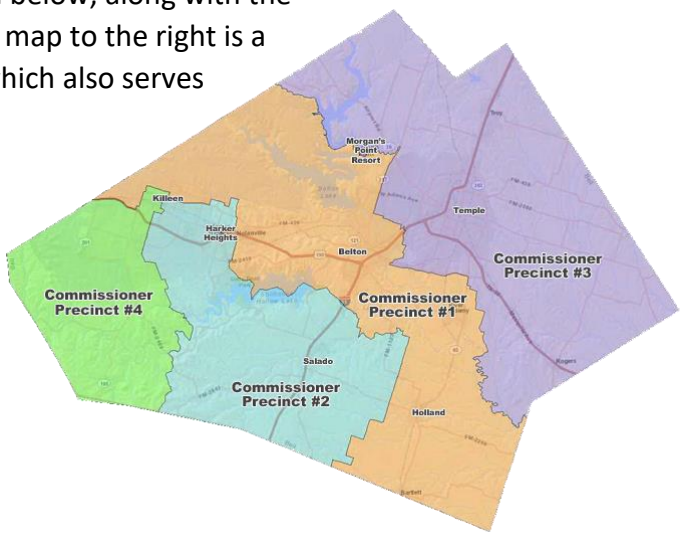
At the time the District Rules were amended in 2016, the rules that addressed the operations of the District were deleted and moved to the Bylaws. The Board of Directors approved the amendments to the Bylaws by resolution on April 13, 2016. No revisions were made to the Bylaws during FY23.

See our website for complete Bylaws: http://www.cuwcd.org/district-overview/bylaws/

D. Board of Directors

1. District Officers

The Board of Directors, per District bylaws, elect officers annually at the first board meeting of the calendar year. The FY 2023 Officers are identified below, along with the office they held and precinct they represent. The map to the right is a map of the Bell County Commissioner Precincts which also serves as the precinct boundaries for the District.



Leland Gersbach, President – Precinct 1

Jody Williams, Vice President – Precinct 3

Gary Young, Secretary – Precinct 2

Scott Brooks, Director – Precinct 4

James Brown, Director – At-Large

2. Meetings – FY23 (Oct 2022-Sept 2023)

The Board of Directors held 13 Board meetings in FY23. The Workshops and regular Board meeting agendas included discussions and presentations on the topics listed below.

- Presentations by USGS Water Science Group
- Presentations by Baylor University regarding the current status of the Edwards (BFZ) Aquifer and the Trinity Aquifer
- Legislative updates
- Conduct hearings on drilling and operating permits
- Salado Salamander issues as it pertains to CUWCD's governance of groundwater

All board meeting agendas, minutes, and financial reports can be viewed online by visiting http://www.cuwcd.org/public-records/

E. Groundwater Management Plan

Texas Water Code, Chapter 36.1071--36.1073, states the Groundwater Management Plan (GMP) must be reviewed and readopted every 5 years by all GCDs in Texas. The plan is then subject to approval by the Texas Water Development Board (TWDB). Clearwater's Initial Groundwater Management Plan was adopted by the District Board of Directors on October 24, 2000 and was formally certified by TWDB on February 21, 2001.

Revisions are required every 5-years, even if simply updated with new DFCs. During each revision, the proposed GMP must go through staff evaluation and a minimum of one preliminary review by the Texas Water Development Board (TWDB). The previous GMP was amended to include the DFC/MAG revisions and was formally readopted by the Board of Directors on January 9, 2019, after the prescribed public hearing on the revised version and was approved by TWDB on March 12, 2019.

The District reviewed and updated the current plan in 2020 and had it readopted by TWDB prior to January 13, 2021. The District completed a full review and formally adopted the revised plan on November 11, 2020, and received final approval from TWDB on December 30, 2020.

The District Groundwater Management Plan can be found on CUWCD's website at: http://www.cuwcd.org/district-overview/management-plan/

4. Groundwater Management Plan Requirements

The District Groundwater Management Plan identifies the goals and objectives of the District and provides performance standards and tracking methods to measure the District's effectiveness in meeting these goals. The District goals are mandated by Texas Water Code Chapter 36, Section 36.1071. Although all groundwater conservation districts are subject to these goals, each district chooses how to best implement the goals within their district by establishing its own objectives and performance standards.

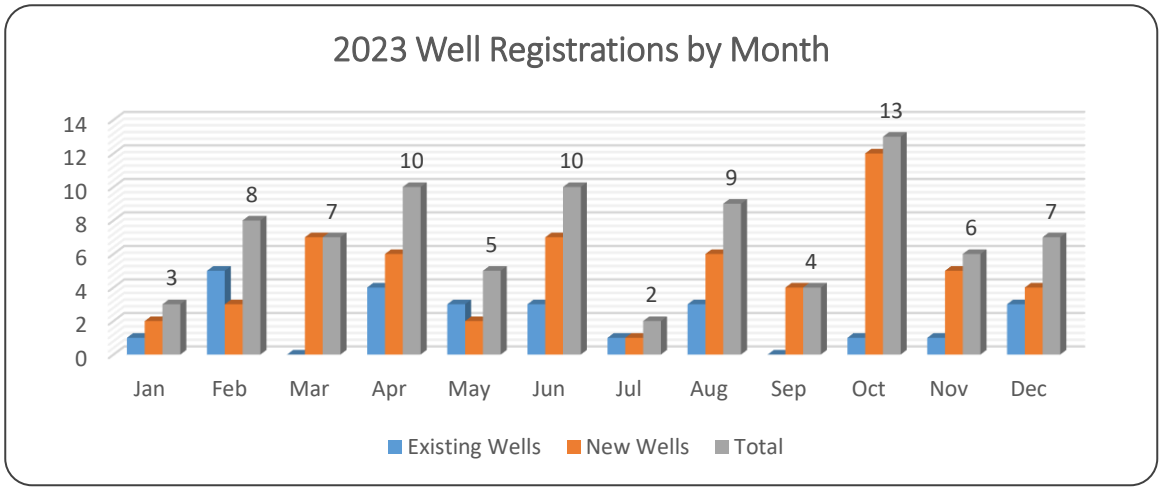
A. Providing the Most Efficient Use of Groundwater

1. Well Registrations

Objective: Each year, CUWCD will require the registration of all wells within the District's jurisdiction.

Objective Satisfied

During the calendar year 2023, 97 wells were registered. The tables below summarize well registration and permitting activity from January 1, 2023, through December 31, 2023. Since 2018, District Staff has been conducting a robust search of all TWDB and TCEQ databases to identify wells that have not been properly registered. The District's field technician follows up with landowners to properly get the unregistered wells registered in the District's database. During the calendar year 2023, 25 existing wells (blue columns) were registered and 59 new wells (orange columns) were registered.



Appendix C for Master Registration Table

2. Permitted Well Applications

Objective: Each year, CUWCD will require permits for all non-exempt use of groundwater in the District as defined in the District rules, in accordance with adopted procedures.

Objective Satisfied

Of the 97 wells registered in 2023, only 13 of those were classified as non-exempt. The Table below summarizes the non-exempt wells or permits that were approved during 2023 and the corresponding permits that were issued where applicable.

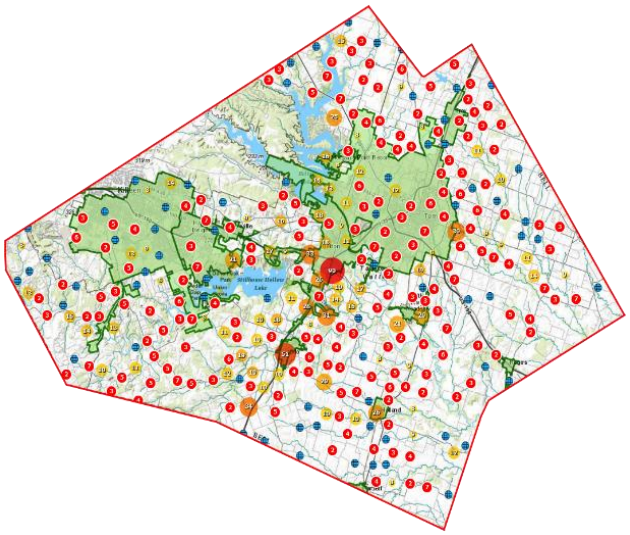
Non-Exempt Permitted Well Registrations for 2023 Calendar Year

Well #	Land Owner	Ac-Ft / Year	Aquifer	Use	Permit Type
N3-23-001P	Ben Daniel	0.051	Lower Trinity	Domestic	Drilling & Operating
N3-23-002P	Kelly Snook	0.30	Alluvial	Domestic	Drilling & Operating

N3-23-003P	Ken Baumgardner	0.38	Lower Trinity	Domestic	Drilling & Operating
N3-23-004P	City of Temple	N/A	Lower Trinity	Industrial	Drilling
N3-23-005P	University of Mary Hardin-Baylor	N/A	Lower Trinity	Irrigation	Drilling
N3-23-009P	James Boger	0.067	Middle Trinity	Domestic	Drilling & Operating

3. Groundwater Database

Objective: Each year, CUWCD will maintain a groundwater database to include information relating to well location, production volume, and other pertinent information deemed necessary by the District to enable effective monitoring of groundwater in Bell County.



Objective Satisfied

District GIS Database

In August of 2021, the Board of Directors voted to move the online GIS system to LRE Water, LLC from Halff Associates, Inc. Since September 2021, staff has been diligently working with the database programmers of LRE Water, LLC to develop the new data management system that went live in January 2022 and replaced the Halff Associates, Inc. GIS system.

Every well registered in the District is available on our database with latitude and longitude coordinates and the elevation of the land surface at the well head. With the well information, the District can attach production and permit information along with other pertinent data.

The public maps are available on the District website's homepage, or by going to the following web address and clicking on Public Access Maps: http://www.cuwcd.org/

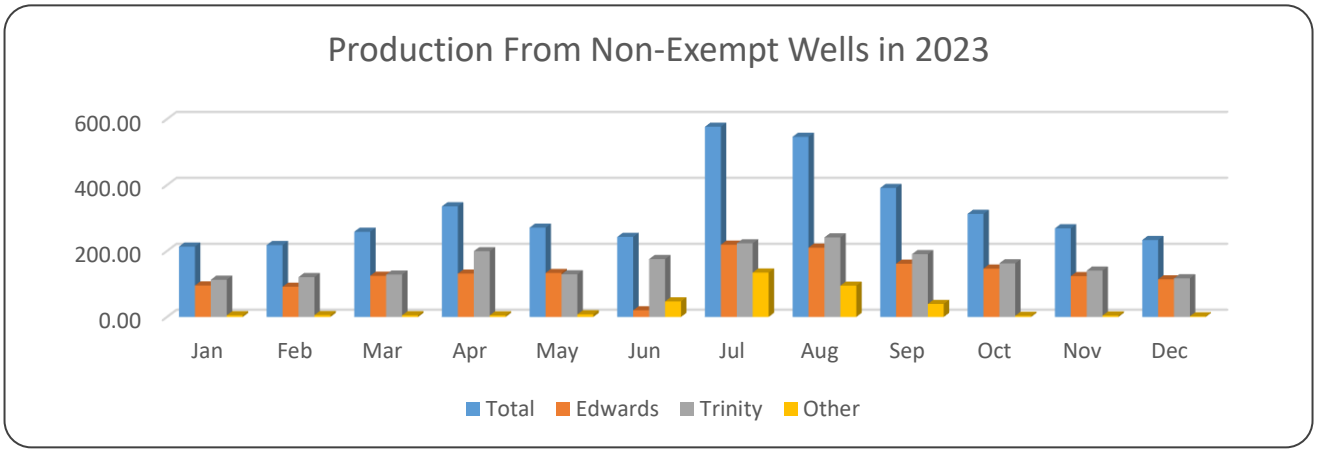
Non-exempt Well Production

The District continued collecting data from non-exempt wells during 2023. Monthly production reports are required by the 5th day of the following month for all wells with operating permits. The tables below show the total permitted amount for the non-exempt wells and their total production. In 2023, actual water production figures were significantly lower than the amount permitted. Part of this is due to the issuance of Historic and Existing Use Permits (HEUP). The HEUPs are issued for the full permit amount, regardless of whether the permittee will be using this amount during the year.

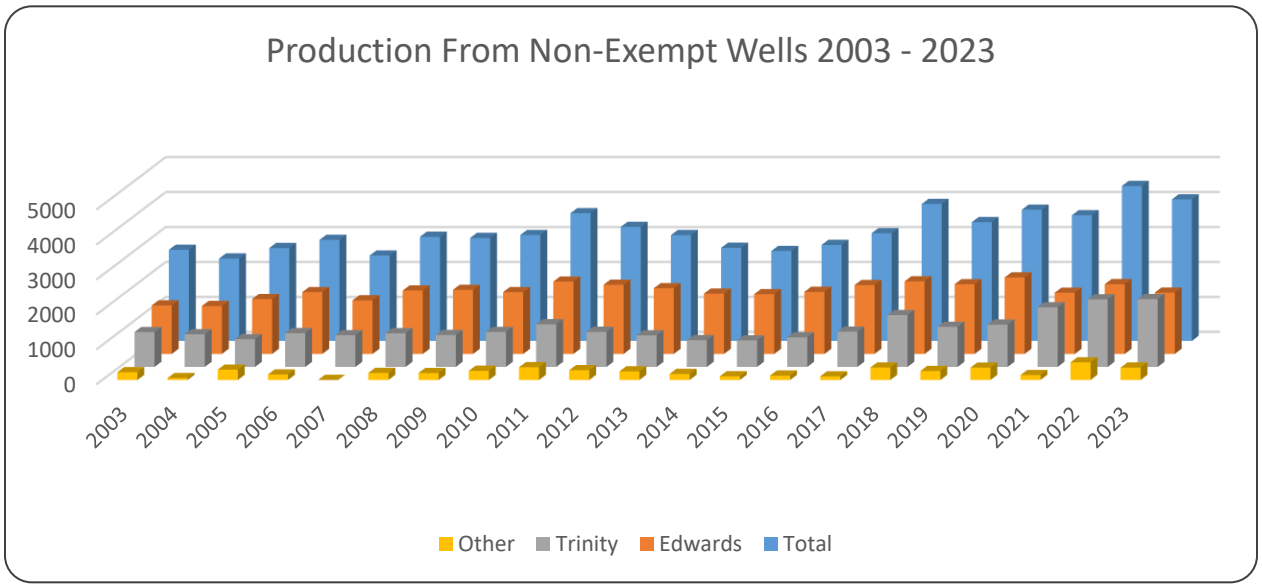
2023 Permitted Wells (Non-Exempt)

	Permitted Ac-Ft	# Permitted Wells	Actual Use Ac-Ft	# Active Permitted Wells	% Usage
Edwards (BFZ)	2,459.08	61	1,754.61	49	71.33%
Trinity (total)	4,992.31	72	1,940.75	57	37.99%
Glen Rose	134.63	7	35.94	6	26.69%
Hensell	467.07	34	44.50	25	9.51%
Hosston	4,390.61	31	1,860.31	26	41.28%
Other Aquifers	579.37	22	354.20	14	61.10%
Total	8,030.76	155	4,049.56	120	50.43%

The following chart shows 2023 production by month and aquifer. Production was at its highest level during the month of July with a monthly withdrawal of 556.55 ac-ft. Throughout the year, withdrawals from the Edwards BFZ were consistently higher than from the Trinity aquifer. Production from other source formations was minimal throughout the year. Production from other source formations is higher during summer months which reflects agriculture irrigation necessary at that time of year.



In the graph on the following page, production from 2023 (120 wells) is shown compared to production in years 2003 through 2022. Overall production in 2023 was 4,049.56 ac-ft which is slightly lower than the total production in 2022. The Edwards (BFZ) had a total production for 2023 of 1,754.61 ac-ft, total Trinity aquifer production was 1,940.75 ac-ft, and other formations produced 354.20 ac-ft of water.



See Appendix D for 2023 Well Production Report

Groundwater Transport

During 2023, six entities in Bell County transported groundwater outside the District. A total transport of 30.56 ac-ft. occurred from the Edwards BFZ aquifer and 103.34 ac-ft. from the Trinity aquifer. The District is allowed by state law to charge a transport fee of $0.025/1,000 gallons transported. This generated a total revenue of $1,090.67 for 2023.

Entity	Aquifer	County	Ac-Ft	Gallons	Fee
Bell-Milam-Falls WSC	Lower Trinity	Falls, Milam, Williamson	41.07	13,382,390	$334.56
Central Texas WSC	Lower Trinity	Falls, Milam	58.08	18,924,993	$473.12
East Bell WSC	Lower Trinity	Falls	1.09	353,462	$8.84
Jarrell-Schwertner WSC	Edwards (BFZ)	Williamson	30.56	9,956,604	$248.92
Little Elm Valley WSC	Lower Trinity	Falls	2.32	754,880	$18.87
O&B WSC	Lower Trinity	Falls	0.78	254,285	$6.36
		TOTAL	133.90	43,626,614	$1,090.67

Water Loss in Public Water Systems

The District tracks water loss of all public water supply systems in Bell County that utilize groundwater. Real Losses, also referred to as physical losses, are actual losses of water from the system and consist of leakage from transmission and distribution mains, leakage and overflows from the water system's storage tanks and leakage from service connections up to and including the meter.



Water leaking from a supply line

Bell County Water Loss 2018-2023

Entity	2023 Loss (% of water)	2022 Loss (% of water)	2021 Loss (% of water)	2020 Loss (% of water)	2019 Loss (% of water)	2018 Loss (% of water)
Armstrong WSC	15.00	12.00	21.00	19.00	19.00	18.00
Bell Co. WCID #2	1.00	11.00	12.00	15.00	14.00	11.10
Bell Co. WCID #5	11.00	3.47	3.00	2.81	24.71	16.72
Bell-Milam-Falls WSC	27.00	36.00	44.00	31.28	41.92	36.60
Central Texas WSC	17.00	19.00	17.00	8.00	9.00	8.00
City of Troy	34.40	22.40	21.98	18.96	21.70	34.75
East Bell WSC	12.30	10.55	14.85	10.74	14.42	16.21
Jarrell-Schwertner WSC	35.00	23.00	38.00	41.00	50.00	48.04
Little Elm Valley WSC	24.73	19.00	26.00	17.54	20.75	23.04
Moffat WSC	23.00	11.00	16.00	10.00	26.00	26.70
Oenaville/Bellfalls WSC	8.46	7.09	7.04	5.54	6.42	7.39
Pendleton WSC	13.81	12.68	18.12	21.51	22.03	24.43
Salado WSC	8.7	2.26	10.20	9.88	8.30	9.76

** Not Reported*

Exempt Well Production

Each year, the exempt wells that have been registered are evaluated. The aquifer from which they are producing is determined and an estimate of their total annual production is calculated. The results are shown below for exempt wells registered through December 31, 2023. Most of the exempt wells in Bell County are used for domestic purposes and their use estimate assumes 106 gallons/person per day (USGS estimate of domestic use outside of a municipal water system) and 2.76 persons/household (U.S. Census Bureau, Population Estimates Program (PEP) July 1, 2019). The exempt well use estimate factors out all plugged, capped, monitor and inactive wells in the database.

2023 Exempt Well Production

	Reserved	Estimated Use*	# Wells
Edwards (BFZ)	825 ac-ft	365 ac-ft	855
Trinity	1,419 ac-ft	784 ac-ft	1,583
Other Aquifers	N/A	826 ac-ft	1,575
Total	1,691.37 ac-ft	1,975 ac-ft	4,013

** Domestic use estimate assumes 106 gallons/person per day (USGS estimate of domestic use outside of a municipal water system) and 2.76 persons/household (U.S. Census Bureau, Population Estimates Program (PEP) July 1, 2019)*

See Appendix E for 2023 Exempt Well Use

Combined Well Production Data

Combining the production from the non-exempt wells with the estimated production from the exempt wells, the following production figures result:

Aquifer	Non-Exempt Well Production (Ac-Ft / Year)	% of Total Permitted	Estimated Exempt Well Production (Ac-Ft / Year)	% of Total Reserved	Total Production (Ac-Ft / Year)	% of Total Available
Edwards (BFZ)	1,754.61	71.33	365	44.24	2,119.61	32.77
Trinity	1,940.75	37.99	784	90.49	2,724.75	50.30
Other Aquifers	354.20	61.10	826	N/A	1,180.2	N/A
Total	4,049.56	50.43	1,975	67.93	6,024.56	38.27

The previous chart shows that overall, exempt wells account for approximately 67.93% of all the groundwater produced in Bell County. In the Trinity, 90.49% of production is attributed to exempt wells and, in the Edwards BFZ, exempt wells account for 44.24% of groundwater production.

Overall, production from the Edwards BFZ aquifer accounts for 32.77% of total groundwater used in Bell County and the Trinity aquifer accounts for 50.30% of total groundwater used in Bell County.

Modeled Available Groundwater - Analysis of Permits and Exempt Use Reserves (in acre-feet)

Aquifer	MAG Modeled *	Reserved for Exempt	Managed	HEU Permit	Operating Permit	Remaining MAG
Edwards (BFZ)	6,469	825	5,644	2,139.20	320.59	3,184.21
Trinity	9,275	866.37	8,408.63	1,502.60	3,606.16	3,299.87
Paluxy	0			0	0	0
Glen Rose (Upper)	275	140.37	134.63	61.90	72.73	0
Hensell (Middle)	1,100	548	552	259.30	208.44	84.26
Hosston (Lower)	7,900	178	7,722	1,181.40	3,324.99	3,215.61

** The Modeled Available Groundwater (MAG) is the estimated amount of water available for permitting assigned to Clearwater UWCD by the Executive Administrator of TWDB.*

See Appendix F for the 2023 Edwards and Trinity Aquifer Status Reports

4. Annual Newsletter

Objective: Each year, CUWCD will disseminate educational information on groundwater through publication of a District newsletter, quarterly web news and website.

Objective Satisfied

Annually, the District publishes a newsletter and mails it to registered well owners in Bell County. In 2023 the total number of newsletters printed were 3,150 with 2,980 copies directly mailed to well owners. The others are handed out to people that come into the office and electronic copies are emailed out to permit holders and other interested parties. The District also sent out 1 quarterly report and 28 informational notices through Mail Chimp.

See Appendix G for Annual Newsletter and quarterly web news.
Online: http://www.cuwcd.org/district-overview/district-newsletter/

B. Controlling and Preventing Waste of Groundwater

Outreach and Education

Objective: Each year, CUWCD will disseminate educational information on controlling and preventing the waste of groundwater focusing on water quality protection through at least one classroom or public presentation to civic organizations and invited opportunities to speak.

Objective Satisfied

District staff is available to speak to any group within our geographical boundaries. In 2023, District staff reached 1,328 adults and children in Bell County directly through presentations and making contact at event booths. We often give PowerPoint presentations to adult groups explaining the District and how we function along with covering important water topics like conservation and watershed management.

In the classroom, we provide the Major Rivers curriculum and give supporting presentations with an Enviroscape watershed model and rainfall simulator. We make sure to always have handouts for the kids like color-changing pencils, rulers, and cups that change color when cold water is poured in. All handouts are branded with district information and most items have water conservation tips printed on them.

See Appendix H for Education and Outreach Events.

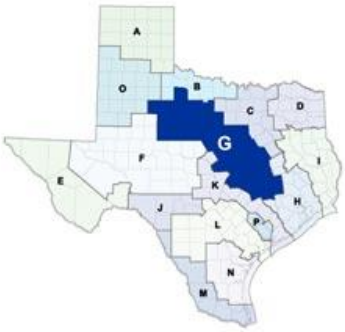
C. Addressing Conjunctive Surface Water Management Issues

Regional and Joint Planning Process Participation

Objective: Each year, CUWCD will participate in the regional planning process by attending a minimum of two meetings of the Brazos G Regional Water Planning Group per fiscal year.

Objective Satisfied

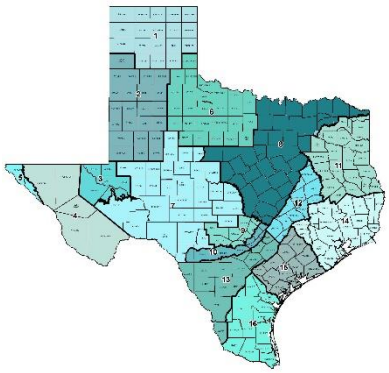
During FY23, District General Manager Dirk Aaron attended the scheduled meetings listed below. In 2019, Dirk Aaron was elected by the GMA8 Membership to represent the Groundwater Management Area as an appointed member of Region G. Dirk also serves on the Brazos G Scope of Work Committee.



March 8, 2023	Attended	July 27, 2023	Attended
May 31, 2023	Attended	October 20, 2023	Attended

Online: http://www.brazosgwater.org/

In addition to the regional planning group, District General Manager Dirk Aaron, Director Gary Young, and Director Jim Brown also attended the meetings for Groundwater Management Area 8. Groundwater Management Areas were created to provide for the conservation, preservation, protection, recharging, and prevention of waste of the groundwater, and of groundwater reservoirs or their subdivisions, and to control subsidence caused by withdrawal of water from those groundwater reservoirs or their subdivisions, consistent with the objectives of Section 59, Article XVI, Texas Constitution.



March 7, 2023	Attended	June 27, 2023	Attended

Online: http://www.gma8.org

D. Addressing Natural Resource Issues Which Impact the Use and Availability of Groundwater, and which are impacted by the Use of Groundwater

Monitoring Water Quality

Objective: Each year, CUWCD will monitor water quality within the District by obtaining water samples from all newly constructed wells and testing the water quality of a minimum 90% of newly constructed wells.

Objective Satisfied

The District has an in-house water quality lab and offers a free screening service to registered well owners. Testing parameters include coliform bacteria; alkalinity; conductivity; total dissolved solids; fluoride; hardness; nitrate; nitrite; pH; phosphate; and sulfate. During FY23, the staff conducted screening on 85 groundwater samples. 18 samples tested were from the Edwards (BFZ) aquifer, 6 samples from the Upper Trinity, 40 samples from the Middle Trinity, 15 samples from the Lower Trinity, and 6 samples from other formations.

The District's lab is intended to provide a general water quality screening only. When a certified test is needed, the District sends properly collected well samples to BioChem located in West, Texas. During FY22, 2 samples were sent out for certified testing.

A summary of the well screening results are shown in Appendix I.

Objective: Each quarter of the year, CUWCD will monitor the water quality and spring-flow of the Salado Springs Complex and the Robertson springs of Salado in accordance with the necessary agreements under the Endangered Species Act (ESA) and a proposed, soon to be negotiated 4(d)rule with United States Fish and Wildlife Service (USFWS) and such, per Chapter 36.108 GMA8 Joint Planning, to manage to the Edwards BFZ Aquifer DFC.

Objective Satisfied

Quarterly water quality assessments for nitrate, nitrite, and dissolved oxygen of both Salado Spring Complex and groundwater flow from all seven of the downtown springs collectively known as the Salado Spring Complex were completed in 2023.

A summary of the Salado Springs Complex screening results is shown in Appendix J.

Objective: Each year, CUWCD, per the agreed-upon five-year reimbursable-task-order with the Texas Fish and Wildlife Conservation Office (TXFWCO), will fund and support the efforts of the assigned research biologist, to assess the status of the Threatened Salado Salamander by systematically monitoring under the federal permit TE676811-9 and state permit SPR-0111-03.

Objective Satisfied

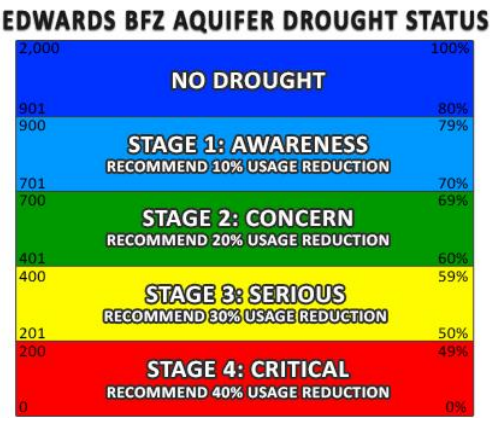
A summary of the formal findings of the assigned research biologist is in Appendix K and on the district website at https://cuwcd.org/salado-salamander/

TXFWCO's report for FY23 is shown in Appendix K.

E. Addressing Drought Conditions

The District's Groundwater Management Plan requires that the General Manager, Staff, and Board of Directors review the District's drought status on a monthly basis. The decisions to declare drought levels per the District's Drought Management Plan approved on December 17, 2009, are reviewed weekly by the General Manager. The Drought Management plans are designed to reflect conditions of the Trinity and Edwards (BFZ) Aquifers independently of each other based on the specified triggers (PDI and/or Spring Flow).

1. Monitor Drought Conditions in the Edwards Aquifer



Objective: Each month, CUWCD will monitor drought conditions in the Edwards aquifer through the process established in the drought management plan for the Edwards aquifer adopted by the Board of Directors.

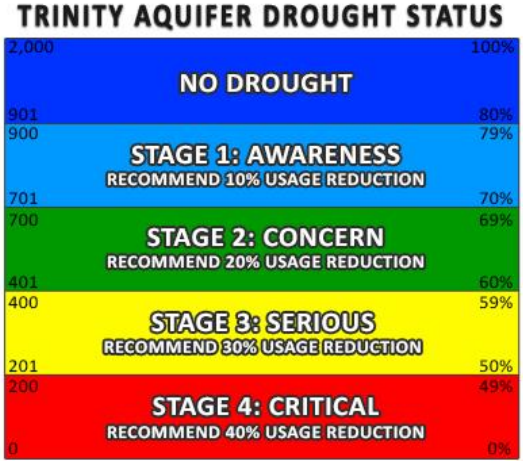
Objective Satisfied

Under the Edwards BFZ Drought Management Plan, a drought stage is triggered when either the Precipitation Deficit Index (PDI) is less than a drought state trigger condition exceeding 28 consecutive days and shall be reduced or terminated when the PDI is greater than the trigger condition exceeding 42 consecutive days, or the average spring discharge measured via stream flow gauges in Salado Creek fall below the trigger level for the periods described time. *Online:* http://www.cuwcd.org/regulatory-program/drought-management/edwards-drought-management-plan/

The chart on the next page shows the declared stages during the fiscal year.

Date	Declared Drought Stage	Salado Creek Acre ft/Month	Salado Creek CFS	PDI Total	PDI % Total
10/3/2022	Stage 3 Drought	411.41	6.91	21.58	65.39
11/8/2022	Stage 2 Drought	465.68	7.826	19.236	58.29
12/12/2022	Stage 2 Drought	626.46	10.53	22.794	69.07
1/3/2023	Stage 2 Drought	530.18	8.91	22.008	66.69
2/14/2023	Stage 2 Drought	1623.27	27.28	21.357	64.72
3/7/2023	Stage 2 Drought	1123.44	18.88	22.371	67.79
4/10/2023	Stage 2 Drought	663.23	11.15	22.859	69.27
5/8/2023	Stage 1 Drought	818.30	13.75	24.335	73.74
6/11/2023	Stage 1 Drought	913.27	15.35	26.619	80.66
7/7/2023	Stage 3 Drought	322.27	5.42	26.03	78.88
7/17/2023	Stage 3 Drought	202.43	3.40	26.031	78.88
8/7/2023	Stage 3 Drought	236.59	3.98	26.031	78.88
9/5/2023	Stage 3 Drought	216.36	3.64	20.968	63.54

2. Monitor Drought Conditions in the Trinity Aquifer



Objective: Each month, CUWCD will monitor drought conditions in the Trinity aquifer through the process established in the drought management plan for the Trinity aquifer adopted by the Board of Directors.

Objective Satisfied

Under the Trinity Aquifer Drought Management Plan, a drought stage is only to be triggered when the Precipitation Deficit Index (PDI) is less than a drought state trigger condition exceeding 28 consecutive days and shall be reduced or terminated when the PDI is greater than the trigger condition exceeding 42 consecutive days.
Online: http://www.cuwcd.org/regulatory-program/drought-management/edwards-drought-management-plan/

Below are the declared stages during the fiscal year.

Date	Declared Drought Stage	PDI Total	PDI % Total
10/3/2022	Stage 3 Drought	21.874	66.28
11/8/2022	Stage 3 Drought	19.629	59.48

12/12/2022	Stage 2 Drought	23.69	71.79
1/3/2023	Stage 2 Drought	22.988	69.66
2/14/2023	Stage 2 Drought	22.992	69.67
3/7/2023	Stage 2 Drought	22.371	67.79
4/10/2023	Stage 1Drought	25.377	76.90
5/8/2023	Stage 1 Drought	26.58	80.55
6/11/2023	No Drought	28.926	87.65
7/7/2023	No Drought	28.932	87.67
8/7/2023	No Drought	28.926	87.65
9/5/2023	No Drought	23.931	72.52

F. Addressing Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, and Brush Control, Where Appropriate and Cost-Effective

1. Conservation

Objective: Each year, CUWCD will promote conservation by conducting and hosting educational events with AgriLife Extension Service and Texas 4-H2O Ambassadors on water conservation and by distributing conservation brochures and literature to the public at a minimum of two educational events attended by district staff and directors.

Objective Satisfied

During 2023, the District exceeded this requirement and was able to reach over 1,328 adults and children in Bell County directly through giving presentations and making contact at event booths where conservation materials were both discussed and handed out. The District also presented the same topics in the ongoing electronic quarterly newsletter and the annual newsletter.

See Appendix H for Education and Outreach Events.

2. Rainwater Harvesting

Objective: Each year, CUWCD will promote rainwater harvesting by posting information on rainwater harvesting on the District website.

Objective Satisfied

The District's Groundwater Management Plan requires the promotion of rainwater harvesting by posting information on the District website. The District satisfied this requirement by including a segment on rainwater harvesting on its website under the Education menu tab along with a link to the Texas A&M AgriLife Extension website and their Rainwater Harvesting Manual. Also included are links to Rainwater Harvesting Contacts and Suppliers and to the Texas A&M AgriLife Extension manual on Rainwater Harvesting Landscape Methods. The District's office has a rainwater harvesting setup for demonstration purposes.

http://www.cuwcd.org/education/rainwater-harvesting/

A copy of the posted information is included under Appendix L.

3. Brush Control

Objective: Each year, the District will provide information relating to brush control on the District web site.

Objective Satisfied

The District's Groundwater Management Plan requires promotion of conservation by providing information relating to brush control on the District website. The District satisfied this requirement by including a segment on brush control on its website under the Education menu tab. For additional information on brush control, links to the Texas A&M AgriLife Extension website are provided. Also included is a link to the Brush Management Fact Sheet produced by Environmental Defense.

http://www.cuwcd.org/education/brush-control/

A copy of the posted information is included under Appendix M.

4. Recharge Enhancement

Objective: Each year, the District will provide information relating to recharge enhancement on the District web site.

Objective Satisfied

The District's Groundwater Management Plan requires promotion of conservation by providing information relating to recharge enhancement, and the District satisfied this requirement by including a segment on recharge enhancement on its website under the Education menu tab. For additional information on recharge enhancement, links to the Texas State Soil and Water Conservation website, and the Leon River Restoration Project website are provided. In addition, the District has contracted with Baylor University to help gain a better scientific understanding of the Edwards (BFZ) and its recharge zone.

http://www.cuwcd.org/education/recharge-enhancement/

A copy of the posted information is included under Appendix N.

G. Addressing in a Quantitative Manner the Desired Future Conditions of the Groundwater Resources

1. Salado Springs

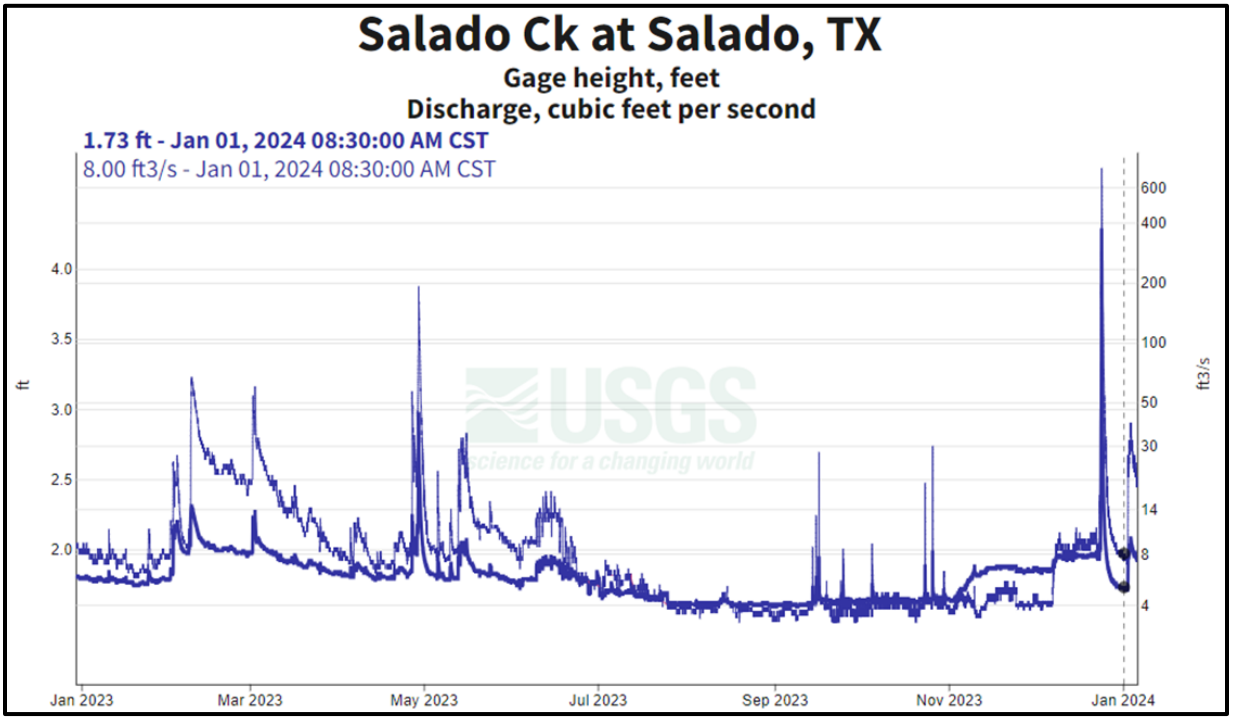
Objective: Each month, CUWCD will operate a gauge system on Salado Creek by contract with USGS Water Science Team in Austin Texas, to accurately record the estimates of the discharge from the Edwards (BFZ) Aquifer at the Salado Springs Complex, Robertson, Big Boiling, Little Bubbly, Side Spring, Critchfield, Benedict and Anderson Springs.

Objective Satisfied

The gauges in the Salado Creek have been an important mechanism to protect spring flow. The District began collecting data from the Salado Creek stream flow gauges during FY08 with the assistance of multiple contractors. During the spring of 2013 an upgraded gauge package by the USGS Water Science Group was installed and the process of analyzing the data and recalibrating the system began. This process was lengthy, but essential to ensure accuracy of the data collected. The new gauges and relationship with the USGS have proved to be an important step forward in monitoring spring flow. The live data can be found online on our website: http://www.cuwcd.org/salado-springs/salado-creek-gauges/

Each month, CUWCD provides a summary of the monthly average discharge rate of Salado Springs and discusses the conservation measures implemented (if any are necessary) to avoid impairment of the Desired Future Conditions for the Edwards (BFZ) Aquifer established by GMA 8.

The image below is a screenshot of the spring flow data for the calendar year 2023.



2. (a) Static Water Level Measurements

Objective: Each month, CUWCD will collect at least 15 water-level measurements from the Trinity aquifer monitor wells located in the District.

Objective Satisfied

The Texas Water Development Board (TWDB) typically measures water levels in selected wells in January each year. Clearwater measures water levels in selected wells four times annually to collect more comprehensive data on water levels in Bell County. The District also collects water level measurements from all newly constructed wells in Bell County and from all Wellntel participants.

Comparing the water level measurements taken by the District with those taken by the TWDB is sometimes difficult due to differences in measurement procedures and equipment. Clearwater primarily uses a Sonic Wave Meter and only utilizes an e-line if necessary. Large producers are asked to turn the pump off at least one hour prior to the measurement to allow the aquifer levels

time to stabilize. TWDB typically uses a steel tape or an airline and does not request the pump to be turned off. During calendar year 2023, the District took water level measurements from 116 wells.

The District has been increasing continuous monitor well locations throughout Bell County, thus some wells have very little historical information. Adding these wells is essential to have a broader spectrum of data to analyze in future years. The District has 12 continuous monitor wells that are monitored by TWDB. The continuous water level measurements can be viewed on TWDB's website at: https://waterdatafortexas.org/groundwater.

A copy of the measurements is included under Appendix O.

2. (b) Changes in Water Levels

Objective: Each year, the Annual Report to the Board of Directors will include a discussion of the change in water levels in each Trinity aquifer layer for which a Desired Future Condition is established by GMA-8.

Objective Satisfied

The District prepares a monthly status report (Appendix F – Trinity Aquifer Status Report 2023) that explains the status of the Trinity aquifers by layer at any given time. The DFC analysis from 2000 to present compares DFC adopted drawdown to actual drawdown figures for Bell County. In addition, potential production from both permitted wells and exempt wells is compared to MAG with figures showing how much actual water is available for permitting. Report can be viewed at: https://cuwcd.org/wp-content/uploads/2023/01/20230123_Trinity_Study_BelcoWilcoTravco-Groundwater-Use.pdf

5. Miscellaneous Activities

In addition to the Groundwater Management Plan requirements, Clearwater is involved in several miscellaneous activities as follows:

A. Abandoned Wells

The District continues to coordinate with the Texas Department of Licensing and Regulation (TDLR) to identify and investigate reports of abandoned wells. After initial investigation, staff refers abandoned wells to TDLR for further investigation, determination of corrective action, and enforcement. The District did not refer any abandoned wells to TDLR during the calendar year 2023.

The District continues to work with the Bell County Public Health District for assistance in locating abandoned wells when septic systems are inspected. The District promotes the plugging of abandoned wells by distributing educational information at various conferences and events and hosting well plugging demonstrations with the Texas A&M AgriLife Extension.

According to records from the Texas Department of Licensing and Regulation, during 2023 a total of 21 wells were plugged in Bell County.

B. Bell County Water Symposium

Clearwater sponsored its twenty first annual water symposium on November 14, 2023 at the Bell County Expo Center. Event partners included Bell County Engineer's Office, KPA Engineers, LRE Water LLC, Lloyd Gosselink Attorneys at Law, Capital Farm Credit, Allan R. Standen LLC, R.W. Harden & Associates, Inc, Michelle A. Sutherland Groundwater Resource Consulting, Advanced Groundwater Solutions LLC, Blanton & Associates, and Texas A&M AgriLife Extension-Bell County.

Topics that were discussed:

- *Growth & Development….same song 53rd verse* – Honorable David Blackburn, Bell County Judge
- *Understanding Today and Tomorrow's Water Needs* – Mr. Tony Smith, Associated Vice President, Carollo Engineers
- *Water Supply and System Update* –Brad Brunett, Lower/Central Basin Region Manager, Brazos River Authority
- *Bell County Groundwater Resource Update, Concerns, Conservation and Future* – Leland Gersbach, Board President, Clearwater UWCD and Dirk Aaron, General Manager, Clearwater UWCD and Mike Keester, Geoscientist, R.W. Harden & Associates.
- *The 88th Texas Water Session* – Madison Huerta, Associate, Lloyd Gosselink Rochelle & Townsend, P.C.
- *Extreme Weather* – Dr. Hal Neeham, Extreme Weather & Disaster Scientist, Galveston, TX
- *Aquifer Storage & Recovery the New Reservoir Panel* – Moderator: Honorable David Blackburn, Bell County Judge, Panelists: Dr. Steve Young, INTERA; Dr. Neil Deeds, INTERA; Ricky Garrett, WCID No. 1; Rick Kasberg, KPA Engineers; David Olson, City of Temple; Brian Dosa, DPW Gt. Cavazos; Andrea Croskrey, TWDB; David Smith, CDM Smith
- *Designing Your Home with Rainwater Catchment* - Allan Standen, LRE Water & 2023 Texas Rainwater Catchment Award Winner

Refer to Appendix P for an agenda of the meeting.
Online: http://www.cuwcd.org/education/annual-water-symposium/

C. Internet Site

The District's website continues to grow on a monthly basis. The website contains general information about the District and Board of Directors along with a calendar of events and meeting agendas. Press releases and other water-related articles are posted to continually provide water-related resources to the residents of Bell County.

Below are some highlights of the website available to the public:

- Current Drought Status
- Educational Resources
- Texas Drought Monitor
- Salado Creek Gauges
- District Rules
- Groundwater Management Plan
- Access to online GIS Maps
- Link to TWDB Groundwater Levels
- Link to TWDB Texas Reservoir Levels
- Public Records
- District Forms and Documents

The website can be viewed at http://www.cuwcd.org

6. Summary

Based on the governance of the Board of Directors and management under the executive direction of the General Manager, District staff continued expanding their efforts in developing in-depth aquifer science, enhancing educational outreach to public schools and civic organizations, and refining database management for the District records.

The District staff has expanded the educational efforts in a partnership with Texas A&M AgriLife Extension, Master Naturalist, and Master Gardener programs. Strategies include: an education trailer (mobile classroom), classroom curriculum, science day events, field days, Earth Day events, and informative presentations for civic organizations.

Clearwater UWCD has maintained relationships with Bell County, all cities within Bell County, USGS, and Baylor University to continue efforts to better understand the Edwards BFZ Aquifer and its complex of springs and recharge features. Maintaining the regulatory system of protecting the spring flow has been validated by the USFWS decision to list the salamander as threatened rather than endangered. The 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023 final reports from USFWS can be found on our website at http://www.cuwcd.org/salado-springs/salado-salamander/.

The District is also committed to continuing our efforts to enhance the network of monitor wells in the three layers of the Trinity Aquifer in order to measure drawdown relative to pumping. This allows the Board of Directors to manage the aquifers to the DFC rather than simply to the MAG. The District continues to monitor over 50 wells in both the Trinity and Edwards (BFZ) Aquifers.

The Board of Directors of Clearwater UWCD have officially amended the District Rules (effective October 13, 2023) after investing approximately $1.5 million (since 2014) in advanced scientific endeavors and with this new understanding has made significant changes to our permitting process and protection of landowner rights. Clearwater Directors amended the rules in both a legal and scientific manner. Due to our enhanced understanding, we have been able to address the many complex questions, but in general, we have established management zones, limited column pipe sizes depending on the zone, enhance exempt well spacings and enhance tract size limits on non-exempt wells. In addition, we have added remedies for exceptions, waivers, and tract size encumbrances. The new District rules can be found on our website at https://cuwcd.org/wp-content/uploads/2023/10/20231011_CUWCD-Final-Revisions-Rules-.pdf

Appendix A

Clearwater Underground Water Conservation
Adopted Budget FY2023

08/26/2022

REVENUE	
Application Fee Income	50,000.00
Bell CAD Current Year Tax	816,578.00
Bell CAD Deliquent Tax	10,000.00
Interest Income	1,000.00
Transport Fee Income	1,500.00
Reserve Funds-Special Projects	28,344.00
Civil Penalties	0.00
Total Income	**907,422.00**
EXPENDITURES	
Administrative Expenses	
Audit	8,500.00
Conferences & Prof Development	4,000.00
Contingency Fund	61,545.00
Director Expenses	7,500.00
Director Fees	12,750.00
Dues & Memberships	4,000.00
Election Expense	5,000.00
GMA 8 Expenses	7,500.00
Meals	1,000.00
Mileage Reimbursements	5,000.00
Travel & Hotel	5,175.00
Total Administrative Expenses	**121,970.00**
Salary Costs	
Administrative Assistant	57,960.00
Educational Coord/Support Tech	51,750.00
Manager	103,500.00
Part Time/Intern	4,500.00
Office Assistant/Field Tech	48,645.00
Health Insurance	34,525.00
Payroll Taxes & Work Comp	26,636.00
Retirement	11,986.00
Payroll Expenses	425.00
Freshbenies	528.00
Total Salary Costs	**340,455.00**
Operating Expenses	
Bank Service Charges	350.00
Advertisement	4,000.00
Appraisal District	9,000.00
Clearwater Studies	171,600.00
Spring Flow Gage System	16,377.00
Computer Consulting	15,100.00
Computer Licenses/Virus Prtctn	1,500.00
Computer Repairs and Supplies	2,000.00
Computer Software & Hardware	5,000.00
Copier/Scanner/Plotter	6,000.00
Educational Outreach/Marketing	20,500.00
Furniture & Equipment	2,500.00
Legal	67,500.00
Office Supplies	3,500.00
Permit Reviews	50,000.00
Postage	2,875.00
Printing	2,500.00
Reserve for Uncollected Taxes	20,000.00
Subscriptions	900.00
Mobile Classroom Expense	2,000.00
Vehicle Expense	5,600.00
Total Operating Expenses	**408,802.00**
Facility Costs	**26,095.00**
Utilities	**10,100.00**
Total Expense	**907,422.00**

For a detailed copy of FY23 Budget, contact CUWCD at 254-933-0120

FILED FOR RECORD
2022 AUG 26 P 1:06
SHELLEY COSTON
BELL COUNTY, TX

RESOLUTION AND ORDER
OF THE BOARD OF DIRECTORS OF THE CLEARWATER
UNDERGROUND WATER CONSERVATION DISTRICT
MEETING HELD AUGUST 25, 2022

THE STATE OF TEXAS	§	
	§	**A RESOLUTION AND ORDER**
COUNTY OF BELL	§	
	§	**SETTING ANNUAL TAX RATE**
CLEARWATER UWCD	§	

The Board of Directors of the Clearwater Underground Water Conservation District met in a regular session, open to the public, after due notice, at the Clearwater Underground Water Conservation District, located at 700 Kennedy Court, Belton, Texas, within the boundaries of the District, on the 25th day of August 2022, whereupon the roll was called of the members of the Board of Directors, to wit:

Leland Gersbach	President
David Cole	Vice President
C. Gary Young	Secretary
Scott A. Brooks	Director
Jody Williams	Director

Five (5) of the five (5) Board members were present, thus constituting a quorum.

WHEREUPON, among other business conducted by the Board, Director **David Cole** introduced the Order set out below and moved for its adoption, which motion was seconded by Director **Scott Brooks** and, after full discussion and the question being put to the Board of Directors, said motion was carried by the following vote:

"Aye": **3**; "No": **2**; "Abstained": **0**; "Absent": **0**.

The Order thus adopted is as follows:

WHEREAS, the Board of Directors was authorized by applicable statutory law to levy a sufficient tax to cover all maintenance and operation expenses of the District;

WHEREAS, the Board of Directors reviewed and approved its budget for its fiscal year October 1, 2022, through September 30, 2023, and determined what tax rate should be set to meet such budget requirements;

WHEREAS, the appraisal roll of the District for 2022 has been prepared and certified by the Tax Appraisal District of Bell County and submitted to the District's tax collector; and

NOW, THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT THAT:

I.

The operation and maintenance tax rate for tax year 2022 shall be $0.002708 per one hundred dollars ($100) of assessed valuation. Be it known that this 2022 tax rate is less than last year's tax rate at $0.00310 per $100 of assessed valuation, but this rate will increase total taxes in Clearwater by 5.1%, or 9¢ per year on the average appraised value of a residence at $219,528.00.

THIS TAX RATE WILL RAISE MORE TAXES FOR MAINTENANCE AND OPERATIONS THAN LAST YEAR'S TAX RATE.

The Bell County Tax Assessor and Collector shall take all steps necessary and authorized by the law to collect taxes as owed pursuant to this order. Said taxes shall be levied, assessed and collected at the rate of $0.002708 per $100 valuation for 2022 as provided for in the District's enabling act; Chapters 36 Texas Groundwater Water Code, as applicable; and all other applicable laws.

II.

The Board President or Vice President are authorized to execute, and the Secretary or any Assistant Secretary to attest, this order on behalf of the Board of Directors.

PASSED, APPROVED AND ADOPTED this the 25th day of August 2022.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

By: _____
Leland Gersbach, Board President (or)
David Cole, Board Vice President

ATTEST:

_____
C. Gary Young, Board Secretary (or)
Dirk Aaron, Assistant Secretary

Appendix B

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Audited Financial Statements

For the Year Ended September 30, 2023

and Independent Auditors' Report

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STRENGTH IN NUMBERS
LMS
LUDWICK, MONTGOMERY & STAPP, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

1949 SCOTT BOULEVARD
TEMPLE, TEXAS 76504
254.771.0061 - VOICE
254.771.1445 - FAX
WWW.LMS-CPA.COM

INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Clearwater Underground Water Conservation District
Belton, TX

Opinions

We have audited the accompanying financial statements of the governmental activities and each major fund of the Clearwater Underground Water Conservation District, as of and for the year ended September 30, 2023, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of Clearwater Underground Water Conservation District, as of September 30, 2023, and the respective changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Clearwater Underground Water Conservation District, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Clearwater Underground Water Conservation District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Clearwater Underground Water Conservation District's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Clearwater Underground Water Conservation District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and budgetary comparison information on pages 3–7 and 19 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Texas supplementary information section but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated February 12, 2024, on our consideration of Clearwater Underground Water Conservation District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Clearwater Underground Water Conservation District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Clearwater Underground Water Conservation District's internal control over financial reporting and compliance.

Ludwick, Montgomery & Stapp, PC

Temple, Texas
February 12, 2024

In this section of the annual financial report, we, the managers of Clearwater Underground Water Conservation District (the District), discuss and analyze the District's financial performance. Please read it in conjunction with the independent auditors' report on page 1 and the District's basic financial statements, which begin on page 8.

FINANCIAL HIGHLIGHTS

- The District's net position decreased by $3,031 as a result of this year's operations.
- The ending net position was $1,468,743.
- During the year, the District had expenses that were $3,031 more than the $861,427 generated in revenues.
- Total costs of all the District's programs were $864,458.
- The resources available for appropriation were $26,783 more than budgeted due to an over budgeting of administrative, compensation and benefits, Clearwater studies, legal and professional and other operating expenses offset by an over budgeting of revenues.

OVERVIEW OF THE FINANCIAL STATEMENTS

This annual report consists of three parts: (1) Management's Discussion and Analysis (this section), (2) government-wide and fund financial statements, and (3) notes to the financial statements. The government-wide and fund financial statements include the statement of net position and governmental fund balance sheet and the statement of activities and governmental fund revenues, expenditures, and changes in fund balance (on pages 8 and 9). The government-wide and fund financial statements are presented together because the District has only one fund. These provide information about the activities of the District as a whole. They reflect the flow of total economic resources in a manner similar to the financial reports of a business enterprise.

The notes to the financial statements, starting on page 10, provide narrative explanations or additional data needed for full disclosure in the government-wide statements and fund financial statements. This report also contains the budgetary comparison schedule as required supplementary information in addition to the government-wide and fund financial statements themselves.

GOVERNMENT-WIDE FINANCIAL STATEMENTS

The government-wide financial statements are designed to provide readers with a broad overview of the District's finances, in a manner similar to a private-sector business. The government-wide financial statements use the economic resources measurement and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred regardless of the timing of the related cash flow.

The statement of net position presents information on all of the District's position and liabilities, with the difference between the two reported as net position. The District's net position (the difference between assets and liabilities) provide one measure of the District's financial health or financial position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the District is improving or deteriorating. To fully assess the overall health of the District, however, you should consider nonfinancial factors as well. The analysis of the District's overall financial condition and operations begins on page 8.

GOVERNMENT-WIDE FINANCIAL STATEMENTS (CONTINUED)

The statement of activities presents information showing how the District's net position changed during the most recent year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future periods.

These two statements report the District's net position and changes in them.

FUND FINANCIAL STATEMENTS

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The District uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. The District has only one fund, namely the general fund.

The general fund is a governmental fund used to account for essentially the same function reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the year. Such information may be useful in evaluating a government's near-term financing requirements.

The District maintains one general fund in the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balance.

Because the focus of the general fund is narrower than that of the government-wide financial statements, it is useful to compare the information presented in the general fund with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financial decisions. Both the general fund balance sheets and the general fund statement of revenues, expenditures, and changes in fund balance provide a reconciliation to facilitate this comparison between the general fund and governmental activities. The general fund financial statements are shown in conjunction with the government-wide financial statements on pages 8 and 9.

NOTES TO THE FINANCIAL STATEMENTS

The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements can be found on pages 10 through 18 of this report.

REQUIRED SUPPLEMENTARY INFORMATION

The budgetary comparison schedule is presented for purposes of additional analysis as required by accounting principles generally accepted in the United States of America. The schedule can be found on page 19 of this report.

GOVERNMENT-WIDE FINANCIAL ANALYSIS

The District implemented GASB 34 during the fiscal year ended September 30, 2004. The following analysis focuses on the Net Position (Table I) and Changes in Net Position (Table II) of the District's governmental fund activities.

GOVERNMENT-WIDE FINANCIAL ANALYSIS (CONTINUED)

Net position of the District's governmental activities decreased from $1,471,774 to $1,468,743. Unrestricted net position - the part of net position that can be used to finance day-to-day operations without constraints established by debt covenants, enabling legislation, or other legal requirements was $1,027,867 at September 30, 2023.

The District's total revenues increased by $60,630. The cost of all governmental activities this year was $864,458 compared to $749,620. Therefore, revenues and expenses both had increases.

Table I
Clearwater Underground Water Conservation District

Net Position

	Governmental Activities 2023	Governmental Activities 2022
Assets:		
Cash	$ 1,023,049	$ 1,003,949
Taxes receivable	22,628	17,804
Accounts receivable	1,528	-
Capital assets - net of depreciation	440,876	469,152
Total Assets	1,488,081	1,490,905
Liabilities:		
Current	19,338	19,131
Total Liabilities	19,338	19,131
Net Position		
Unrestricted	1,027,867	1,002,622
Net investment in capital assets	440,876	469,152
Total Net Position	$ 1,468,743	$ 1,471,774

GOVERNMENT-WIDE FINANCIAL ANALYSIS (CONTINUED)

Table II
Clearwater Underground Water Conservation District

Changes in Net Position

	Governmental Activities 2023	Governmental Activities 2022
Revenues		
Property taxes	$ 791,897	$ 760,441
Permits and other fees	8,924	12,736
Interest income	60,606	8,542
Gain on sale of assets	-	19,078
Total Revenues	861,427	800,797
Expenses		
Operating expenses	864,458	749,620
Total Expenses	864,458	749,620
Increase (decrease) in net position	(3,031)	51,177
Net position - beginning of the year	1,471,774	1,420,597
Net position - end of the year	$ 1,468,743	$ 1,471,774

FUND FINANCIAL ANALYSIS

The focus of the District's governmental fund is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the District's financing requirements. In particular, fund balance may serve as a useful measure of a government's net resources available for spending for program purposes at the end of the year.

As the District completed the current year, its governmental fund, which consists of one general fund, as presented in the governmental fund balance sheet on page 8 reported an ending fund balance of $1,024,577, which is $26,783 higher than last year's total of $997,794. The District's major source of revenue is property taxes. The fund balance represents funds available for operations.

The District's general fund balance of $1,024,577 reported on page 19 differs from the General Fund's budgetary fund balance of $997,794 reported on the same schedule. This is principally due to expenses being under budget offset by revenues being over budgeted.

CAPITAL ASSETS

At the end of fiscal year 2023, the District had $440,876 invested in building, land and equipment, net of accumulated depreciation. During the year ended September 30, 2023, there were no additions or disposals.

DEBT

The District had no debt during the year or at year end.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

The District's board considered many factors when setting the 2024 budget. One of the factors was the appraisal value of property. Additionally, the economy and population growth were considered.

CONTACTING THE DISTRICT'S FINANCIAL MANAGEMENT

This financial report is designed to provide our citizens and taxpayers with a general overview of the District's finances and to show the District's accountability for the funds it receives. If you have questions about this report or need additional financial information, contact the District's business office, Clearwater Underground Water Conservation District, 700 Kennedy Ct., P.O. Box 1989, Belton, TX 76513.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Statement of Net Position and Governmental Fund Balance Sheet

September 30, 2023

	General Fund	Adjustments (Note 11)	Statement of Net Position
Assets			
Current Assets:			
Cash and cash equivalents	$ 20,578	$ -	$ 20,578
Temporary investments	1,002,471	-	1,002,471
Taxes receivable, net of allowance of $-0-	22,628	-	22,628
Accounts receivable, net of allowance of $-0-	1,528	-	1,528
Total Current Assets	1,047,205	-	1,047,205
Noncurrent Assets:			
Capital assets not being depreciated			
Land	-	29,059	29,059
Capital assets being depreciated			
Building and equipment, net of accumulated depreciation	-	411,817	411,817
Total Capital Assets, net	-	440,876	440,876
Total Noncurrent Assets	-	440,876	440,876
Total Assets	$ 1,047,205	440,876	1,488,081
Liabilities			
Compensated absences	-	19,338	19,338
Total Liabilities	-	19,338	19,338
Deferred Inflows of Resources			
Unavailable revenue - property taxes	22,628	(22,628)	-
Total Deferred Inflows of Resources	22,628	(22,628)	-
Fund Balance			
Unassigned	1,024,577	(1,024,577)	-
Total Fund Balance	1,024,577	(1,024,577)	-
Total Liabilities, Deferred Inflows, and Fund Balance	$ 1,047,205		
Net Position			
Unrestricted		1,027,867	1,027,867
Net investment in capital assets		440,876	440,876
Total Net Position		$ 1,468,743	$ 1,468,743

The accompanying notes are an integral part of these financial statements.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT
Statement of Activities and Governmental Fund Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended September 30, 2023

	General Fund	Adjustments (Note 11)	Statement of Activities
Revenues			
Property taxes	$ 793,226	$ (1,329)	$ 791,897
Permits and other fees	8,924	-	8,924
Interest and other income	60,606	-	60,606
Total Revenues	862,756	(1,329)	861,427
Expenditures			
Administrative	39,731	-	39,731
Clearwater studies	219,122	-	219,122
Compensation and benefits	303,500	209	303,709
Depreciation	-	28,276	28,276
Directors fees	7,050	-	7,050
Educational outreach	19,620	-	19,620
Facility costs	21,877	-	21,877
Legal and professional	87,332	-	87,332
Other operating expenses	91,667	-	91,667
Payroll taxes	20,953	-	20,953
Spring flow gauge system	16,300	-	16,300
Utilities	8,821	-	8,821
Total Expenditures	835,973	28,485	864,458
Excess of revenues over expenditures	26,783	(26,783)	-
Change in net position	-	(3,031)	(3,031)
Fund balance/net position:			
Beginning of year	997,794	473,980	1,471,774
End of year	$ 1,024,577	$ 444,166	$ 1,468,743

The accompanying notes are an integral part of these financial statements.

1. Nature of Activities

The Clearwater Underground Water Conservation District (the "District") was created in 1989 by the Texas State Legislature and resolution of the Commissioners Court of Bell County, Texas, in order to carry out groundwater management in Bell County. The purpose of the District is to develop and implement an efficient, economical and environmentally sound groundwater management program to protect and enhance the water resources of the District. The District is governed by a five member Board of Directors ("the Board") elected by the qualified voters within the boundaries of the District.

2. Summary of Significant Accounting Policies

The following is a summary of certain significant accounting policies followed in the preparation of the financial statements of Clearwater Underground Water Conservation District.

The District is a governmental entity with its principal office in Belton, Texas from which it oversees groundwater management in Bell County. Principal revenues are property taxes and permit fees. The board of directors constitutes an on-going entity and is the level of government which has governance responsibilities over all activities.

Reporting Entity

The District has developed criteria to determine if the activities of any outside agencies or organizations should be included within its financial statements. The criteria includes the amount of oversight responsibility exercised by the District over the activities of an agency or organization, the scope of public service of an agency or organization, and the nature of any special financing relationships which may exist between the District and an agency or organization. Oversight responsibility includes financial interdependency, selection of the governing authority, designation of management, the ability to significantly influence operations, and accountability for fiscal matters. The District's financial statements include all funds over which the District exercises oversight responsibility. The District does not exercise oversight responsibility over any other reporting entity. Also, the District is not included as a part of any other reporting entity.

Government-wide and Fund Financial Statements

The statement of net position and the statement of activities are government-wide financial statements. They report information on all of Clearwater Underground Water Conservation District. The fund financial statements provide reports on the financial condition and results of operations for one fund category - governmental.

Measurement Focus, Basis of Accounting, and Financial Statement Presentation

The government-wide financial statements use the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows.

2. Summary of Significant Accounting Policies (Continued)

Measurement Focus, Basis of Accounting, and Financial Statement Presentation (Continued)

Governmental fund financial statements use the current financial resources measurement focus and the modified accrual basis of accounting. With this measurement focus, only current assets, current liabilities and fund balances are included on the balance sheet. Operating statements of these funds present net increases and decreases in current assets (i.e., revenues and other financing sources and expenditures and other financing uses).

The modified accrual basis of accounting recognizes revenues in the accounting period in which they become both measureable and available, and it recognizes expenditures in the accounting period in which the fund liability is incurred, if measurable, except for unmatured interest and principal on long-term debt, which is recognized when due. The expenditures related to certain compensated absences and claims and judgments are recognized when the obligations are expected to be liquidated with expendable available financial resources. Clearwater Underground Water Conservation District considers all revenues available if they are collectible within 60 days after year end.

Revenues from local sources consist primarily of permit and other fees and property taxes. These revenues are recognized under the susceptible-to-accrual concept. Miscellaneous revenues are recorded as revenue when received in cash because they are generally not measurable until actually received. Investment earnings are recorded as earned, since they are both measurable and available.

Cash and Cash Equivalents

Cash and cash equivalents includes all short-term liquid investments convertible into cash and includes cash and money market accounts with an original maturity of less than three months.

Taxes Receivable

Taxes receivable are the amount of ad-valorem taxes which have been collected for the District by the various county tax assessor-collectors which were remitted to the District during the ensuing sixty day period. The assessment and collection of these taxes has been handled solely by the counties involved.

Capital Assets

Capital assets, which include office equipment and furniture, are reported in the government-wide financial statements. Assets are recorded at historical cost or estimated historical cost. Capital assets are being depreciated using the straight-line method over the following estimated useful lives:

Equipment	5-15 years
Building and Improvements	10 – 40 years

2. Summary of Significant Accounting Policies (Continued)

Budget

The Board of Directors prepared and formally adopted an annual budget prior to the disbursement of funds.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Fund Accounting

The District reports the following major governmental funds:

General Fund - This is the District's primary operating fund. It accounts for all financial resources of the District.

Clearwater Underground Water Conservation District does not have any long-term debt for the year ended September 30, 2022.

In June 1999, the Governmental Accounting Standards Board (GASB) issued Statement No. 34, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments. This statement, known as the "Reporting Model" statement, affects the way the District prepares and presents financial information in addition to requiring the presentation of the Clearwater Underground Water Conservation District's Management's Discussion and Analysis (MD&A). MD&A is considered to be required supplementary data and precedes the financial statements.

GASB 34 provides that special-purpose governments engaged in a single governmental program may combine the fund financial statements and the government-wide financial statements. The District has elected to present its financial statements under this combined approach.

2. Summary of Significant Accounting Policies (Continued)

Fund Accounting (Continued)

To conform to the requirements of GASB 34, the following changes have been made to the Clearwater Underground Water Conservation District's financial statements:

- Fund balance has been reclassified into the following category of net position: Unrestricted and Net Investment in Capital Assets.
- The balance sheet has been modified to report a statement of net position.
- The balance sheet was adjusted for net capital assets of $440,876 and compensated absences of $19,338 on the statement of net position.
- The statement of revenues, expenditures, and changes in fund balance has been modified to report a statement of activities with operating and non-operating revenues and expenses.
- The statement of revenues, expenditures, and changes in fund balance was adjusted by $28,276 for depreciation, $209 for increases in compensated absences and $1,329 for decreases in property taxes.

Deferred Outflows/Inflows

A deferred outflow of resources represents a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that future time. A deferred inflow of resources represents an acquisition of net position that applies to a future period and therefore will not be recognized as an inflow of resources (revenue) until that future time.

3. Deposits and Investments

The District is required by Government Code Chapter 2256, *The Public Funds Investment Act*, to adopt, implement, and publicize an investment policy. That policy must address the following areas: (1) safety of principal and liquidity, (2) portfolio diversification, (3) allowable investments, (4) acceptable risk levels, (5) expected rates of return, (6) maximum allowable stated maturity of portfolio investments, (7) maximum average dollar-weighted maturity allowed based on the stated maturity date for the portfolio, (8) investment staff quality and capabilities, and (9) bid solicitation preferences for certificates of deposit.

The Public Funds Investment Act ("the Act") requires an annual audit of investment policies. Audit procedures in this area conducted as a part of the audit of the financial statements disclosed that in the areas of investment practices, management reports and establishment of appropriate policies, the District adhered to the requirements of the Act. Additionally, investment practices of the District were in accordance with local policies.

3. Deposits and Investments (Continued)

The Act determines the types of investments which are allowable for the District. These include, with certain restrictions, (1) obligations of the U.S. Treasury, certain U.S. agencies, and the State of Texas, (2) certificates of deposit, (3) certain municipal securities, (4) money market savings accounts, (5) repurchase agreements, (6) bankers acceptances, (7) mutual funds, (8) investment pools, (9) guaranteed investment contracts, and (10) common trust funds.

Additional Contractual Provisions governing deposits and investments are as follows:

The funds of Clearwater Underground Water Conservation District must be deposited and invested under the terms of a contract, contents of which are set out in the Depository Contract Law. The depository bank places approved pledged securities for safekeeping and trust with the District's agent bank in an amount sufficient to protect District funds on a day-to-day basis during the period of the contract. The pledge of approved securities is waived only to the extent of the depository bank's dollar amount of Federal Deposit Insurance Corporation (FDIC) insurance.

At September 30, 2023, the bank balance of the District was $84,814 with $-0- of deposits in excess of FDIC coverage.

Analysis of Specific Deposit and Investment Risks

GASB Statement No. 40 requires a determination as to whether the District was exposed to the following specific investment risks at year end and, if so, the reporting of certain related disclosures:

a. Credit Risk - Credit risk is the risk that an issuer or other counter party to an investment will not fulfill its obligations. The ratings of securities by nationally recognized rating agencies are designed to give an indication of credit risk. At year end, the District's investments, other than those which are obligations of or guaranteed by the U.S. Government, are related as to credit quality.

   The Clearwater Underground Water Conservation District does not invest in debt securities.

   The State Comptroller of Public Accounts exercises oversight responsibility over TexPool. Oversight includes the ability to significantly influence operations, designation of management and accountability for fiscal matters. TexPool is rated AAA by Standard and Poor's. As a requirement to maintain the rating, weekly portfolio information must be submitted to Standard & Poor's, as well as the office of the Comptroller of Public Accounts for review. TexPool operates in a manner consistent with the SEC's Rule 2a7 of the Investment Company Act of 1940. TexPool uses amortized cost rather than market value to report net position to compute share prices. Accordingly, the fair value of the position in TexPool is the same as the value of TexPool shares.

b. Custodial Credit Risk - Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent but not in the District's name.

3. Deposits and Investments (Continued)

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government, and are held by either the counterparty or the counterparty's trust department or agency but not in the District's name.

At year end, the District was not exposed to custodial credit risk.

c. Concentration of Credit Risk - This risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. At year end, the District had no positions of 5% or more in the securities of a single issuer.

The District's undesignated temporary investments at September 30, 2023, are shown below:

	Carrying Amount	Fair Value
TexPool	$ 1,002,471	$ 1,002,471
	$ 1,002,471	$ 1,002,471

d. Interest Rate Risk - This is the risk that changes in interest rates will adversely affect the fair value of an investment. At year end, the District has a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

e. Foreign Currency Risk - This is the risk that exchange rates will adversely affect the fair value of an instrument. At year end, the District was not exposed to foreign currency risk.

4. Capital Assets

Capital asset activity for the period ended September 30, 2023 was as follows:

	Cost	Accumulated Depreciation	Net
Balance - October 1, 2021	$ 738,540	$ (269,388)	$ 469,152
Additions	-	(28,276)	(28,276)
Disposals	-	-	-
Balance - September 30, 2022	$ 738,540	$ (297,664)	$ 440,876

5. Long-Term Debt

The District has no long-term debt.

6. Risk Management

The District is exposed to various risks of loss related to torts, thefts, damage or destruction of assets, errors and omissions, injuries to employees, and natural disasters. The District purchased commercial insurance to cover general liabilities. There were no significant reductions in coverage in the past year and there were no settlements exceeding insurance coverage.

7. Property Taxes

Clearwater Underground Water Conservation District has contracted with the Tax Appraisal District of Bell County for the assessment and collection of taxes. By September 1 of each year, the rate of taxation is set by the board of directors based upon the valuation of property within the District as of January 1. Taxes are due October 1, and become delinquent after January 31 of the following year.

8. Employee Benefits

a. Annual Leave
Annual leave (vacation) is a benefit provided to eligible, full-time, employees of the District. A full-time employee is one who is regularly scheduled to work thirty to forty hours per week. Annual leave is accrued at eight hours per pay period immediately upon employment but cannot be taken until the employee has reached the one hundred eighty (180) day probationary period. The accrual maximum is twelve days for an employee with up to five years of continuous service. After five years, an employee is entitled to accrue an additional three days for a total of fifteen days per year. An employee may carry-over leave up to a maximum of twenty-four days per fiscal year. Remaining accrued leave is payable up separation. Accrued compensated absences for September 30, 2023 was $19,338.

b. Sick Leave
A full-time employee, as previously defined, is entitled to six days per year. Accrual of sick leave is at four hours prepay period and a full-time employee can accumulate up to twelve days with carry-over. Upon termination of employment, no accumulated sick leave will be paid and therefore, no accrual is recorded.

c. Retirement Plan
The District has established a Governmental 457 Deferred Compensation Plan as their retirement plan for full-time eligible employees. UMB Bank, N.A. is designated as trustee and Security Financial Resources, Inc. is the plan service provider. The District agrees to match employee contributions at 100% of the first 3% and 50% of the next 3% for a maximum match of up to 4.5% depending on the contribution of the employee. As of September 30, 2023, the employer match was $10,678.

9. Litigation

At September 30, 2023, the District was not involved in any litigation.

10. Management Review of Subsequent Events

Management has evaluated subsequent events through February 12, 2024, the date on which the financial statements were available to be issued.

11. Reconciliation to Government-Wide Statements

Total fund balance - total governmental funds	$ 1,024,577
Amounts reported for governmental activities in the statement of net assets are different because:	
Capital assets used in government activities are not financial resources; therfore, they are not reported in the funds.	440,876
Compensated absences are not a current requirement of resources and therefore are not accrued in the general fund.	(19,338)
Deferred inflows of resources are potential revenue that do not meet the "measurable" and "available" criteria; therefore, it is reported in the funds.	22,628
Total net position	$ 1,468,743

11. Reconciliation to Government-Wide Statements (Continued)

Net change in fund balance - total governmental funds	$	26,783
Amounts reported for governmental activities in the statement are different because:		
Property tax revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the fund.		(1,329)
Adjustment made to compensated absences		(209)
Governmental funds report capital outlays as expenditures; however, in the statement of activities, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which depreciation of $28,276 was more than capital outlays of $-0-.		(28,276)
Change in net position	$	(3,031)

REQUIRED SUPPLEMENTARY INFORMATION

BUDGETARY COMPARISON SCHEDULE

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

Required Supplementary Information

Budgetary Comparison Schedule - General Fund

For the Year Ended September 30, 2023

	Budgeted Amounts		Actual Amounts	Variance with Final Budget Favorable (Unfavorable)
	Original	Final		
Revenues				
Property taxes	$ 826,578	$ 826,578	$ 793,226	$ (33,352)
Permits and other fees	51,500	51,500	8,924	(42,576)
Interest and other income	29,344	89,421	60,606	(28,815)
Total Revenues	907,422	967,499	862,756	(104,743)
Expenditures				
Administrative	100,720	49,594	39,731	9,863
Clearwater studies	171,600	246,748	219,122	27,626
Compensation and benefits	313,819	313,920	303,500	10,420
Director's fees	12,750	12,750	7,050	5,700
Educational outreach	20,500	20,500	19,620	880
Facility costs	26,095	26,095	21,877	4,218
Legal and professional	76,000	95,515	87,332	8,183
Other operating expenses	132,825	149,365	91,667	57,698
Payroll taxes	26,636	26,535	20,953	5,582
Spring flow gauge system	16,377	16,377	16,300	77
Utilities	10,100	10,100	8,821	1,279
Total Expenditures	907,422	967,499	835,973	131,526
Excess Revenues Over (Under) Expenditures	-	-	26,783	26,783
Net Changes in Fund Balance	-	-	26,783	26,783
Fund Balance - Beginning of the Year	997,794	997,794	997,794	-
Fund Balance - End of the Year	$ 997,794	$ 997,794	$ 1,024,577	$ 26,783

See independent auditors' report.

TEXAS SUPPLEMENTARY INFORMATION

TSI – 2

CLEARWATER CONSERVATION UNDERGROUND WATER CONSERVATION DISTRICT
TSI - 2: General Fund Expenditures
For the Year Ended September 30, 2023

Personnel expenditures (including benefits)	$ 303,500
Professional fees:	
Auditing	8,400
Legal	78,932
Utilities	8,821
Clearwater studies	219,122
Facility costs	21,877
Administrative expenditures	39,731
Directors fees	7,050
Educational outreach	19,620
Spring flow gauge system	16,300
Other expenditures	112,620
Total Expenditures	$ 835,973

TSI – 3

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

TSI - 3: Temporary Investments

For the Year Ended September 30, 2023

General Fund	ID or Certificate Number	Interest Rate	Maturity Date	Balance at End of Year	Accrued Interest Receivable at End of Year
Tex Pool - Investment Pool	449/7935800001	5.3547%	-	$ 497,179	$ -
Tex Pool Prime - Investment Pool	590/7935800001	5.5872%	-	505,292	-
Total - All Funds				$ 1,002,471	$ -

TSI – 4

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

TSI - 4: Taxes Levied and Receivable

For the Year Ended September 30, 2023

	Maintenance Taxes
Taxes receivable, beginning of year	$ 17,804
2022 original tax levy	821,429
Less abatements	-
Total to be accounted for	839,233
Tax collections	
Current year	805,470
Prior years	11,135
Total collections:	816,605
Taxes receivable, end of year	$ 22,628
Taxes receivable, by year	
2022	$ 10,130
2021	4,099
2020	2,807
2019	1,827
2018 and prior	3,765
Taxes receivable, end of year	$ 22,628

	2022	2021	2020	2019
Property valuations				
Property valuations, net taxable	$ 30,332,466,196	$ 24,999,251,580	$ 22,630,374,553	$ 20,531,428,738
Tax rates per $100 valuation	$0.00271	$0.00310	$0.00327	$0.00357
Maintenance tax rates				
Total tax rates per $100 valuation	$0.00271	$0.00310	$0.00327	$0.00357
Original tax levy:	821,429	774,997	740,538	732,972
Percent of taxes collected to taxes levied	98.06%	99.60%	98.59%	96.60%

TSI – 7

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

TSI - 7: Comparative Schedule of Revenues and Expenditures

General Fund - Five Years Ended

For the Year Ended September 30, 2023

	Amounts				
	2023	2022	2021	2020	2019
General Fund					
Revenues					
Property taxes	$ 793,226	$ 757,692	$ 724,896	$ 716,887	$ 684,759
Permits and other fees	8,924	12,736	24,736	13,866	6,689
Interest and other income	60,606	58,542	807	11,935	15,580
Total revenues	862,756	828,970	750,439	742,688	707,028
Expenditures					
Personnel	324,453	323,054	280,788	278,509	264,480
Professional fees	87,332	75,656	69,403	41,025	41,330
Clearwater studies	219,122	108,277	171,082	287,509	123,472
Administrative expenditures	39,731	25,200	23,918	36,110	25,528
Other expenditures	165,335	185,503	148,555	141,412	170,707
Total expenditures	835,973	717,690	693,746	784,565	625,517
Excess (Deficient) revenues over expenditures	$ 26,783	$ 111,280	$ 56,693	$ (41,877)	$ 81,511

Percent of Total Fund Revenues				
2023	2022	2021	2020	2019
91.9%	91.4%	96.6%	96.5%	96.9%
1.0%	1.5%	3.3%	1.9%	0.9%
7.0%	7.1%	0.1%	1.6%	2.2%
100.0%	100.0%	100.0%	100.0%	100.0%
37.6%	39.0%	37.4%	37.5%	37.4%
10.1%	9.1%	9.2%	5.5%	5.8%
25.4%	13.1%	22.8%	38.7%	17.5%
4.6%	3.0%	3.2%	4.9%	3.6%
19.2%	22.4%	19.8%	19.0%	24.1%
96.9%	86.6%	92.4%	105.6%	88.5%
3.1%	13.4%	7.6%	-5.6%	11.5%

See independent auditors' report.

TSI - 8

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT

TSI - 8: Board Members, Key Personnel, and Consultants

For the Year Ended September 30, 2023

Complete District Mailing Address:	P.O. Box 1989, Belton, TX 76513
District Business Telephone Number:	(254) 933-0120
Submission Date of the Most Recent District Registration Form: (TWC Sections 36.054 and 49.054)	June 8. 2023
Limit on Fees of Office That a Director may Receive During a Fiscal Year: (TWC Section 36.060)	$9,000

Names:	Term of Office (Elected or Appointed) or Date Hired	Fees of Office Paid for the Year Ended 9/30/2023	Title at Year End
Board Members			
Leland Gersbach	Elected Nov. 2020-2024	$ -	President
Gary Young	Elected Nov. 2022-2026	$ 2,700	Secretary
Jody Williams	Elected Nov. 2020-2024	$ 2,400	Director
Scott Brooks	Elected Nov. 2022-2026	$ -	Director
James Brown	Appointed Mar. 2023 - Nov. 2026	$ 1,500	Director
Key Administrative Personnel			
Dirk Aaron	June 2011	$ 103,500	General Manager
Shelly Chapman	October 2011	$ 57,960	Office Manager
Consultants			
Ludwick, Montgomery, & Stapp, P.C.	July 14, 2021	$ 8,400	Auditor
Lloyd Gosselink, Attorneys at law	2012	$ 93,361	Attorney
Bell County Tax Appraisal District	1989	$ 8,131	Tax appraiser/collector

STRENGTH IN NUMBERS
LMS
LUDWICK, MONTGOMERY & STAPP, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

1949 SCOTT BOULEVARD
TEMPLE, TEXAS 76504
254.771.0061 - VOICE
254.771.1445 - FAX
WWW.LMS-CPA.COM

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Directors
Clearwater Underground Water Conservation District

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of Clearwater Underground Water Conservation District, as of and for the year ended September 30, 2023, and the related notes to the financial statements, which collectively comprise Clearwater Underground Water Conservation District's basic financial statements, and have issued our report thereon dated February 12, 2024.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Clearwater Underground Water Conservation District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Clearwater Underground Water Conservation District's internal control. Accordingly, we do not express an opinion on the effectiveness of Clearwater Underground Water Conservation District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether Clearwater Underground Water Conservation District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Temple, Texas
February 12, 2024

FINANCIAL STATEMENT FINDINGS

There were no findings in the current year.

CLEARWATER UNDERGROUND WATER CONSERVATION DISTRICT
Schedule of Prior Year Findings and Corrective Action Plan
For the Year Ended September 30, 2023

There were no prior year findings.

Appendix C

Well Registration Totals - December 2023

Year	Exempt Wells		Non-Exempt Wells				Monitor Wells		Total
	Grandfathered	New	Grandfathered	Class 1	Class 2	Class 3	Water	Envr	
2002 - 2022	4469	1222	107	37	67	1	24	121	**6048**
2023 - Jan	1	2	0	0	0	0	0	0	**3**
Feb	5	3	0	0	0	0	0	0	**8**
Mar	0	7	0	0	0	1	0	0	**8**
April	4	6	0	0	0	0	0	0	**10**
May	3	2	0	0	0	1	0	0	**6**
June	3	7	0	0	0	3	0	0	**13**
July	1	1	1	0	0	0	0	0	**3**
Aug	3	6	3	0	0	1	0	0	**13**
Sep	0	4	0	0	0	2	0	0	**6**
Oct	1	12	1	0	0	0	0	0	**14**
Nov	1	5	0	0	0	0	0	0	**6**
Dec	3	4	0	0	0	0	0	0	**7**
Total 2023	**25**	**59**	**5**	**0**	**0**	**8**	**0**	**0**	**97**
Grand Totals	**4494**	**1281**	**112**	**37**	**67**	**9**	**24**	**121**	**6145**

Adjustments

Adjustment Type	Exempt Wells		Non-Exempt Wells				Monitor Wells		Total
	Grandfathered	New	Grandfathered	Class 1	Class 2	Class 3	Water	Envr	
2002-Present	**4494**	**1281**	**112**	**37**	**67**	**9**	**24**	**121**	**6145**
**Never Drilled	N/A	-41	N/A	-5	-10	0	-1	0	-57
**Plugged	-322	-51	-18	-2	-2	0	-2	-60	-457
****Totals**	**4172**	**1189**	**94**	**30**	**55**	**9**	**21**	**61**	**5631**

(**updated January 2024)

Appendix D

Non-exempt Wells--Edwards BFZ

			Acre-Feet			2023 Monthly Production (gallons)														
File No	State #	Well Name	Hist. Permit	Oper. Permit	Total Permit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD ac-ft	% Permit
		Chick Landscaping	0	2.29	2.29	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	28,800	0.09	4%
N2-06-002G	5804324	Chick Landscaping Well #2				2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	**28,800**	**0.09**	**4%**
		Jarrell-Schwertner WSC	301.20	153.00	454.20	4,651,765	6,913,410	9,663,162	8,725,827	10,391,688	13,624,274	13,414,872	14,085,005	11,997,460	11,655,041	11,759,465	10,360,792	127,242,761	390.49	86%
N2-02-041G	5804808	JSWSC (Prairie Dell 2)				1,772,296	2,088,046	3,062,382	2,564,708	3,035,357	4,396,356	4,672,626	4,891,593	4,795,311	3,998,539	4,003,721	3,545,650	**42,826,585**	**131.43**	**44%**
N2-02-042G	5804811	JSWSC (Prairie Dell 5)				2,422,269	2,831,801	3,928,039	3,761,608	4,429,294	4,279,760	3,203,449	3,223,250	2,665,270	2,724,336	2,844,562	2,939,358	**39,252,996**	**120.46**	**40%**
N2-03-005P	5804818	JSWSC (Prairie Dell 8)				457,200	1,993,563	2,672,741	2,399,511	2,927,037	4,948,158	5,538,797	5,970,162	4,536,879	4,932,166	4,911,182	3,875,784	**45,163,180**	**138.60**	**31%**
		Salado WSC	1,472.30	36.99	1,509.29	18,774,000	16,245,000	23,354,000	24,112,000	26,142,000	43,052,000	46,303,000	44,703,000	33,523,000	28,220,000	20,898,000	20,001,000	345,327,000	1,059.77	70%
N2-02-003G	5804602	Salado WSC (#1)				4,014,000	3,640,000	4,061,000	3,939,000	4,089,000	4,020,000	4,031,000	3,996,000	3,530,000	4,039,000	3,600,000	1,431,000	**44,390,000**	**136.23**	**9%**
N2-02-004G	5804604	Salado WSC (#2)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-02-005G	5804508	Salado WSC (#3)				2,625,000	1,814,000	3,795,000	3,153,000	2,720,000	3,884,000	4,701,000	5,087,000	3,967,000	3,330,000	3,876,000	3,188,000	**42,140,000**	**129.32**	**9%**
N2-02-006G	5804621	Salado WSC (#4)				1,760,000	1,438,000	2,253,000	2,380,000	4,406,000	7,233,000	6,087,000	5,206,000	4,566,000	3,287,000	3,466,000	4,812,000	**46,894,000**	**143.91**	**10%**
N2-02-007G	5804509	Salado WSC (#5)				1,332,000	1,291,000	2,218,000	2,498,000	2,340,000	7,539,000	8,711,000	8,276,000	5,607,000	4,210,000	3,527,000	2,024,000	**49,573,000**	**152.13**	**10%**
N2-02-008G	5804510	Salado WSC (#6)				1,411,000	1,395,000	2,182,000	2,774,000	2,914,000	7,064,000	7,038,000	6,555,000	4,660,000	4,685,000	1,386,000	1,458,000	**43,522,000**	**133.56**	**9%**
N2-02-009G	5804626	Salado WSC (#7)				1,802,000	1,549,000	3,117,000	3,890,000	3,843,000	7,887,000	7,292,000	7,199,000	5,545,000	5,067,000	2,647,000	1,193,000	**51,031,000**	**156.61**	**10%**
N2-02-010G	5804512	7KX Ranch (#8)				2,000	0	0	4,000	0	4,159,000	8,443,000	8,384,000	5,648,000	3,602,000	1,634,000	0	**31,876,000**	**97.82**	**7%**
N2-02-011G	5804513	7KX Ranch (#9)				5,828,000	5,118,000	5,728,000	5,474,000	5,830,000	1,266,000	0	0	0	0	762,000	5,895,000	**35,901,000**	**110.18**	**7%**
		Schwertner Farms	328.90	74.05	402.95	7,284,423	6,318,863	7,145,669	9,497,833	6,360,488	8,748,366	10,449,061	8,588,394	6,323,234	7,309,504	7,318,050	6,522,186	91,866,071	281.93	70%
N2-04-001G	5812302	Schwertner Farms CCL #1				1,660,768	1,464,556	1,583,553	2,338,516	1,222,020	2,041,900	2,599,253	2,071,523	1,897,975	1,608,125	1,633,183	1,346,900	**21,468,272**	**65.88**	**16%**
N2-04-002G	5812303	Schwertner Farms CCL #2				1,660,768	1,464,556	1,583,553	2,338,516	1,222,020	2,041,900	2,599,253	2,071,523	1,897,975	1,608,125	1,633,183	1,346,900	**21,468,272**	**65.88**	**16%**
N2-04-003G	5812304	Schwertner Farms CCL #3				1,660,768	1,464,556	1,583,553	2,338,516	1,222,020	2,041,900	2,599,253	2,071,523	189,975	1,608,125	1,633,183	1,346,900	**19,760,272**	**60.64**	**15%**
N2-04-004G	5812206	Schwertner Farms Eastland W.				274,040	238,000	268,450	293,250	316,404	311,100	289,680	263,806	229,194	305,660	304,130	313,565	**3,407,279**	**10.46**	**3%**
N2-04-005G	5812305	Schwertner Farms Blackwell				240,125	253,555	263,500	281,775	327,216	319,770	315,588	309,349	276,624	303,370	308,584	326,740	**3,526,196**	**10.82**	**3%**
N2-04-006G	5812306	Schwertner Farms ES #1				109,170	104,580	119,115	117,585	126,102	129,366	136,115	125,439	100,330	100,806	109,000	95,400	**1,373,008**	**4.21**	**1%**
N2-04-007G	5812307	Schwertner Farms ES #2				738,446	639,863	784,023	792,285	835,414	792,030	832,116	605,948	757,350	779,671	733,499	773,636	**9,064,281**	**27.82**	**7%**
N2-04-008G	5812308	Schwertner Farms ES #3				606,390	518,177	580,142	626,110	712,980	663,000	656,115	691,951	590,580	593,504	561,000	555,815	**7,355,764**	**22.57**	**6%**
N2-10-006P	5812604	Schwertner Farms Little D.				333,948	171,020	379,780	371,280	376,312	407,400	421,688	377,332	383,231	402,118	402,288	416,330	**4,442,727**	**13.63**	**3%**
		Stagecoach Inn	35.30	7.02	42.32	68,000	18,600	101,100	175,600	145,500	226,300	522,700	406,500	256,600	115,200	4,500	6,900	2,047,500	6.28	15%
N2-02-002G	5804623	Stagecoach (deep)				68,000	18,600	101,100	175,600	145,500	226,300	522,700	406,500	256,600	115,200	4,500	6,900	**2,047,500**	**6.28**	**15%**
N2-02-037G		Stagecoach (spring)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**

Non-exempt Wells--Edwards BFZ

			Acre-Feet			2023 Monthly Production (gallons)														
File No	State #	Well Name	Hist. Permit	Oper. Permit	Total Permit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD ac-ft	% Permit
		Not Aggregated																		0%
N1-07-001P	4061802	James Schnitker	0	1.84	1.84	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	**600,000**	**1.84**	**100%**
N1-07-003P	5805405	Ronald Gravette	0	0.38	0.38	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	**123,996**	**0.38**	**100%**
N1-07-005P	5804817	Patricia Suarez	0	0.38	0.38	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	**123,996**	**0.38**	**100%**
N1-09-004P	5804322	Domingo Perez	0	0.53	0.53	14,416	14,416	14,416	14,416	14,416		14,416	14,416	14,416	14,416	14,416	14,416	**158,576**	**0.49**	**92%**
N1-10-001P	4061713	Kenneth Stone	0	0.57	0.57	15,445	15,445	15,445	15,445	15,445	15,445	15,445	15,445	15,445	15,445	15,445	15,445	**185,340**	**0.57**	**100%**
N1-13-002P	4061714	Janet Stone	0	0.34	0.34	9,233	9,233	9,233	9,233	9,233	9,233	9,233	9,233	9,233	9,233	9,233	9,233	**110,796**	**0.34**	**100%**
N1-14-001P	5805406	Karen Duerr	0	0.27	0.27	7,331	7,331	7,331	7,331	7,331	7,331	7,331	7,331	7,331	7,331	7,331	7,331	**87,972**	**0.27**	**100%**
N1-18-002P	5812203	Windy Meadows	0	0.47	0.47	12,762	12,762	12,762	12,762	12,762	12,762	12,762	12,762	12,762	12,762	12,762	12,762	**153,144**	**0.47**	**100%**
N1-20-001P	4061710	Dwayne Ordner	0	0.59	0.59	16,060	16,060	16,060	16,060	16,060	16,060	16,060	16,060	16,060	16,060	16,060	16,060	**192,720**	**0.59**	**100%**
N1-20-002P	4060913	Donald & Sheryl Rich	0	0.39	0.39	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	**127,080**	**0.39**	**100%**
N2-03-004G	5804627	Soccer field	1.50	0.71	2.21	9,720	9,720	9,720	9,720	9,720	9,720		9,720	9,720	9,720	9,720	9,720	**106,920**	**0.33**	**15%**
N2-04-017G	5804643	Sonic of Salado	0	0.86	0.86	1,790	1,860	2,300	1,920	1,880	2,170	2,060	2,180	1,780	1,620	1,460	1,560	**22,580**	**0.07**	**8%**
N2-07-005G	5803808	RLF Salado Quarries (Office)	0	3.91	3.91															**0%**
N2-07-010G	5804637	Bloomer Mfg.	0	2.07	2.07	1	0	0	965	4,441	13,372	4,501	2,846	1,339	15	124	0	**27,604**	**0.08**	**4%**
N2-08-004P	5804644	Lonnie Sherman	0	1.10	1.10	180	0	560	9,710	4,620	580	500	0	130	480	100	0	**16,860**	**0.05**	**5%**
N2-09-002P	5804645	O. W. Lowery	0	1.84	1.84	66,420	53,530	47,070	53,420	31,440	58,750	133,800	92,549	54,610	72,810	25,180	37,420	**726,999**	**2.23**	**121%**
N2-09-004G	5804646	Salado UMC	0	1.86	1.86	0	0	20	15,000	10,375	30,645	31,340	33,520	16,410	19,200	9,070	2,425	**168,005**	**0.52**	**28%**
N2-11-004P	5804631	Charles Broecker	0	0.99	0.99			15,000	10,000	8,000	16,000	5,000	3,000	5,000	0	0	0	**62,000**	**0.19**	**19%**
N2-11-005P	5805108	James & Terry Boston	0	1.66	1.66	11	0	0	0	0	116	61	818	18	22	11	41	**1,098**	**0.00**	**0%**
N2-15-003P	5804325	Anthony Craft	0	0.60	0.60	1,125	2,820	900	1,400	540	1,230	11,360	7,120	740	890	660	470	**29,255**	**0.09**	**15%**
N2-15-004P	5804633	Scott Law Well #1, Guthrie	0	0.60	0.60															**0%**
N2-15-005P	5804634	Scott Law Well #2, Guthrie	0	0.60	0.60	7,460	3,970	14,920	4,960	8,220	11,387	21,193	12,450	10,210	15,320	6,060	7,380	**123,530**	**0.38**	**63%**
N2-15-006P		Scott Law Well #3	0	0.60	0.60															**0%**
N2-15-007P		Scott Law Well #4	0	0.60	0.60															**0%**
N2-15-008P		Scott Law Well #5	0	0.60	0.60															**0%**
N2-15-009P	5805110	Scott Law Well #6 - Reed	0	0.60	0.60															**0%**
N2-15-010P	5805109	Scott Law Well #7 - Brady Woods	0	0.75	0.75	8,630	1,880	4,160	4,930	4,470	4,470	24,470	29,720	19,800	4,700	5,180	4,360	**116,770**	**0.36**	**48%**
N2-15-011P		Scott Law Well #8	0	0.60	0.60															**0%**
N2-15-012P	5804316	Scott Law Well #9 - Drigalla	0	0.60	0.60	17,629	17,629	17,629	17,629	17,629	65,096	65,096	65,096	39,720	14,920	14,030	15,090	**367,193**	**1.13**	**188%**
N2-16-002G	5804647	Charles Dunifer	0	0.60	0.60	100	100	100	200	300	9,600	13,300	12,400	16,000	7,400	1,500	0	**61,000**	**0.19**	**31%**
N2-17-001P	5804305	Heart of Texas Feed	0	0.14	0.14	740	580	440	1,430	1,590	1,320	620	470	300	730	520	360	**9,100**	**0.03**	**20%**
N2-19-007P	5804640	Brazos Valley Equine Hospital	0	1.32	1.32	26,500	16,600	22,800	21,000	26,500	39,100	17,900	35,800	17,200	19,300	19,000	29,900	**291,600**	**0.89**	**68%**
N2-20-001G	5804319	SDG Properties	0	0.67	0.67															**0%**
N2-20-006G	4061711	Reddylee LLC	0	9.97	9.97	3,788	70,967	49,960	1,997	92,193	119,990	174,060	170,130	139,150	119,850	83,810	898	**1,026,793**	**3.15**	**32%**
N2-21-002G	5804320	R&A Hauling	0	2.15	2.15															**0%**
N2-21-006P	5804321	Salado RV Park	0	2.98	2.98	15,900	12,400	17,200	18,600	18,300	18,300	22,600	25,200	16,100	17,500	19,000	12,900	**214,000**	**0.66**	**22%**
N2-21-007P		Belton Partners LLC	0	2.50	2.50															**0%**
Totals:			**2,139.20**	**320.59**	**2,459.79**	**31,097,085**	**29,846,832**	**40,625,613**	**42,843,044**	**43,438,797**	**66,197,273**	**71,376,397**	**68,444,821**	**52,607,424**	**47,763,125**	**40,334,343**	**37,172,305**	**571,747,059**	**1,754.63**	**71%**

Non-exempt Wells--Trinity

			Acre-Feet			2023 Monthly Production (gallons)														
File No	State #	Well Name	Hist. Permit	Oper. Permit	Total Permit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD ac-ft	% Permit
		Armstrong WSC	154.90	333.00	487.90	3,580	70	3,740	2,170	348,900	4,761,680	6,416,330	6,613,540	5,520,670	4,141,340	2,908,090	3,074,210	33,794,320	103.71	21%
N2-02-024G	5805202	Armstrong WSC #1				3,580	70	3,740	2,170	13,900	15,680	13,330	15,540	14,670	2,340	90	1,210	**86,320**	**0.26**	**0%**
N2-10-001P	5805502	Armstrong WSC #2				0	0	0	0	335,000	4,746,000	6,403,000	6,598,000	5,506,000	4,139,000	2,908,000	3,073,000	**33,708,000**	**103.45**	**21%**
		Bell Milam Falls WSC	262.20	0	262.20	3,480,500	2,627,300	3,510,800	6,225,800	7,926,300	10,197,100	13,116,200	12,281,000	9,591,000	4,676,800	6,498,800	6,676,500	86,808,100	266.40	102%
N2-02-038G	5806601	Bell-Milam-Falls WSC (Rogers)				577,500	7,300	178,800	2,734,800	4,502,300	5,547,100	6,295,200	5,803,000	4,385,000	435,800	3,249,400	3,345,500	**37,061,700**	**113.74**	**43%**
N2-02-046G	5814402	Bell-Milam-Falls WSC (Bartlett)				2,903,000	2,620,000	3,332,000	3,491,000	3,424,000	4,650,000	6,821,000	6,478,000	5,206,000	4,241,000	3,249,400	3,331,000	**49,746,400**	**152.67**	**58%**
		Central Texas WSC	0	1,776.00	1,776.00	8,950,000	11,683,000	12,243,000	10,004,000	8,762,000	10,549,000	17,272,000	19,725,000	18,443,000	19,833,000	18,369,000	11,376,000	167,209,000	513.15	29%
N2-14-004P	5804203	CTWSC Doc Curb				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-14-005P	5806202	CTWSC System Split Well				8,950,000	11,683,000	12,243,000	10,004,000	8,762,000	10,549,000	17,272,000	19,725,000	18,443,000	19,833,000	18,369,000	11,376,000	**167,209,000**	**513.15**	**29%**
		City of Troy	119.90	350.60	470.50	739,200	817,500	1,131,900	962,900	882,300	1,449,000	1,389,500	2,739,800	183,400	132,000	1,651,500	833,300	12,912,300	39.63	8%
N2-02-036G	4054503	City of Troy #1				739,200	817,500	1,131,900	962,900	882,300	1,449,000	1,389,500	2,739,800	183,400	132,000	1,649,000	833,300	**12,909,800**	**39.62**	**8%**
N2-15-002P	4054201	City of Troy #2				0	0	0	0	0	0	0	0	0	0	2,500	0	**2,500**	**0.01**	**0%**
		East Bell WSC	69.70	114.85	184.55	461,080	547,140	190,820	95,000	928,770	1,260,780	7,800,620	8,122,120	5,205,210	2,938,250	879,780	629,080	29,058,650	89.18	59%
N2-02-034G	4063501	East Bell WSC #1				266,000	418,000	179,000	95,000	133,000	406,000	3,263,000	2,744,000	1,258,000	1,167,000	373,830	143,330	**10,446,160**	**32.06**	**31%**
N2-04-010P	5806301	East Bell WSC #2				195,080	129,140	11,820	0	795,770	854,780	4,537,620	5,378,120	3,947,210	1,771,250	505,950	485,750	**18,612,490**	**57.12**	**38%**
		Leon River Turkey Farms	60.90	0	60.90	15,000	16,400	16,300	15,600	15,800	27,740	45,400	31,000	30,500	22,600	21,300	20,400	278,040	0.85	1%
N2-02-043G	4053301	Leon River Turkey (East)				6,800	7,100	7,000	6,700	6,600	9,500	10,200	11,100	10,900	8,100	7,800	8,100	**99,900**	**0.31**	**1%**
N2-02-044G	4053302	Leon River Turkey (West)				1,100	1,300	1,200	1,100	1,200	1,400	18,000	2,000	1,900	1,500	1,400	1,000	**33,100**	**0.10**	**0%**
N2-02-045G	5805403	Leon River Turkey				7,100	8,000	8,100	7,800	8,000	16,840	17,200	17,900	17,700	13,000	12,100	11,300	**145,040**	**0.45**	**1%**
		Lhoist	40.00	0	40.00	20,786	22,145	25,374	32,088	32,097	32,147	32,433	31,220	30,100	31,872	26,123	23,719	340,104	1.04	3%
N2-03-002G	4060101	LHoist #1				20,786	22,145	25,374	32,088	32,097	32,147	32,433	31,220	30,100	31,872	26,123	23,719	**340,104**	**1.04**	**3%**
N2-03-003G	4060102	LHoist #2																		**0%**
		Moffat WSC	47.70	209.20	256.90	3,645,000	4,610,000	8,635,000	9,512,000	8,645,000	10,329,000	313,000	7,706,000	6,242,000	3,920,000	1,581,000	4,056,000	69,194,000	212.35	83%
N2-02-022G	4053406	Moffat WSC #1				1,135,000	1,168,000	1,282,000	1,453,000	1,914,000	4,240,000	150,000	1,627,000	1,936,000	1,259,000	367,000	683,000	**17,214,000**	**52.83**	**21%**
N2-13-001P	4053507	Moffat WSC #2				2,510,000	3,442,000	7,353,000	8,059,000	6,731,000	6,089,000	163,000	6,079,000	4,306,000	2,661,000	1,214,000	3,373,000	**51,980,000**	**159.52**	**62%**
		Pendleton WSC	75.30	36.90	112.20	3,308,100	2,693,800	2,425,900	2,122,600	2,000,500	3,302,300	3,529,800	3,677,500	2,990,300	2,629,400	2,059,700	1,451,200	32,191,100	98.79	88%
N2-02-047G	4054401	Pendleton WSC (#1)				1,688,300	1,318,200	1,877,500	353,600	617,600	2,751,300	3,529,800	3,677,500	2,990,300	2,629,400	2,059,700	1,451,200	**24,944,400**	**76.55**	**68%**
N2-02-048G	4054502	Pendleton WSC (#2)				1,619,800	1,375,600	548,400	1,769,000	1,382,900	551,000	0	0	0	0	0	0	**7,246,700**	**22.24**	**20%**

Non-exempt Wells--Trinity

			Acre-Feet			2023 Monthly Production (gallons)														
File No	State #	Well Name	Hist. Permit	Oper. Permit	Total Permit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD ac-ft	% Permit
		Not Aggregated																		0%
N1-05-001P	4057907	John Kurzyniec	0	0.67	0.67	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	**219,000**	**0.67**	**100%**
N1-07-002P	4060405	Ingo Smith	0	1.57	1.57	42,766	42,766	42,766	42,766	42,766	42,766	42,766	42,766	42,766	42,766	42,766	42,766	**513,192**	**1.57**	**100%**
N1-08-001P	4057908	Yong Conway	0	1.59	1.59	43,120	43,120	43,120	43,120	43,120	43,120	43,120	43,120	43,120	43,120	43,120	43,120	**517,440**	**1.59**	**100%**
N1-09-003P	4053707	Laurie Gehring	0	0.34	0.34	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N1-11-002P	5803201	Andrew Robertson	0	0.59	0.59	16,021	16,021	16,021	16,021	16,021	16,021	16,021	16,021	16,021	16,021	16,021	16,021	**192,252**	**0.59**	**100%**
N1-16-001P	5803505	Richard Ross	0	0.70	0.70	19,008	19,008	19,008	19,008	19,008	19,008	19,008	19,008	19,008	19,008	19,008	19,008	**228,096**	**0.70**	**100%**
N1-16-004P	4059804	Michael Maples	0	0.39	0.39	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	**127,080**	**0.39**	**100%**
N1-16-005P	4059803	David Cole	0	0.39	0.39	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	10,590	**127,080**	**0.39**	**100%**
N1-16-006P	4057603	Ronald Ham	0	0.53	0.53	14,391	14,391	14,391	14,391	14,391	14,391	14,391	14,391	14,391	14,391	14,391	14,391	**172,692**	**0.53**	**100%**
N1-17-002P	5802506	Advanced Electrical Systems	0	0.88	0.88	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	**288,000**	**0.88**	**100%**
N1-18-001P	5803506	William Lutz	0	0.36	0.36	9,672	9,672	9,672	9,672	9,672	9,672	9,672	9,672	9,672	9,672	9,672	9,672	**116,064**	**0.36**	**99%**
N1-18-003P	4059302	Myers	0	1.98	1.98	53,765	53,765	53,765	53,765	53,765	53,765	53,765	53,765	53,765	53,765	53,765	53,765	**645,180**	**1.98**	**100%**
N1-18-004P	5803404	Justin Scott	0	0.22	0.22	5,973	5,973	5,973	5,973	5,973	5,973	5,973	5,973	5,973	5,973	5,973	5,973	**71,676**	**0.22**	**100%**
N1-19-003P	5802505	Gary Kelley	0	0.20	0.20	5,353	5,353	5,353	5,353	5,353	5,353	5,353	5,353	5,353	5,353	5,353	5,353	**64,236**	**0.20**	**100%**
N1-19-007P	4057906	Cristy & Larry Bickel	0	0.60	0.60	16,292	16,292	16,292	16,292	16,292	16,292	16,292	16,292	16,292	16,292	16,292	16,292	**195,504**	**0.60**	**100%**
N1-19-008P		Cristy & Larry Bickel	0	0.60	0.60															**0%**
N2-02-001G	5806102	Bell Co. WCID #2	184.20	21.60	205.80	4,809,000	4,535,000	2,262,148	24,760,250	2,453,000	3,273,000	3,912,000	4,718,000	3,118,000	2,833,000	2,470,000	2,472,000	**61,615,398**	**189.09**	**92%**
N2-02-012G	5807701	City of Rogers	139.40	0	139.40															**0%**
N2-02-013G	5805901	City of Holland	158.40	0	158.40															**0%**
N2-02-017G	4055701	Oenaville / Belfalls WSC	16.20	20.79	36.99	122,370	0	18,542	58,269	61,205	199,428	420,087	316,712	314,991	259,065	137,942	67,730	**1,976,341**	**6.07**	**16%**
N2-02-035G	5804642	Mill Creek Country Club, LLC	61.90	60.00	121.90	0	0	0	0	1,440,000	1,440,000	2,700,000	0	1,980,000	1,260,000	0	0	**8,820,000**	**27.07**	**22%**
N2-02-039G	4054801	Little Elm Valley WSC	91.20	0	91.20	2,094,800	4,803,000	1,999,733	1,895,500	2,119,300	2,898,800	4,024,100	4,219,100	2,735,300	1,979,400	1,638,500	1,587,200	**31,994,733**	**98.19**	**108%**
N2-02-040G	4062801	Bell Co. WCID #5	20.70	8.00	28.70	350,500	348,100	408,500	403,600	391,200	509,200	698,600	689,900	527,000	435,800	364,700	365,933	**5,493,033**	**16.86**	**59%**
N2-03-001G	4062401	Cen. TX Vet. Hospital	0	60.00	60.00	0	0	0	0	0	0	0	734,800	4,600	0	0	200	**739,600**	**2.27**	**4%**
N2-04-011P	4061407	BellTec	0	1.30	1.30	70	0	0	0	0	0	70	0	0	0	0	0	**140**	**0.00**	**0%**
N2-05-003P	40589	Texas Veterans Land Board	0	36.80	36.80															**0%**
N2-05-004P	5804323	Salado B.P. / Ronnie Tynes	0	11.05	11.05															**0%**
N2-06-008P	4053709	VillasDelSol / John Henderson	0	3.13	3.13	23,000	16,000	39,000	40,000	21,000	62,000	117,000	115,000	32,000	28,000	37,000	16,000	**546,000**	**1.68**	**54%**
N2-07-003G	5803503	Killeen Crushed Stone	0	36.00	36.00	0	0	637,600	406,900	0	0	512,700	145,100	0	500	0		**1,702,800**	**5.23**	**15%**
N2-07-006G	5802101	Kuczek	0	0.16	0.16															**0%**
N2-07-007G	5803303	Garden of Hope of Central Texas	0	0.01	0.01	270	270	270	270	270	270	270	270	270	270	270	270	**3,240**	**0.01**	**99%**
N2-07-008G	5803809	Apache Stone	0	22.66	22.66	128,684	46,553	65,637	56,838	46,681	63,961	58,303	63,927	130,894	61,249	55,164	62,052	**839,943**	**2.58**	**11%**
N2-07-009G	4058701	Parrie Haynes Ranch	0	13.80	13.80	74,460	66,518	49,880	38,270	59,020	56,420	56,130	69,480	61,600	44,010	71,460	19,560	**666,808**	**2.05**	**15%**
N2-07-011G	5804624	Stagecoach (Spa)	0	0.05	0.05	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-07-012G	4053710	Temple Park Estates	0	9.50	9.50	343,000	28,060	79,780	69,600	97,500	259,580	343,720	258,670	176,880	87,070	53,990	56,240	**1,854,090**	**5.69**	**60%**
N2-08-001P	5803912	5 Womans Materials	0	16.03	16.03	123,890	82,480	58,890	102,550		342,380	342,380	248,980	142,050	75,960	57,560	115,450	**1,692,570**	**5.19**	**32%**
N2-08-002P	5804314	Salado ISD (HS)	0	21.41	21.41	31,100	1,200	137,500	411,700	27,200	583,500	13,500	665,300	400,600	342,000	100	400	**2,614,100**	**8.02**	**37%**
N2-08-003G	4059601	City of Harker Heights	0	1.16	1.16	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-09-001P	4053508	Kimberly Langston	0	12.32	12.32	232	310	392	281	399	420	860	1,112	1,430		1,210	210	**6,856**	**0.02**	**0%**
N2-09-005G	5803707	R S Materials Group	0	16.67	16.67	468,183	217,197	257,383	312,964	338,135	361,948	276,415	376,731	164,099	346,830	272,937	394,113	**3,786,935**	**11.62**	**70%**
N2-11-003G	4061408	UMHB	0	7.50	7.50	45	58	2,086	1,447	10,026	9,531	19,905	22,673	14,533	3,776	303	1,869	**86,252**	**0.26**	**4%**
N2-13-002P	5806201	Trinity Oasis LLC (Jack Hilliard Dozer and Ma	0	279.00	279.00	7,070,500	5,629,200	7,219,300	6,851,400	5,040,600	4,754,400	8,794,100	4,654,900	3,613,000	6,483,300	6,224,900	4,409,800	**70,745,400**	**217.11**	**78%**
N2-19-001P	5804705	CenTex Acres 1 (Crawford)	0	0.61	0.61	527	22	84	536									**1,169**	**0.00**	**1%**
N2-19-002P	5804706	CenTex Acres 2 (Penney)	0	0.61	0.61	4,350	3,880	4,600	4,500	4,150	5,620	14,900	8,920	4,730	4,350	4,200	3,910	**68,110**	**0.21**	**34%**
N2-19-003P	4053708	Eveans	0	0.50	0.50	13,540	13,540	13,540	15,580	15,920	15,920	16,650	9,400	6,020	10,490	7,710	6,440	**144,750**	**0.44**	**89%**
N2-20-002P	5803406	Hines Texas, LLC #1	0	4.14	4.14	45,983	53,510	35,810	50,770	44,440	92,050	96,000	20,160	0	0	0	360	**439,083**	**1.35**	**33%**
N2-20-003P	5803407	Hines Texas, LLC #2	0	4.14	4.14	0	0	0	0	0	0	0	20,010	30,180	54,620	51,510	59,290	**215,610**	**0.66**	**16%**
N2-20-004P	5803408	Hines Texas, LLC #3	0	4.14	4.14	135,313	137,780	115,090	167,340	101,480	10,150	43,680	0	0	0	26,310	90,900	**828,043**	**2.54**	**61%**
N2-21-001P		Victory Rock LLC	0	30.00	30.00															**0%**
N2-21-003P		David & Denea Reaves	0	0.54	0.54															**0%**
N2-21-004P	5803409	Hines Texas, LLC #4	0	4.14	4.14	17,050	32,800	27,200	6,310	41,030	23,310	37,280	22,160	18,170	35,850	23,480	29,820	**314,460**	**0.97**	**23%**
N2-21-005P	5802601	Nathan & Danielle McNeal	0	0.40	0.40															**0%**
N2-22-002P	4059805	Scott Gillman	0	0.39	0.39	32	0	0			0		0					**32**	**0.00**	**0%**
Totals:			**1,502.60**	**3,606.16**	**5,108.76**	**36,769,936**	**39,322,624**	**41,905,590**	**64,916,824**	**42,144,014**	**57,160,426**	**72,703,724**	**78,598,276**	**62,002,318**	**52,960,593**	**45,784,330**	**38,189,947**	**632,458,602**	**1,940.94**	**38%**

Non-exempt Wells--Other

File No	State #	Well Name	Acre-Feet Hist. Permit	Acre-Feet Oper. Permit	Acre-Feet Total Permit	2023 Monthly Production (gallons) Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	YTD ac-ft	% Permit
		Bradley Ware	0	160.00	160.00	1,531,501	1,759,597	1,531,501	1,433,745	2,509,055	4,855,186	11,600,311	10,590,170	2,443,885	1,042,724	1,335,990	553,946	41,187,611	126.40	79%
N2-11-001G	5802106	Bradley B. Ware				1,173,065	1,270,820	684,288	1,042,724	2,118,034	3,193,344	8,635,063	7,918,189	1,759,597	684,288	1,042,724	391,021	**29,913,157**	**91.80**	**57%**
N2-11-002G	5802107	Bradley B. Ware				358,436	488,777	847,213	391,021	391,021	1,661,842	2,965,248	2,671,981	684,288	358,436	293,266	162,925	**11,274,454**	**34.60**	**22%**
		Strasburger Farms	271.80	33.84	305.64	0	0	0	0	0	10,404,000	32,160,000	20,220,000	10,296,000	0	0	0	73,080,000	224.27	73%
N2-02-026G		DO NOT USE - Strasburger Farms (#2)																		**0%**
N2-02-027G	5806801	Strasburger Farms (#4)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-02-028G		DO NOT USE-Strasburger Farms (#5)																		**0%**
N2-02-029G	5806802	Strasburger Farms (#6)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-02-030G	5806901	Strasburger Farms (#10)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-02-031G	5806902	Strasburger Farms (#11)				0	0	0	0	0	0	0	7,242,000	4,752,000	0	0	0	**11,994,000**	**36.81**	**12%**
N2-02-032G	5806803	Strasburger Farms (#15)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-02-033G	5806804	Strasburger Farms (#16)				0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-12-002P	5806805	Strasburger Farms (#5)				0	0	0	0	0	1,548,000	13,392,000	9,234,000	5,544,000	0	0	0	**29,718,000**	**91.20**	**30%**
N2-18-001P	5806501	Strasburger Farms (#2)				0	0	0	0	0	8,856,000	18,768,000	3,744,000	0	0	0	0	**31,368,000**	**96.26**	**31%**
		Not Aggregated																		0%
N1-04-001P	5806701	Stephen Spinn	0	0.56	0.56	15,207	15,207	15,207	15,207	15,207	15,207	15,207	15,207	15,207	15,207	15,207	15,207	**182,484**	**0.56**	**100%**
N1-11-001P	4060603	Roy Rodriquez	0	0.55	0.55	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	**180,000**	**0.55**	**100%**
N1-16-007P	5805903	Wells Fargo Bank	0	0.79	0.79	21,390	21,390	21,390	21,390	21,390	21,390	21,390	21,390	21,390	21,390	21,390	21,390	**256,680**	**0.79**	**100%**
N1-21-001P	5814101	Kelly Carter	0	0.87	0.87	23,664	23,664	23,664	23,664	23,664	23,664	23,664	23,664	23,664	23,664	23,664	23,664	**283,968**	**0.87**	**100%**
N2-06-007G	4061903	Misty Creek HOA	0	6.45	6.45	17,050	17,000	17,500	15,500	12,000	14,500	14,500	14,200	12,000	10,250	14,700	15,800	**175,000**	**0.54**	**8%**
N2-07-013G	5806104	D.R. Dorsey Properties	0	2.47	2.47	8	17	5	7	4	15	4	11	17	12	8	5	**113**	**0.00**	**0%**
N2-07-014P	4061607	Barking Oaks	0	0.62	0.62	5,690		5,760	5,370	5,860	6,230	6,380	5,870	6,120	5,620	5,970	5,920	**64,790**	**0.20**	**32%**
N2-08-005G	4061511	Lone Star Paving	0	1.07	1.07	63	113	110	124	58	90	114	70	120	62	97	213	**1,234**	**0.00**	**0%**
N2-08-007G	4061512	Trio Investments	0	0.18	0.18	100	100	100	100	100	200	200	300	200	100	100	100	**1,700**	**0.01**	**3%**
N2-10-007P	4061715	Goode Towing	0	0.05	0.05	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-14-001G	5806806	Mikeska	0	100.00	100.00	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
N2-16-001P	4061410	Strike 3 Bail Bonds	0	0.12	0.12	390	360	270	310	240	310	420	300	270	250	260	220	**3,600**	**0.01**	**9%**
Totals:			**271.80**	**307.87**	**579.67**	**1,630,063**	**1,852,448**	**1,630,507**	**1,530,417**	**2,602,578**	**15,355,792**	**43,857,190**	**30,906,182**	**12,833,873**	**1,134,279**	**1,432,386**	**651,465**	**115,417,180**	**354.20**	**61%**

Appendix E

CUWCD Exempt Well Use Summary

As of: 2/12/2024

Aquifer	Total Active Registered Exempt Wells[3]	Registered Domestic Wells	Estimated Domestic Use Gallons/Day[1,2]	Estimated Domestic Use Ac-ft/Year[1,2]	Registered Stock Wells	Estimated Stock Use Gallons/Day[4]	Estimated Stock Use Ac-ft/Year[4]	Total Estimated Use Gallons/Day[7]	Total Estimated Exempt Well Use Ac-ft/Year[7]	MAG Reserved Exempt Well Use
Glen Rose (Upper Trinity)	*428*	*350*	*102,396*	*115*	*78*	*67,392*	*75*	*169,788*	*190*	
Hensell (Middle Trinity)	*993*	*931*	*423,297*	*474*	*62*	*53,568*	*60*	*476,865*	*534*	
Hosston (Lower Trinity)	*162*	*151*	*44,177*	*49*	*11*	*9,504*	*11*	*53,681*	*60*	
Trinity (Total)[6]	**1,583**	**1,432**	**569,870**	**638**	**151**	**130,464**	**146**	**700,334**	**784**	**1,419**
Edwards BFZ	**855**	**723**	**211,521**	**237**	**132**	**114,048**	**128**	**325,569**	**365**	**825**
Edwards Equivalent	485	386	112,928	126	99	85,536	96	198,464	222	
Buda	28	15	4,388	5	13	11,232	13	15,620	17	
Lake Waco	8	3	878	1	5	4,320	5	5,198	6	
Austin Chalk	226	141	41,251	46	85	73,440	82	114,691	128	
Ozan	161	114	33,352	37	47	40,608	45	73,960	83	
Pecan Gap	67	44	12,873	14	23	19,872	22	32,745	37	
Kemp	15	11	3,218	4	4	3,456	4	6,674	7	
Alluvium	585	377	110,295	124	208	179,712	201	290,007	325	
Other[5]	**1,575**	**1,091**	**319,183**	**358**	**484**	**418,176**	**468**	**737,359**	**826**	
CUWCD Total Active	**4,013**	**3,246**	**1,100,574**	**1,233**	**767**	**662,688**	**742**	**1,763,262**	**1,975**	

1. Domestic use estimate assumes 106 gallons/person per day (USGS estimate of domestic use outside of a municipal water system) and 2.76 persons/household (U.S. Census Bureau, Population Estimates Program (PEP) July 1, 2019)

2. Benjamin G. Wherley, Ph.D. Associate Professor- Turfgrass Science & Ecology Dept. of Soil and Crop Sciences Texas A&M University estimate of 2,000ft^2 warm season turfgrass requires 38,855gal/yr/lawn or 106gal/day/lawn; "Ranchette" Avg. lawn size is 13,042ft^2 , 6.5X larger; 6.5 X 106gal/day/lawn= 689gal/day/lawn; ~217 "Ranchette" Middle Trinity Wells; 689 X 217=an additional 150,924gal/day/lawn; ***490ac-ft/yr or an 89% increase in Middle Trinity exempt well use from the 2018 estimate of 258ac-ft/yr.***

3. Exempt well use estimate factors out all plugged, capped, monitor and inactive wells in the database.

4. Source of stock water estimates is Texas Agrilife Extension @ 18 gallons water per day per cow. Livestock water use estimates are based on the 2017 Census of Agriculture, USDA National Agricultural Statistics Service. 36,868 cows / 771 stock wells= 48 cows/stock well; 48* 18gpd= 846 gal/day/stock well, ***747ac-ft/yr or a 34% increase in annual stock use from the 2018 estimate of 556ac-ft/yr.***

5. The "Other" designation is the total of minor aquifer and alluvium source designation of the exempt wells.

6. Trinity Aquifer wells registered with unknown depth are assigned to the Middle Trinity per Board decision.

7. All estimates of groundwater use by exempt well owners is based on assumptions and scientific data, but by no means are they to be interpreted as recommended practices by CUWCD.

Appendix F

Edwards (BFZ) Aquifer Status Report – December 2023

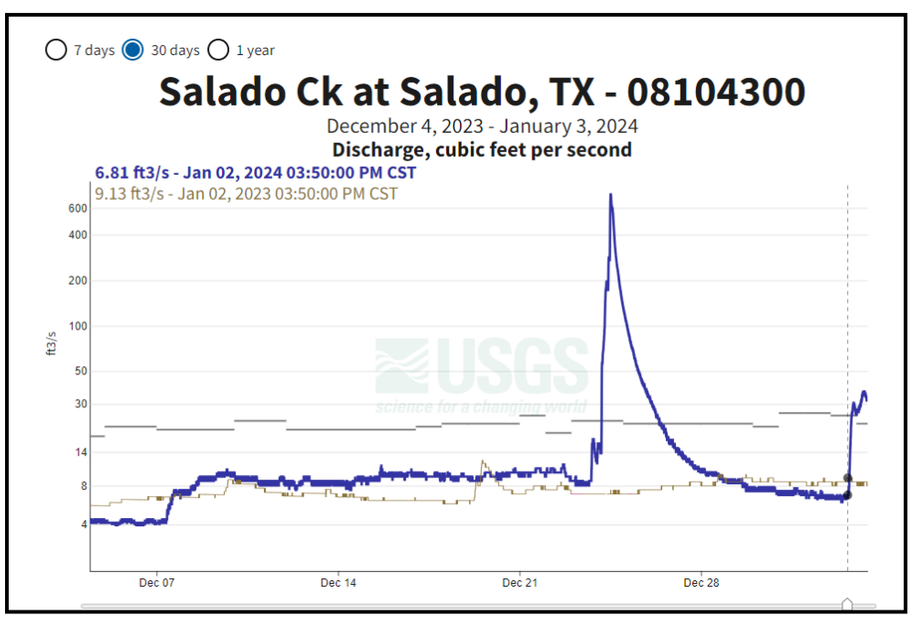
DFC Analysis Over Time (2000-Present) Modeled Available Groundwater				*HEUP and OP Permit Analysis* Relative to the Modeled Available Groundwater			*2023 YTD Prod.* Jan - Dec *1,754.61 Ac-ft 71.33%*	*Pending Applications*		*Exempt Well Reservations*		
	DFC Adopted * Minimum Spring Flow	**Status of DFC** ** Current / Low	**MAG** *** Ac-ft	HEUP Ac-ft	OP Ac-ft	Total Permitted Ac-ft	**2022 Actual Production**	Available for Permitting Ac-ft	Pending Applications Ac-ft	Exempt Well Reservation Ac-ft	Exempt Well Use Estimation Ac-ft	Available Exempt Use Ac-ft
Edwards (BFZ) Aquifer	**100 Ac-ft** per month or **1.68 cfs**	**504.83 Ac-ft** 1/02/2024 vs **220 Ac-ft** 08/20/2014	6469	2139.20	320.59	**2459.79**	**1995.86 Ac-ft 81.16%**	3184.92	**500**	825	361	464

**Desired Future Conditions (DFC) established by Clearwater UWCD and approved by GMA8 and TWBD, is the description of how the aquifer should look in the future (50 years based on maintaining the Salado Spring Complex discharge during a repeat of drought conditions similar to the drought of record in the 1950's, under drought of record, a five-day average of discharge amounting to 200 ac-ft-month is preferred and 100 ac-ft-/month is the minimum acceptable spring flow. Spring flow is measured and estimated by the USGS Gage in Salado Creek located below the Salado Creek Spring Complex.*

***Status of the DFC is the estimated spring flow over a five-day average from the springs releasing artesian pressure from the Edwards BFZ Aquifer expressed as acre feet per month of spring flow into Salado Creek.*

****The Modeled Available Groundwater (MAG) is the estimated amount of water available for permitting assigned to Clearwater UWCD by the Executive Administrator of TWDB, based on the desired future conditions.*

7KX Investments N2-19-005P (500 ac-ft/yr)



CFS is measured continuously at the downstream gage with USGS developing the rating curve according to industry standards and maintaining the information for public access on the USGS website.

5 - day average for December 28th – January 2nd was 8.48 CFS = 504.83 ac-ft/month

5 - day average for November 27th – December 1st was 4.38 CFS = 260.63 ac-ft/month

DFC Analysis Over Time (2000-Present) *Modeled Available Groundwater*			*HEUP and OP Permit Analysis* *Relative to the Modeled Available Groundwater*			*2023 YTD Total Prod.* *Jan - Dec* *1940.75 ac-ft* *37.99%*		*Pending Applications*		*Exempt Well Reservations*		
Trinity Aquifer (by layer)	**DFC Adopted *** **Average Drawdown** (by layer)	**MAG **** Ac-ft Current	**HEUP Ac-ft** (by layer)	**OP Ac-ft** (by layer)	**Total Permitted Ac-ft** (by layer)	**2022 YTD Prod.** (by layer)	**2023 YTD Prod.** (by layer)	**Available for Permitting Ac-ft** (by layer)	**Pending Applications Ac-ft** (by layer)	**Exempt Well Reserve Ac-ft** (by layer)	**2022 Exempt Well Use Estimate Ac-ft** (by layer)	**Available Exempt Use Ac-ft** (by layer)
Pawluxy	NA	0	0	0	**0**	0	0	0	0			0
Glen Rose (upper)	**-1.38 ft/yr** -83 ft/60 yrs	275	61.9	72.73	**134.63**	23.79	35.94	0	0	140.37	189	0
Hensell (middle)	**-2.28 ft/yr** -137 ft/60 yrs	1100	259.3	208.44	**467.74**	67.06	44.50	84.26	0	548	527	21
Hosston (lower)	**-5.50 ft/yr** -330 ft/60 yrs	7900	1181.4	3324.99	**4506.39**	1842.71	1860.31	3215.61	***552.80	178	59	119
Total		**9275**	1502.6	3606.16	**5108.76**	1933.56 (40.77%)	1928.30 (37.75%)	3299.87	**552.80**	866.37	793	140

**Desired Future Conditions (DFC) is the description of how the aquifer should look in the future (60 years).*

***The Modeled Available Groundwater (MAG) is the estimated amount of water available for permitting assigned to Clearwater UWCD by the Executive Administrator of TWDB.*

****Pending applications*

City of Temple N3-23-004P (239 ac-ft/yr)
UMHB N3-23-005P (64 ac-ft/yr)
Mustang Springs N3-23-010P & N3-23-011P (249.8 ac-ft/yr)

Appendix G

Clearwater Source

Clearwater Underground Water Conservation District

www.cuwcd.org

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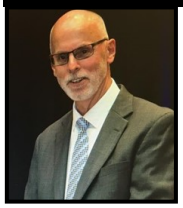
Water Resiliency and the Never Ending Drought



Clearwater Underground Water Conservation District and our Partners have set the 22nd Bell County Water Symposium for November 14, 2023, in Belton at the Cadence Bank Center (formerly Bell County Expo) on Loop 121. The theme of this year's event is *"Water Resiliency and the Never-Ending Drought"*.

The legacy partners of the annual event are the Texas AgriLife Extension Service in Bell County, the Bell County Engineers Office, and the Bell County Commissioners Court. We also have twelve additional sponsors who have been so very supportive in years past.

The Honorable Bell County Judge, David Blackburn, will welcome the day's attendees and give us an update and understanding of the growth in our County which is a serious concern of citizens living in the unincorporated rural areas. Judge Blackburn is a key leader in Bell County who is helping all communities navigate the need to understand many issues related to our expanding population, our demand for new developments, and the need to supply water in a sustainable fashion.

Our first speaker of the morning will be Mr. Tony Smith, Associate Vice President of Carollo Engineers in Austin Texas. Tony states that he has been fortunate to work with and lead experts on various multi-disciplinary projects in many states. Tony knows and understands water issues both in planning and delivering water to industry and residents.

Mr. Brad Brunett, BRA's Lower & Central Basin Regional Manager, will follow Mr. Smith with an update on BRA's Water Management Strategies including but not limited to the recent announcement of the "*Belhouse Drought Preparedness Project*". Brad will also provide an in-depth update of the Allens Creek Reservoir which is a water supply storage reservoir planned for construction near the City of Wallis in Austin County. The reservoir is planned to be "off-channel," meaning it will be built near the Brazos River on Allens Creek, a tributary of the Brazos. Water stored in Allens Creek Reservoir will be used to meet the anticipated growth in demand for surface water in the Lower Brazos basin due to projected population increases and hopefully reduces the required releases from both Belton and Stillhouse Lakes for downstream users. The reservoir will also help satisfy regulatory requirements to reduce groundwater pumping, which contributes to land subsidence in the lower Brazos River basin.

Dirk Aaron, Clearwater Board President, Leland Gersbach and the District's Geoscientist, Mr. Mike Keester will present and update on the groundwater resources across the county and provide specifics on current uses of groundwater, pending permits and status of the groundwater resources across the region. With updated data from recent studies conducted and funded by the district to address many of the new understandings.

Then a panel of experts will specifically address "***Aquifer Storage & Recovery the New Reservoir***" by a seven-member panel of ASR experts and those pursuing the need for this invisible reservoir for Bell County. Planned and

(continued on page 2)

Introducing James Brown, CUWCD Director At-Large



On March 8, 2023, I was appointed by the Clearwater UWCD Board to be its Director At-Large to fill a recently vacated position. My role on the Board is to represent the interests of all Bell County citizens in matters related to groundwater supply and quality. The Board focuses on balancing development and conservation of our limited groundwater resources based on the best available geoscience and hydrogeologic information as the basis for its decisions. A key priority is to manage the District's activities using a conservative approach to budgets and spending in order to maintain low costs for Bell County taxpayers.

I was appointed to the Board based in part on my academic and career history. I hold a Bachelor's Degree in Geology, a Master's Degree in Hydrology, and a Masters in Business Administration. During the first half of my thirty-five-year career, I held hydrology and geoscience positions, and the second half involved marketing and management responsibilities. Thus, I am very familiar with Clearwater's approach to hydrologic data collection, modeling, and impact assessments, and I understand the scientific challenges involved in characterizing local geologic features which can impact water well performance. Additionally, my prior management experience allowed me to quickly assume the business and operations responsibilities of the Director-At-Large position.

My wife and I moved to Salado in 2018, after living in the Houston area since 1985, except for several years in foreign places including Colombia, Argentina, Belgium, and Illinois. We came to Bell County to be closer to family members who live and work here, and to enjoy a more rural setting with of course, less humidity. We still have family members in the Houston area, whom we visit regularly.

Since moving here, I have become familiar with the entirety of Bell County, and I appreciate the wide range of communities who live here, including city, suburban, rural, agricultural, and of course, military. These communities each have specific water needs, and Clearwater's activities are a key part of the overall Bell County water supply picture. For example, the CUWCD Board recently approved participation in a joint program at Fort Cavasos which will evaluate the potential use of aquifer storage and recovery (ASR). During wet years, this strategy involves injecting excess surface water into local aquifers for recovery and use during subsequent drought periods. I fully support this strategy and hope it will become a useful tool in other parts of the County in the future. As Bell County continues to grow, it will likely be necessary to utilize a range of water supply strategies for our various communities. Groundwater will continue to be a vital water supply component, and I am proud to be part of this CUWCD Board as we implement prudent and cost-effective groundwater management practices for the benefit of the County.

James Brown, Director At-Large
Clearwater UWCD

Board of Directors

Leland Gersbach - Precinct 1
2013-Present (President)

Jody Williams - Precinct 3 2018
-Present (Vice President)

Gary Young - Precinct 2
2014-Present (Secretary)

Scott Brooks - Precinct 4
2018-Present (Director)

James Brown - At large
2023-Present (Director)

Mission Statement

To implement an efficient, economical, and environmentally sound groundwater management program to protect and enhance the water resources of the District.

Water Quality Screening

The District's in-house lab offers registered well owners free screening for common constituents and bacteria. Annual screening is recommended.

"Hurricane Hal" to Give Keynote Speech at the Bell County Water Symposium



Dr. Hal Needham, an Extreme Weather and Disaster Scientist located in Galveston Texas. Dr. Hal has been an extreme weather and disaster scientist with fifteen plus years' experience conducting data-driven risk analysis for disaster-prone communities. He specializes in science communication to both professional scientists and the public on extreme weather such as floods and drought. He hosts the GeoTrek podcast https://www.geo-trek.com/podcast , ranked by FeedSpot as the #1 podcast on natural disasters.

Dr. Hal is also an international expert on coastal flooding and directs the U-Surge Project, which provides the first comprehensive coastal flood data for the United States, Australia, the Philippines, Bangladesh, and India. He is lead scientist for Flood Information Systems, where he develops address-based flood risk tools. He resides in Galveston, Texas, site of the deadliest natural disaster in U.S. history. He has obtained a B.S. from Penn State University and M.S. and doctoral degrees from Louisiana State University.

Having somebody of Dr. Hal's stature on the issues and challenges of "Extreme Weather" from both a national and local perspective adds a new dimension to our conference, especially as we navigate the emotions related to our persistent and/or perpetual droughts. He will offer an insightful description of understanding the history of droughts and famines while navigating weather patterns in a rapidly changing world. Dr. Hal will help us all align our personal perspectives on fact and understanding. Hopefully, the attendees glean from his comments personal discernment on how we can resolve or don't resolve our current or pending disputes over both surface water and groundwater. These are unique times of perpetual drought yet persistent in Central Texas.

Rainwater Catcher of the Year, Mr. Allan Standen

The Rainwater Catcher of 2023 was named by the Texas Water Development Board and presented to Mr. Allan Standen who will speak at this year's Water Symposium. If you are on public water supply or groundwater and don't like curtailment in times of drought, come and hear his talk. We are empathetic to the extreme investment people have in their landscape, but the reality is that our extreme use of potable water for landscape is coming to an abrupt change in the near future, thus Rainwater Catchment is a strategy we all must do to protect our outdoor areas and trees. Mr. Allan Standen is recognized for his excellence in the design and implementation of rain catchment in his home. He uses no public water or groundwater in his home.

The Standen residence was designed and built with rainwater harvesting in mind since municipal water service is unavailable in his neighborhood. The design provides for 100 percent of the household water needs by maximizing the 4,000-square-foot metal roof collection area while minimizing the conveyance distance between roof eaves and storage tanks. The two 10,000-gallon storage tanks are located underneath an exterior deck, allowing the system to conform to the natural slope of the lot while keeping the tanks out of sight. By collecting and capturing rainwater, Mr. Standen has conserved local groundwater resources by avoiding the need to drill a well, minimized erosion, and provided water back into the watershed through an underground overflow pipe. One individual said to me that rainwater catchment is pie in the sky, but I was also told that as a kid when I dreamed of a talking Dick Tracy Watch. Oh, but the innovation of man.

Mr. Standen is not new to Bell County because as a professional geoscientist, he has overseen the development of the 3D visualization of the County for Clearwater which has brought great discernment on how managing the resource is being affected by the geologic structure of the County and the influence of overuse in Williamson County has affected the resource in such a negative way that is now insurmountable in sustain the resource in the next decade.



(continued from page 1)

implemented strategies for our county will be laid out by the panelists. This update reflects the newest information since first being discussed in 2019.

The Board of Directors of Clearwater UWCD look forward to another year of showcasing the importance of both surface water and groundwater to our robust economy coupled with the untethered growth and demands occurring along the IH35 corridor. Call 254-933-0120 or email tsmith@cuwcd.org to reserve your seat by November 9, 2023.

Dirk Aaron, General Manager
Clearwater UWCD

Contact Us

www.cuwcd.org

Phone: 254-933-0120

Physical Address: 700 Kennedy Court
Belton, TX 76513

Mailing Address: P.O. Box 1989
Belton, TX 76513

Contact the District office if you would like to be added to our e-mail list for more frequent updates.

Groundwater Vocabulary

•**GCD:** Groundwater Conservation Districts are political subdivisions created to protect aquifers and manage the use of groundwater. GCDs are granted authority in Chapter 36 of the Water Code to manage groundwater production through various methods, including well spacing and production limitations.

•**GMA:** Groundwater Management Areas are designated by the TWDB for regional planning purposes. GCDs within the GMA meet to jointly develop DFCs for the GMA region.

•**DFC:** a Desired Future Condition is a quantifiable condition of an aquifer at a specified future time. It may be based on aquifer levels, spring flows, or volumes of water in the aquifer (example: average drawdown not to exceed 75 feet at the end of 50 years). In setting DFCs, GCDs balance groundwater production with conservation and protection of the aquifer and then manage that production on a long term basis to achieve and maintain the DFC.

•**TWDB:** The Texas Water Development Board is the state agency responsible for overseeing state and regional water planning, providing financial assistance for local government water projects, and studying the state's surface water and groundwater resources.

•**MAG:** the Modeled Available Groundwater is calculated bythe TWDB and is the amount of water that may be produced on an average annual basis to achieve a DFC. The MAG is one tool used by GCDs to ensure consistency with the DFC, and is regional water planning groups.

•**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.

•**Groundwater Ownership:** the Texas Legislature and Texas Supreme Court have recognized that landowners have a constitutionally protected property right in groundwater and own the groundwater below the surface as real property, subject to the rule of capture and regulation by GCDs.

•**GAM:** a Groundwater Availability Model is a regional groundwater flow model approved by TWDB.

•**Joint Planning:** the process by which GCDs in a GMA work together to develop DFCs, review groundwater management plans, assess the accomplishments of the GMA, and evaluate the need to modify the DFCs.

•**Management Plan:** a plan adopted by a GCD, approved by the TWDB, and forwarded to regional water planning groups that outlines the GCD's management goals and objectives. The plan must include performance standards, methods for achievement, and groundwater estimates.

•**TAGD:** the Texas Alliance of Groundwater Districts is a 501(c)(3) association that assists GCDs, provides outreach and education, and facilitates communication.

•**GCDI:** the GCD Index is available on TAGD's website and is searchable, interactive online information bank with data on GCDs across the state.

Texasgroundwater.org

Join the District for the 22nd Annual

Bell County Water Symposium

November 14, 2023 8:00 A.M. --- 3:30P.M.

Cadence Bank Center - Assembly Hall

This event is free but requires RSVP by November 9th

"Water Resiliency While Battling the Never Ending Drought"

8:00 a.m. - Registration

Issues of the Day on Water
Honorable David Blackburn, Bell County Judge

Understanding Today and Tomorrow's Water Needs
Tony Smith, Associated Vice President, Carollo Engineers

Brazos River Authority Update
Brad Brunett, Lower/Central Basin Region Manager, Brazos River Authority

Bell County Groundwater Resource Update: Concerns, Conservation and Future
Leland Gersbach, Board President, Clearwater UWCD
Dirk Aaron, General Manager, Clearwater UWCD
Mike Keester, Geoscientist, R.W. Harden & Associates

The 88th Texas Water Session

12:00 p.m. - Lunch

Dr. Hal Needham, Extreme Weather & Disaster Scientist, Galveston, TX

Aquifer Storage & Recovery the New Reservoir (ASR Panel)
Moderator: Honorable David Blackburn, Bell County Judge
Dr. Steve Young, INTERA
Dr. Neil Deeds, INTERA
Mr. Ricky Garrett, WCID No. 1
Mr. Rick Kasberg, KPA Engineers
Mr. David Olson, City of Temple
Mr. Brian Dosa, DPW, Ft. Cavazos
Ms. Andrea Croskrey, Geoscientist, ASR Lead, TWDB

Designing Your Home with Rainwater Catchment
Allan Standen, LRE Water, 2023 Texas Rainwater Catchment Award Winner)

Event Sponsors

Bell County Engineers Office
R.W. Harden & Associates
KPA Engineers
MRB Group
Eno Scientific
Michelle A. Sutherland
Lloyd-Gosselink Attorneys at Law
LRE Water, LLC
ICF
Gamblin Engineering Group
INTERA
Advanced Groundwater Solutions

Clearwater Underground Water Conservation District
Texas AgriLife Extension Service

This event is free, but requires RSVP by November 9th
Phone: 254-933-0120
Email: tsmith@cuwcd.org

Clearwater Underground Water Conservation District
Every drop counts!
P.O. Box 1989
Belton, TX 76513



Fort Cavazos Aquifer Storage & Recovery Feasibility Study
A Source Water Resiliency Project

The words "water supply" have a heightened urgency for a lot of people living in the Heart of Texas, or Central Texas. State and local water suppliers are double checking water use projections and keeping an eye out for new supply opportunities.

One supply opportunity, Aquifer Storage & Recovery (ASR) is being explored in West Bell County just south of Lake Belton on the Fort Cavazos Military Reservation. According to the United States Geological Service "Aquifer storage and recovery (ASR) is a water resources management technique for actively storing water underground during wet periods for recovery when needed, usually during dry periods. The timeframe can range from months to decades." In this case, treated or potable water would be injected into the most suitable aquifer in the test area during times when water is plentiful. Unlike with large lakes, there will be no loss of stored water due to evaporation or sedimentation. Natural disasters such as extreme freeze events or tornados can impact a water supply system. Having potable water stored and available would enable the owner to use that water during a natural disaster to meet their needs. Additionally, an intense drought such as the one we're in can result in curtailed surface water usage to preserve lake supplies. Having additional water stored can minimize the impact of curtailments.

Thanks to the generous contributions from several supporters in the region including; the Killeen Economic Development Corporation, the Clearwater Underground Water Conservation District, the City of Harker Heights, the City of Copperas Cove and the Bell County Water Control & Improvement District #1 (WCID 1), the necessary funding is in place to conduct the well drilling and geological study necessary to assess the feasibility for moving forward with a successful resiliency project. INTERA Incorporated has been selected to perform the viability testing and work directly with the well driller to acquire the necessary geological data.

Continued Investments in the Future

From the Red River to the Rio Grande and everywhere in between, the conversation remains the same – water supply challenges are a pressing concern for many communities and landowners across the State. The ongoing exceptional drought and Drought Disaster Declarations from Governor Abbot have only exacerbated these conversations by highlighting the fragility of our water infrastructure, including our aquifers. As drought persists, those pressures applied to our aquifers are increased and can sometimes prompt fluctuations in water levels, well yields and chemistry. Fear can easily set in when these aquifer changes are poorly understood, whereas when planned for, can simply be a minor inconvenience.

In Bell County, the Clearwater Underground Water Conservation District has invested approximately $1.5 million in scientific initiatives to advance and enhance our understanding of the groundwater resources within the County. These scientific initiatives have shed light on county-wide aquifer conditions and the great disparities that exist within those systems. Most recently, this research supported the development of management zones that protect the investment-backed expectations of current and future landowners and residents of Bell County by establishing well column pipe and spacing requirements specific to each zone. This is just one of many examples that demonstrate how Clearwater has used science to guide groundwater management strategies.

In a continued effort to develop and work with the *best available science*, as prescribed in Chapter 36 of the Texas Water Code, the Clearwater UWCD has partnered with neighboring groundwater conservation districts (Central Texas and Southwest Travis County), and Travis County to develop a detailed hydrogeologic model of the Trinity Aquifer. This research specifically evaluates the hydrogeology of the Trinity Aquifer for the area west of Interstate Highway 35 in portions of Bell, Burnet, Travis, and Williamson Counties (Figure 1). With this research, the local communities will have a better understanding of the movement of groundwater within the Trinity aquifer and how water levels may be impacted by the underlying aquifer geology. For Clearwater, this provides a better understanding for how water flows into and across Bell County. This research is currently ongoing and scheduled for completion in early 2024.

Vince Clause, GISP, Project Manager
LRE Water

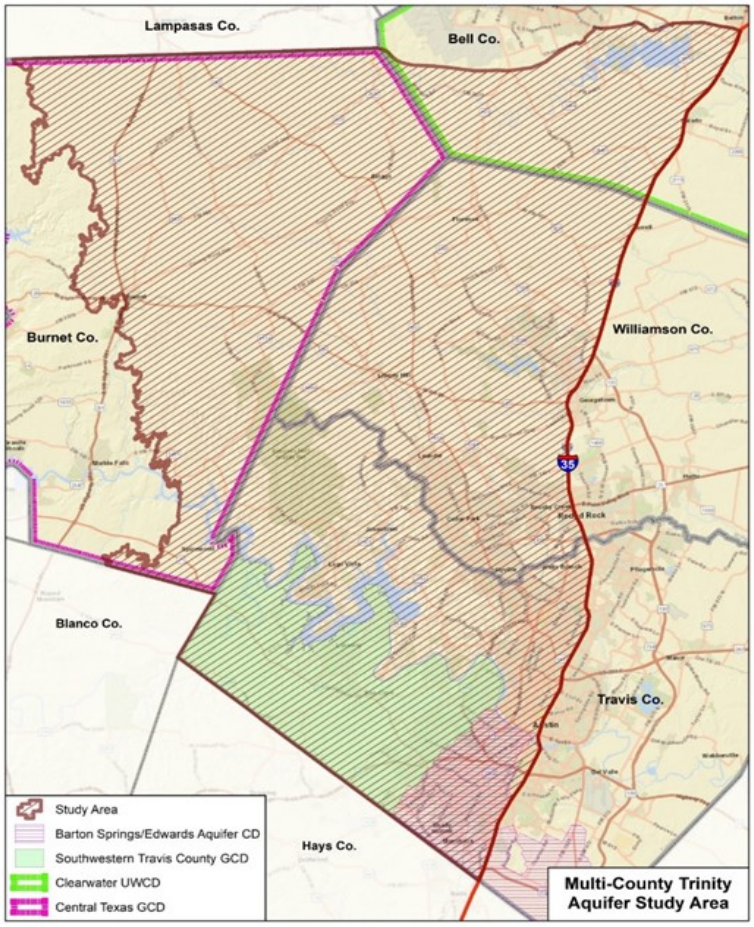


Figure 1 – Study Area for the jointly funded study of the Trinity Aquifer for portions of Bell, Burnet, Travis, and Williamson County.

Clearwater Underground Water Conservation District

Every drop counts!

Edwards BFZ Aquifer—Drought Status Report

STAGE 3: SERIOUS

Salado Creek Spring Discharge

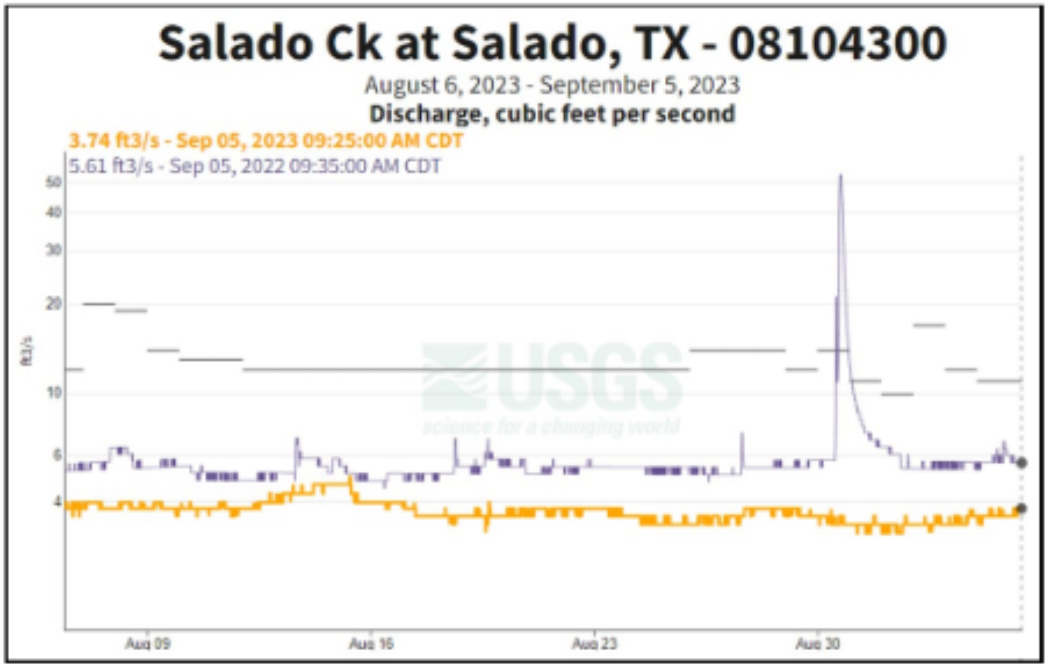
2,000	NO DROUGHT	100%
901		80%
900	STAGE 1: AWARENESS RECOMMEND 10% USAGE REDUCTION	79%
701		70%
700	STAGE 2: CONCERN RECOMMEND 20% USAGE REDUCTION	69%
401		60%
400	STAGE 3: SERIOUS RECOMMEND 30% USAGE REDUCTION	59%
201		50%
200	STAGE 4: CRITICAL RECOMMEND 40% USAGE REDUCTION	49%
0		0%

As of 9/5/2023

216.357 ac-ft (month)
3.636 cfs

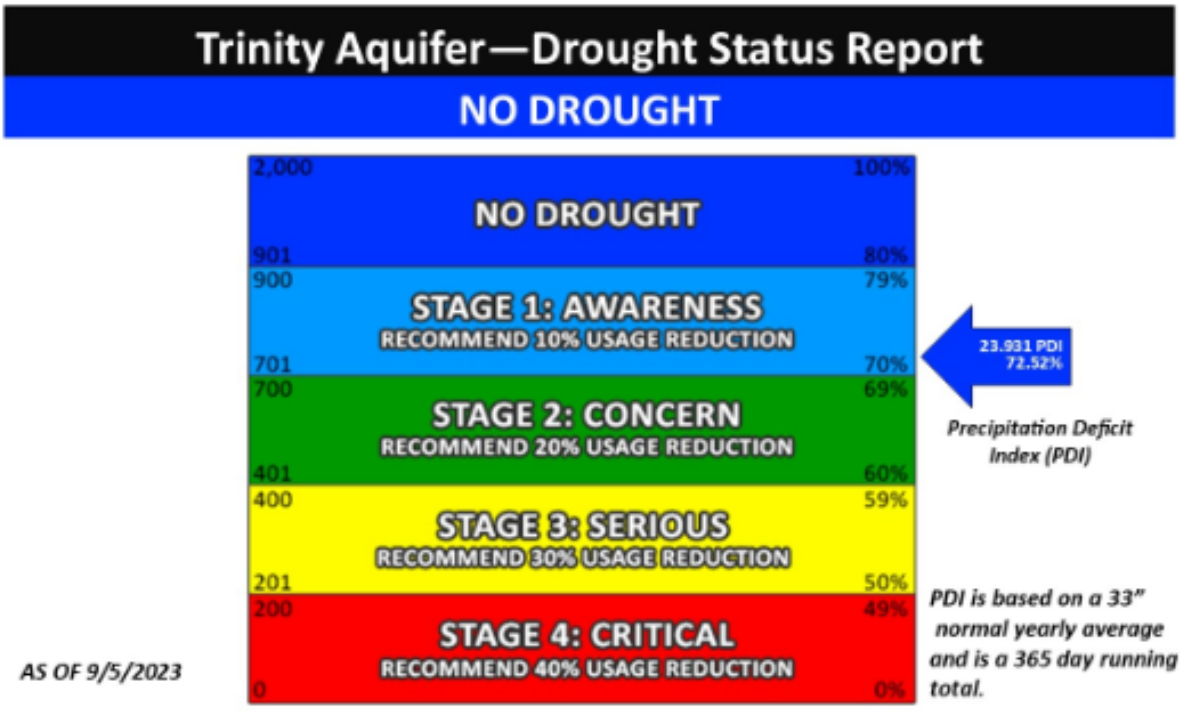
Preciptation Deficit Index (PDI)

PDI is based on a 33" normal yearly average and is a 365 day running total.



Stage 3: Serious - PDI 50 to 59%; Spring Discharge 400 to 201 ac-ft/month
Conservation Goal: 30% Reduction

- **Limit watering of landscape (lawns, trees, shrubs, etc.) to only once every 5 to 7 days.**
  (Agriculture and horticulture operations are exempted from this measure but are encouraged to reduce tree, plant, and crop watering by 30%.)
- **Only water landscape at night between the hours of 7 pm and 7 am.**
- **No filling of ponds, lakes, tanks, reservoirs, swimming pools or other surface impoundments for holding water.**
- **Check for and correct all plumbing leaks.**
- **Re-use or re-circulate water whenever possible.**
- **Wash vehicles at car wash only as needed.**
- **No washing of buildings, driveways, streets, patios, or other outdoor surfaces.**
- **Keep swimming pools, landscape or decorative ponds and fountains covered (where possible).**
- **Water livestock in leak-proof troughs - pumping water into ponds is discouraged.**
- **Water for dust control only when required by law.**



Drought in the State of Texas

Drought continues to intensify for many parts of the state. Last week, Governor Greg Abbott has declared a state of disaster in many counties as a result of these drought conditions. Click here to read the Governor's full proclamation. Click here for TWDB's Water Weekly.

Water Weekly

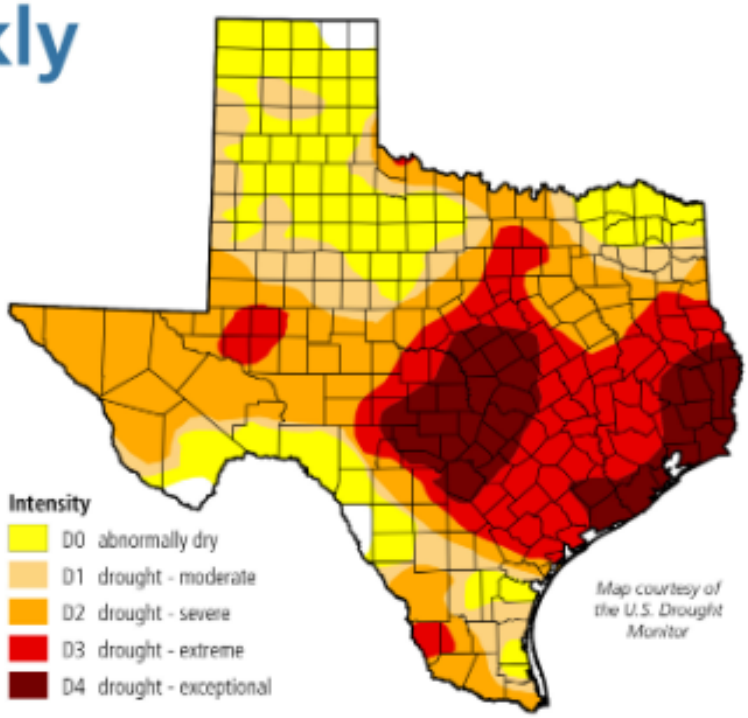
For the week of 09/05/23

Water conditions

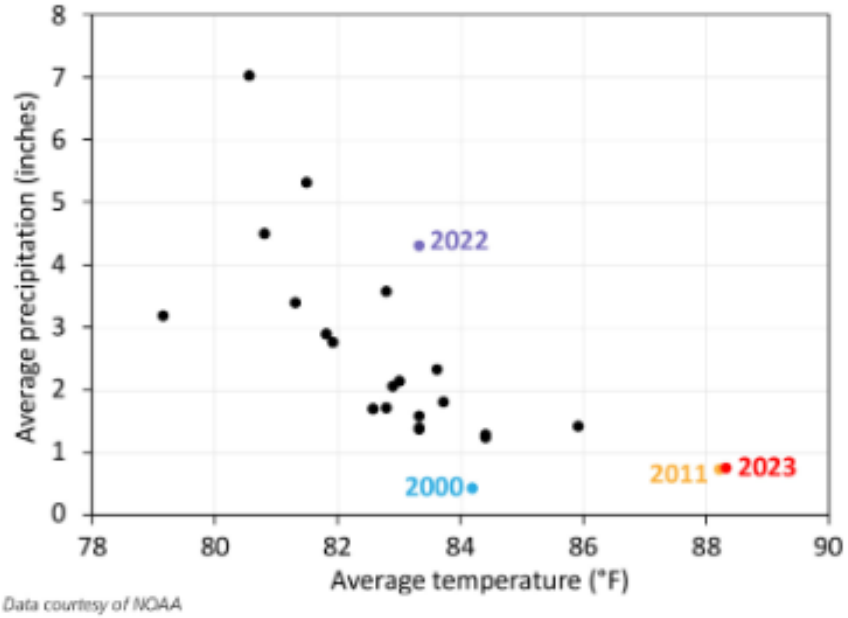
This week's drought map shows that rainfall from Tropical Storm Harold remnants brought one to two categories of drought improvement to parts of South Texas. While other parts of the state saw continued degradation, the overall area of the state impacted by drought decreased for the first time in 11 weeks.

Drought conditions

- 76% now
- 79% a week ago
- 34% three months ago
- 76% a year ago



Map courtesy of the U.S. Drought Monitor



Data courtesy of NOAA

August temperature and precipitation

With a statewide average temperature of 88.3°F and precipitation of 0.76 inches, 2023 was the hottest and third driest August for Texas since 2000. Only August 2011 (0.74 inches) and 2000 (0.47 inches) were drier, while August 2022 (4.33 inches) was the fourth wettest.

Written by Dr. Mark Wentzel — *Dr. Mark Wentzel is a hydrologist in the TWDB's Office of Water Science and Conservation.*

Bryan McMath, Government Relations | bryan.mcmath@twdb.texas.gov | 512-463-7850
Media Relations | MediaRelations@twdb.texas.gov | 512-463-5129

www.twdb.texas.gov

Stay connected:

Texas Water Development Board

Texas Water Journal Legislative Wrap-Up

The Texas Water Journal has published a new commentary, "88th Texas State Legislature: Summaries of Water-Related Legislative Action," by Sarah Kirkle (TWCA), Leah Martinsson (TAGD), Sarah Schlessinger (TWF), Alex Ortiz (Sierra Club), Perry Fowler (TWIN), Vanessa Puig-Williams (EDF), Jeremy Mazur (Texas 2036), and Todd Votteler (Texas + Water). This article, authored by seven organizations that work closely with the Texas Legislature, provides their take on the changes to Texas water policy and law that were made during the 2023 session. You can view the article here.



For more information and formal postings of meetings, we encourage you to visit our website.

CHECK OUT CUWCD WEBSITE HERE

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Our mailing address is:
P.O. Box 1989
Belton, Texas 76513

Telephone Number:
254-933-0120

Appendix H

CUWCD 2022 Education and Outreach Events

Date	People	Event Information	Presentation	Booth
1/18/23	142	Bell County Crops Conference		X
4/12/23	55	Bell County Master Gardener Class	X	
4/24/23 – 4/25/23	75	ASR Presentation with INTERA	X	
4/27/23	6	Bell County Master Gardener Class	X	
6/13/23	22	Tier I 4-H2O Leadership Academy	X	
7/6/23	19	Texas A&M University – Central Texas STEM Camp	X	X
7/18/23	42	Texas Well Owner's Network Program	X	
9/19/23	45	Fort Cavazos ASR Update	X	
10/7/23	200	Salado Sirena Fest		X
10/10/23	55	Central Texas Master Naturalist Class	X	
10/18/23	220	Salado Middle School	X	X
11/6/23	185	Regional Water Summit	X	
11/14/23	263	Bell County Water Symposium	X	X
Total reached	1,328			

Appendix I

Results of Groundwater Samples in CUWCD Lab

Test Date	District Well #	Latitude	Longitude	Elevation	Depth (ft)	Aquifer[2]	Coliform Bacteria[3]	Ecoli	Conductivity (µs/cm)	Total Dissolved Solids (mg/L)	Salinity (mg/L)	pH	Alkalinity (mg/L)	Hardness (mg/L)	Nitrite (mg/L)	Nitrate (mg/L)	Phosphate (mg/L)	Sulfate[4] (mg/L)	Fluoride[4] (mg/L)	Chloride, mg/L	Calcium, mg/L	Magnesium, mg/L	CaCO3, mg/L CaCO3	Sodium Ion, mg/L
FY23																								
3/16/2022	E-22-078P	30.933781	-97.709401	831.303	558	Upper Trinity	Not Tested	Not Tested	983	484	490	8.21	320	200	0.003	0.4	0.09	194	2.5		18.9	37.7	172	52.6
10/13/2022	E-20-111P	30.878153	-97.601141	761.321	900	Middle Trinity	Not Tested	Not Tested	1301	648		8.78	300	220	0.006	1.9	0.22	274	3.2					
10/13/2022	E-22-055P	30.94	-97.59157	700.485	890	Middle Trinity	Not Tested	Not Tested	1873	943		8.31	300	140	0	3.2	0.13	411	2.2					
10/13/2022	N2-22-002P	31.025216	-97.667645	702.905	580	Middle Trinity	Not Tested	Not Tested	2064	1042		8.47	340	160	0	0.141	0.1	518	6.55					
10/13/2022	E-22-059P	30.94209	-97.5889	711.911	900	Middle Trinity	Not Tested	Not Tested	1670	835		8.57	300	160	0.004	3	0.1	311	2.7					
10/17/2022	E-21-068P	31.01361	-97.874423	868.311	310	Middle Trinity	Not Tested	Not Tested	1944	992		8.46	340	220	0	1.77	0.04	191	2.95					
10/19/2022	N1-16-006P	31.061974	-97.910345	962.955	400	Middle Trinity	Not Tested	Not Tested	3670	1898		8.45	340	200	0.001	0.201	0.06	660	3.95					
10/26/2022	E-22-069P	31.006814	-97.47196	525.617	200	Edwards (BFZ	Not Tested	Not Tested	779	380		8.18	360	300	0.013	1.23	0	45	2.5					
10/31/2022	E-22-054P	30.928407	-97.793984	845.008	630	Middle Trinity	Not Tested	Not Tested	1896	953		8.77	400	60	0.008	0.7	0.62	83	3.2					
10/31/2022	E-22-061P	30.93519	-97.824012	950.674	500	Middle Trinity	Not Tested	Not Tested	1189	591		8.49	340	160	0	0.7	0.11	188	1.6					
11/3/2022	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Not Tested	Not Tested	1777	894		8.5	360	100	0.008	0.139	1.07	463	3.25					
11/3/2022	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Not Tested	Not Tested	1777	894		8.5	360	100	0.008	0.139	1.07	463	3.25					
11/8/2022	E-22-014P	31.16052	-97.476964	651.725	890	Middle Trinity	Not Tested	Not Tested	2730	1392		8.91	380	100	0.631	0.576	0.02	523	3.1					
11/30/2022	E-22-063P	30.861574	-97.271009	426.509	60	Austin Chalk	Not Tested	Not Tested	471	228		8.45	240	180	0.009	0.6	0.23	5	0.32					
11/30/2022	E-22-064P	30.869411	-97.270147	393.701	60	Austin Chalk	Not Tested	Not Tested	788	386		7.95	380	340	3057	0.9	0.36	9	0.18					
12/6/2022	E-22-020P	30.98178	-97.629581	885.237	850	Middle Trinity	Not Tested	Not Tested	1109	547		9.02	360	40	0.004	0.2	0.09	120	1.95					
12/12/2022	E-22-021P	30.980322	-97.630937	848.732	815	Middle Trinity	Not Tested	Not Tested	1081	532		8.99	340	10	0	0.4	0.18	121	1.2					
12/15/2022	E-22-037P	30.877252	-97.388183	488.917	60	Alluvium	Not Tested	Not Tested	1676	840		8.08	340	380	0.002	0.2	0.13	196	0.93					
12/15/2022	E-22-079P	30.978359	-97.616774	841.34	840	Middle Trinity	Not Tested	Not Tested	1218	603		8.61	360	60	0.002	0.13	0.04	125	2.15					
12/15/2022	E-22-107P	30.93446	-97.59271	701.552	885	Middle Trinity	Not Tested	Not Tested	1885	949		8.28	360	120	0.003	0.2	0.07	361	3.15					
1/4/2023	E-06-005P	30.933056	-97.606402	748.195	880	Middle Trinity	Not Tested	Not Tested	5510	2910		8.42	500	340	0.003	0.1	0.11	1522	6.2					
1/4/2023	E-02-3193G	30.93427	-97.836534	993.113	530	Middle Trinity	Not Tested	Not Tested	1497	747		8.57	320	240	0.004	0.9	0.06	322	3.4					
1/5/2023	N2-20-002P	30.929997	-97.737794	815.943	710	Lower Trinity	Not Tested	Not Tested	2124	1073		8.95	440	80	0	5.7	0.75	9	5					
1/5/2023	N2-20-003P	30.928025	-97.744002	852.523	730	Lower Trinity	Not Tested	Not Tested	2087	1055		8.85	460	80	0.003	5.1	0.99	9	4					
1/5/2023	N2-20-004P	30.927005	-97.731903	809.88	730	Lower Trinity	Not Tested	Not Tested	2118	1064		8.86	420	100	0.005	1	0.31	10	5.5					
1/5/2023	N2-21-004P	30.923519	-97.735001	837.509	790	Lower Trinity	Not Tested	Not Tested	2123	1073		8.84	400	80	0	0.7	0.59	15	5					
1/10/2023	E-22-013P	30.947608	-97.589979	724.764	102	Edwards (BFZ	Not Tested	Not Tested	701	345		8.3	340	380	0.004	1.6	0.51	5	0					
1/10/2023	E-22-023P	30.93287	-97.59963	731.823	95	Edwards (BFZ	Not Tested	Not Tested	1170	579		8.16	360	400	0.003	2.2	0.37	96	0.5					
1/10/2023	E-06-023P	30.940965	-97.605367	717.72	840	Middle Trinity	Not Tested	Not Tested	2490	1260		8.2	400	400	0.039	0.7	0.07	632	2					
1/10/2023	E-17-016P	30.934955	-97.606342	725.625	865	Middle Trinity	Not Tested	Not Tested	1449	722		8.5	360	120	0.001	2.5	0.17	174	2.5					
1/10/2023	E-22-081P	30.940195	-97.605907	715.442	858	Middle Trinity	Not Tested	Not Tested	1878	942		8.38	340	120	0	0.2	0.11	330	2.5					
1/12/2023	E-20-010P	30.94337	-97.59093	719.089	900	Middle Trinity	Absent	Present	1548	786		8.65	340	100	0.127	1.46	0.25	191	2.5					
1/20/2023	E-17-067G	30.934479	-97.536254	671.366	140	Edwards (BFZ	Not Tested	Not Tested	652	318		8.21	300	280	0.004	1.5	0.14	23	1.5					
1/20/2023	E-17-067G	30.934479	-97.536254	671.366	140	Edwards (BFZ	Not Tested	Not Tested	652	318		8.21	300	280	0.004	1.5	0.14	23	1.5					
1/20/2023	N2-14-005P	30.981208	-97.329998	458.687	2850	Lower Trinity	Not Tested	Not Tested	2087	1047		8.59	380	100	0.003	0.1	0.15	250	2					
1/26/2023	E-19-128P	31.079116	-97.444345	504.199	40	Alluvium	Present	Absent	712	348		8.09	280	340	0.003	3.3	0.17	15	0.3					
1/26/2023	E-22-087P	30.950146	-97.734113	710.96	600	Lower Trinity	Not Tested	Not Tested	2470	1261		8.72	220	120	0.004	0.5	0.14	10	6					
1/26/2023	E-23-001G	30.934336	-97.703513	839.634	680	Middle Trinity	Not Tested	Not Tested	2220	1129		8.72	340	200	0.001	0.3	0.2	650	5.9					
2/3/2023	E-06-005P	30.933056	-97.606402	748.195	880	Middle Trinity	Not Tested	Not Tested	3950	2052	2.09	9.08	360	280	0.003	1.6	0.12	1152	4.15					
2/3/2023	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Present	Absent	1407	699	0.7	8.96	380	80	0.002	0	0.44	83	2.7					
2/3/2023	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Present	Absent	1407	699	0.7	8.96	380	80	0.002	0	0.44	83	2.7					
2/3/2023	E-23-004GU	30.92032	-97.624425	772.391	860	Middle Trinity	Not Tested	Not Tested	1526	762	0.77	8.89	340	100	0.026	1.5	0.21	238	2.8					
2/9/2023	E-22-015P	30.91109	-97.63889	716.269	770	Middle Trinity	Not Tested	Not Tested	1630	816	0.82	8.43	360	120	0.006	0.2	0.16	289	2.7					
2/9/2023	E-22-016P	30.914045	-97.63413	732.724	790	Middle Trinity	Not Tested	Not Tested	1448	722	0.73	8.47	360	120	0.002	0.5	0.14	199	2.45					
2/9/2023	E-22-089P	30.91882	-97.61501	732.522	852	Middle Trinity	Not Tested	Not Tested	2280	1143	1.16	8.49	400	100	0.004	0.2	0.3	457	3.8					
2/9/2023	E-22-105P	30.936269	-97.594557	696.275	870	Middle Trinity	Not Tested	Not Tested	2182	1104	1.12	8.35	380	140	0.001	0.4	0.01	453	3.4					
2/16/2023	E-22-058P	30.939103	-97.591391	696.948	890	Middle Trinity	Not Tested	Not Tested	3510	1813	1.84	8.16	500	340	0	1.8	0.17	862	4.55					
2/16/2023	E-23-008G	31.055285	-97.596278	736.665	760	Middle Trinity	Not Tested	Not Tested	5130	2690	2.75	8.17	540	320	0.006	1.7	0.06	1488	7.45					
2/21/2023	E-22-010P	30.93819	-97.58566	687.556	880	Middle Trinity	Not Tested	Not Tested	1480	739	740	8.73	380	80	0.004	1.7	0.11	181	2.7		12.9	5.98	56.7	81.7
2/24/2023	E-21-083P	31.031846	-97.903601	962.5	420	Middle Trinity	Not Tested	Not Tested	3170	1631	1.66	8.46	360	360	0.01	0.331	0.27	539	4.45					
2/27/2023	N3-22-001P	30.934963	-97.536749	667.635	195	Edwards (BFZ	Not Tested	Not Tested	636	310	310	8.33	320	280	0.003	0.8	0.3	32	1.6					
3/2/2023	E-14-059P	30.977273	-97.816442	778.338	380	Middle Trinity	Not Tested	Not Tested	1300	647	650	8.92	380	80	0.002	0	0.4	128	3.5					
3/7/2023	E-17-067G	30.934479	-97.536254	671.366	140	Edwards (BFZ	Not Tested	Not Tested	641	312	310	8.36	300	320	0.002	0.7	0.08	24	2.1					
3/7/2023	E-17-067G	30.934479	-97.536254	671.366	140	Edwards (BFZ	Not Tested	Not Tested	641	312	310	8.36	300	320	0.002	0.7	0.08	24	2.1					
3/10/2023	E-22-076P	30.963053	-97.504685	555.666	120	Edwards (BFZ	Not Tested	Not Tested	1417	705	710	8.4	340	120	0.001	6.9	0.91	185	4.45					
3/10/2023	E-22-088P	30.99283	-97.46231	561.051	235	Edwards (BFZ	Not Tested	Not Tested	2230	1130	1140	8.42	380	100	0.093	0.8	0.43	331	5.35					
3/10/2023	E-22-098P	30.954203	-97.494329	566.647	190	Edwards (BFZ	Not Tested	Not Tested	1700	851	850	8.39	360	120	0.001	1	0.39	226	4.65					
3/10/2023	N3-22-001P	30.934963	-97.536749	667.635	195	Edwards (BFZ	Not Tested	Not Tested	642	312	310	8.32	340	300	0.002	0.9	0.32	29	1.65					
3/10/2023	E-22-110P	30.936428	-97.603806	702.576	850	Middle Trinity	Not Tested	Not Tested	1815	912	920	8.52	420	100	0.003	1.1	0.11	279	2.35					
3/14/2023	E-22-060P	30.937867	-97.680054	894.933	840	Middle Trinity	Not Tested	Not Tested	995	489	490	8.4	320	120	0.002	0.193	1.03	84	1.25		19.9	15.8	115	57.5
3/16/2023	E-19-076P	30.934088	-97.606992	735.318	870	Middle Trinity	Not Tested	Not Tested	1753	880	880	8.48	380	120	0.016	0	0.29	251	2.5					
3/16/2023	E-22-099P	30.973856	-97.612399	836.131	865	Middle Trinity	Not Tested	Not Tested	1225	607	610	8.53	360	120	0.005	0.3	0.36	160	2		6.64	8.38	48.2	81.4
3/16/2023	E-22-108P	30.932636	-97.674338	835.785	790	Middle Trinity	Not Tested	Not Tested	1138	562	560	8.49	340	120	0.135	1	0.18	155	1.5		10.6	13.1	76.6	72.5
3/17/2023	E-22-091P	30.956353	-97.557305	669.12	120	Edwards (BFZ	Not Tested	Not Tested	668	324	320	8.27	360	320	0.005	4.89	0.14	12	1.41		104	25	363	241
3/22/2023	E-22-100P	30.99996	-97.814428	843.226	575	Lower Trinity	Not Tested	Not Tested	2280	1156	1170	8.59	420	120	0.001	1.37	0.85	330	5.6	47	13.7	16.7	97.9	142
3/31/2023	E-03-449P	30.993922	-97.49459	577.795	960	Middle Trinity	Absent	Absent	1723	857	870	8.59	380	120	0.002	0.153	0.16	240	2.75		12.4	6.8	58.9	97
3/31/2023	E-03-449P	30.993922	-97.49459	577.795	960	Middle Trinity	Absent	Absent	1723	857	870	8.59	380	120	0.002	0.153	0.16	240	2.75		12.4	6.8	58.9	97
4/4/2023	E-23-011P	30.94332	-97.58442	706.387	902	Middle Trinity	Not Tested	Not Tested	1588	795	800	8.82	380	80	0.002	1.1	0.08	220	2.9		11.5	6.86	57	85.2
4/5/2023	E-17-051P	31.16049	-97.469629	669.048	910	Middle Trinity	Absent	Absent	2740	1400	1420	8.77	380	20	0.002	1.39	0.66	515	3.8	16.4	0.31	1.29	6.1	180
4/12/2023	E-22-046P	30.92997	-97.782966	879.934	550	Lower Trinity	Not Tested	Not Tested	1419	712	710	8.62	320	120	0	1.6	0.1	222	3.65		18.1	13.7	102	80.2

4/12/2023	E-22-070P	31.020469	-97.7628	887.803	610	Middle Trinity	Not Tested	Not Tested	2550	1301	1310	8.61	440	120	0.049	0.7	0.26	384	8		13	9.92	76.2	144
4/21/2023	E-02-049P	30.924348	-97.579208	695.248	140	Edwards (BFZ	Absent	Absent	697	339	340	8.34	320	340	0.001	4.77	0.29	16	0.21		98	22.9	339	4.42
4/25/2023	E-22-077P	30.93381	-97.59612	722.32	98	Edwards (BFZ	Not Tested	Not Tested	787	386	380	7.72	360	340	0.001	2	0.1	8	0.26		100	30.4	375	6.74
4/25/2023	E-03-330G	31.018955	-97.492715	584.591	90	wards Equival	Absent	Absent	683	332	330	8.59	300	80	0.005	3.7	0.24	6	0.55		1.84	2.67	15.6	35.1
4/25/2023	E-22-002P	31.022163	-97.899757	875.896	320	Upper Trinity	Not Tested	Not Tested	3300	1718	1750	7.81	340	400	0.039	0	0.04	514	2.4	282	75.6	48.4	388	136
4/27/2023	E-23-017P	30.879206	-97.385963	497.912	57.5	Alluvium	Not Tested	Not Tested	710	348	0.5	8.08	240	220	0.005	0.2	0.36	72	0.54		77.1	15.6	256	20.2
4/27/2023	E-02-037G	30.967071	-97.528161	618.93	92	Edwards (BFZ	Present	Present	714	349	350	7.98	340	360	0.004	2.4	0.09	11	0.84		54	14.3	145	3.4
4/27/2023	E-21-088P	30.959809	-97.760557	700.876	395	Middle Trinity	Not Tested	Not Tested	1669	837	840	8.45	260	100	0.001	1.9	0.11	211	8.35					
4/27/2023	E-22-083P	30.946574	-97.820177	976.599	610	Middle Trinity	Not Tested	Not Tested	1516	758	760	8.46	380	100	0.006	1.1	0.18	194	3.5		15.5	12.3	89.1	66.1
5/3/2023	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Absent	Absent	2168	1098	1110	8.36	400	140	0	0.141	0.02	372	3					
5/3/2023	E-22-052P	30.937452	-97.58623	699.563	890	Middle Trinity	Absent	Absent	2168	1098	1110	8.36	400	140	0	0.141	0.02	372	3					
5/17/2023	E-08-054P	30.935833	-97.598336	718.713	150	Edwards (BFZ	Not Tested	Not Tested	848	415	410	8.26	400	380	0	0.3	0.16	13	0.4					
5/17/2023	E-08-054P	30.935833	-97.598336	718.713	150	Edwards (BFZ	Not Tested	Not Tested	848	415	410	8.26	400	380	0	0.3	0.16	13	0.4					
5/17/2023	E-17-016P	30.934955	-97.606342	725.625	865	Middle Trinity	Not Tested	Not Tested	1498	748	750	8.63	400	160	0.003	1.1	0.05	174	2.9					
5/17/2023	E-17-016P	30.934955	-97.606342	725.625	865	Middle Trinity	Not Tested	Not Tested	1498	748	750	8.63	400	160	0.003	1.1	0.05	174	2.9					
5/18/2023	E-23-007P	30.977029	-97.643117	931.353	878	Middle Trinity	Not Tested	Not Tested	1094	540	540	9.13	380	60	0.004	0.188	0.7	103	1.55	68	8.56	5.3	43.2	43.9
6/1/2023	E-22-031P	30.971715	-97.800854	771	580	Lower Trinity	Not Tested	Not Tested	2119	1071	1080	8.59	460	100	0.012	0	0.09	132	6.2	320	8.8	4.76	41.5	84
6/1/2023	E-22-026P	30.906995	-97.796649	877.416	540	Middle Trinity	Not Tested	Not Tested	2460	1249	1260	8.41	320	260	0.003	0.3	0.22	574	6.4	153	36.4	37.9	246	77.1
6/2/2023	E-09-045P	30.953638	-97.484074	550.264	380	Edwards (BFZ	Absent	Absent	2740	1397	1420	8.61	400	120	0.002	2.2	0.23	391	6.4	360	21.3	10.4	95.8	98.6
6/2/2023	E-23-033G	30.957088	-97.482653	549.541	300	Edwards (BFZ	Absent	Present	2670	1363	1380	8.58	380	100	0.046	1.4	0.03	380	4.85	340	20.4	7.5	81.7	105
6/9/2023	E-22-086P	31.024171	-97.903002	924.042	380	Middle Trinity	Not Tested	Not Tested	3330	1717	1740	8.31	320	380	1.356	1.8	0.03	513	2.8	561	69.5	50.9	383	119
6/9/2023	E-22-096P	31.03732	-97.907398	969.777	440	Middle Trinity	Not Tested	Not Tested	4450	2320	2360	8.4	340	340	0.788	1.4	0.14	576	3.15	861	61	38.3	310	164
6/14/2023	E-23-014P	30.99544	-97.50208	583.618	160	Edwards (BFZ	Not Tested	Not Tested	749	366	360	8.43	320	360	0	0.348	0.13	66	2.4	1.83	0	255	1050	5.57
6/16/2023	E-22-080P	30.905771	-97.778295		600	Lower Trinity	Not Tested	Not Tested	2022	1021	1030	8.82	460	60	0.009	0	0.05	80	3.85	329	7.29	1.84	25.8	82.7
6/16/2023	E-22-102P	30.913372	-97.742969	909.157	848	Lower Trinity	Not Tested	Not Tested	2176	1101	1110	8.94	440	40	0	1	0.15	1	4.65	437	4.56	0	11.4	89
6/19/2023	E-23-013P	30.942713	-97.819925	953.492	600	Middle Trinity	Not Tested	Not Tested	1638	821	830	8.49	340	140	0.011	0	0.54	275	3.85	138	23.6	17.3	130	59.6
6/19/2023	E-23-021P	30.921701	-97.782623	789.384	440	Middle Trinity	Not Tested	Not Tested	1212	598	600	8.63	360	80	0.003	0.9	0.41	120	3.35	90.1	4.47	4.02	27.7	44.6
6/22/2023	E-23-015P	31.00775	-97.88579	769.415	200	Middle Trinity	Not Tested	Not Tested	965	475	470	8.24	340	300	0.005	1.3	0.38	60	1.4	61.2	60.1	33.6	288	16.3
6/22/2023	E-19-198GU	31.008939	-97.886683	792.278	220	Upper Trinity	Not Tested	Not Tested	1162	574	570	8.21	360	240	0.005	0.9	0.06	79	2.05	84.5	37.5	19.9	175	31.4
6/30/2023	E-11-052P	30.909838	-97.772979	857.491	710	Lower Trinity	Not Tested	Not Tested	2106	1064	1070	8.47	380	100	0.007	0.7	0.17	79	4.45	380	6.79	5.04	37.7	72
6/30/2023	E-02-2035G	30.9119	-97.773968	879.118	600	Middle Trinity	Not Tested	Not Tested	2460	1252	1270	8.34	360	240	0.005	0.06	0.3	607	7.3	119	11.2	52.1	242	69.2
6/30/2023	E-22-103P	30.932306	-97.718083	758.05	570	Middle Trinity	Not Tested	Not Tested	2089	1054	1070	8.56	360	140	0.004	0.4	0.03	535	6.4	89.9	24.7	16.7	131	67.1
6/30/2023	E-23-016P	30.916911	-97.713153	896.503	770	Middle Trinity	Not Tested	Not Tested	939	461	460	8.5	340	120	0	2.2	0.24	106	0	56.7	21.7	14.9	116	23.3
7/6/2023	E-21-030P	30.97728	-97.813877	788.653	565	Lower Trinity	Absent	Absent	2940	1504	1530	9.15	520	40	0.003	1.1	0.39	78	5.8	545	0.507	0.665	4	88.4
7/13/2023	E-22-019P	30.912035	-97.561029	707.703	150	Edwards (BFZ	Not Tested	Not Tested	640	311	310	8.18	300	300	0.011	2.8	0.08	9	0.3	12.1	95	17.9	311	4.12
7/13/2023	E-23-029P	31.014361	-97.461105	501.659	102	Edwards (BFZ	Not Tested	Not Tested	750	364	360	8.47	300	280	0	0.4	0.17	75	1.7	12.6	58.3	35.5	292	9.8
7/18/2023	E-03-005G	31.052944	-97.470211	571.525	0	wards Equival	Present	Absent	694	338	340	8.24	300	320	0	3.6	0.41	20	3.75	15.5	83.6	30.2	333	7.38
7/18/2023	E-05-110P	30.977721	-97.803305	826.899	460	Middle Trinity	Absent	Absent	1597	798	800	9.07	380	120	0	0.3	0.2	150	0.74	250	7.72	10.3	61.6	47.1
7/20/2023	E-02-579G	31.034484	-97.878981	941.751	362	Upper Trinity	Absent	Absent	3330	1711	1740	8.47	340	40	0.005	1.5	0.07	619	3.5	582	3.53	1.97	16.9	110
7/25/2023	E-23-025P	30.966471	-97.642895	873.391	806	Middle Trinity	Not Tested	Not Tested	1231	625	630	8.49	380	120	0.113	0.002	0.12	160	2.25	89	18.8	8.75	82.8	33.9
7/27/2023	E-23-037P	30.9308	-97.60569	751.762	890	Middle Trinity	Not Tested	Not Tested	1795	900	910	8.65	360	120	0.002	0.177	0.11	305	2.9	165	20	12.7	102	47.1
8/2/2023	N2-02-022G	31.19669	-97.45956	714.888	1192	Lower Trinity	Not Tested	Not Tested		1020			368		0.01	0.01		200	1.45	212	5.91		14.8	378
8/2/2023	N2-13-001P	31.205449	-97.442734	722.162	1260	Lower Trinity	Not Tested	Not Tested		967		8.45	357		0.01	0.01		191	1.26	198	5.3		13.2	363
8/9/2023	E-23-022P	31.16125	-97.47401	654.263	900	Middle Trinity	Not Tested	Not Tested	2580	1316	1330	8.75	380	120	0.007	0.2	0.13	460	2.9	298	16.1	8.04	73.2	66.2
8/9/2023	E-23-034P	30.90296	-97.69391	893.4	810	Middle Trinity	Not Tested	Not Tested	1061	522	520	8.58	340	120	0	1.1	0.18	86	1.45	63.4	20.4	11.4	97.6	31.1
8/11/2023	E-02-002G	31.02642	-97.47849	632.173	85	wards Equival	Not Tested	Not Tested	679	331	330	8.49	320	40	0	1.01	0	29	1.32	4.68	0.75	0.29	3.06	21.6
8/15/2023	E-23-041P	30.92482	-97.578127	690.765	140	Edwards (BFZ	Not Tested	Not Tested	931	458	460	8.1	320	380	0.007	6	0.37	72	0.2	56.6	126	22.2	406	7.09
8/21/2023	E-23-057P	30.945727	-97.818658	974.329	600	Middle Trinity	Not Tested	Not Tested	1859	938	950	8.33	360	300	0.031	0.251	0.6	384	4.4	118	47.3	46.3	308	36.3
9/7/2023	E-06-072P	30.929023	-97.602906	734.355	880	Middle Trinity	Not Tested	Not Tested	1488	742	750	8.49	360	100	0.006	0.151	0.04	193	3.1	128	14.5	8.46	71	36.2
9/8/2023	E-22-062P	30.897695	-97.768619	885.827	700	Lower Trinity	Not Tested	Not Tested	2076	1048	1060	8.91	400	80	0	0.165	0	30	4.05	414	5.53	3.13	26.7	48.9
9/12/2023	E-23-045P	31.06088	-97.87984	988.229	420	Upper Trinity	Not Tested	Not Tested	3680	1903	1930	8.49	320	200	0.039	0.226	0.03	629	3.1	541	33.1	25.9	189	79.6
9/22/2023	E-02-1965G	30.994234	-97.383349	501.241	63	Austin Chalk	Not Tested	Not Tested	924	454	450	8.19	180	260	0	24.6	0.13	45	0.5	5	121	6.23	328	13.7
9/23/2023	E-23-054P	30.94288	-97.59767	722.627	880	Middle Trinity	Not Tested	Not Tested	1670	831	830	8.7	260	80	0.005	1.1	0.06	185	2.5	164	12.2	6.57	57.6	43.2
9/28/2023	E-23-056P	30.948912	-97.589475	716.223	890	Middle Trinity	Not Tested	Not Tested	2750	1406	1430	8.4	420	380	0	0.394	0.15	578	2.65	172	77.9	41	363	54.2

Appendix J

Salado Spring Samples

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
Big	21-Sep-16	156	48	7.96	284	584	4.26	0.003	0.315			
Boiling	16-Feb-17	119	46	7.57	355	727	4.28	0.007	0.341			
	21-Feb-17	208	120	7.69	293	602	2.9	0.002	0.31			
-97.536574	25-May-17	150	32	8.02	286	587	1.8	0.006	0.3			
30.943783	30-May-17	2:50	30	7.65	287	592	4.5	0.000	0.01			
	29-Jun-17	925	28	7.58	286	587	2.1	0.001	0.3			
	5-Jul-17	10:56	25	7.94	293	602	4.02	0.003	0.26			
	11-Aug-17	1245	21	7.84	294	602	1.8	0.004	0.2			
	14-Aug-17	1102	16	7.64	295	606	2.1	0.002	0.3			
	12-Mar-18	200	12	8.02	290	600		0.002	0.3			
	19-Mar-18	301	22	7.83	291	597		0	0.3			
	23-Mar-18	216	12	7.93	292	601		0.003	NT			
	26-Mar-18	944	12	8.02	290	596		0.003	NT			
	11-Sep-18	1028	23	8.05	297	612		0	0.2			
	29-May-19	1120	122	8.2	320	667		0.005	0.5			
	22-Jun-20	942	11	8.06	287	590		0.008	NT			
	13-Jul-20	215	10	8.06	282	583	4.29	0.002	NT			
	28-Jul-20	1042	10	7.84	296	609	4.48	0.016	NT			
	31-Aug-20	926	6	8.2	290	595	3.8	0.024	NT	7.38	85.2	
	10-Sep-20	1017	18	7.98	298	612	3.1	0.022	NT	7.65	86.5	
	3-Dec-20	830	12	8.02	293	604	4.1	0.003	NT	7.49	84.7	
	2-Jun-21	113	116	7.99	300	616	3.3	0.004	NT	6.37	73.1	0.45
	22-Jun-21	203	547	8.09	295	605	4.7	0.006	NT	7.48	85.3	0.39
	23-Sep-21	1015	18	7.97	296	609	2.8	0.002	NT	7.56	85.7	0.13
	18-Oct-21	1007	14	7.98	298	615	2.9	0	NT	7.26	85.2	0.04
	20-Jun-22	913	11	7.92	298	614	2.4	0.001	NT	7.32	85.5	0.03
	19-Jan-23	1002	6.5	8.07	299	613	2.4	0.001	NT			
	19-Jan-23	333	6.2	8.08	298	613	4	0.001	NT			
	28-Feb-23	1045	9.1	8.21	289	593	2.2	0.005	NT	7.43	85.4	0.08
	7-Mar-23	147	19.9	7.97	298	616	3.5	0.006	NT	7.19	84.6	0.06
	11-Jul-23	943	3.04	8.11	299	615	3.6	0.005	NT	7.27	87.5	0.05
	20-Jul-23	944	4.25	7.88	298	614	4.2	0.003	NT	8.07	97.7	0.07
	4-Aug-23	901	3.74	8.09	300	616	2.9	0.001	NT	8.81	99.2	0.19
	12-Dec-23	324		8.28	296	609	3.5	0.003	NT			0.06

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
	21-Sep-16	214	48	7.77	284	584	4.34	0.003	0.346			
Side Spring	16-Feb-17	122	46	7.57	295	608	4.29	0.004	0.296			
	21-Feb-17	210	120	7.66	293	602	2.3	0.004	0.38			
-97.536704	25-May-17	153	32	7.96	286	593	2.8	0.001	0.2			
30.943861	30-May-17	2:52	30	7.81	279	575	2.1	0.000	0.01			
	29-Jun-17	928	28	7.63	284	582	1.8	0	0.3			
	5-Jul-17	10:57	25	7.89	291	599	3.96	0.005	0.22			
	11-Aug-17	1247	21	7.77	290	595	2.9	0.002	0.2			
	14-Aug-17	1105	16	7.63	294	603	2.2	0.004	0.3			
	12-Mar-18	203	12	8.07	294	605		0.006	0.3			
	19-Mar-18	303	22	7.87	291	597		0.002	0.3			
	23-Mar-18	218	12	8.03	293	603		0	NT			
	26-Mar-18	946	12	8.07	290	598		0.005	NT			
	11-Sep-18	1030	23	8.1	299	616		0.002	0.3			
	29-May-19	1122	122	8.04	297	611		0.004	0			
	22-Jun-20	941	11	8.11	285	587		0.003	NT			
	13-Jul-20	217	10	8.07	283	582	4.31	0.001	NT			
	28-Jul-20	1043	10	7.95	296	608	4.62	0.019	NT			
	31-Aug-20	928	6	8.29	287	592	4.3	0.016	NT	7.47	86.7	
	10-Sep-20	1020	18	7.92	297	611	3.9	0.018	NT	7.07	80.3	
	3-Dec-20	828	12	8.07	293	603	4.6	0.009	NT	7.54	83.6	
	2-Jun-21	116	116	8.09	301	621	1.5	0.008	NT	6.07	69.2	0.32
	22-Jun-21	207	547	8.14	293	604	3.4	0.005	NT	7.08	80.7	0.67
	23-Sep-21	1018	18	7.94	296	610	4.5	0.004	NT	8.5	96.4	0.06
	18-Oct-21	1008	14	7.96	299	614	2.4	0.004	NT	7.65	81.2	0
	20-Jun-22	916	11	7.92	299	616	2.9	0	NT	7.25	84.5	0.15
	28-Feb-23	1048	9.1	8.18	289	597	2.6	0.002	NT	7.45	83.8	0.21
	7-Mar-23	150	19.9	7.98	300	615	3.7	0.002	NT	7.2	84.2	0.25
	11-Jul-23	945	3.04	8.11	298	614	2.4	0.008	NT	7.48	88.5	0.16
	20-Jul-23	947	4.25	7.89	297	611	3.6	0.003	NT	8.26	98.9	0.2
	4-Aug-23	905	3.74	8.11	288	593	2.4	0.001	NT	8.65	97.1	0.31
	12-Dec-23	326		8.24	289	597	3.2	0.007	NT			0.14

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
Critchfield	21-Sep-16	244	48	7.73	285	586	4.18	0.003	0.368			
	16-Feb-17	136	46	7.56	295	607	4.3	0.005	0.262			
-97.534881	21-Feb-17	222	120	7.63	293	601	3.1	0.005	0.21			
30.943319	25-May-17	200	32	7.89	289	593	1.9	0.005	0.3			
	30-May-17	2:57	30	7.68	293	602	2.5	0.002	0.27			
	29-Jun-17	935	28	7.6	290	597	2.1	0.002	0.2			
	5-Jul-17	11:03	25	7.83	292	600	3.93	0.004	0.23			
	11-Aug-17	1257	21	7.75	295	608	3.4	0.002	0.2			
	14-Aug-17	1110	16	7.6	293	604	3.4	0.003	0.2			
	12-Mar-18	215	12	7.94	287	587		0.002	0.3			
	19-Mar-18	305	22	8.08	278	573		0.007	0.2			
	23-Mar-18	223	12	7.89	286	589		0.007	NT			
	26-Mar-18	950	12	7.98	290	598		0.009	NT			
	11-Sep-18	1038	23	8.06	287	592		0.011	0.3			
	29-May-19	1131	122	8	297	611		0.004	0			
	22-Jun-20	953	11	7.89	298	616		0.005	NT			
	13-Jul-20	224	10	7.83	296	608	4.16	0.002	NT			
	28-Jul-20	214	10	7.84	297	611	4.31	0.024	NT			
	31-Aug-20	940	6	8.13	289	593	4	0.016	NT	3.09	36.7	
	10-Sep-20	1030	18	7.86	297	612	2.3	0.017	NT	5.53	61.1	
	3-Dec-20	852	12	7.96	294	606	4.5	0.027	NT	7.64	75.2	
	2-Jun-21	125	116	7.9	307	637	2.8	0.002	NT	6.21	71.2	0.25
	22-Jun-21	218	547	8.05	302	623	3.1	0	NT	6.45	73.9	0.58
	23-Sep-21	1027	18	7.93	297	611	3.4	0	NT	8.5	96	0.06
	18-Oct-21	1015	14	7.96	298	614	3.5	0	NT	6.18	71.5	0.03
	20-Jun-22	926	11	7.9	303	622	2.7	0.007	NT	4.22	65.3	1.75
	19-Jan-23	940	6.5	8.07	298	611	2.9	0.02	NT			
	19-Jan-23	315	6.2	8.09	290	598	2.3	0.023	NT			
	28-Feb-23	1058	9.1	8.18	287	589	3.2	0.016	NT	4.67	63.6	0.36
	7-Mar-23	158	19.9	7.98	297	611	1.3	0.016	NT	4.85	62.7	0.35
	11-Jul-23	955	3.04	8.1	306	628	0.4	0.012	NT	6.85	85.6	1.29
	20-Jul-23	1001	4.25	7.89	320	658	0.4	0.007	NT	5.8	72	2.14
	4-Aug-23	918	3.74	8.06	348	715	0	0.003	NT	5.24	65.2	4.03
	12-Dec-23	332		8.09	348	714	0	0	NT			1.65

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
	21-Sep-16	251	48	7.92	288	598	4.08	0.003	0.273			
Doc Benedict	16-Feb-17	142	46	7.55	295	608	3.99	0.005	0.345			
	21-Feb-17	245	120	7.62	297	602	2.3	0.004	0.39			
-97.534948	25-May-17	205	32	7.82	296	611	2.3	0.006	0.3			
30.943967	30-May-17	3:06	30	8.09	288	592	2.3	0.002	0.42			
	29-Jun-17	940	28	7.55	271	558	2.1	0.008	0.2			
	5-Jul-17	11:07	25	7.81	293	603	3.85	0.004	0.26			
	11-Aug-17	100	21	7.71	295	602	3.5	0.001	0.2			
	14-Aug-17	1115	16	7.58	293	602	2.1	0.002	0.3			
	12-Mar-18	219	12	7.95	290	599		0	0.3			
	19-Mar-18	315	22	8.01	286	590		0.012	0.3			
	23-Feb-18	228	12	7.89	294	604		0	NT			
	26-Mar-18	953	12	7.96	290	596		0.001	NT			
	11-Sep-18	1045	23	7.92	294	604		0	0.3			
	29-May-19	1140	122	7.96	305	628		0.001	0.5			
	22-Jun-20	955	11	7.89	395	607		0.006	NT			
	13-Jul-20	227	10	7.95	287	592	4.31	0.001	NT			
	28-Jul-20	158	10	7.82	297	612	4.47	0.02	NT			
	31-Aug-20	945	6	8.09	292	601	3.9	0.027	NT	8.23	95.1	
	10-Aug-20	1037	18	7.79	297	611	2.7	0.017	NT	7.42	83.9	
	3-Dec-20	858	12	7.95	294	604	4.7	0.003	NT	7.49	83.4	
	2-Jun-21	134	116	7.88	303	624	2.2	0.007	NT	6.22	71.7	0.61
	22-Jun-21	225	547	8.03	303	620	1.1	0.004	NT	6.08	70.5	0.69
	23-Sep-21	1032	18	7.93	298	613	3.2	0.005	NT	8.49	96.1	0.14
	18-Oct-21	1018	14	7.94	299	615	1.9	0.006	NT	7.24	81.3	0.16
	20-Jun-22	930	11	7.92	303	623	2.8	0.005	NT	6.82	77.4	0.6
	19-Jan-23	946	6.5	8.08	305	628	3.5	0	NT			
	19-Jan-23	319	3.2	8.09	303	622	3	0.003	NT			
	28-Feb-23	1102	9.1	8.16	290	598	2.5	0.005	NT	7.28	85.6	0.22
	7-Mar-23	204	19.9	7.99	298	614	3.6	0	NT	7.37	86.3	0.26
	11-Jul-23	1000	3.04	8.1	299	616	2.7	0.009	NT	7.41	92.7	0.44
	20-Jul-23	1005	4.25	7.95	299	614	2.2	0.009	NT	8.64	96.3	0.94
	4-Aug-23	924	3.74	8.13	298	614	2	0.008	NT	8.43	95.2	1.37
	12-Dec-23	334		8.2	294	604	4.6	0.002	NT			0.01

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
Anderson	21-Sep-16	300	48	7.87	284	584	4.18	0.005	0.354			
	16-Feb-17	152	46	7.72	297	612	3.99	0.008	0.473			
-97.534503	21-Feb-17	251	120	7.58	295	608	2.4	0.002	0.44			
30.944111	25-May-17	210	32	7.78	295	606	0.9	0.006	0.3			
	30-May-17	3:13	30	7.86	294	604	3.9	0.000	0.27			
	29-Jun-17	945	28	7.59	291	599	2.5	0	0.3			
	5-Jul-17	11:11	25	7.79	292	602	3.88	0.004	0.26			
	11-Aug-17	105	21	7.59	292	600	1.7	0.11	0.1			
	14-Aug-17	1120	16	7.66	291	598	1.9	0.006	0.3			
	12-Mar-18	222	12	7.84	288	596		0.009	0.3			
	19-Mar-18	318	22	7.96	287	589		0.004	0.3			
	23-Mar-18	232	12	7.86	288	594		0.002	NT			
	26-Mar-18	956	12	7.91	290	598		0.001	NT			
	11-Sep-18	1052	23	7.93	291	599		0.003	0.3			
	29-May-19	1146	122	7.93	298	616		0.003	0.5			
	22-Jun-20	1000	11	7.84	298	614		0.01	NT			
	13-Jul-20	231	10	7.88	296	609	4.1	0.022	NT			
	28-Jul-20	202	10	7.74	297	612	4.47	0.023	NT			
	31-Aug-20	953	6	7.98	299	614	3.3	0.34	NT	7.79	89.8	
	10-Sep-20	1042	18	7.81	297	611	3	0.021	NT	7.18	81.1	
	3-Dec-20	906	12	7.91	294	606	3.1	0.006	NT	7.3	81	
	2-Jun-21	140	116	7.8	309	627	1.5	0.006	NT	7.83	95.2	0.45
	22-Jun-21	237	547	8.02	290	596	3.8	0.002	NT	7	81.2	4.97
	23-Sep-21	1040	18	7.92	298	612	2.3	0.004	NT	8.73	98.5	0.29
	18-Oct-21	1022	14	7.93	298	612	3	0.007	NT	7.42	85.6	0.02
	20-Jun-22	936	11	7.92	301	620	2.9	0.002	NT	7.35	81.4	0.2
	19-Jan-23	952	6.5	8.06	303	623	3.7	0.003	NT			
	19-Jan-23	324	6.2	8.08	301	620	3.1	0	NT			
	28-Feb-23	1107	9.1	8.14	292	601	2.9	0.001	NT	7.25	83.3	0.3
	7-Mar-23	210	19.9	7.99	297	610	3.6	0.003	NT	7.38	83.6	0.27
	11-Jul-23	1005	3.04	8.12	298	613	2.2	0.006	NT	7.57	93.3	0.43
	20-Jul-23	1012	4.25	7.97	297	612	2.9	0.006	NT	8.69	96.5	0.56
	4-Aug-23	928	3.74	8.13	297	612	3.5	0.003	NT	8.53	96.2	0.42
	12-Dec-23	338		8.17	296	608	2.3	0.008	NT			0.08

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
Upstream	21-Sep-16	224	48	8.05	241	499	2.58	0.008	0.235			
	16-Feb-17	124	48	7.59	242	500	2.05	0.017	0.326			
-97.536988	21-Feb-17	212	120	7.73	201	417	0.1	0.002	0.3			
30.943897	25-May-17	156	32	8.22	240	493	1.9	0.003	0.3			
	30-May-17	2:55	30	7.9	232	479	2.4	0.005	0.26			
	29-Jun-17	930	28	7.61	250	514	2.3	0.008	0.3			
	5-Jul-17	10:58	25	7.83	265	546	3.1	0.012	0.23			
	11-Aug-17	1250	21	7.66	235	487	2.1	0.014	0.1			
	14-Aug-17	1107	16	7.71	254	524	1.2	0.013	0.3			
	12-Mar-18	205	12	8.32	242	499		0.007	0.2			
	19-Mar-18	305	22	7.93	224	463		0.008	0.2			
	23-Mar-18	220	12	8.23	242	603		0.006	NT			
	26-Mar-18	948	12	8.15	241	498		0.008	NT			
	11-Sep-18	1032	23	8.38	162	338		0.013	0			
	22-Jun-20	939	11	8.25	259	534		0.003	NT			
	13-Jul-20	205	10	8.38	262	540	3.48	0.019	NT			
	28-Jul-20	1032	10	8.44	275	575	3.33	0.044	NT			
	31-Aug-20	912	6	7.98	267	551	2.9	0.052	NT	7.7	96.4	
	10-Sep-20	950	18	8.56	274	562	2.5	0.032	NT	5.83	65	
	3-Dec-20	1110	12	8.67	262	543	1.4	0.016	NT	9.94	96.7	
	2-Jun-21	100	116	8.32	207	430	0.3	0.006	NT	6.94	79.2	12.73
	22-Jun-21	153	547	8.61	109	229	0	0.02	NT	6.46	79.9	257
	23-Sep-21	1000	18	8	295	606	2	0.006	NT	8.73	98.1	0.81
	18-Oct-21	955	14	8.02	278	574	2.4	0.006	NT	8.14	93.1	1.02
	20-Jun-22	900	11	8.2	290	595	1.7	0.025	NT	7.86	91.3	3.77
	28-Feb-23	1036	9.1	8.21	243	506	0.9	0.01	NT	6.88	78.2	2.38
	7-Mar-23	135	19.9	8.3	238	491	0.5	0.007	NT	6.95	80.1	2.27
	11-Jul-23	950	3.04	8.29	268	553	1.1	0.009	NT	8.51	98	2.61
	20-Jul-23	933	4.25	7.98	263	546	2.5	0.015	NT	7.72	96.5	4.74
	4-Aug-23	846	3.74	8.23	274	564	1.1	0.032	NT	8.76	99.6	9.97
	12-Dec-23	319		8.52	291	601	3.5	0.003	NT			0.19

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
	21-Sep-16	315	48	7.99	253	523	2.99	0.005	0.312			
	16-Feb-17	156	46	7.81	253	522	2.43	0.014	0.159			
Down stream	21-Feb-17	254	120	7.81	211	438	1.20	0.008	0.260			
	25-May-17	215	32	7.78	257	529	2.00	0.005	0.200			
-97.533989	30-May-17	3:17	30	7.86	257	530	2.60	0.003	0.290			
39.944543	29-Jun-17	950	28	7.61	292	601	2.4	0.004	0.2			
	5-Jul-17	11:13	25	7.8	278	573	3.56	0.006	0.22			
	11-Aug-17	110	21	7.69	263	542	2.4	0.005	0.2			
	14-Aug-17	1125	16	7.73	272	563	2.2	0.01	0.2			
	12-Mar-18	230	12	7.83	270	557		0.002	0.3			
	19-Mar-18	322	22	8.35	260	529		0.003	0.3			
	23-Mar-18	235	12	7.89	270	557		0.005	NT			
	26-Mar-18	1000	12	7.94	269	554		0.006	NT			
	11-Sep-18	1056	23	8.02	191	396		0.012	0.1			
	22-Jun-20	1005	11	7.86	283	581		0.009	NT			
	13-Jul-20	234	10	7.87	291	599	3.91	0.024	NT			
	28-Jul-20	207	10	7.84	277	570	3.84	0.017	NT			
	31-Aug-20	1002	6	7.92	291	603	3.8	0.035	NT	8.34	101.1	
	10-Sep-20	1051	18	7.8	269	556	3	0.033	NT	8.13	91.5	
	3-Dec-20	912	12	7.91	281	578	4	0.17	NT	8.91	91.2	
	2-Jun-21	149	116	7.92	220	456	1.6	0.005	NT	8.09	92.3	8.69
	22-Jun-21	241	547	8.24	130	291	0	0.023	NT	6.52	80.4	208
	23-Sep-21	1050	18	7.91	293	605	3.4	0.004	NT	8.85	99.8	1.01
	18-Oct-21	1028	14	7.97	274	564	1.4	0.008	NT	8.54	90.8	0.7
	20-Jun-22	942	11	7.92	290	600	2.1	0.006	NT	8.45	88.7	0.77
	28-Feb-23	1112	9.1	8.17	267	550	2.9	0.002	NT	8.22	91.4	0.842
	7-Mar-23	215	217	8.2	272	554	3.1	0.004	NT	8.07	92.3	0.872
	11-Jul-23	1012	3.04	8.1	288	594	3.6	0.002	NT	8.03	98.5	0.67
	20-Jul-23	1020	4.25	8.02	287	590	3.4	0.004	NT	7.98	97.1	0.7
	4-Aug-23	936	3.74	8.13	288	593	3.8	0.002	NT	8.33	98.3	1.72
	12-Dec-23	342		8.23	289	594	3.2	0.004	NT			0.15

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
	13-Nov-15	unk	unk	unk	279	575	4.00	0.002	0.200			
	22-Sep-16	400	48	7.69	285	588	4.32	0.004	0.341			
Cave Well	16-Feb-17	214	46	7.65	294	608	4.31	0.005	0.293			
	21-Feb-17	308	120	7.75	293	603	4.20	0.000	0.400			
-97.53777	25-May-17	225	32	7.77	292	601	2.20	0.003	0.300			
30.942044	30-May-17	3:29	30	7.66	292	602	1.30	0.003	0.020			
	11-Aug-17	140	21	7.6	293	603	3	0.003	0.1			
	19-Mar-18	333	22	7.9	284	582		0.001	0.3			
	23-Mar-18	242	12	7.87	292	601		0.002	NT			
	26-Mar-18	1009	12	7.89	290	599		0.002	NT			
	11-Sep-18	1110	23	7.93	289	594		0.004	0.3			
	22-Jun-20	1027	11	7.83	296	609		0.005	NT			
	13-Jul-20	242	10	7.85	297	610	4.41	0.019	NT			
	28-Jul-20	222	10	7.81	296	611	4.63	0.026	NT			
	31-Aug-20	1015	6	7.9	296	609	4	0.028	NT	7.38	85.2	
	10-Sep-20	1100	18	7.79	295	602	4.2	0.029	NT	6.89	78	
	3-Dec-20	1120	12	7.93	293	605	4.7	0.015	NT	7.67	85.6	
	2-Jun-21	215	116	7.87	298	614	3.6	0.003	NT	8.4	97.7	0.14
	22-Jun-21	258	547	8	294	605	3.7	0.008	NT	7.57	86.5	0.8
	23-Sep-21	1104	18	7.9	298	611	3.4	0.002	NT	8.56	97	0
	18-Oct-21	1037	14	7.95	298	612	3.2	0.004	NT	8.23	95.2	0.02
	20-Jun-22	956	11	7.92	302	622	2.7	0.004	NT	7.89	87.5	0.2
	11-Jul-23	1026	3.04	8.08	298	613	3.7	0.003	NT	8.02	97.8	0.15
	20-Jul-23	1036	4.25	7.97	299	614	3.4	0.007	NT	8.62	97.4	0.33
	4-Aug-23	947	3.74	8.13	296	610	3	0.002	NT	8.3	93.7	0.06
	12-Dec-23	356		8.24	295	608	3.3	0.001	NT			0.05

Location	Date	Time	CFS	PH	TDS	Cond.	Nitrates	Nitrites	Fluoride	DO mg/L	DO %	Turbidity
Robertson	12-Mar-18	145	12	8.58	297	617	7.3	0	0			
	19-Mar-18	254	22	7.89	285	589	5.7	. 11	0.3			
	23-Mar-18	210	12	8.56	294	615		0.001	NT			
-97.540273	26-Mar-18	935	12	8.53	311	653		0.003	NT			
30.944542	11-Sep-18	1017	23	8.5	205	424		0.027	0			
	22-Jun-20	932	11	8.48	284	592		0.003	NT			
	13-Jul-20	250	10	8.02	301	617	4.29	0.001	NT			
	28-Jul-20	235	10	8.03	297	611	4.61	0.021	NT			
	10-Sep-20	950	18	8.56	274	562	2.5	0.007	NT	7.71	86	
	3-Dec-20	1130	12	8.26	291	599	2.9	0.025	NT	8.87	97	
	2-Jun-21	230	116	8.2	299	612	2.4	0.004	NT	7.04	85.5	1.75
	22-Jun-21	315	547	8.22	284	583	2.1	0.01	NT	7.54	86.3	0.38
	23-Sep-21	1113	18	8.08	297	612	4.7	0.005	NT	8.83	99.6	1.21
	18-Oct-21	1046	14	8.12	278	609	3.5	0.005	NT			0.35
	12-Dec-23	410		8.21	295	608	2.9	0.006	NT			0.79

Appendix K

Salado Salamander Monitoring
Final Report 2023



Peter H. Diaz
Texas Fish and Wildlife Conservation Office
San Marcos Texas

Jennifer Bronson Warren
Texas Parks and Wildlife Department
Waco Texas

Justin Crow
San Marcos Aquatic Resource Center
San Marcos Texas

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Executive Summary

Monitoring of the Salado salamander (*Eurycea chisholmensis*) concluded in January of 2024 finalizing the ninth year of monitoring at the Salado Downtown Spring Complex (DSC) and at Robertson Springs in Bell County (Figure 1). One Salado salamander was detected during 2023 at the DSC in Anderson Spring. There was no observable flow at Robertson Springs throughout 2023. Flow at Side Spring in the DSC has been variable due to infrequent rainfall and habitat changes, however higher flow rates similar to 2018 have not returned and no salamanders have been detected there this year. All salamanders were captured during active searches. This was the second lowest average year for discharge on Salado Creek during our monitoring period since 2015 beating out 2022 for the spot. In 2014, the average discharge of Salado Creek was 9.07 ft^3/s while in 2023 it is 10.43 ft^3/s with the data available from USGS (Gauge #08104300 accessed 1/22/2024).

Monitoring continued at Solana Ranch Spring #1 (SR1), providing a fifth year of quarterly data. A total of 121 detections, made up of 68 individual salamanders (determined through photographic analysis) were documented over the 2023 seasonal monitoring period. A total of nine juveniles were collected in April at SR1.

An additional spring site known as Kings Garden on the Tres Palacios Tract was added to the overall monitoring program for the Salado salamander in 2022. This site was visited four times during 2023 and during each visit salamanders were detected. A total of 64 detections, made up of 44 individual salamanders (determined through photographic analysis) were documented over the seasonal monitoring period. Recaptures were documented this year as the sample size of the population has increased. A major highlight this year was the addition of a new site to the documented population of Salado salamanders. This was at Keeta Spring.

Introduction

The Salado salamander (*Eurycea chisholmensis*) was first described as a species in 2000 (Chippindale et al. 2000). Although the salamander had been discovered earlier and was in a collection kept at Baylor University by B.C. Brown, no formal description had been made. In addition, collecting individuals from this population proved to be difficult (Chippindale et al. 2000). Due to the limited knowledge about the species (population density, life history patterns), potential threats (dewatering and urbanization), and limited geographical range, this species was listed as threatened by the U.S. Fish and Wildlife Service (USFWS) on February 21, 2014.

Critical habitat was designated in 2021 and more information can be found at *http://www.fws.gov/southwest/es/austintexas*.

The Salado salamander is the most northern population of fully aquatic *Eurycea* in Texas. The species is highly restricted geographically and is hypothesized to have a very low population within Central Texas (Norris et al. 2012). Nice et al. (2021) presented an analysis on the effective population size, showing that the northern populations (i.e. DSC, Robertson, Solana) have a lower effective population size compared to sampled populations in the southern group of Salado salamanders (Cowan Creek Spring and Twin Springs).

Over nine years of monitoring by the TXWFCO, we have added two new Salado salamander locations, one at Anderson Spring in the DSC and one at Keeta Spring further upstream along Salado Creek in proximity of Kings Garden. There have been three peer-reviewed publications relating to the Salado salamander (Diaz et al. 2020; Nice et al. 2021; Diaz et al. 2023). In addition, five peer-reviewed publications describing the aquifer community and species present in this northern section of the Edwards Aquifer have come from the Salado salamander work (Okan Külköylüoğlu et al. 2017; Gibson et al. 2020; Alvear, Dominique et al. 2020a; Alvear, Dominique et al. 2020b; Perez et al. 2023). This information will be valuable and hopefully aid in management decisions as the Village of Salado, Bell County and the northern portion of Williamson County continue to expand their conservation into the future.

Before monitoring by TXFWCO, an active research or monitoring program had not been established for this species. In addition, the known community structure of aquifer-dwelling species in the northern segment of the aquifer was not well studied. Due to these gaps in scientific knowledge of the species and the aquifer, the TXFWCO has been collecting data on habitat associations, reproduction, seasonality, surface densities, and the aquifer community with the intent of creating a long-term data set for the species within its known geographical range.

Methods

Sampling was conducted quarterly this year at the DSC, Robertson Springs, Kings Garden, and SR1 (Figure 1). The DSC consists of Big Boiling, Side Spring, and Anderson Spring. Keeta Spring was sampled three times when schedules with the landowner and monitoring staff overlapped. Sampling at Kings Garden Spring was sampled quarterly and followed the same methods as Solana listed below. Timed searches were used at Robertson, while Side and Anderson spring were searched entirely due to the small area of the springs.

Solana Ranch Spring #1 was sampled from the spring orifice to a location where the spring run fans out and enters the main channel. Areas where the water emerged from under the gravel and cobble were searched. Another smaller spring adjacent to the main spring was also entirely searched (from spring run to spring orifice) each visit. Sampling at Kings Garden was done from the spring orifice down to a pool approximately 20 feet from the opening. The pool creates a shift from a cobble and gravel run to silt substrates, which appear to be present due to the slower flowing water in the pool.

All springs were actively searched by uniformly turning over rocks and sifting through vegetation and debris. During timed searches all mesohabitats were searched for salamanders. Salamanders were captured using small aquarium nets. Captured salamanders were placed into mesh bags and kept in the spring run for processing (see below).

If a salamander was captured during any survey the primary substrate and vegetation were documented. If a salamander was captured in the drift net placed over an orifice, a designation of cave conduit was applied for substrate. All captured salamanders had two sets of photographs taken. First, photographs alongside a ruler were taken to determine total length of the salamander (mm) using the program ImageJ (Schneider et al. 2012). Following that, a close-up photograph of the head was taken and analyzed with the program WildID (Bolger et al. 2012) to determine if any individuals were recaptures (Bendik et al. 2013).

Drift nets with 250 µm mesh were positioned over the spring opening and used for passive sampling at Robertson and SR1 when spring flow was available. Nets were left in place for seven days to passively collect organisms as part of the monitoring regime. Aquatic invertebrates captured during this sampling were taken back to the lab, sorted, identified, and enumerated. Most taxa were photographed using a dissecting scope with certain taxa sent to experts for identification.

Due to low surface densities encountered at the sites over the years, the data have been collapsed and examined cumulatively. As in previous reports the overall dataset has been updated to include the 2023 collections. Data was grouped into seasonal blocks for a size distribution analysis. The relative abundance of salamanders was calculated for each season separated into size classes. Size classes are from 0-19, 20-29, 30-39, 40-49, 50-59, 60-69 mm; 1, 2, 3, etc. respectively. Associated substrate and vegetation percentages were updated to reflect the new collections.

Solana Ranch Spring #1 statistical analysis included probability of capture from quarterly data collected from 2020 – 2023. The probability calculations marked each time a salamander was captured and identified as "1", therefore the capture history of a salamander for 2019 may resemble 101001 (six number places for six events, 0 = not detected, 1 = detected). For this example, the probability is the sum of the captures divided by the number of events, therefore, 0.5. Examining the average probabilities of capture history provides some insight into the effort of sampling between years.

Water level and flow data was collected from the Cemetery Well (Monitor well #5804628) and from the USGS gauge on the Salado Creek (USGS #08104300) from 2014 to 2022. This data was plotted with the total collection of salamanders from each year of sampling since 2015. This analysis was conducted to determine if there is an indicator for the issuance of spring flow at Robertson, and to identify preliminary trends associated with the salamander collections.

Results

Robertson and Downtown Spring Complex

No spring flow has been detected at Robertson Spring Complex since approximately June of 2022. The last collection of a salamander there was in April of 2022 from Middle (Bathtub) Spring. The detection of the salamanders at Robertson from all known springs had been decreasing since the end of 2019; with three in 2020 and two in 2021. The DSC flow has been continuous except for Critchfield. The flow at Side Spring has been decreasing and sediment has been filing in the spring run. Side Spring is also being cut back into the bank.

A total of 181 Salado salamanders have been captured since 2015 from all Robertson and DSC sampling locations. Only three of these salamanders do not have associated substrate or vegetation data, leaving 178 salamanders to examine with substrate and vegetation associations. A total of 67 (38%) salamanders were captured in drift nets, presumably leaving the aquifer. Of the remaining 111 salamanders caught on the surface, 73 (65%) were caught in gravel as the primary substrate, and 28 (25%) were caught in cobble as the primary substrate (Table 2). Other substrates included boulder, sand and silt. Data from past habitat sampling at Robertson Springs has shown around 50% of the substrate to be silt (Diaz et al. 2016). Salamanders have been

captured in different types of vegetation, but 47 (43%) were associated with watercress (*Nasturtium* sp.), and 43 (39%) were captured in areas with no vegetation.

From the 181 total individuals detected, 174 were used to examine the temporal shift in size for surface populations at the DSC and Robertson Springs. The updated temporal shift in surface population size classes displays a classic ecological progression from smaller to larger, over the course of the year (Figure 3). In spring, the majority of salamanders captured were in the smallest size class ranging from 10 to 19 mm. The spring trend line shows (dashed blue line) a minimal bimodal hump, with a smaller hump in the fifth size class. In summer (solid green line), the smallest size class is still prevalent by one salamander. However, the second hump in the third size class is comparable. During fall (dot and dash purple line), the community is dominated by the fourth size class. The winter trend line (dotted red) is similar to the fall line except the initial hump of the line is in the first size class rather than the second size class as in fall. Overall, more salamanders have been detected in spring, with the fewest detected in winter, and juveniles are more prevalent in spring with adults more dominant in fall and winter.

Solana Ranch Spring #1

A total of 121 salamanders were captured at SR1 during 2023 monitoring. After removing recaptures of individual adult salamanders, the capture history shows that 68 individual adult salamanders were detected and photographed during 2023. The number of recaptures from the previous year was similar to other calculated years. However just as in 2022, the actual number of new individuals was lower compared to previous years (Table 3). Probabilities for recapture are listed in Table 3 and are similar between sampling events from the last three years.

Nine of the 121 salamanders were considered juveniles (<25 mm). Reviewing salamanders capture data dating back to 2017, the majority of the surface captures were adults (91%). The size average, based on the 608 salamanders detected since 2017, is 52.72 mm. The largest Salado salamander (87 mm) captured to date was in October 2020.

The temporal shifts in size class follow the same trends as the DSC and Robertson springs, but the overall population exhibits larger salamanders on the surface year-round (Figure 4). During the fall there have been no documented occurrences of salamanders in the first or second size class. This type of graph when compared to individual graphs from the other springs

in the monitoring area highlight the permanence of the spring at Solana Ranch by exhibiting most of the salamander community at size classes 4 – 6 throughout the year (Figure 5).

Kings Garden and Pecan Springs

Initially we visited Kings Garden, Pipe, and Pecan springs in northern Williamson County on April 4, 2022. No salamanders were detected at Pipe or Pecan springs during surveys. Salamander have been found at Kings Garden Spring and since our initial visit in April 2022, however salamanders have been know at this location for some time.

Kings Garden is located just south of the Bell County line and north of Cobbs Spring, for *E. chisolmensis* this will be a new genetic sample based on historical sampling (Figure 1). Other reports have shown a small genetic shift highlighting species variability from Robertson springs and associated sites to the north of Solana Ranch (Nice 2021). The goal now is to monitor Kings Garden Spring quarterly with active searches while sampling aquifer taxa using the passive sampling techniques previously described following the surveys. This will be done with the help of Texas Parks and Wildlife Department over the next couple of years.

Kings Garden Spring run consists of two branches. The branch termed "secondary" was searched for salamanders in April of 2022, however, none were detected. Cobble and gravel substrates were present in the run although most were embedded or covered in silt. The main branch had a noticeable orifice where water was emerging and flowing over cobble and gravel substrates. The flow continued down over a small riffle covered in watercress, and aquatic moss with cobble and gravel substrate. The salamanders were detected in this riffle that was supported by laminar flow. Downstream of the riffle section was a larger silt dominated shallow pond. The silted pond flowed into another riffle that feeds into a more stream like habitat (narrow with flow). This second riffle below the silted pond also has salamanders.

In 2023 Kings Garden was sampled in April, July, October and December. Sampling in 2023 was conducted in the main branch along the first riffle below the orifice. A total of 64 detections were made during the quarterly sampling events including seven juvenile salamanders. Of that following post processing with Wild ID, a total of 44 individual salamanders were detected. The most salamanders were captured in April (n = 25). A total of 12 recaptures were documented in 2023. Seven recaptures were made from salamanders collected 2022, while the remaining five recaptures were all from new salamanders observed in 2023. In

2024, the second riffle will be searched to determine if salamanders are moving across the silted pool that also contains *Gambusia*.

Our interest in Pipe and Pecan springs would involve restoration work at Pecan Spring. These springs were modified and now have no apparent orifice where water was discharging. Historically, each spring did have flow producing a slow spring run. The restoration should consider altering flow velocity. The low flow coming from either of these springs may allow the accumulation of silt within the interstitial spaces causing embedded cover objects. An elevational gradient from orifice to the end of a spring run could be used to combat the low flow issue. At Pecan Spring my recommendation would be to just remove the blocks at the end of the pool and let time and a good rain clean the area. A recent conversation with Tim Brown about the structure at Pecan Spring was interesting as he mentioned the blocks at the end of the pool were limestone, there weren't quarries back in the time period that the Texas Historic Commission would be interested in; however the rest of the structure, probably so.

Keeta Spring

The new Keeta Spring location was visited three times in 2023 and one individual was captured in July. The individual was clipped for genetics and returned. There have been a total of two individuals collected from this new location just south and east of Kings Garden.

Stream Flow and Well Height Data

During this study, assessments of a potential connection between surface salamander population densities and rainfall, stream flow and/or well gauge height were examined. The Cemetery Well (#5804628) has shown the best connection between water level (gauge height) and surface population densities. Recently the available data from the Cemetery Well has been sporadic. From 2015 to 2019, the data was reported monthly. Gaps in the well data began to appear during 2020. For 2020, only data from March to December is available. In 2021, only data from January and February are available. Finally in 2022, the data reporting increased and includes data from February to December. So far in 2023, only January data has been made available.

We compared Cemetery Well (feet below surface (fbs)), Salado Creek flow (USGS, ft^3/s), and the number of captured salamanders per year (Figure 6). The goal is be to predict

when Robertson Springs would be flowing based off the Cemetery Well. We understand the Cemetery Well has an inverse relationship with salamander abundance at Robertson Springs (Figure 7). So, as the feet below surface decrease we observe more salamanders at Robertson Springs. Salamanders were captured at Robertson Spring when levels at the Cemetery Well ranged from 12 to 75 feet below the surface. Although there have been varying levels of effort over the years, our data demonstrates that if the springs are dry no salamanders will be detected at the surface. Once the springs on the Robertson property go dry, a large percentage of salamanders are removed from the overall potential total at year end. Only when flows return to Robertson springs do the probabilities of capturing a salamander return. This year, there was no spring flow from any of the spring outlets resulting in zero salamanders captured (Table 1).

Discussion

The low number of encounters with Salado salamanders in 2023 was once again due to the lack of rain and an ongoing drought beginning around the end of 2019. The lack of rain has led to the lack of spring flow and the dewatering of Robertson Springs. During the last drought in 2014, a pool of water remained from Ludwigia Spring down to the confluence of Salado Creek. In comparison, as of January 2023 no springs were flowing at Robertson and the run was dry to the confluence of Salado Creek.

The Cemetery Well water level was examined to determine if it correlated to Robertson Spring flow reductions or ceasing of flows. When well water level was compared to salamander surface population data, it showed a negative correlation to “feet below the surface” data. Although a relationship was shown it is not predictive enough with the salamander data to be useful at this time. The effects of time spent underground for surface species have been documented and correlates to loss of tail width during long periods without surface interaction (Bendik and Gluesenkamp 2013).

The temporal shifts in size class for the Salado salamander appear to echo other research for the northern group of *Eurycea* sp. indicating a Fall/Winter breeding season and the increase of juveniles at the surface in spring (Pierce et al. 2014). This breeding season in the northern salamander group appears unique and could be facilitated by the shallowing of the aquifer as the limestone generally decreases in depth as the aquifer moves north. This shallowing of the limestone in this northern segment could cause the influx of recharge water into inhabited areas more quickly than in deeper portions of the aquifer to the south.

Other research by Bendik et al. (2017) on the Jollyville Plateau salamander (*E. tonkawae*) and Pierce et al. (2014) on the Georgetown salamander (*E. naufragia*) showed a peak time for gravidity in December, with Pierce et al. (2014) showing an additional peak in February or March for the Georgetown salamander. Gravidity has not been observed in the Salado salamander in the number of observations necessary to elucidate any trends. What would be expected is to see a lag time between gravid females observed by the two mentioned authors and the observation of salamanders in the first size class. Growth curves in captive San Marcos salamanders show that it takes about 60 days to reach around 15 mm. Therefore, if there was a peak in Salado salamander gravidity in December, the juveniles would be on the spring surface and measure up to about 15 mm at the earliest in late February. The Salado salamander seasonal dynamics graph shows the largest percentages of juveniles occur during spring, which runs from March to May. In other words, we might hypothesize that there is some peak in gravidity for the Salado salamander sometime in December or January, although undetected. This section of the work on breeding seasonality has recently been published (Diaz et al. 2023; Herp Review).

Insights into why the surface densities of these salamanders are historically small (Norris et al. 2012), with estimates by the author that surface populations are around 10 salamanders at the DSC and Robertson Springs sites, could be based on nine years of monitoring observations. The hydroperiod of the springs (i.e. the duration of discharge over time) and proximity to larger order streams, (i.e. ecological disturbance) may play a large part of influencing surface densities at historic Salado salamander sites (Robertson Springs and DSC). Salado Creek's hydroperiod includes large pulses of water after large rain events in the watershed. These pulses cause Salado Creek to rise high enough that it floods the spring outlets at the DSC and at Robertson Springs. The flood waters also bring or remove sediment, gravel and cobble changing the habitat substrate and even depth over the spring orifices as seen at Side Spring (DSC).

The spring flows in the DSC appear to be stable except for Little Bubbly Springs which has been intermittent during the study. However, Robertson Springs has a large fluctuation in hydroperiod and was not flowing in 2015 and resumed discharging at many of the orifices in 2016. In 2017, the discharge began to decline again and ceased to flow in 2018. Flow returned to the springs at the beginning of 2019. In 2020, the flows began to subside in May and by August no salamander producing mapped spring zones were flowing. Flows were sporadic in early 2021 but by May 2021 the springs were dry. The springs began to flow again in June of 2021 and

flowed till around June of 2022. However, flow ceased for all springs in the Robertson springs complex between July 2022 and January 2024. In addition, Robertson and the DSC springs are at the known northern fringe of *Eurycea* distribution in Texas and the Edwards Aquifer. In comparison, the surface population present at SR1, just south of Salado, over the last eight years have always been detectable and consistent with regards to count data. Solana Ranch Spring #1 has had a consistent hydroperiod, is not near a larger order stream or river, and is south of the known northern locations for these salamanders.

These factors may be a large part of why the surface densities are low at the historic Salado salamander sites. In addition, the small surface recruitment of salamanders seen at Robertson and Anderson springs (DSC), based on the drift net sampling data, suggest that the populations at these sites may be slow to recover from natural disturbances like a flood or cessation in flows. Given that surface densities are low but appear to be consistent given the flows over the last eight years (2015- 2022), it has been suggested that a large proportion of the Salado salamander population is below the surface within the aquifer (Nice et al. 2021). The first genetic analysis for the Salado salamander was completed in 2021 and expanded the known range. A second round of genetic collections began in 2023 with the goal to estimate an effective population density at the sites previously assessed and new sites will be included in the genetic analysis providing more information about the species range. This type of analysis can be woven into part of the monitoring program for the Habitat Conservation Plan in development for the area.

The views expressed in this paper are the authors and do not necessarily reflect the view of the U.S. Fish and Wildlife Service or Texas Parks and Wildlife Department.

Table 1. Number of Salado salamanders collected during quarterly monitoring using active and passive sampling techniques 2023.

Season	Robertson	Downtown Spring Complex	Solana Ranch Spring #1	Kings Garden
Spring	0	1	57	25
Summer	0	0	14	8
Fall	0	0	30	13
Winter	0	0	20	18

Table 2. Habitat associations of the Salado salamander determined by 177 salamanders collected from 2015 to 2023 at the Downtown Springs Complex (DSC) and Robertson Springs.

	#	%
Cave Conduit	67	37.85
Substrate		
Silt	3	2.73
Sand	2	1.82
Gravel	73	66.36
Cobble	28	25.45
Boulder	4	3.64
Vegetation		
***Sagittaria* sp.**	1	0.93
***Nasturtium* sp.**	47	43.52
Filamentous Algae	4	3.70
***Ludwigia* sp.**	3	2.78
***Amblystegium* sp.**	5	4.63
***Hydrocotyle* sp.**	2	1.85
none	43	39.81
Organic Debris	2	1.85
Grass	1	0.93

Table 3. History of quarterly monitoring data from Solana Spring Ranch #1 (SR1). "Recaps Previous Years" are individuals that were captured more than once between sampling years.

	2020	2021	2022	2023
Recaps Previous Years	17	36	43	41
Recaps for Year	16	10	13	11
New Individuals	83	74	59	61
Naive Probability of recap	23	29	31	29

Table 4. Water quality collected during monitoring in 2023.

Spring	Date	Temperature °C	Dissolved Oxygen mg/L	pH	Conductivity µs/cm
Keeta	4/7/2023	19.8	6.23	7.09	503
Solana	4/12/2023	20.15	8.95	7.03	NA
Kings Garden	4/13/2023	20.50	7.68	7.31	NA
Stagecoach	4/18/2023	20.96	7.84	7.12	585
Anderson	4/18/2023	20.92	7.76	7.07	587

Big Boiling	4/18/2023	20.96	7.77	7.11	585
Side	4/18/2023	20.94	7.85	7.19	585
Anderson	7/18/2023	20.98	7.62	7.19	539.5
Big Boiling	7/18/2023	20.98	7.62	7.24	538.9
Side	7/18/2023	22.35	7.52	7.31	544.1
Solana	7/19/2023	20.94	7.81	6.75	429.2
Keeta	7/19/2023	20.98	6.52	6.88	526.6
Kings Garden	7/31/2023	21.24	7.49	7.1	375.4
Anderson	10/10/2023	21.94	7.13	7.1	563.1
Big Boiling	10/10/2023	21.17	7.27	7.2	566.4
Side	10/10/2023	NA	Damp		
Kings Garden	10/11/2023	23.47	4.31	6.89	555.9
Solana	10/13/2023	21.84	7.28	7.32	424
Solana	10/24/2023	21.5	7.66	7.31	357.7
Keeta	10/13/2023	21.6	3.8	7.06	598
Solana	12/19/2023	21.05	7.7	7.42	493.8
Kings Garden	12/20/2023	21.08	7.11	7.57	635.1

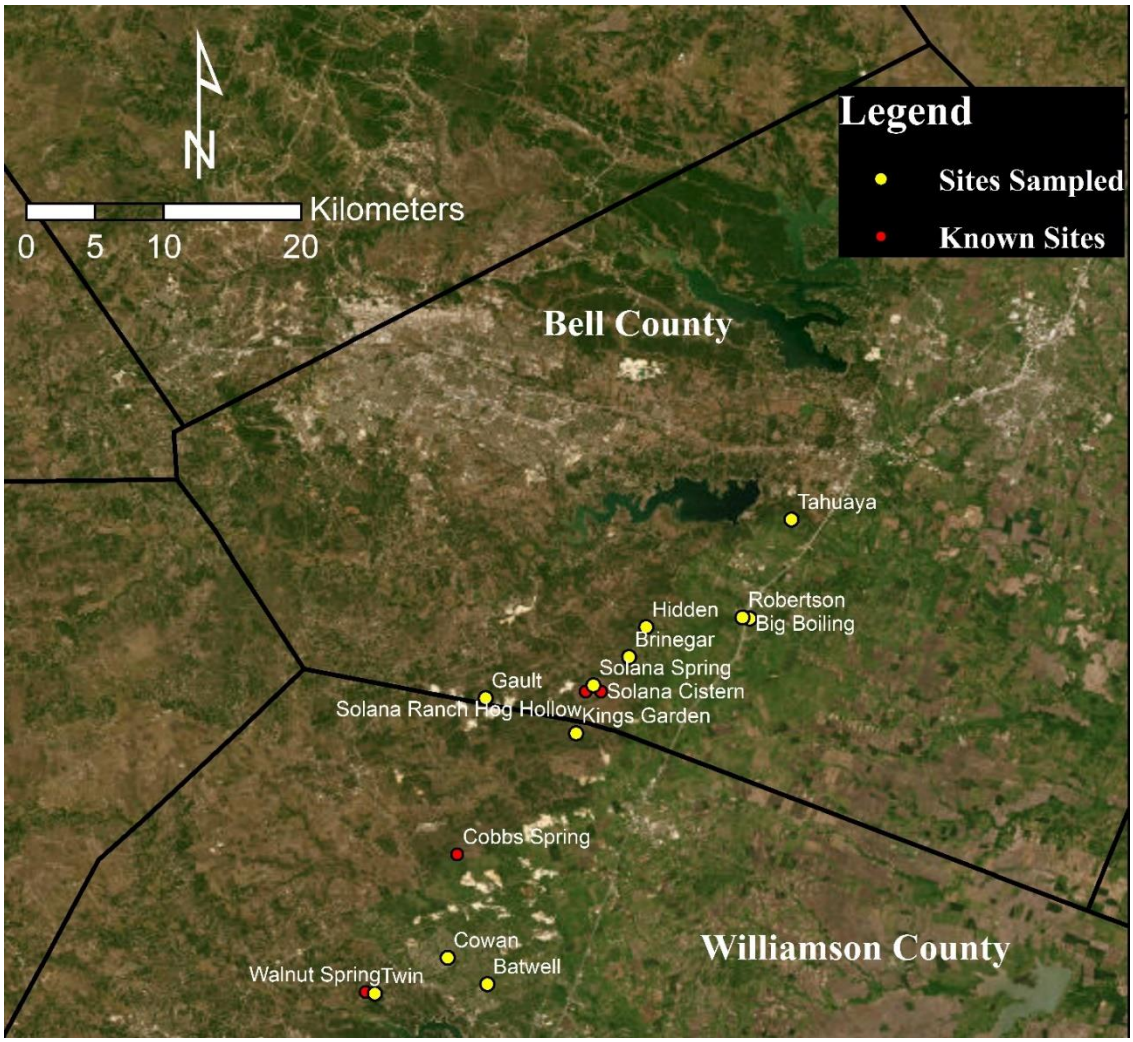

Figure 1. Study area for Salado salamander monitoring or searches conducted from 2015 to 2023.

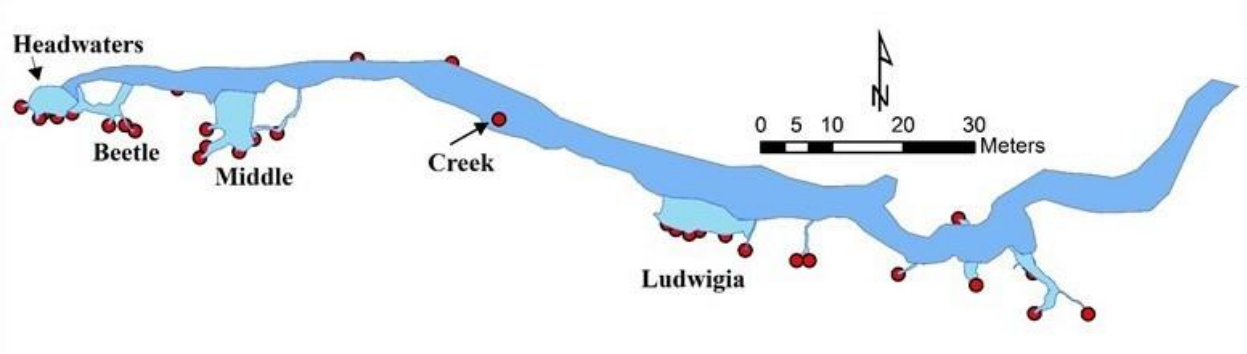

Figure 2. Map of Robertson Springs showing spring zones mapped in 2016 during optimal flow conditions at the site. Light blue zones are spring zones, red dots are orifice, and the blue is the spring run terminating into Salado Creek. From July of 2022 to January 2024 the system was dry to the creek.

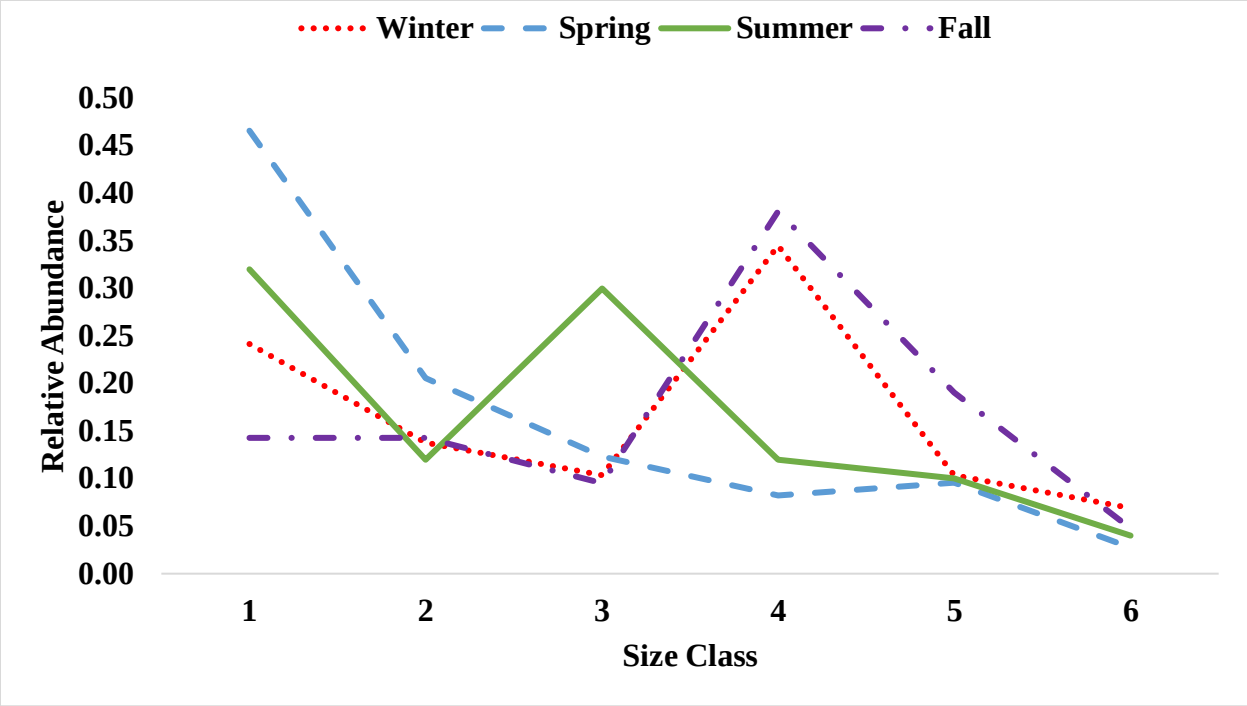

Figure 3. Relative abundance of Salado salamanders reflecting the dominant size class captured from the Downtown Spring Complex (DSC) and Robertson Springs by season from 2015 to 2023 for 173 salamanders. Size classes range from 10 - 19.99 mm = 1; 20 - 29.99 mm = 2; etc.

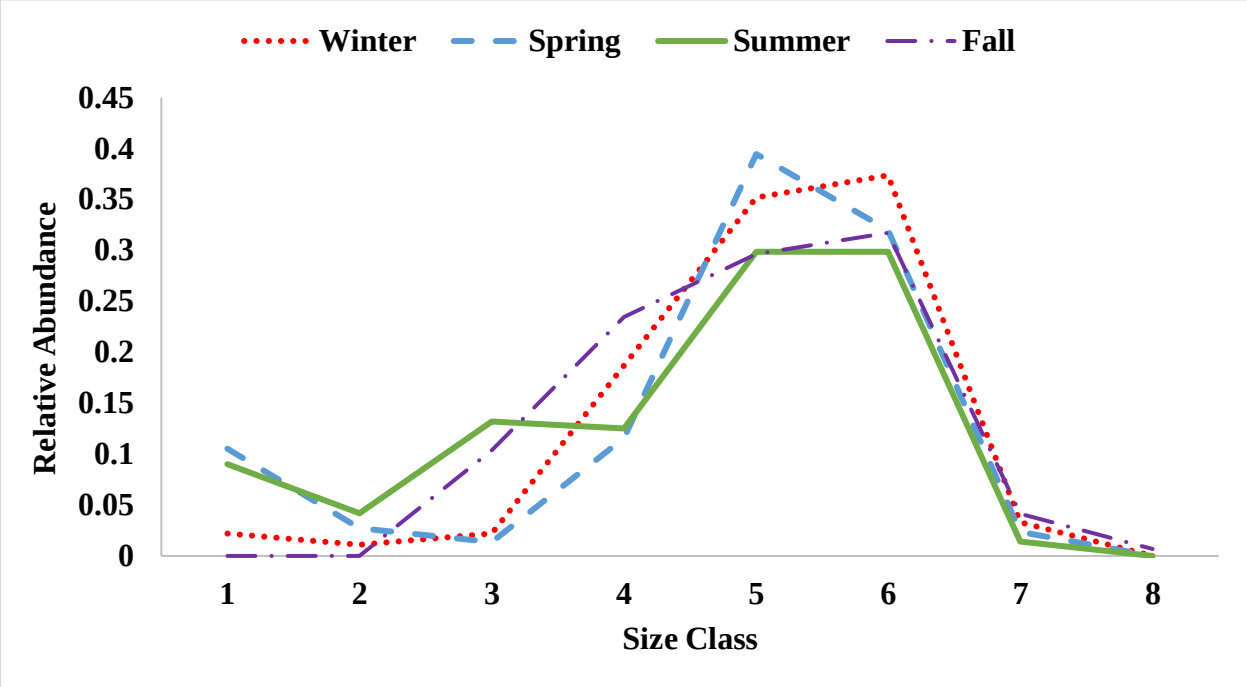

Figure 4. Relative abundance of Salado salamanders reflecting the dominant size class captured from the Solana Ranch Spring #1 by season from 2015 to 2023 for 674 salamander observations. Size classes range from 10 - 19.99 mm = 1; 20 - 29.99 mm = 2; etc.

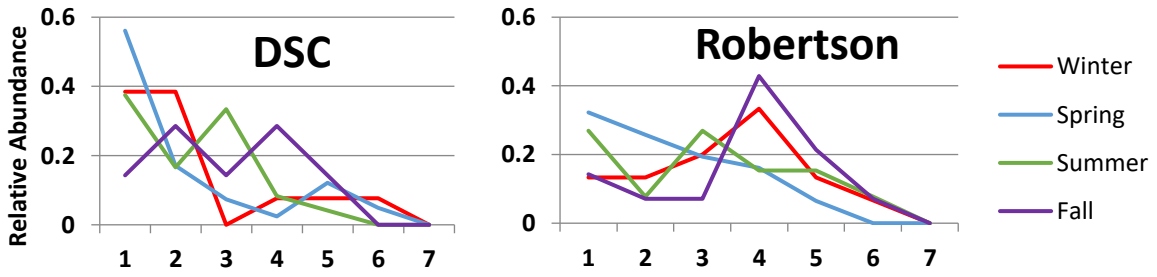

Figure 5. Relative abundance of Salado salamanders reflecting the dominant size class captured from the Downtown Spring Complex (DSC) and Robertson Springs by season from 2015 to 2023. Salamander observations; 86 from Robertson Springs and 85 from the DSC. Size classes (x-axis) range from 10 - 19.99 mm = 1; 20 - 29.99 mm = 2; etc.

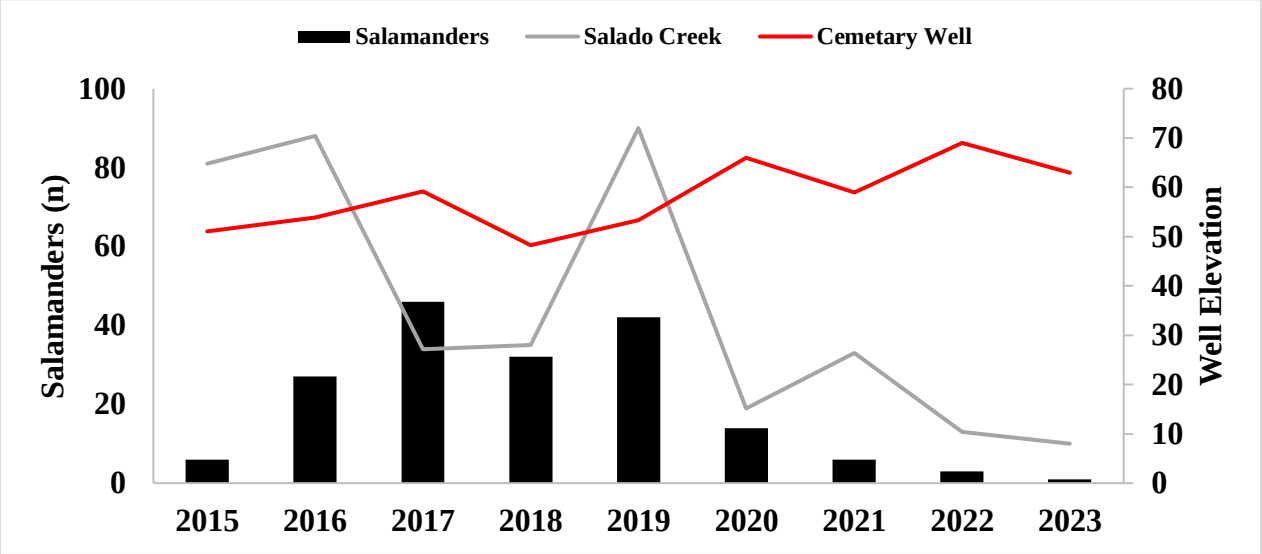

Figure 6. Data collected from the Cemetery Well (Monitor well #5804628; feet below surface) and from the USGS gauge on the Salado Creek (USGS #08104300; ft^3/sec) plotted with the total collection of salamanders (n) from each year sampled at the Downtown Spring Complex (DSC) and Robertson Springs.

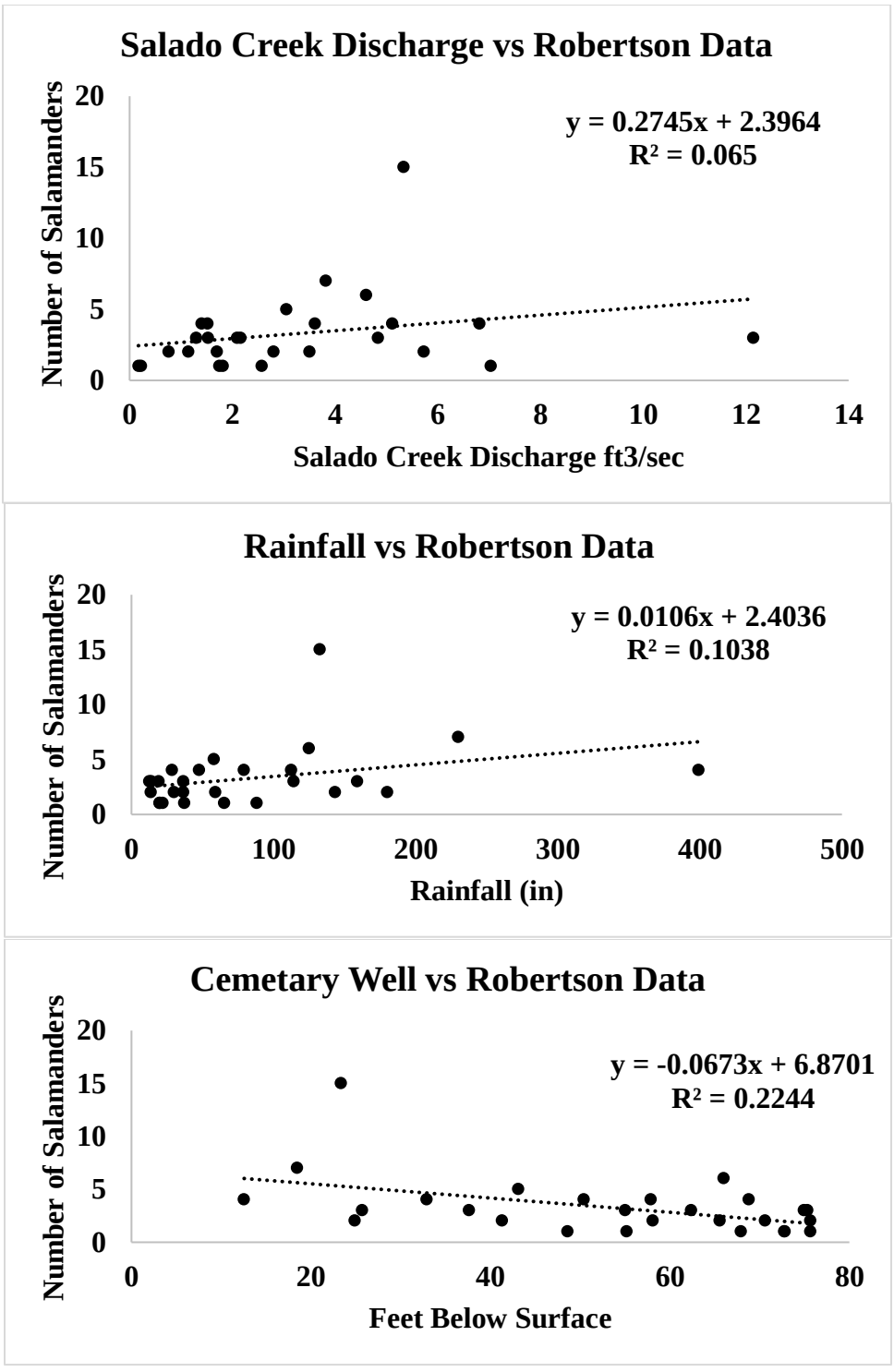

Figure 7. Relationships between Salado salamander capture data from Robertson Springs (2015 to January 2023) and predictors of abundance data.

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Appendix L

RAINWATER HARVESTING

Rainwater harvesting is an innovative alternative water supply approach anyone can use. Rainwater harvesting captures, diverts, and stores rainwater for later use.



Implementing rainwater harvesting is beneficial because it reduces demand on existing water supply, and reduces run-off, erosion, and contamination of surface water.

Rainwater can be used for nearly any purpose that requires water. These include landscape use, stormwater control, wildlife and livestock watering, in-home use, and fire protection.

A rainwater harvesting system can range in size and complexity. All systems have basics components, which include a catchment surface, conveyance system, storage, distribution, and treatment.

For more information, please visit the **Texas A&M AgriLife Extension – Rainwater Harvesting website** and the **Texas Water Development Board – Rainwater Harvesting website.**

Related Resources



Rainwater Harvesting Book: Homeowners and landowners can construct systems to capture, store and use rainwater to water their landscape plants.



SEARCH

Appendix M

BRUSH CONTROL

Brush Busters is a cooperative program of the Texas AgriLife Research and Extension Service to expedite the adoption of Tactical Brush Management Systems (TBMS) technology.

Brush Busters methods are easily understood, even by those with little or no previous experience in brush control. We recommend only "select" treatments capable of killing at least 7 out of 10 of the plants treated. Brush Busters methods make every attempt to keep equipment costs and complexity to a minimum, and whenever possible, to use non-restricted herbicides. One-page pamphlets are available from most County Extension offices that describe, in a simple 3-step process, the Brush Busters control methods for mesquite, pricklypear and cedar. Videos are available for checkout through most County Extension offices that demonstrate the Brush Busters control methods. For those who are computer literate, a CD-ROM Brush Busters program is a vailable that uses interactive video, audio and graphics to teach the use of Brush Buster methods for mesquite control.

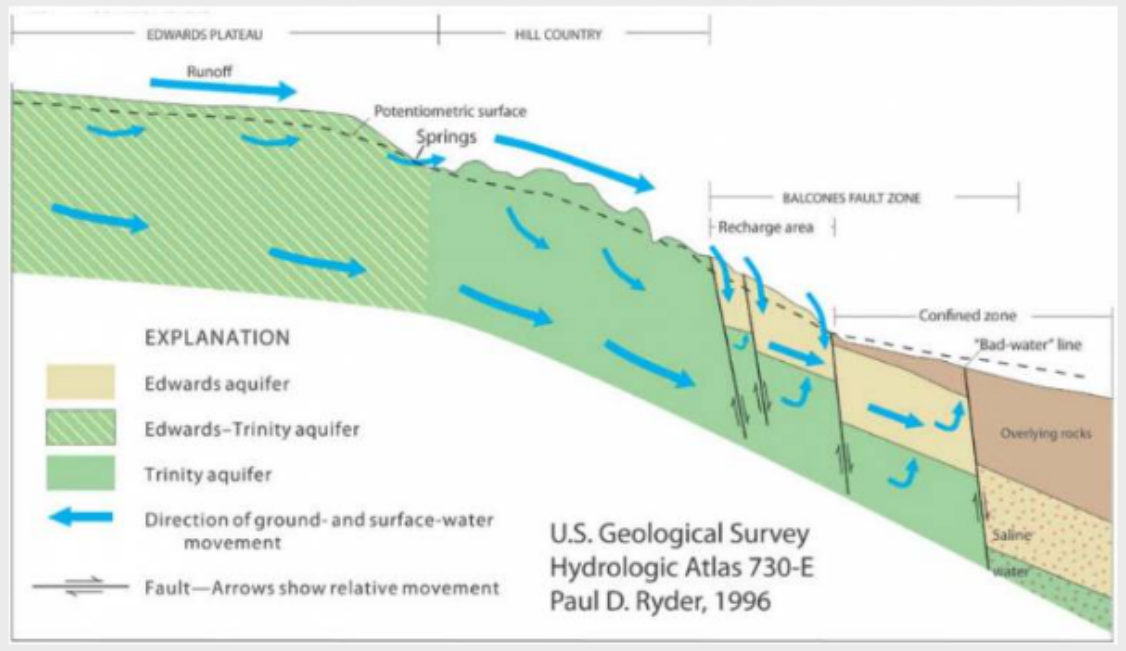
- Cedar
  - Leaf Spray Method
  - Spot Spray Method
  - Top Removal Method
  - How to Estimate Costs for Controlling Small Cedar
- Cut Stumps
  - Cut Stump Spray for Hardwood Species
  - Cut Stump Spray for Redberry Cedar
- Huisache
  - Leaf Spray Method
  - Stem Spray Method
- Macartney Rose
  - Leaf Spray Method
- Mesquite
  - Leaf Spray Method
  - Stem Spray Method
  - How to Estimate Cost for Controlling Mesquite
- Pricklypear
  - Pad or Stem Spray Method
  - Top Removal Method
  - How to Estimate Costs for Controlling Pricklypear
- Saltcedar
  - Leaf Spray Method
  - Stem Spray Method
- Tallowtrees
  - Leaf Spray Method
  - Stem Spray Method
- Yucca
  - Herbicide + Oil Whorl Spray
  - Undiluted Whorl Spray
- Equipment



SEARCH

Appendix N

RECHARGE ENHANCEMENT



Recharge enhancement is an important tool to help encourage recharge of our groundwater. Urban development decreases direct recharge from precipitation but introduces new sources of water which, in most instances, can increase groundwater recharge if applied properly.

Best Management Practices for Recharge Enhancement

Onion Creek Recharge Enhancement



SEARCH

Appendix O

Clearwater UWCD - Edwards BFZ Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Kendall, shown in red.

Date # (USWCD #)	18-05-604 E-02-101F	18-12-501 E-03-446L	18-04-410 E-06-001F	18-08-408 E-10-005F	18-05-106 E-13-309F	18-04-625 E-18-001U	18-08-704 E-18-107F	18-12-204 E-19-318F	18-12-205 E-19-319F	18-04-018 E-19-007F	18-08-416 E-19-079CU	18-04-619 E-19-081CU	18-04-623 E-19-111F	18-04-641 E-22-037A	18-08-722 M-06-001I	18-04-916 M-08-101E	18-08-928 M-08-002A	18-11-502 M-10-314L	18-04-102 M-13-104L	18-22-702 M-18-301F	40-61-405 M-16-102L	M-22-001F	18-12-203 N1-18-101F	40-61-710 N1-20-001F	40-62-513 N1-20-002F	18-04-623 N2-02-001L	18-08-602 N2-02-101L	18-04-508 N2-02-005L	18-04-509 N2-02-007L	18-04-510 N2-02-008L	18-04-526 N2-02-009L	18-04-512 N2-02-010L	18-04-513 N2-02-011L	18-04-517 N2-02-014L	18-04-527 N2-07-010L	18-04-217 N2-14-001F	18-04-431 N2-11-004F	18-05-108 N3-11-002F	18-08-633 N3-11-006F	18-04-634 N3-15-003F	18-05-110 N2-15-005F	18-05-109 N2-15-010F	18-04-316 N2-15-012F	18-04-201 N2-17-001F	18-04-640 N2-19-007F	18-08-303 N2-20-001L	40-61-711 N2-20-006L	18-04-221 N2-21-006F	N3-22-001F
Well Name	Avila	Tolfre	Young	Coppin	Thiller	Brown	Edwards	Yopez	Yopez	Pathcock	Campbell	Lowry	Lee	Magnolia Sur. Wa	Crowson's Cro	Bent Stop	Bent Stop	Soledo Cemeter	Ivy of Barth	Soledo ISD	Gault - Edwards	Bell Co DOT		Windy Meadows	Dillman Trust	Donald & Sharyl Rich	Stagecoach (deep)	Soledo WSC (#1)	Soledo WSC (#2)	Soledo WSC (#3)	Soledo WSC (#4)	Soledo WSC (#7)	7KX Ranch (#1)	7KX Ranch (#4)	Soledo (SD WS)	Bluomar Mfg.	James Construction	Charles Broecker	James & Terry Boston	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #3 - Read	Scott Law Well #7 - Brady Woods	Scott Law Well #9 - Java Level	Scott Law Well #10	Heart of Texas Feed	Brazos Valley Equine Hospital	DDG Properties	Soledo/Lee LLC	Soledo RV Park	
Highest	-78.30	-210.80	-85.30	-58.10	-76.20	-44.20	-43.00	-226.40	-232.05	-94.11	-31.00	-10.50	-13.90	-307.40	-110.53	-63.75	-78.25	-129.53	-89.10	-83.30	-60.00	-59.97	-106.94	-86.00	-248.00	-54.80	-59.90	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-101.19	-103.70	-52.70	-106.40	-75.30	-78.10	-85.50	-108.51	-108.04	-66.39	-63.70	-57.20	-75.10	-102.21	-70.40	-12.01	-81.22	-106.00
Lowest	-100.00	-222.00	-89.10	-73.30	-128.10	-50.40	-68.00	-252.80	-253.00	-40.00	-55.20	-13.90	-97.40	-110.53	-63.75	-78.25	-129.53	-89.10	-83.30	-60.00	-59.97	-106.94	-86.00	-248.00	-54.80	-59.90	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-101.19	-103.70	-52.70	-106.40	-75.30	-78.10	-85.50	-108.51	-108.04	-66.39	-63.70	-57.20	-75.10	-102.21	-70.40	-12.01	-81.22	-106.00
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7/1/2004 0:00															-71.94					-48.40							-91.20	-52.70																					
1/1/2005 0:00															-72.30					-47.00							-84.70	-27.20																					
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11/1/2006 0:00															-73.05					-43.60							-79.40	-30.09																					
############																			-57.80									-69.30																					
1/1/2007 0:00															-72.08					-49.30							-78.70	-27.55																					
6/30/2007 17:00																			-46.50									-64.60																					
7/1/2007 0:00															-69.87					-44.60							-70.70	-31.50																					
7/4/2007 0:00																			-43.60									-59.60																					
############															-72.07					-49.60							-84.90	-31.42																					
1/1/2008 0:00																			-43.50									-62.00																					
6/30/2008 17:00															-69.82	-124.80				-52.00							-70.70	-40.17																					
7/1/2008 0:00																			-38.30									-62.00																					
############															-72.88	-125.47	-71.91		-60.30	-51.40							-87.20	-36.52																					
1/1/2009 0:00																												-61.80																					
6/30/2009 17:00															-73.10	-128.15	-83.61			-53.50							-84.10	-34.92																					
7/1/2009 0:00															-70.42	-118.37	-79.84			-49.20							-86.10	-37.12																					
1/30/2010 17:00				-58.30															-55.00																														
7/1/2010 0:00																-120.66	-72.83			-50.50							-80.10	-31.53																					
############																			-55.90									-69.60																					
1/1/2011 0:00															-72.05	-121.76	-64.63		-58.20	-49.20							-81.00	-31.43																					
6/30/2011 17:00																												-61.40																					
7/1/2011 0:00															-71.05	-125.39	-81.51		-65.60	-53.30							-85.60	-35.12																					
8/31/2011 17:00																												-62.90																					
9/1/2011 0:00															-71.15	-126.41	-89.10		-73.80	-53.80							-87.60	-37.83																					
############																												-64.20																					
11/1/2011 0:00															-72.08	-126.09	-80.97		-73.00	-52.60							-82.00	-32.53																					
############																												-62.80																					
1/1/2012 0:00															-74.20	-125.18	-64.78			-50.00							-78.10	-30.73																					
6/30/2012 17:00																								-248.00																									
7/1/2012 0:00															-73.83	-123.57	-79.17		-64.40	-50.60							-80.30	-31.20																					
############																			-65.90									-69.20																					
1/1/2013 0:00															-71.20	-125.18	-71.54			-49.60							-81.80	-32.40																					
7/1/2013 0:00																													-58.00	-76.00	-109.60	-66.10	-87.00	-101.90														
8/5/2013 18:00					-63.90																																										
7/1/2014 0:00																												-59.50	-78.50	-114.30	-67.60	-89.70	-102.30														
6/30/2014 17:00																			-60.00																														
7/1/2014 0:00															-73.57	-126.78	-84.79		-61.70	-49.80							-84.90	-31.60																					
7/31/2014 17:00																												-60.40																					
8/1/2014 0:00				-73.80											-73.70	-129.44	-84.93			-52.30							-82.50	-32.20																					
8/5/2014 0:00																												-62.60	-70.24	-89.90	-115.90	-93.70	-97.45	-85.30														
11/1/2014 0:00				-66.90											-73.60	-125.05	-53.35			-49.50							-79.50	-29.40																					
12/2/2014 0:00																												-62.10																					
1/6/2015 0:00																												-58.30	-57.60	-74.60	-83.90	-64.50	-85.67	-92.30														
1/15/2015 16:00																												-58.20	-73.50	-102.30	-63.90	-85.67	-102.50														
1/1/2016 0:00				-67.00											-73.64	-124.22	-67.54		-59.20	-49.70	-59.10						-78.40	-30.20																					
6/7/2014 0:00																												-60.34	-75.60	-108.72	-65.50	-87.17	-102.90														
6/30/2014 17:00																			-61.40																														
1/1/2014 0:00				-70.70											-73.98	-125.66	-73.25		-62.00	-52.00	-57.20						-88.70	-33.00																					
7/31/2014 17:00																			-62.80																														
8/1/2014 0:00				-70.60											-74.24	-126.09	-82.71		-62.90	-52.50	-57.30						-90.20	-33.80																					
8/6/2014 0:00																													-70.74	-88.30	-115.80	-91.60	-95.77	-83.91														
############																			-56.80																														
11/1/2014 0:00				-67.60											-74.10	-127.60	-77.79		-63.70	-50.58							-87.00	-31.20																					
12/1/2014 0:00																													-58.44	-77.14	-110.90	-66.90	-88.27	-102.50														
############																			-58.00																														
1/1/2015 0:00				-67.40											-73.77	-125.52	-80.01		-61.10	-50.01							-77.70	-29.60																					
1/5/2015 0:00																												-61.07	-58.20	-76.30	-89.90	-66.10	-87.57	-102.10														
7/2/2015 0:00																												-59.77	-58.24	-84.04	-108.10	-66.70	-86.47	-102.71														
8/2/2015 0:00																												-60.67	-58.64	-74.76	-105.90	-64.70	-86.37	-102.81														
8/5/2015 0:00																												-64.17	-57.84	-82.50	-108.70	-65.70	-86.07	-103.10														
1/4/2016 0:00																												-59.77	-57.54	-84.54	-110.60	-88.90	-86.87	-103.21														
1/11/2016 0:00				-61.10															-53.80																														
1/15/2015 17:00															-72.97	-121.67	-73.43		-58.30	-53.32							-74.80	-33.97	-64.64	-81.14	-106.30	-62.50	-80.47	-76.61													
7/1/2015 0:00																												-58.77	-68.34	-80.74	-83.20	-62.50	-82.07	-76.41														
8/1/2015 0:00																												-54.87	-68.74	-82.14	-110.50	-85.30	-87.47	-77.70														
8/12/2015 17:00																			-59.50																														
8/14/2015 0:00				-69.20											-72.70	-122.76	-77.55		-60.40	-50.26							-79.30	-27.70	-68.04	-83.54	-113.50	-65.30	-88.80	-78.51													
10/1/2015 0:00																												-58.47	-68.54	-84.84	-113.20	-66.50	-91.30	-79.80														
11/1/2015 0:00																												-55.07	-57.54	-83.04	-91.60	-64.70	-82.97	-77.21														
############																			-56.00	-45.40																														
12/30/2015 0:00				-61.20											-72.00	-120.64	-76.20			-54.33							-70.80	-29.90																					
12/1/2015 0:00																												-57.14																					
12/7/2015 0:00																												-24.77	-57.84	-71.14	-84.00	-61.20	-79.27	-102.60														
1/1/2016 0:00															-72.83													-57.84																					
1/6/2016 0:00																												-24.60	-57.84	-79.54	-83.50	-61.30	-78.09	-102.49														
1/8/2016 18:00																			-55.40	-47.00																														
1/5/2016 0:00				-62.20											-75.91	-119.60	-61.53				-57.16						-68.30	-24.60																					
7/2/2016 0:00																												-25.60	-57.50	-70.34	-80.50	-60.20	-78.69	-102.59														
8/7/2016 0:00																												-26.60	-57.90	-71.94	-105.50	-61.50	-81.69	-102.69														
11/2016 12:00																																																
8/8/2016 0:00																												-25.80	-66.34	-73.50	-109.10	-62.70	-81.10	-102.79														
1/18/2016 17:00																			-50.50	-47.50																														
8/15/2016 0:00				-62.65											-71.39	-120.16	-71.78			-56.49							-68.50	-26.30																					
10/2016 0:00																												-25.40	-58.50	-71.54	-105.10	-61.30	-80.00	-102.69														
11/2016 0:00															-71.27	-117.89			-4.49	-55.51																													
1/5/2016 0:00																												-23.00	-56.70	-68.64	-101.90	-58.40	-76.20	-102.30														
1/6/2016 0:00																												-25.20	-57.50	-71.74	-109.70	-61.00	-82.60	-74.19														
11/2016 0:00																												-26.40	-57.74	-80.30	-106.20	-63.70	-81.20	-75.79														
5/26/2016 0:00																												-25.40	-65.94	-72.54	-109.00	-61.70	-82.09	-74.89														
6/29/2016 17:00																			-52.60	-48.33																														
6/29/2016 18:00																																																
8/30/2016 0:00															-71.40	-119.60	-53.40			-56.90							-74.22																					
10/1/2016 0:00																												-26.40	-61.40	-73.54	-111.90	-62.90	-84.49	-76.49														
10/5/2016 0:00															-71.60	-120.63	-74.40																														
10/15/2016 0:00															-71.75	-121.11	-73.02			-57.56																											
11/2016 0:00															-71.78	-121.40				-57.75																											
11/2/2016 0:00																			-72.91																														
11/7/2016 0:00																												-27.20	-59.14	-73.34	-110.30	-62.90	-82.69	-76.69														
11/28/2016 0:00																												-27.40	-58.74	-72.78	-108.70	-62.50	-82.89	-76.89														
12/1/2016 0:00															-71.95	-121.79	-65.21			-57.79																											
12/6/2016 0:00															-71.93	-121.67	-51.22			-57.74																											
12/12/2016 0:00																												-27.57	-58.14	-72.50	-101.70	-63.14	-83.29	-102.69														
12/19/2016 0:00																												-27.77	-58.34	-72.54	-107.30	-63.20	-83.20	-102.49														
1/6/2017 18:00																			-52.20	-48.80																														
1/5/2017 0:00															-72.00	-121.90	-63.20			-58.00							-75.40																					
1/6/2017 18:00					-84.10																																										
1/6/2017 0:00																												-27.80	-58.34	-73.54	-107.50	-62.70	-84.09	-102.69														
1/6/2017 0:00															-72.06	-121.71	-53.37			-57.52								-27.37	-58.14	-73.54	-89.20	-62.90	-83.09	-85.23														
6/1/2017 0:00															-72.23	-121.11			-43.11	-57.43																													
6/6/2017 0:00																												-27.20	-57.94	-72.74	-86.60	-62.10	-82.20	-83.69														
6/6/2017 12:00																																																
7/1/2017 0:00					-81.80														-48.00	-48.10																														
7/1/2017 0:00				-65.50											-72.35	-120.90	-60.13			-57.48							-75.90																					
6/1/2017 0:00																												-26.97	-61.70	-72.76	-86.60	-62.10	-102.70	-82.49														
8/6/2017 0:00															-72.46	-121.15	-49.82			-57.26								-25.17	-57.94	-82.94	-112.70	-86.70	-83.29	-102.89														
8/6/2017 0:00															-72.48	-121.34			-53.60	-57.43								-27.37	-58.64	-76.94	-82.10	-62.00	-84.10	-76.49														
8/6/2017 0:00																													-70.94	-83.14	-110.80	-85.30	-90.99	-79.29														
7/1/2017 17:00					-101.10														-46.40	-44.70																														
1/6/2017 0:00			-37.40	-66.50											-72.58	-122.22	-73.75			-58.06							-88.90																					
7/1/2017 0:00																												-31.17	-71.54	-85.04	-114.90	-87.10	-94.89	-81.19														
8/6/2017 0:00															-72.67	-122.76	-71.86			-57.88																											
1/5/2017 0:00															-72.70	-123.00	-54.90			-56.32																											
8/1/2017 0:00																												-28.77		-76.78	-111.80	-90.50	-93.09	-80.49														
10/2/2017 0:00																												-29.07	-70.14	-75.14	-110.80	-66.00	-82.89	-76.69														
10/2/2017 17:00					-99.10														-52.50	-52.20																														
10/3/2017 0:00			-37.30	-66.90											-72.85	-123.66	-54.90			-58.36							-76.40																					
11/1/2017 0:00																												-29.37	-70.14	-74.74		-64.70	-91.99	-80.09														
############															-72.85	-123.96	-56.04			-58.41																											
12/1/2017 0:00					-79.20														-53.30	-53.20																														
12/29/2017 0:00			-37.60	-66.70											-72.94	-123.84	-61.67			-58.49							-81.20																					
1/7/2018 18:00																																																
1/8/2018 0:00																												-32.37	-61.54	-73.94		-64.40	-85.20	-102.29														
1/8/2018 10:26																			-56.45																														
1/5/2018 10:01																				-54.09																														
1/5/2018 10:02															-72.95																																		
1/5/2018 10:07																				-56.50																														
1/5/2018 13:10																												-32.47																					
1/5/2018 13:11																													-70.14																				
1/5/2018 13:12																														-74.44												

Clearwater UWCD - Edwards BFZ Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #	58-05-404	58-12-101	58-04-410	58-04-408	58-05-106	58-04-635	58-04-704	58-12-204	58-12-205	58-04-418	58-04-638	58-04-639	58-04-363	40-61-712	58-04-641	58-04-702	58-04-816	58-04-628	58-13-502	58-04-502	58-03-702	40-61-409		58-12-203	40-61-710	40-60-913	58-04-623	58-04-602	58-04-508	58-04-509	58-04-510	58-04-626	58-04-512	58-04-513	58-04-627	58-04-637	58-04-317	58-04-631	58-05-108	58-04-633	58-04-634	58-05-110	58-05-109	58-04-316	58-04-305	58-04-640	58-04-319	40-61-711	58-04-321	
CUWCD #	E-02-021P	E-02-646G	E-08-054P	E-10-005P	E-13-009P	E-18-043GU	E-18-107P	E-19-028P	E-19-029P	E-19-037P	E-19-079GU	E-19-081GU	E-19-113P	E-21-008GI	E-22-047G	M-06-001(	M-08-001G	M-08-002G	M-12-014(	M-13-004G	M-14-001P	M-16-002G	M-22-001P	N1-18-002P	N1-20-001P	N1-20-002P	N2-02-002G	N2-02-003G	N2-02-005G	N2-02-007G	N2-02-008G	N2-02-009G	N2-02-010G	N2-02-011G	N2-03-004G	N2-07-010G	N2-10-002P	N2-11-004P	N2-11-005P	N2-15-004P	N2-15-005P	N2-15-009P	N2-15-010P	N2-15-012P	N2-17-001P	N2-19-007P	N2-20-001G	N2-20-006G	N2-21-006P	N3-22-001P
Well Name	Avila	Trihn	Young	Coppin	Thaler	Brown	Edwards	Yepez	Yepez	Fishbeck	Campbell	Lowry	Law	Magnolia	hur. W. Ca	erson's Cro	Rest Stop	Salado Cemetar	ity of Bartl	Salado ISD	Gault - Edwards	Bell Co DOT		Windy Meadows	Dillman Trust	Donald & Sheryl Rich	Stagecoach (deep)	Salado WSC (#1)	Salado WSC (#3)	Salado WSC (#5)	Salado WSC (#6)	Salado WSC (#7)	7KX Ranch (#8)	7KX Ranch (#9)	Salado ISD (MS)	Bloomer Mfg.	James Construction	Charles Broecker	James & Terry Boston	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #6 - Reed	Scott Law Well #7 - Brady Woods	Scott Law Well #9 - Jana Lever	Heart of Texas Feed	Brazos Valley Equine Hospital	SDG Properties	Reddylee LLC	Salado RV Park	
Highest	-78.70	-210.60	-30.30	-58.30	-76.20	-44.20	-63.90	-236.40	-232.05	-36.11	-10.80	-10.36	-53.80	-101.59	-63.75	-69.82	-116.65	-4.49	-37.10	-38.30	-53.32	-126.73	-86.00	-234.00	-28.30	-54.93	-66.10	-21.57	-56.14	-68.64	-60.00	-58.40	-75.59	-72.49	-34.60	-97.10	-74.50	-67.10	-70.91	-46.54	-45.42	-23.80	-17.95	-19.22	-71.30	-80.00	-69.80	-31.50	-79.12	-106.00
Lowest	-100.00	-222.60	-40.10	-73.30	-128.10	-50.40	-68.00	-252.80	-252.00	-40.00	-15.20	-13.90	-87.40	-110.59	-63.75	-78.25	-129.53	-89.10	-83.30	-60.00	-59.97	-128.94	-86.00	-248.00	-56.80	-59.90	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-103.19	-103.70	-50.70	-108.40	-75.30	-78.10	-85.50	-108.51	-108.04	-66.29	-63.70	-57.20	-75.10	-102.21	-70.40	-32.01	-81.22	-106.00
7/2/2018 12:00																											-50.97			-117.90	-91.10	-100.89	-85.89																
7/5/2018 9:30			-39.30																																															
7/5/2018 9:40				-68.10																																														
7/5/2018 10:15																											-82.10																						
7/5/2018 12:00																-73.36	-126.74	-46.42			-58.71																												
7/5/2018 16:30																				-51.20																													
7/5/2018 16:36																																			-43.80														
7/5/2018 16:40																																						-75.70											
7/5/2018 16:51																																													-71.60					
7/5/2018 17:35					-115.40																																												
7/5/2018 17:47																																								-73.18									
7/5/2018 17:50																																									-72.32								
7/5/2018 18:28																			-51.00																														
7/9/2018 12:00																											-32.97	-59.48	-80.54	-91.50	-95.20	-99.49	-84.69															
7/16/2018 12:00																											-34.01	-59.64	-78.74	-89.70	-93.70	-100.89	-84.69															
7/23/2018 12:00																											-50.97	-69.24	-91.54	-119.20	-91.70	-103.19	-86.29															
7/30/2018 8:00																											-50.97	-69.54	-92.34	-120.10	-92.50	-102.99	-102.89															
8/6/2018 12:00																-73.29	-128.87				-58.72							-50.97	-69.54	-90.74	-119.70	-92.30	-103.09	-102.69															
8/9/2018 12:00																		-40.05																															
8/13/2018 12:00																-73.29	-127.84	-46.20			-58.73							-34.07	-59.40	-80.14	-91.20	-94.90	-100.90	-84.99															
8/20/2018 12:00																											-50.97	-69.24	-90.54	-118.90	-97.00	-101.29	-85.99															
8/27/2018 12:00																											-50.97	-72.54	-90.54	-119.10	-97.70	-103.19	-86.29															
9/3/2018 12:00																-73.36	-129.06	-42.24																															
9/10/2018 12:00																											-33.70	-58.74	-78.04	-87.70	-69.90	-97.69	-82.89															
9/17/2018 12:00																											-32.77	-58.84	-77.54	-87.10	-69.50	-96.69	-82.39															
9/24/2018 12:00																											-31.57	-58.54	-77.14	-87.30	-67.30	-96.69	-84.40															
9/27/2018 10:10				-68.10																																														
9/27/2018 10:32			-37.90																																															
9/27/2018 12:00																-73.41		-66.67																															
9/27/2018 17:17																				-50.00																													
9/27/2018 17:26																																			-42.60														
9/27/2018 17:30																																						-75.20											
9/27/2018 17:41																																													-71.50					
9/27/2018 18:02					-96.80																																												
9/27/2018 18:12																																								-57.71									
9/27/2018 18:14																																									-58.48								
9/27/2018 19:18																			-61.80																														
9/28/2018 12:00																	-125.56				-56.65																												
10/1/2018 10:59																											-83.20																						
10/1/2018 12:00																											-31.77	-59.64	-75.94	-86.90	-66.30	-98.59	-82.49															
10/8/2018 12:00																												-58.54	-75.04	-84.50	-66.10	-94.09	-80.79															
##############																											-31.97																					
##############																											-31.57	-58.64	-75.34	-84.50	-94.30	-93.69	-80.59															
##############																											-27.17	-56.94	-74.34	-83.00	-90.60	-88.09	-78.69															
11/5/2018 11:00																-73.06																																	
11/5/2018 12:00																	-123.01	-17.44			-55.76							-27.57	-57.84	-73.64	-81.90	-89.20	-86.89	-77.49															
##############																											-27.97	-57.94	-73.14	-105.30	-89.90	-84.90	-77.17															
##############																											-27.97	-58.14	-73.54	-106.10	-63.70	-84.49	-102.69															
##############																											-28.17	-58.14	-73.74	-107.10	-63.70	-84.49	-102.69															
12/3/2018 0:00																																-63.70																	
12/3/2018 12:00																-73.08	-122.45	-55.90			-56.99							-28.17	-58.34		-107.40		-84.49	-102.89															
12/4/2018 12:00																													-73.94																				
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12/27/2018 9:50			-37.60																																															
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12/28/2018 5:52																																									-47.65								
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2/4/2019 12:00																-72.34	-119.33	-43.46			-55.75																												
2/11/2019 12:00																											-25.77	-57.54	-69.94	-103.90	-60.10	-79.49	-102.69															
3/4/2019 11:27																											-75.00																						
3/4/2019 12:00																-72.45	-119.23	-57.45			-56.90							-26.17	-57.94	-69.84	-79.70	-60.20	-79.79	-102.69															
3/16/2019 12:00								-246.00																																									
3/23/2019 12:00									-246.00																																								
3/28/2019 10:32				-65.80																																														
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3/28/2019 12:00																-72.47	-120.05	-61.90			-57.33																												
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3/28/2019 18:48																																						-74.00											
3/28/2019 18:58																																													-71.40					
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3/28/2019 19:30																																											-20.98							
3/28/2019 20:05																			-54.00																														
4/1/2019 12:00																											-26.67	-58.04	-72.54	-110.70	-61.90	-81.29	-102.69															
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5/6/2019 10:00																	-119.38																																
5/6/2019 12:00																		-4.70			-55.69							-21.57	-56.14	-70.74	-78.50	-60.90	-75.59	-72.49															
6/3/2019 12:00																-71.56	-118.24	-57.38			-55.09							-25.07	-57.34	-78.54	-104.00	-59.90	-79.29	-73.09															
6/5/2019 9:52																											-73.20																						
6/26/2019 12:00																					-55.96																												
6/27/2019 5:35																																								-53.88									
6/27/2019 12:00																	-118.13	-34.76																															
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6/27/2019 17:38																																									-53.48								
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6/27/2019 18:54																																						-73.00											
6/27/2019 19:04					-81.50																																												
7/1/2019 12:00																											-25.37	-57.54		-108.30	-60.20	-78.19	-73.69															
7/1/2019 14:00																													-70.94																				
7/11/2019 17:25													-61.50																																				
7/22/2019 11:45		-210.60																																																
7/22/2019 12:00																	-119.77	-75.60			-56.70							-26.17	-57.94	-81.54	-109.00	-83.20	-85.19	-75.79															
7/22/2019 13:20															-63.75																																		
7/22/2019 13:30																						-126.73																	-71.60										
7/22/2019 13:35																																					-74.90												
7/22/2019 14:09																																													-74.70					
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7/22/2019 16:10										-36.11																																							
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7/22/2019 16:40																																						-74.00											
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7/23/2019 17:10						-44.60																																											
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7/24/2019 14:30									-236.25																																								
7/24/2019 15:00																																			-41.00														
8/5/2019 12:00																	-119.59	-75.26			-56.96							-55.67	-69.54	-74.34	-87.10	-88.90	-86.09	-76.29															
8/6/2019 11:45																											-79.70																						
8/26/2019 17:25																																									-76.62								
8/26/2019 21:27																																								-76.34									
9/3/2019 12:00																-72.16	-121.07	-76.71			-57.45																												
9/4/2019 12:00																											-50.77	-70.54	-83.24	-111.30	-85.10	-89.09	-78.09															
9/11/2019 19:25																																									-75.24								
9/11/2019 19:28																																								-75.23									
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9/25/2019 9:20																								-237.80																									
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9/27/2019 12:00																					-57.82																												
10/9/2019 9:10								-244.40																																									
11/4/2019 12:00																	-122.12	-68.41			-58.23																												
12/2/2019 12:00																	-122.73	-67.27			-58.42							-50.77	-70.54	-72.14	-80.80	-62.70	-83.88	-102.69															
12/4/2019 11:43																											-82.60																						
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1/31/2020 11:15										-36.90																																							
2/3/2020 12:00																-72.69		-67.56			-58.19							-50.87	-69.04	-72.84		-63.70	-84.39	-102.49															

Clearwater UWCD - Edwards BFZ Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #	58-05-404	58-12-101	58-04-410	58-04-408	58-05-106	58-04-635	58-04-704	58-12-204	58-12-205	58-04-418	58-04-638	58-04-639	58-04-363	40-61-712	58-04-641	58-04-702	58-04-816	58-04-628	58-13-502	58-04-502	58-03-702	40-61-409		58-12-203	40-61-710
CUWCD #	E-02-021P	E-02-646G	E-08-054P	E-10-005P	E-13-009P	E-18-043GU	E-18-107P	E-19-028P	E-19-029P	E-19-037P	E-19-079GU	E-19-081GU	E-19-113P	E-21-008GI	E-22-047G	M-06-001(	M-08-001G	M-08-002G	M-12-014(	M-13-004G	M-14-001P	M-16-002G	M-22-001P	N1-18-002P	N1-20-001P
Well Name	Avila	Trihn	Young	Coppin	Thaler	Brown	Edwards	Yepez	Yepez	Fishbeck	Campbell	Lowry	Law	Magnolia	hur. W. Ca	erson's Cro	Rest Stop	Salado Cemetar	ity of Bartl	Salado ISD	Gault - Edwards	Bell Co DOT		Windy Meadows	Dillman Trust
Highest	-78.70	-210.60	-30.30	-58.30	-76.20	-44.20	-63.90	-236.40	-232.05	-36.11	-10.80	-10.36	-53.80	-101.59	-63.75	-69.82	-116.65	-4.49	-37.10	-38.30	-53.32	-126.73	-86.00	-234.00	-28.30
Lowest	-100.00	-222.60	-40.10	-73.30	-128.10	-50.40	-68.00	-252.80	-252.00	-40.00	-15.20	-13.90	-87.40	-110.59	-63.75	-78.25	-129.53	-89.10	-83.30	-60.00	-59.97	-128.94	-86.00	-248.00	-56.80
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3/5/2020 11:29																					-57.70				
3/30/2020 12:00																									
4/1/2020 10:31																									
4/10/2020 12:00																									-33.00
5/3/2020 2:00																-72.73									
5/4/2020 9:52																									
5/4/2020 12:00																					-57.15				
5/26/2020 20:08																									
6/1/2020 12:00																	-122.63	-65.78			-57.89				
6/15/2020 12:00																									
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6/23/2020 9:40																								-239.40	
6/23/2020 9:59							-65.70																		
6/23/2020 10:24										-37.40															
6/23/2020 10:29			-38.20																						
6/23/2020 12:00																	-123.40	-76.52			-58.17				
6/23/2020 13:22																									
6/23/2020 17:41												-11.83													
6/23/2020 17:42											-13.42														
6/23/2020 17:50																									
6/23/2020 17:55																				-52.60					
6/23/2020 18:04						-47.10																			
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6/26/2020 18:36																			-57.00						
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6/26/2020 19:47					-119.70																				
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8/3/2020 9:34																									
8/3/2020 9:35																									
8/3/2020 12:00																-72.92	-124.90	-81.18			-58.52				
8/7/2020 9:35																									
8/10/2020 12:00																									
8/11/2020 10:07										-37.50															
8/11/2020 10:12			-39.50																						
8/11/2020 10:46																								-242.20	
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8/11/2020 15:20																						-128.50			
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8/11/2020 17:21												-13.08													
8/11/2020 17:23											-14.26														
8/11/2020 17:50						-49.10																			
8/11/2020 18:15																									
8/11/2020 18:19																				-53.80					
8/11/2020 18:25																									
8/11/2020 18:33					-128.10																				
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8/11/2020 18:45																									
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8/11/2020 19:07	-93.20																								
8/17/2020 0:00																									
8/17/2020 12:00																									
8/24/2020 12:00																									
9/7/2020 12:00																-72.89	-124.80	-73.87			-57.14				
9/9/2020 12:00																									
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9/30/2020 11:08																								-240.80	
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9/30/2020 11:43										-37.70															
9/30/2020 11:48			-39.70																						
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9/30/2020 12:08																									
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9/30/2020 18:46												-12.35													
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3/29/2021 12:00																-73.37	-124.77				-58.65				
3/29/2021 12:01				-67.90																					
3/29/2021 12:21							-67.40																		
3/29/2021 12:32																								-240.90	
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3/29/2021 19:00												-12.56													
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3/29/2021 19:18						-45.40																			
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State #	40-60-913	58-04-623	58-04-602	58-04-508	58-04-509	58-04-510	58-04-626	58-04-512	58-04-513	58-04-627	58-04-637	58-04-317	58-04-631	58-05-108	58-04-633	58-04-634	58-05-110	58-05-109	58-04-316	58-04-305	58-04-640	58-04-319	40-61-711	58-04-321	
CUWCD #	N1-20-002P	N2-02-002G	N2-02-003G	N2-02-005G	N2-02-007G	N2-02-008G	N2-02-009G	N2-02-010G	N2-02-011G	N2-03-004G	N2-07-010G	N2-10-002P	N2-11-004P	N2-11-005P	N2-15-004P	N2-15-005P	N2-15-009P	N2-15-010P	N2-15-012P	N2-17-001P	N2-19-007P	N2-20-001G	N2-20-006G	N2-21-006P	N3-22-001P
Well Name	Donald & Sheryl Rich	Stagecoach (deep)	Salado WSC (#1)	Salado WSC (#3)	Salado WSC (#5)	Salado WSC (#6)	Salado WSC (#7)	7KX Ranch (#8)	7KX Ranch (#9)	Salado ISD (MS)	Bloomer Mfg.	James Construction	Charles Broecker	James & Terry Boston	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #6 - Reed	Scott Law Well #7 - Brady Woods	Scott Law Well #9 - Jana Lever	Heart of Texas Feed	Brazos Valley Equine Hospital	SDG Properties	Reddylee LLC	Salado RV Park	
Highest	-54.93	-66.10	-21.57	-56.14	-68.64	-60.00	-58.40	-75.59	-72.49	-34.60	-97.10	-74.50	-67.10	-70.91	-46.54	-45.42	-23.80	-17.95	-19.22	-71.30	-80.00	-69.80	-31.50	-79.12	-106.00
Lowest	-59.90	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-103.19	-103.70	-50.70	-108.40	-75.30	-78.10	-85.50	-108.51	-108.04	-66.29	-63.70	-57.20	-75.10	-102.21	-70.40	-32.01	-81.22	-106.00
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3/2/2020 11:25		-91.40																							
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3/30/2020 12:00			-50.87	-70.74	-73.04	-82.50	-63.50	-84.09	-102.69																
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6/1/2020 12:00			-50.77	-71.14	-73.54	-86.30	-63.70	-88.89	-78.89																
6/15/2020 12:00			-64.07	-71.64	-86.94	-92.70	-67.50	-94.29	-81.59																
6/22/2020 12:00			-50.77	-71.64	-78.24	-91.50	-67.30	-90.49	-81.29																
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8/24/2020 12:00			-50.97	-72.74	-89.14	-114.90	-91.70	-94.39	-82.59																
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9/9/2020 12:00			-50.97	-71.54	-75.34	-86.00	-65.70	-86.49	-79.99																
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9/14/2020 12:00			-50.97	-71.34	-77.54	-110.30	-67.10	-87.29	-80.49																
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Clearwater UWCD - Edwards BFZ Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and on additional well in Uvalde, shown in red.

Date #	18-05-404	18-12-101	18-04-410	18-06-403	18-05-106	18-04-615	18-06-704	18-12-204	18-12-205	18-04-018	18-04-020	18-04-029	18-06-063	40-61-712	18-04-041	18-06-722	18-04-816	18-04-028	18-11-502	18-04-102	18-03-702	40-61-405		18-12-203	40-61-710	40-60-513	18-04-623	18-06-602	18-04-508	18-04-509	18-04-510	18-04-526	18-04-513	18-04-513	18-04-627	18-04-627	18-04-217	18-04-631	18-05-108	18-06-633	18-04-634	18-05-110	18-05-109	18-04-316	18-04-205	18-04-640	18-08-203	40-61-711	18-04-221
CUWCD #	E-56-501F	E-56-644L	E-56-001F	E-19-505F	E-19-309F	E-19-901U	E-19-107F	E-19-130P	E-19-129P	E-19-037P	E-19-079U	E-19-978U	E-19-113P	E-21-808U	E-22-047U	M-56-001U	M-59-101L	M-59-002L	M-59-003L	Saluda Cemetery	Ag of Barth	Saluda (S)	Gault / Edwards	Bell Co DOT	M-22-003F	Windy Meadows	Dillman Trust	Donald & Sheryl Rich	Rogerson Family	Saluda WSC (#1)	Saluda WSC (#2)	Saluda WSC (#3)	Saluda WSC (#4)	Saluda WSC (#7)	TKK Ranch (#8)	TKK Ranch (#9)	Saluda (SD WSC)	Bluemar Mfg.	James Construction	Charles Broecker	James & Terry Burton	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #3 - Read	Scott Law Well #1 - Brady Woods	Scott Law Well #3 - Java Level	Heart of Texas Feed	Brazos Valley Equine Hospital	SDG Properties	Saddyback LLC	Saluda RV Park
Well Name	Avilla	Tolfa	Young	Coppin	Thiller	Brown	Edwards	Yupac	Yupac	Pathtrek	Campbell	Lowry	Law	Magnolia	Sue, W.	Caravan's Cm	Rest Stop	Saluda Cemetery	Ag of Barth	Saluda (S)	Gault / Edwards	Bell Co DOT		Windy Meadows	Dillman Trust	Donald & Sheryl Rich	Rogerson Family	Saluda WSC (#1)	Saluda WSC (#2)	Saluda WSC (#3)	Saluda WSC (#4)	Saluda WSC (#7)	TKK Ranch (#8)	TKK Ranch (#9)	Saluda (SD WSC)	Bluemar Mfg.	James Construction	Charles Broecker	James & Terry Burton	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #3 - Read	Scott Law Well #1 - Brady Woods	Scott Law Well #3 - Java Level	Heart of Texas Feed	Brazos Valley Equine Hospital	SDG Properties	Saddyback LLC	Saluda RV Park
Highest	-78.70	-210.80	-93.20	-58.10	-76.20	-44.20	-43.00	-236.40	-232.05	-36.13	-21.00	-53.90	-13.00	-303.19	-63.75	-68.32	-118.65	-4.69	-72.10	-28.10	-54.12	-126.73	-86.00	-218.00	-28.30	-54.51	-96.10	-23.57	-56.14	-48.64	-60.20	-58.40	-72.74	-92.38	-72.00	-54.02	-97.10	-76.50	-47.10	-70.91	-46.14	-41.42	-22.82	-17.05	-15.22	-71.30	-62.50	-68.30	-74.12	-106.00
Lowest	-100.00	-222.60	-85.10	-73.30	-128.10	-55.40	-68.00	-252.80	-252.00	-40.00	-15.20	-13.90	-87.40	-159.58	-63.75	-78.25	-129.53	-89.10	-65.30	-60.00	-59.97	-126.94	-86.00	-249.00	-56.80	-59.90	-106.50	-64.07	-72.74	-92.38	-120.10	-97.70	-103.19	-103.70	-50.50	-106.40	-75.30	-78.10	-85.50	-108.51	-108.04	-66.29	-34.01	-57.20	-75.10	-102.21	-70.40	-72.01	-83.72	-106.00
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Clearwater UWCD - Edwards BFZ Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Kendall, shown in red.

Date # (USACE)	18-05-404 E-66-0537	18-12-501 E-66-6466	18-04-410 E-66-0619	18-06-403 E-19-1037	18-05-106 E-19-3009	18-04-615 E-19-3010	18-06-704 E-19-1079	18-12-204 E-19-1330	18-12-205 E-19-1338	18-04-618 E-19-0579	18-04-616 E-19-0780	18-04-619 E-19-0810	18-06-313 E-19-1129	40-61-712 E-21-3060	18-04-641 E-22-0574	18-06-722 M-06-0011	18-04-616 M-08-0016	18-04-618 M-08-0024	18-11-502 M-13-0144	18-04-102 M-13-0306	18-03-702 M-18-0019	40-61-405 M-18-0201	M-22-0019	18-12-203 N1-18-0139	40-61-710 N1-20-0019	40-60-513 N1-20-0139	18-04-623 N2-00-0026	18-06-602 N2-00-0035	18-04-508 N2-02-0006	18-04-509 N2-02-0076	18-04-510 N2-02-0086	18-04-526 N2-02-0096	18-04-513 N2-02-0106	18-04-513 N2-02-0116	18-04-617 N2-07-0146	18-04-627 N2-07-0106	18-04-217 N2-14-0019	18-04-431 N2-11-0039	18-05-108 N2-11-0107	18-06-633 N2-15-0099	18-04-634 N2-15-0439	18-05-110 N2-15-0099	18-05-109 N2-15-0109	18-04-316 N2-15-0129	18-04-201 N2-17-0027	18-04-640 N2-19-0079	18-08-303 N2-20-0016	40-61-711 N2-20-0066	18-04-221 N2-21-0069	N2-22-0019
Well Name	Ayllu	Tuffy	Young	Coppin	Thiller	Brown	Edwards	Yupon	Yupon	Pathtrek	Campbell	Lowry	Law	Magnolia	Sue, W.	Caraway's Crk	Rest Stop	Schatte Cemetery	Ag of Barth	Schatte Old	Gault - Edwards	Bell Co DOT	Windy Meadows	Dillman Trail	Donald & Sharyl Rich	Stagecoach (deep)	Schatte WSC (#1)	Schatte WSC (#2)	Schatte WSC (#3)	Schatte WSC (#4)	Schatte WSC (#5)	Schatte WSC (#6)	TKK Ranch (#1)	TKK Ranch (#2)	Schatte (30 GHS)	Bluemar Mfg.	James Construction	Charles Broecker	James & Terry Boston	Scott Law Well #1, Guthrie	Scott Law Well #2, Guthrie	Scott Law Well #3 - Bear	Scott Law Well #1 - Brady Woods	Scott Law Well #3 - Jena Lane	Scott Law Well #2	Heart of Texas Feed	Brazos Valley Equine Hospital	SOG Properties	Sedalyke LLC	Sedalyke RV Park	
Highest	-78.70	-210.80	93.26	-58.97	-76.20	-44.20	-43.00	-236.40	-232.05	-36.13	-11.00	-13.90	-13.80	-303.97	-63.75	-78.25	-129.53	-89.10	-65.30	-60.00	-59.97	-126.74	-86.00	-249.00	-54.80	-59.00	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-103.19	-103.70	-50.70	-106.40	-75.30	-78.10	-85.50	-108.51	-108.06	-66.29	-63.70	-57.20	-75.10	-102.21	-70.40	-32.01	-81.22	-106.00
Lowest	-300.00	-220.80	-85.10	-73.30	-128.10	-50.40	-68.00	-252.80	-252.00	-40.00	-15.20	-13.90	-87.40	-310.58	-63.75	-78.25	-129.53	-89.10	-65.30	-60.00	-59.97	-126.94	-86.00	-249.00	-54.80	-59.00	-106.50	-64.07	-72.74	-92.34	-120.10	-97.70	-103.19	-103.70	-50.70	-106.40	-75.30	-78.10	-85.50	-108.51	-108.06	-66.29	-63.70	-57.20	-75.10	-102.21	-70.40	-32.01	-81.22	-106.00
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Clearwater UWCD - Edwards BFZ Monitor Wells

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Done #	18-05-404	18-12-501	18-04-410	18-06-403	18-05-106	18-04-625	18-06-704	18-12-204	18-12-205	18-04-018	18-06-630	18-04-629	18-06-263	40-61-712	18-04-646	18-06-722	18-04-616	18-04-628	18-11-502	18-04-502	18-20-702	40-61-405	18-12-203	40-61-718	40-60-513	18-04-623	18-06-602	18-04-508	18-04-509	18-04-510	18-04-526	18-04-513	18-06-513	18-04-617	18-04-627	18-04-317	18-04-631	18-05-108	18-06-632	18-04-634	18-05-110	18-05-109	18-06-316	18-04-201	18-04-640	18-08-303	40-61-711	18-04-221
CUWCD #	E-56-501F	E-56-646L	E-38-061F	E-19-505F	E-19-509F	E-18-505U	E-19-107F	E-19-318F	E-19-319F	E-19-067F	E-19-979U	E-19-981U	E-19-112F	E-21-808U	E-22-047U	M-06-001I	M-09-031L	M-09-032L	M-13-014L	M-13-009L	M-18-901F	M-16-002L	M-22-061F	N-19-053F	N-20-001F	N-20-002F	N-20-003F	N2-02-002L	N2-02-003L	N2-02-005L	N2-02-006L	N2-02-007L	N2-02-008L	N2-02-009L	N2-02-010L	N2-02-014L	N2-02-015L	N2-02-016L	N2-02-017L	N2-02-018L	N2-02-019L	N2-02-020L	N2-02-021L	N2-02-022L	N2-02-023L	N2-02-024L	N2-02-025L	N2-02-026L	N2-02-027L	N2-02-028L	N2-02-029L	N2-02-030L	N2-02-031L	N2-02-032L	N2-02-033L

Clearwater UWCD - Upper Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #	40-57-902	40-57-903	58-04-103	40-57-905	40-58-201	57-15-903	40-59-302	40-57-906					
CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
2/24/1993 0:00			-301.70										
2/8/1994 0:00			-308.25										
1/26/1995 0:00			-280.10										
1/12/1998 0:00			-302.27										
1/13/1999 0:00			-297.20										
2/19/2004 0:00			-304.70										
11/1/2006 0:00	-142.10	-142.50											
1/1/2007 0:00	-144.30	-144.20											
7/1/2007 0:00	-131.20	-131.10											
1/1/2008 0:00	-134.50	-134.40											
7/1/2008 0:00	-151.80	-151.50											
1/1/2009 0:00	-145.40	-145.00											
7/1/2009 0:00	-159.60	-159.50											
1/1/2010 0:00	-152.10	-152.00			-87.59	-7.38							
7/1/2010 0:00	-150.60	-151.30			-77.83	-14.51							
1/1/2011 0:00	-149.70	-150.00			-79.64	-16.03							
2/25/2011 0:00			-326.12										
7/1/2011 0:00	-166.80	-165.70			-80.53	-16.42							
9/1/2011 0:00	-170.10	-170.90			-81.01	-28.97							
11/1/2011 0:00	-163.80	-164.30			-80.28	-48.35							
1/1/2012 0:00	-156.50	-157.30			-79.72	-64.19							
5/1/2012 0:00	-156.40	-157.60			-78.99	-13.83							
10/9/2012 0:00			-332.23										
1/1/2013 0:00	-155.00	-157.30			-81.66	-16.64							
5/1/2013 0:00	-160.80	-161.30			-82.13	-16.34							
8/1/2013 0:00	-172.60	-173.30			-82.70	-15.16							
11/1/2013 0:00	-159.20	-160.00			-82.35	-13.11							
2/1/2014 0:00	-156.80	-157.70			-82.68	-14.94							
5/1/2014 0:00	-163.00	-162.90			-83.07	-15.95							
8/1/2014 0:00	-169.70	-167.70			-83.56	-15.96							
11/1/2014 0:00	-165.10	-166.60			-83.42	-21.88							
1/1/2015 0:00	-157.60	-158.40			-83.54	-15.98							
6/1/2015 0:00	-153.20	-154.20			-83.92	-10.12							
9/14/2015 0:00	-167.90	-167.90			-83.48	-15.17							
11/30/2015 0:00	-155.50	-156.50			-82.72	-10.51							
1/1/2016 0:00						-4.93							
1/5/2016 0:00	-154.70	-155.60			-83.50								
4/19/2016 0:00	-155.03				-83.82	-7.72							
4/19/2016 6:00		-157.10											
6/1/2016 0:00						-8.28							

Clearwater UWCD - Upper Trinity Monitor Wells

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State #	40-57-902	40-57-903	58-04-103	40-57-905	40-58-201	57-15-903	40-59-302	40-57-906					
CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
8/30/2016 0:00	-159.00	-162.50			-84.45								
10/3/2016 0:00					-84.30								
10/6/2016 0:00			-310.15										
10/19/2016 0:00					-84.25								
12/1/2016 0:00					-84.07								
12/6/2016 0:00					-83.91								
12/29/2016 0:00	-153.60	-153.80											
1/5/2017 0:00					-83.90								
2/6/2017 0:00					-83.92								
3/5/2017 0:00					-83.96								
3/30/2017 0:00	-154.10	-154.40			-84.00								
5/8/2017 0:00					-84.23								
6/4/2017 0:00					-84.21								
7/7/2017 0:00	-162.70	-162.90			-84.51								
8/9/2017 0:00					-83.28								
9/5/2017 0:00					-83.37								
10/2/2017 0:00	-160.90	-161.40			-83.30								
10/2/2017 14:09						-14.20							
11/6/2017 0:00					-83.29								
11/6/2017 14:13						-14.05							
12/4/2017 0:00					-83.20								
12/4/2017 14:13						-14.12							
12/27/2017 0:00	-156.70	-156.80			-83.31								
12/27/2017 14:14						-13.81							
3/5/2018 0:00						-13.86							
3/8/2018 12:00					-83.18								
3/29/2018 0:00						-13.98							
3/29/2018 12:00					-83.41								
5/7/2018 0:00						-13.54							
5/7/2018 14:21					-83.78								
6/3/2018 20:00					-83.99								
6/4/2018 0:00						-11.75							
6/21/2018 11:57		-162.70											
6/21/2018 12:00					-84.21								
6/22/2018 11:53	-162.60												
7/5/2018 0:00						-11.18							
8/6/2018 12:00					-84.54								
8/13/2018 12:00					-84.38								
9/3/2018 12:00					-84.46								
9/4/2018 12:00						-12.81							

Clearwater UWCD - Upper Trinity Monitor Wells

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State #	40-57-902	40-57-903	58-04-103	40-57-905	40-58-201	57-15-903	40-59-302	40-57-906					
CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
9/10/2018 9:30							-477.86						
9/28/2018 12:00					-84.30	-11.83							
9/28/2018 12:14	-165.70												
9/28/2018 12:17		-166.00											
9/28/2018 14:20							-473.69						
10/17/2018 16:07			-410.82										
11/5/2018 12:00					-83.46	-5.69							
12/3/2018 12:00					-83.64	-8.36							
12/26/2018 9:12							-475.93						
12/26/2018 11:24	-157.10												
12/26/2018 11:27		-157.40											
12/26/2018 12:00					-83.35								
12/31/2018 12:00						-8.77							
2/4/2019 12:00					-83.48	-8.75							
3/4/2019 12:00					-83.91	-9.39							
3/26/2019 9:35							-468.48						
3/26/2019 11:25	-154.00												
3/26/2019 11:28		-154.10											
3/26/2019 12:00					-84.02								
4/1/2019 12:00						-10.07							
5/6/2019 8:00					-84.51								
5/6/2019 12:00						-9.56							
6/3/2019 12:00					-84.88	-9.55							
6/26/2019 9:18							-467.55						
6/26/2019 11:13	-154.10												
6/26/2019 11:16		-154.40											
7/1/2019 12:00						-9.42							
8/5/2019 12:00					-84.81	-11.04							
9/2/2019 12:00						-11.73							
9/3/2019 12:00					-85.08								
9/27/2019 10:00							-473.06						
9/27/2019 11:41	-164.50												
9/27/2019 11:43		-165.00											
9/27/2019 12:00					-84.98								
10/7/2019 12:00						-12.85							
10/16/2019 11:40				-213.14									
10/18/2019 8:02				-215.47									
10/18/2019 22:02				-212.47									
11/4/2019 12:00					-85.22	-13.56							
12/2/2019 6:00						-13.35							

Clearwater UWCD - Upper Trinity Monitor Wells

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CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
12/2/2019 12:00					-85.26								
12/26/2019 6:00						-13.80							
12/26/2019 10:11							-473.97						
12/26/2019 12:00					-85.07								
12/26/2019 12:57				-222.86									
12/26/2019 13:20	-158.50												
12/26/2019 13:22		-158.80											
2/2/2020 12:00					-85.10								
2/3/2020 6:00						-14.03							
3/2/2020 6:00						-13.62							
5/4/2020 5:00						-12.01							
5/4/2020 12:00					-84.70								
6/1/2020 12:00					-85.11								
6/2/2020 5:00						-12.07							
6/24/2020 9:28							-474.09						
6/25/2020 5:00						-12.54							
6/25/2020 10:17				-226.63									
6/25/2020 10:34	-171.30												
6/25/2020 10:37		-171.40											
6/25/2020 12:00					-85.38								
8/3/2020 5:00						-13.26							
8/3/2020 12:00					-85.74								
9/7/2020 5:00						-13.53							
9/7/2020 12:00					-84.94								
10/1/2020 12:00					-85.03								
10/2/2020 5:00						-13.28							
10/2/2020 9:02							-483.66						
10/2/2020 10:57	-170.90												
10/2/2020 11:00		-171.30											
10/2/2020 11:15				-233.62									
12/1/2020 12:00					-85.07								
12/27/2020 12:00					-85.07								
12/29/2020 10:30				-235.20									
12/30/2020 13:38	-167.80												
12/30/2020 13:41		-168.00											
12/30/2020 14:38							-480.20						
2/1/2021 6:00						-12.46							
3/1/2021 6:00						-12.88							
3/30/2021 10:11				-237.50									
3/30/2021 10:40								-164.14					

Clearwater UWCD - Upper Trinity Monitor Wells

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Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
3/31/2021 5:00						-13.30							
3/31/2021 12:00					-85.49								
3/31/2021 14:53		-170.10											
3/31/2021 15:35							-478.98						
4/2/2021 14:49	-169.90												
5/3/2021 5:00						-13.09							
5/3/2021 12:00					-84.93								
6/29/2021 10:07				-236.56									
6/29/2021 10:38								-165.87					
6/30/2021 12:00					-85.47								
6/30/2021 15:10	-172.90												
6/30/2021 15:12		-173.40											
6/30/2021 16:11							-477.89						
9/2/2021 11:40								-168.11					
9/29/2021 12:00					-85.51								
9/29/2021 14:37								-170.24					
9/29/2021 14:48	-177.90												
9/29/2021 14:50		-178.20											
9/29/2021 16:00							-482.21						
10/13/2021 14:30			-418.80										
11/1/2021 12:00					-85.26								
12/29/2021 12:00					-85.06								
12/29/2021 15:07								-166.48					
12/29/2021 15:18	-171.90												
12/29/2021 15:20		-172.20											
12/29/2021 16:14							-481.40						
2/7/2022 18:00					-85.36								
4/6/2022 11:00					-85.55								
4/6/2022 19:17								-171.89					
4/6/2022 19:28	-176.40												
4/6/2022 19:31		-176.70											
4/6/2022 20:39							-482.14						
5/2/2022 11:00					-85.75								
6/29/2022 11:00					-86.28								
6/29/2022 12:43								-176.54					
6/29/2022 12:54	-184.70												
6/29/2022 12:57		-184.50											
6/29/2022 13:48							-485.73						
8/1/2022 11:00					-86.32								
8/22/2022 11:00					-86.32								

Clearwater UWCD - Upper Trinity Monitor Wells

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CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
9/6/2022 11:00					-86.14								
10/5/2022 11:00					-86.06								
10/5/2022 12:59								-178.05					
10/5/2022 13:10	-185.30												
10/5/2022 13:13		-185.30											
10/5/2022 13:57							-491.81						
11/1/2022 11:00					-85.75								
12/29/2022 18:00					-85.25								
12/29/2022 21:00								-172.25					
12/29/2022 21:16	-178.40												
12/29/2022 21:19		-178.10											
12/29/2022 22:22							-481.26						
2/6/2023 6:00						-17.18							
2/6/2023 18:00					-85.27								
3/6/2023 6:00						-13.49							
3/6/2023 18:00					-85.46								
3/29/2023 5:00						-13.29							
3/29/2023 17:00					-85.77								
3/29/2023 19:08								-170.48					
3/29/2023 19:21	-177.80												
3/29/2023 19:23		-177.60											
3/29/2023 20:22							-488.82						
5/1/2023 5:00						-13.65							
5/1/2023 17:00					-85.62								
6/5/2023 5:00						-11.72							
6/5/2023 17:00					-85.79								
6/28/2023 5:00						-12.85							
6/28/2023 17:00					-86.12								
6/28/2023 19:04								-175.48					
6/28/2023 19:18	-182.80												
6/28/2023 19:20		-183.90											
6/28/2023 20:19							-490.09						
8/7/2023 17:00					-86.45								
9/5/2023 17:00					-86.36								
9/29/2023 17:00					-86.24								
9/29/2023 19:00								-182.83					
9/29/2023 19:15	-190.70												
9/29/2023 19:18		-191.80											
9/29/2023 20:10							-498.81						
11/6/2023 18:00					-85.74								

Clearwater UWCD - Upper Trinity Monitor Wells

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CUWCD #	E-02-721G	E-02-722G	E-16-052GU	E-19-224P	M-10-001P	L7-CTGCD_Robin	N1-18-003P	N1-19-007P					
Well Name	McCallum #1	McCallum #2	Fant	R Family Land	CTC	Robinson	Myers	risty & Larry Bickel					
Highest	-131.20	-131.10	-280.10	-212.47	-77.83	-4.93	-467.55	-164.14	0.00	0.00	0.00	0.00	0.00
Lowest	-190.70	-191.80	-418.80	-237.50	-87.59	-64.19	-498.81	-182.83	0.00	0.00	0.00	0.00	0.00
12/29/2023 18:00					-85.44								
12/29/2023 21:52								-174.64					
12/29/2023 21:59	-179.50												
12/29/2023 22:02		-180.50											
12/29/2023 22:32							-487.47						
Since Last													
Historic													

E-line Measurement
Sonic Measurement
TWDB Measurement
No Reading Available

The desired future conditions established by Clearwater Underground Water Conservation District for the Upper Trinity is no more than 155 feet of drawdown after 50 years.

The average drawdown goal per year is -3.1 feet.

Minimum Number of Measurements: 5

Average Drawdown **-3.78 ft/yr**

Drawdown of Water Level

Increase of Water Level

Clearwater UWCD - Middle Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory requirements by. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through published of continuous monitoring data on thenearest wells, of the TxDOT wells and an additional well in Ochiltree, shown in red.

| Date ▲ | 58-59-806 | 58-59-907 | 58-59-914 | 49-48-1 | 49-51-301 | 49-51-302 | 49-51-303 | 49-51-304 | 49-51-305 | 49-51-306 | 49-51-307 | 49-51-308 | 49-51-309 | 58-59-501 | 58-59-502 | 58-59-503 | 58-59-504 | 58-59-505 | 58-59-506 | 58-59-507 | 58-59-508 | 58-59-509 | 58-59-510 | 58-59-511 | 58-59-512 | 58-59-513 | 58-59-514 | 58-59-515 | 58-59-516 | 58-59-517 | 58-59-518 | 58-59-519 | 58-59-520 |

Clearwater UWCD - Middle Trinity Monitor Wells

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| Date ▲ | 58-59-806 | 58-58-907 | 58-58-914 | 58-58-402 | 58-58-913 | 58-58-910 | 58-58-911 | 58-58-914 | 58-58-915 | 58-58-916 | 58-58-917 | 58-58-918 | 58-58-919 | 58-58-920 | 58-58-921 | 58-58-922 | 58-58-923 | 58-58-924 | 58-58-925 | 58-58-926 | 58-58-927 | 58-58-928 | 58-58-929 | 58-58-930 | 58-58-931 | 58-58-932 | 58-58-933 |

Clearwater UWCD - Middle Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through published continuous monitoring data on thenearest wells. of the FLOAT wells and an additional well in Salado, shown in red.

| Date ▲ | 58-59-806 | 58-59-907 | 58-59-914 | 58-60-402 | 58-60-501 | 58-60-502 | 58-60-503 | 58-60-504 | 58-60-505 | 58-60-506 | 58-60-507 | 58-60-508 | 58-60-509 | 58-60-510 | 58-60-601 | 58-60-602 | 58-60-603 | 58-60-604 | 58-60-605 | 58-60-606 | 58-60-607 | 58-60-608 | 58-60-609 | 58-60-610 | 58-60-611 | 58-60-612 | 58-60-613 | 58-60-614 | 58-60-615 | 58-60-616 | 58-60-617 | 58-60-618 | 58-60-619 | 58-60-620 |

Clearwater UWCD - Middle Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory requirements. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through published continuous monitoring data on themeasurements of the FLEET wells and an additional well in Salado, shown in red.

| State # | 58-59-806 | 58-59-907 | 58-59-914 | 65-60-102 | 58-59-701 | 65-53-902 | 65-53-910 | 58-59-918 | 58-59-925 | 58-59-938 | 58-59-939 | 58-59-943 | 58-59-945 | 58-59-947 | 58-59-948 | 58-59-949 | 58-59-950 | 58-59-951 | 58-59-952 | 58-59-953 | 58-59-954 | 58-59-955 | 58-59-956 | 58-59-957 | 58-59-958 | 58-59-959 | 58-59-960 | 58-59-961 | 58-59-962 | 58-59-963 | 58-59-964 | 58-59-965 | 58-59-966 | 58-59-967 | 58-59-968 | 58-59-969 | 58-59-970 | 58-59-971 | 58-59-972 | 58-59-973 | 58-59-974 | 58-59-975 | 58-59-976 | 58-59-977 | 58-59-978 | 58-59-979 | 58-59-980 | 58-59-981 | 58-59-982 | 58-59-983 | 58-59-984 | 58-59-985 | 58-59-986 | 58-59-987 | 58-59-988 | 58-59-989 | 58-59-990 | 58-59-991 | 58-59-992 | 58-59-993 | 58-59-994 | 58-59-995 | 58-59-996 | 58-59-997 | 58-59-998 | 58-59-999 | 58-59-1000 | 58-59-1001 | 58-59-1002 | 58-59-1003 | 58-59-1004 | 58-59-1005 | 58-59-1006 | 58-59-1007 | 58-23-1008 |
|---|---|---

Clearwater UWCD - Middle Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory requirements. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through published coordinates monitoring data on themeasurements of the TxDOT wells and an additional well in Ochiltree, shown in red.

| Date ▲ | 58 59 806 | 58 59 907 | 58 59 914 | 65 60 102 | 58 59 915 | 58 59 916 | 58 59 917 | 58 59 918 | 58 59 919 | 58 59 920 | 58 59 921 | 58 59 922 | 58 59 923 | 58 59 924 | 58 59

Clearwater UWCD - Middle Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statutory responsibility. The Texas Water Development Board conducted several of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through

| Date ▼ | 58 59 806 | 58 59 907 | 58 59 914 | 49 60 402 | 58 61 902 | 58 61 903 | 58 61 904 | 58 61 905 | 58 61 906 | 58 61 907 | 58 61 908 | 58 61 909 | 58 61 910 | 58 61 911 | 58 61

Clearwater UWCD - Lower Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71

Date	40-62-501	40-54-701	40-61-509	40-53-405	58-10-303	58-17-902	58-29-603	58-06-102
3/1/1952 0:00			-31.00					
9/30/1955 0:00								-50
12/29/1961 0:00								-36
1/8/1965 12:00							-37.9	
3/21/1966 12:00							-40.57	
8/30/1966 12:00					-293.45		-47.03	
9/1/1966 0:00	-136.13		-134.13					
9/28/1966 12:00					-309.05			
11/3/1966 12:00					-292.25			
11/23/1966 12:00					-290.14			
3/24/1967 12:00					-295.75		-42.3	
5/4/1967 12:00					-303.46			
6/8/1967 12:00					-306.45			
11/9/1967 12:00					-302.15			
12/8/1967 12:00					-304.09			
2/16/1968 12:00					-295.29			
3/13/1968 12:00					-289.96			
3/19/1968 12:00							-45.95	
5/7/1968 12:00					-292.36			
6/1/1968 0:00		-259.00						
3/5/1969 12:00					-293.17			
3/18/1969 12:00							-49.49	
9/30/1969 12:00					-310.5			
10/23/1969 12:00					-316.75			
11/25/1969 12:00					-293.15			
12/22/1969 12:00					-296.49			
1/26/1970 12:00					-305.6			
3/4/1970 12:00					-310.21			
3/20/1970 12:00							-54.27	
4/14/1970 12:00						-220.4		
6/5/1970 0:00					-290.97			
7/7/1970 12:00					-308.59			
9/3/1970 12:00					-308.75			
10/2/1970 12:00					-298.46			
11/3/1970 12:00					-299.85			
12/8/1970 12:00					-313.15			
1/8/1971 12:00					-313.65			
2/5/1971 12:00					-312.15			
3/21/1971 12:00							-61.1	
3/23/1971 12:00					-308.39			
3/25/1971 12:00						-232.15		
4/9/1971 12:00					-314.87			
5/11/1971 12:00					-319.15			
6/8/1971 12:00					-315.3			
8/3/1971 12:00					-313.85			
10/5/1971 12:00					-308.85			
12/3/1971 12:00					-306.1			
2/8/1972 12:00					-309.07			
3/8/1972 12:00					-306.73			
3/15/1972 12:00							-75.5	
4/7/1972 12:00					-313.15			
6/2/1972 12:00					-317.9			
10/3/1972 12:00					-318.75			
12/5/1972 12:00					-317.5			
1/9/1973 12:00					-317.2			
3/13/1973 12:00					-319.77			
3/15/1973 12:00							-68.04	
5/8/1973 12:00					-315.5			
6/5/1973 12:00					-316.75			
8/6/1973 12:00					-317.1			
11/2/1973 12:00					-317.15			
1/8/1974 12:00					-316.98			
1/14/1974 0:00				-268.60				
3/18/1974 12:00						-223.85		
3/19/1974 12:00							-72.02	
5/29/1975 12:00							-76.93	
3/10/1976 12:00							-84.3	
3/11/1976 12:00					-324.05			
3/29/1976 12:00						-248.15		
3/16/1977 12:00					-329.25	-245.72		
3/17/1977 12:00							-87.89	
3/1/1978 0:00			-94.19					
4/12/1978 12:00						-268.1		
3/23/1979 12:00					-341.41		-105.6	
3/29/1979 12:00						-256.75		
3/18/1980 12:00						-269.15		
3/20/1980 12:00							-111.82	
4/3/1981 12:00						-281.85	-110.43	
5/13/1983 12:00						-288.85		
3/9/1984 12:00					-410.2			
3/13/1984 12:00						-298.37		
6/1/1984 12:00							-168.29	
9/10/1984 12:00							-173.91	
3/18/1985 12:00						-306		
4/29/1986 12:00					-387.1			
5/13/1986 12:00						-307.85		
5/14/1986 12:00							-165.88	
4/21/1987 12:00					-407.89	-307.68		
4/22/1987 12:00							-170.04	
8/19/1988 12:00					-424.06			
1/18/1989 12:00						-321.2		
2/16/1990 12:00					-470.26			
2/21/1990 12:00							-203.7	
2/25/1991 12:00							-199.2	
1/30/1992 12:00						-290.55		
2/7/1992 12:00							-179.65	
2/10/1992 12:00					-454.09			
1/15/1993 12:00						-306		
2/24/1994 12:00						-311.65	-186.25	
11/9/1994 12:00						-315.2		
11/10/1994 12:00							-187.6	
7/31/1995 12:00					-472.57			
1/21/1996 12:00						-311.2		
1/26/1996 12:00							-181.7	
1/29/1996 12:00					-470.26			
8/5/1996 12:00					-521.08			
8/7/1996 12:00						-335.5		
11/5/1996 12:00							-197.75	
11/6/1996 12:00						-324.8		
1/27/1997 12:00					-500.29	-307.65		
3/13/1997 12:00						-275.9		
4/16/1997 12:00						-280.16		
6/18/1997 12:00						-266.07		
7/29/1997 12:00						-314.11		
1/8/1998 12:00						-317.3		
1/9/1998 12:00							-178.18	
10/10/1998 12:00							-166.36	
1/14/1999 12:00					-470.26			
1/21/1999 12:00						-308.25		
2/25/1999 12:00							-162.85	
4/5/1999 12:00							-162.63	
5/5/1999 12:00							-162.6	
6/5/1999 12:00							-163.11	
7/5/1999 12:00							-163.82	
8/5/1999 12:00							-167.97	
9/5/1999 12:00							-164.36	
10/5/1999 12:00							-164.87	
11/5/1999 12:00							-165.34	
12/5/1999 12:00							-165.71	
12/27/1999 12:00					-467.95	-328.1		
1/5/2000 12:00							-166.19	
2/5/2000 12:00							-166.5	
4/5/2000 12:00							-166.7	
5/5/2000 12:00							-166.82	
6/5/2000 12:00							-167.17	
7/5/2000 12:00							-167.49	
8/5/2000 12:00							-167.87	
9/5/2000 12:00							-166.43	
10/5/2000 12:00							-168.7	
11/5/2000 12:00							-168.69	
1/8/2001 12:00					-474.88			
1/12/2001 12:00						-316.75		
5/5/2001 12:00							-169.28	
6/5/2001 12:00							-169.21	
7/5/2001 12:00							-169.25	
8/5/2001 12:00							-169.28	
9/5/2001 12:00							-169.42	
10/5/2001 12:00							-170.46	
11/5/2001 12:00							-170.89	
12/5/2001 12:00							-170.81	
1/5/2002 12:00							-170.88	
1/16/2002 12:00						-315.75		
2/5/2002 12:00							-171.21	
3/5/2002 12:00							-171.21	

Clearwater UWCD - Lower Trinity Monitor Wells

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State #		58-03-410	58-03-411	40-17-602	40-42-501	40-54-701	40-61-509	40-53-405	vl-17-CTGCO_Carll	40-35-404	58-02-303	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-43-501	40-42-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-605
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	Carlile	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1.-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		Elman Valley Ranchettes Well	Elman Valley Ranchettes Well	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Temple	Ridge-City of Temple	Tanglewood Moni			RRR Hoiston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	am. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hillard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Spill Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-170.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-171.40	-417.08	-179.11	-464.05	-348.35	-393.81	-377.12	-390.13	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-215.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
4/5/2002 12:00														-171.07																		
5/5/2002 12:00														-171.08																		
6/5/2002 12:00														-171.09																		
7/5/2002 12:00														-171.36																		
8/5/2002 12:00														-171.61																		
9/5/2002 12:00														-171.72																		
10/5/2002 12:00														-172.04																		
11/10/2002 12:00														-171.8																		
12/5/2002 12:00														-172.67																		
1/1/2003 0:00																		332.7														
1/5/2003 12:00														-172.6																		
1/31/2003 12:00												-491.05	-321.15																			
2/5/2003 12:00														-172.72																		
3/5/2003 12:00														-170.92																		
4/5/2003 12:00														-171.68																		
5/5/2003 12:00														-171.58																		
6/5/2003 12:00														-171.76																		
7/1/2003 0:00																		415.5														
7/5/2003 12:00														-172.07																		
8/5/2003 12:00														-172.21																		
9/5/2003 12:00														-172.42																		
10/5/2003 12:00														-172.44																		
11/5/2003 12:00														-172.17																		
12/5/2003 12:00														-172.55																		
1/1/2004 0:00																		333.7														
1/5/2004 12:00														-172.33																		
2/5/2004 12:00														-172.29																		
2/27/2004 12:00													-318.88																			
3/5/2004 12:00														-172.26																		
4/5/2004 12:00														-173.07																		
5/5/2004 12:00														-174.43																		
6/5/2004 12:00														-175.45																		
7/1/2004 0:00																		413.8														
7/5/2004 12:00														-175.34																		
8/5/2004 12:00														-175.36																		
9/5/2004 12:00														-175.52																		
10/5/2004 12:00														-175.57																		
11/5/2004 12:00														-175.61																		
12/5/2004 12:00														-175.29																		
1/1/2005 0:00																		337.7														
1/5/2005 12:00														-175.36																		
1/26/2005 12:00												-491.05																				
1/28/2005 12:00													-300																			
2/5/2005 12:00														-175.45																		
3/5/2005 12:00														-175.12																		
4/5/2005 12:00														-174.62																		
5/5/2005 12:00														-174.56																		
6/5/2005 12:00														-174.56																		
7/5/2005 12:00														-176.46																		
8/5/2005 12:00														-176.54																		
9/5/2005 12:00														-176.59																		
11/5/2005 12:00														-176.68																		
12/5/2005 12:00														-177.06																		
1/5/2006 12:00														-177.16																		
1/11/2006 12:00													-311.18																			
2/5/2006 12:00														-175.63																		
3/5/2006 12:00														-175.6																		
4/5/2006 12:00														-174.87																		
5/5/2006 12:00														-176.55																		
6/5/2006 12:00														-176.43																		
7/5/2006 12:00														-176.28																		
8/5/2006 12:00														-174.6																		
9/5/2006 12:00														-174.37																		
10/5/2006 12:00														-174.2																		
11/5/2006 12:00														-173.43																		
12/5/2006 12:00														-173.88																		
1/1/2007 0:00																		330.7														
1/5/2007 12:00														-172.38																		
1/8/2007 12:00												-470.24	-352.4																			
2/5/2007 12:00														-173.39																		
3/5/2007 12:00														-172.72																		
4/5/2007 12:00														-171.84																		
5/5/2007 12:00														-171.96																		
6/5/2007 12:00														-171.77																		
7/1/2007 0:00																		379														
7/5/2007 12:00														-170.57																		
8/5/2007 12:00														-170.35																		
9/5/2007 12:00														-169.29																		
10/5/2007 12:00														-168.88																		
11/5/2007 12:00														-171.08																		
12/5/2007 12:00														-169.7																		
1/1/2008 0:00																		329.7														
1/5/2008 12:00														-168.72																		
1/31/2008 12:00													-325.19																			
2/5/2008 12:00														-167.81																		
3/5/2008 12:00														-166.4																		
3/13/2008 12:00												-470.24																				
4/5/2008 12:00														-166.54																		
5/5/2008 12:00														-171.68																		
6/5/2008 12:00														-173.63																		
7/1/2008 0:00																		355.9														
7/5/2008 12:00														-170.89																		
8/5/2008 12:00														-170.23																		
9/5/2008 12:00														-169.04																		
10/5/2008 12:00														-169.15																		
11/5/2008 12:00														-168.97																		
12/5/2008 12:00														-169.65																		
1/1/2009 0:00																		434.4														
1/5/2009 12:00														-168.88																		
2/5/2009 12:00														-169.35																		
3/5/2009 12:00														-168.41																		
4/5/2009 12:00														-167.96																		
5/5/2009 12:00														-167.38																		
6/5/2009 12:00														-167.82																		
7/1/2009 0:00																		355.9														
7/1/2009 12:00										-480.05																						
7/5/2009 12:00														-167.21																		
8/5/2009 12:00														-167.12																		
9/5/2009 12:00														-166.68																		
10/5/2009 12:00														-167.23																		
12/31/2009 12:00														-165.98																		
1/1/2010 0:00				-291.16														397.4														
1/1/2010 12:00										-477.64																						
1/5/2010 12:00														-166.38																		
2/5/2010 12:00														-170.02																		
3/5/2010 12:00														-167.51																		
4/5/2010 12:00														-165.51																		
5/5/2010 12:00														-164.54																		
6/5/2010 12:00														-164.4																		
7/1/2010 0:00				-292.71														406.7														
7/1/2010 12:00										-482.23																						
7/5/2010 12:00														-164.38																		
8/5/2010 12:00														-164.98																		
9/5/2010 12:00														-163.62																		
10/5/2050 12:00														-164.54																		
12/5/2010 12:00														-175.8																		
1/1/2011 0:00				-290.13														360.5														
1/1/2011 12:00										-481.64																						
1/5/2011 12:00														-174.31																		
2/5/2011 12:00														-172.18																		
2/24/2011 12:00													-329.85																			
3/5/2011 12:00														-171.45																		
4/5/2011 12:00														-171.46																		
5/5/2011 12:00														-169.40																		
6/5/2011 12:00														-168.39																		
7/1/2011 0:00				-290.25														346.5				-268										
7/1/2011 12:00										-492.01																						
7/5/2011 12:00														-167.41																		
8/5/2011 12:00														-168.54																		
9/1/2011 0:00				-291.93														457.1														
9/1/2011 14:00										-504.69																						
9/5/2011 12:00														-176.8																		
10/5/2011 12:00														-173.76																		
11/1/2011 0:00				-292.44		-456.40												454.8														
11/1/2011 12:00										-495.66																						
11/5/2011 12:00														-193.58																		
12/5/2011 12:00														-192.94																		
1/1/2012 0:00				-293.85														453.2				-278										
1/5/2012 12:00														-193.89																		
1/5/2012 13:00										-492.23																						
2/5/2012 12:00														-193.96																		
3/10/2012 12:00														-193.16																		
4/5/2012 12:00														-190.91																		
5/1/2012 0:00				-293.47														456.5				-278										

Clearwater UWCD - Lower Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303	58-10-303	58-17-902	58-29-603
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57
5/1/2012 12:00										-494.64				
5/5/2012 12:00														-189.71
6/5/2012 12:00														-187.41
7/5/2012 12:00														-187.35
8/5/2012 12:00														-185.91
9/5/2012 12:00														-188.65
10/5/2012 12:00														-188.58
10/9/2012 12:00												-588.72		
10/11/2012 12:00													-357.71	
11/5/2012 12:00														-192.84
12/5/2012 12:00														-192.61
1/1/2013 0:00				-294.22										
1/1/2013 12:00										-504.42				
1/5/2013 12:00														-192.09
2/5/2013 12:00														-191.95
3/5/2013 12:00														-191.36
4/5/2013 12:00														-193.83
5/1/2013 0:00				-294.96										
5/1/2013 12:00										-504.54				
5/5/2013 12:00														-193.42
6/5/2013 12:00														-191.6
7/5/2013 12:00														-195.14
8/1/2013 0:00				-295.11										
8/1/2013 12:00										-507.21				
8/5/2013 12:00														-195.48
9/5/2013 12:00														-195.75
10/5/2013 12:00														-195.53
10/25/2013 0:00														
11/1/2013 0:00				-295.85										
11/1/2013 12:00										-504.65				
11/5/2013 12:00														-195.75
12/5/2013 0:00														
12/5/2013 12:00														-195.68
12/11/2013 12:00													-348.58	
1/5/2014 12:00														-195.26
2/1/2014 0:00				-295.70										
2/1/2014 12:00										-500.52				
2/5/2014 12:00														-195.27
3/5/2014 12:00														-194.73
4/5/2014 12:00														-194.1
5/1/2014 0:00				-296.14										
5/1/2014 12:00										-505.63				
5/5/2014 12:00														-193.76
6/5/2014 12:00														-193.36
7/5/2014 12:00														-193.35
8/1/2014 0:00				-296.00	-348.68	-456.00	-239.20							
8/1/2014 12:00										-501.99				
8/5/2014 12:00														-195.05
9/5/2014 12:00														-192.79
9/23/2014 0:00						-465.05								
9/26/2014 0:00							-241.10							
10/5/2014 12:00														-192.65
11/1/2014 0:00				-296.91										
11/1/2014 12:00										-509.54				
11/5/2014 12:00														-193.05
11/17/2014 0:00														
12/5/2014 12:00														-193.01
12/16/2014 0:00														
1/1/2015 0:00				-296.84	-340.10	-456.00	-239.70							
1/1/2015 12:00										-504.68				
1/5/2015 12:00														-193.14
1/6/2015 0:00														
1/9/2015 0:00														
2/1/2015 0:00						-456.20								
2/5/2015 12:00														-193.15
2/11/2015 0:00														
3/5/2015 0:00														
3/5/2015 12:00														-193.23
3/11/2015 0:00														
3/26/2015 0:00						-465.05	-241.60							
4/5/2015 12:00														-192.35
4/9/2015 0:00														
5/1/2015 0:00														
5/5/2015 12:00														-193.21
5/12/2015 0:00														
5/20/2015 0:00														
6/1/2015 0:00				-296.69	-339.50									
6/1/2015 12:00										-500.88				
6/4/2015 0:00														
6/5/2015 0:00						-456.20								
6/5/2015 12:00														-191.36
7/1/2015 0:00														
7/5/2015 12:00														-190.02
7/8/2015 0:00														
8/3/2015 0:00														
8/5/2015 12:00														-188.94
9/2/2015 0:00														
9/5/2015 0:00														
9/5/2015 12:00														-191.85
9/7/2015 0:00														
9/14/2015 0:00				-297.06	-347.84	-469.26								
9/14/2015 12:00										-515.00				
10/1/2015 0:00														
10/5/2015 12:00														-190.42
10/28/2015 12:20													-337.26	
11/2/2015 0:00														
11/5/2015 0:00														
11/5/2015 12:00														-189.04
11/30/2015 0:00				-297.43	-349.07	-468.20								
11/30/2015 12:00										-509.45				
12/2/2015 0:00														
12/5/2015 12:00														-189.45
1/1/2016 12:00										-507.80				
1/5/2016 0:00				-297.43	-349.98	-467.91								
1/5/2016 12:00														-190.62
2/5/2016 12:00														-190.26
3/1/2016 0:00														
3/5/2016 16:00														-189.56
4/4/2016 0:00														
4/5/2016 0:00														
4/5/2016 18:00														-188.77
4/9/2016 0:00						-466.87								
4/19/2016 0:00				-297.21	-349.38									
4/19/2016 12:00										-507.52				
5/2/2016 0:00														
5/5/2016 18:00														-188.38
5/11/2016 0:00								-445.40						
6/1/2016 12:00										-505.35				
6/5/2016 19:00														-188.15
7/1/2016 0:00														
7/5/2016 19:00														-187.14
8/1/2016 0:00														
8/2/2016 0:00														
8/5/2016 20:00														-186.77
8/30/2016 0:00				-297.10	-351.60			-451.00						
8/30/2016 12:00										-515.93				
8/31/2016 0:00									-371.39					
9/5/2016 12:00														-198.14
9/13/2016 0:00							-239.50							
9/30/2016 0:00														
10/3/2016 0:00				-297.14										
10/5/2016 0:00					-352.23	-471.54								
10/5/2016 18:00														-195.79
10/6/2016 0:00									-371.17					
10/6/2016 12:00										-515.12				
10/13/2016 10:00													-341.85	
10/13/2016 12:00												-523.9		
10/17/2016 0:00														
10/19/2016 0:00				-297.65	-353.20									
11/1/2016 0:00									-371.69					
11/1/2016 12:00										-515.11				
11/2/2016 0:00								-450.00						
11/5/2016 20:00														-194.06
11/21/2016 0:00								-455.90						
12/1/2016 0:00				-297.58	-352.85	-472.58			-371.46					
12/1/2016 12:00										-514.00				
12/5/2016 14:00														-193.97
12/6/2016 0:00				-298.17	-352.84	-472.68	-250.00							
1/3/2017 0:00														
1/5/2017 0:00				-298.30	-353.20	-472.30	-249.90		-371.12					
1/5/2017 6:00														-194.44
1/5/2017 12:00										-513.32				
1/6/2017 0:00														
2/1/2017 0:00														

State #	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
5/1/2012 12:00																			
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1/1/2013 0:00				-468.8				-280											
1/1/2013 12:00																			
1/5/2013 12:00																			
2/5/2013 12:00																			
3/5/2013 12:00																			
4/5/2013 12:00																			
5/1/2013 0:00				-466.3				-285											
5/1/2013 12:00																			
5/5/2013 12:00																			
6/5/2013 12:00																			
7/5/2013 12:00																			
8/1/2013 0:00				-473.1				-282	-329.83										
8/1/2013 12:00																			
8/5/2013 12:00																			
9/5/2013 12:00																			
10/5/2013 12:00																			
10/25/2013 0:00									-328										
11/1/2013 0:00				-466.6				-290			-173.4								
11/1/2013 12:00																			
11/5/2013 12:00																			
12/5/2013 0:00											-177.7								
12/5/2013 12:00																			
12/11/2013 12:00																			
1/5/2014 12:00																			
2/1/2014 0:00				-466.2		-230		-290		-475.7									
2/1/2014 12:00																			
2/5/2014 12:00																			
3/5/2014 12:00																			
4/5/2014 12:00																			
5/1/2014 0:00				-469.5		-230		-285		-479.1	-174								
5/1/2014 12:00																			
5/5/2014 12:00																			
6/5/2014 12:00																			
7/5/2014 12:00																			
8/1/2014 0:00				-471.7		-230		-285		-481.1	-176								
8/1/2014 12:00																			
8/5/2014 12:00																			
9/5/2014 12:00																			
9/23/2014 0:00																			
9/26/2014 0:00																			
10/5/2014 12:00																			
11/1/2014 0:00				-470.4		-235		-290		-476.9	-177.8								
11/1/2014 12:00																			
11/5/2014 12:00																			
11/17/2014 0:00					-247.9				-329.6										
12/5/2014 12:00																			
12/16/2014 0:00					-246.3				-327.4										
1/1/2015 0:00						-235		-290			-175.1								
1/1/2015 12:00																			
1/5/2015 12:00																			
1/6/2015 0:00				-467.79						-477.3									
1/9/2015 0:00					-246.4				-327.7										
2/1/2015 0:00																			
2/5/2015 12:00																			
2/11/2015 0:00					-246.7				-327.7										
3/5/2015 0:00				-468.79						-478.4									
3/5/2015 12:00																			
3/11/2015 0:00					-247				-328.3										
3/26/2015 0:00																			
4/5/2015 12:00																			
4/9/2015 0:00				-468.7	-247.9				-329.2	-478									
5/1/2015 0:00				-469						-478.6									
5/5/2015 12:00																			
5/12/2015 0:00					-245.8				-330.3										
5/20/2015 0:00												-454							
6/1/2015 0:00				-467.8		-230		-290		-477.4	-175.1								
6/1/2015 12:00																			
6/4/2015 0:00					-248.5				-331										
6/5/2015 0:00																			
6/5/2015 12:00																			
7/1/2015 0:00				-468.5		-230		-290		-478									
7/5/2015 12:00																			
7/8/2015 0:00					-248.7				-330.6										
8/3/2015 0:00				-485.2		-265		-290		-484.7									
8/5/2015 12:00																			
9/2/2015 0:00				-481.1						-485.9									
9/5/2015 0:00						-275		-290											
9/5/2015 12:00																			
9/7/2015 0:00					-247.3				-330.6										
9/14/2015 0:00											-180.8								
9/14/2015 12:00																			
10/1/2015 0:00				-477.7						-485.9									
10/5/2015 12:00																			
10/28/2015 12:20																			
11/2/2015 0:00				-478						-483.9									
11/5/2015 0:00					-248.8	-270		-290	-330.8										
11/5/2015 12:00																			
11/30/2015 0:00											-177.7								
11/30/2015 12:00																			
12/2/2015 0:00				-471.7						-481.3									
12/5/2015 12:00																			
1/1/2016 12:00																			
1/5/2016 0:00				-470.8	-249	-260		-295	-331.1	-480.9	-175.9								
1/5/2016 12:00																			
2/5/2016 12:00																			
3/1/2016 0:00				-470.9						-481.1									
3/5/2016 16:00																			
4/4/2016 0:00				-472.2						-482.4									
4/5/2016 0:00					-250.3	-260		-295	-332.1										
4/5/2016 18:00																			
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4/19/2016 0:00											-176.5								
4/19/2016 12:00																			
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6/5/2016 19:00																			
7/1/2016 0:00				-485.5						-486.4									
7/5/2016 19:00																			
8/1/2016 0:00				-484						-490.2									
8/2/2016 0:00						-272		-290											
8/5/2016 20:00																			
8/30/2016 0:00				-476.8	-252.8	-265		-292	-334.1	-488.5	-176.7								
8/30/2016 12:00																			
8/31/2016 0:00																			
9/5/2016 12:00																			
9/13/2016 0:00																			
9/30/2016 0:00				-485.1						-489.4									
10/3/2016 0:00						-268		-290											
10/5/2016 0:00					-251.7				-334.5										
10/5/2016 18:00																			
10/6/2016 0:00																			
10/6/2016 12:00																			
10/13/2016 10:00																			
10/13/2016 12:00																			
10/17/2016 0:00			-262.5																
10/19/2016 0:00																			
11/1/2016 0:00				-477.3		-268		-270		-489.2									
11/1/2016 12:00																			
11/2/2016 0:00					-254.1				-335.5										
11/5/2016 20:00																			
11/21/2016 0:00																			
12/1/2016 0:00				-476.3	-252.9	-268		-290	-305.8	-488.4									
12/1/2016 12:00																			
12/5/2016 14:00																			
12/6/2016 0:00																			
1/3/2017 0:00				-475.6		-262		-290		-486.5									
1/5/2017 0:00					-254.6				-356.3										
1/5/2017 6:00																			
1/5/2017 12:00																			
1/6/2017 0:00											-183.8								
2/1/2017 0:00				-476.3	-254.6	-262		-290	-336.2	-487.1									

Clearwater UWCD - Lower Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
2/2/2017 0:00																	-225.5																
2/5/2017 15:00														-194.45																			
2/6/2017 0:00				-297.72	-353.35	-472.18	-249.99		-371.03																								
2/6/2017 12:00										-512.78																							
3/1/2017 0:00																				-251		-292											
3/5/2017 0:00				-297.65	-353.20				-371.13																								
3/5/2017 12:00										-512.95																							
3/5/2017 15:00														-194.21																			
3/6/2017 0:00						-471.30	-249.90																										
3/7/2017 0:00																			-254				-336.5										
3/30/2017 0:00				-297.60	-353.20	-472.20	-249.50																										
3/31/2017 0:00									-370.70																								
3/31/2017 12:00										-512.64																							
4/3/2017 0:00								-453.90										-476.8		-253		-294		-487.1									
4/4/2017 0:00																			-253.7				-335										
4/5/2017 0:00														-194.43											-184.2								
4/24/2017 0:00					-353.31																												
5/1/2017 0:00																		-477.3		-267		-294		-487.8									
5/4/2017 0:00																			-252.4				-335										
5/5/2017 17:00														-194.3																			
5/8/2017 0:00				-292.70		-471.93	-249.84		-371.04																								
5/8/2017 12:00										-514.67																							
6/1/2017 0:00																				-269		-295											
6/2/2017 0:00																			-254				-335.7										
6/4/2017 0:00				-297.28	-353.90				-371.41																								
6/4/2017 12:00										-515.82																							
6/5/2017 0:00						-473.45	-250.00											-480.7						-489.4									
6/5/2017 16:00														-193.56																			
6/30/2017 0:00																	-186.2																
7/5/2017 0:00																		-478		-268		-295		-488.3									
7/5/2017 17:00														-193.87																			
7/6/2017 0:00					-354.40	-473.83	-250.63	-451.20	-371.28																-185.1								
7/6/2017 12:00										-516.31																							
7/7/2017 0:00				-297.35															-254.7				-336										
8/1/2017 0:00																		-478.6		-270		-295		-489.7									
8/3/2017 0:00																			-255				-335.5										
8/4/2017 0:00																										-453.9							
8/5/2017 18:00														-194.04																			
8/9/2017 0:00				-297.20	-355.22	-474.52	-251.31		-371.28																								
8/9/2017 12:00										-525.80																							
8/25/2017 0:00																					-404.7												
9/1/2017 0:00																		-482.2		-285		-294		-493.6									
9/4/2017 0:00																			-253.2				-336.7										
9/5/2017 0:00				-296.91		-474.84	-251.74		-371.50																								
9/5/2017 12:00										-525.80																							
9/5/2017 17:00														-194.36																			
10/2/2017 0:00				-297.80					-371.30									-484.4		-283		-295		-487.9									
10/2/2017 12:00										-526.60																							
10/3/2017 0:00																	-193.17		-256.6				-337.3		-183.6								
10/4/2017 0:00								-451.60													-405.3												
10/5/2017 18:00														-194.78																			
10/19/2017 13:50													-352																				
11/1/2017 0:00																		-477.9						-488.4									
11/2/2017 0:00																			-257.2				-337.9			-455	-183.4						
11/3/2017 0:00																				-283		-297											
11/5/2017 19:00														-196.34																			
11/6/2017 0:00				-297.87	-356.97	-475.80																			-185.3								
11/6/2017 12:00										-524.16																							
11/6/2017 14:19									-371.40																								
12/1/2017 0:00																		-484		-220		-297		-507									
12/4/2017 0:00				-297.94	-357.15	-476.26																			-186.3	-455.4	-183.3						
12/4/2017 14:16									-371.20																								
12/5/2017 0:00														-196.45					-256.77				-338.3										
12/27/2017 0:00				-297.80																					-186.95								
12/27/2017 12:00										-522.91																							
12/27/2017 14:16									-371.30																								
12/29/2017 0:00					-357.33	-476.82	-253.86	-456.20																		-455.85	-183.75						
1/2/2018 0:00																		-483.9		-220		-297		-492									
1/4/2018 0:00																			-257.8				-357.7										
1/5/2018 19:00														-196.97																			
1/8/2018 0:00																					-406.7												
1/31/2018 12:00																				-217.45		-294.41											
2/1/2018 13:50																			-257.8				-338.4										
2/4/2018 12:00									-371.40																								
2/5/2018 0:00									-371.30															-481.1									
2/5/2018 9:57																																	
2/5/2018 10:00																																	
2/5/2018 10:02																																	
2/5/2018 10:12																																	
2/5/2018 12:00										-522.72																							
2/5/2018 19:00														-196.86																			
2/28/2018 12:00																				-217.45		-296.72											
3/1/2018 0:00																								-495.09									
3/1/2018 14:00																		-484.5															
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3/2/2018 12:30																							-338.2										
3/4/2018 12:00									-371.70																								
3/5/2018 0:00									-371.00																								
3/5/2018 4:00														-196.52																			
3/5/2018 12:00				-297.72	-357.77	-477.14	-253.65																										
3/6/2018 15:48																									-186.75								
3/19/2018 9:45																	-183.62																
3/29/2018 12:00				-297.72																													
3/30/2018 12:00					-357.98	-477.16	-254.39																										
3/30/2018 14:00																									-187.3								
3/30/2018 15:40								-468.50																									
4/3/2018 0:00																								-513.5									
4/3/2018 8:00																		-494.8															
4/4/2018 8:58																			-256.6														
4/4/2018 13:22																	-190.55																
4/4/2018 13:55																											-180.05						
4/4/2018 14:40																										-456.75							
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4/24/2018 8:17																							-334.8										
4/24/2018 9:05																			-254.8														
4/24/2018 11:01																				-219.76													
4/24/2018 11:41																						-295.95											
4/24/2018 13:25																					-408.8												
4/24/2018 13:52																	-276.02																
4/26/2018 10:05																										-456.45							
4/27/2018 8:57																											-180.29						
4/30/2018 12:00																				-219.76		-299.03											
5/1/2018 0:00																								-505.09									
5/1/2018 12:40																		-487.3															
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5/7/2018 0:00									-371.90																								
5/7/2018 12:00				-297.43	-359.03	-477.82	-254.96																										
5/31/2018 9:03																				-217.45													
5/31/2018 12:00																				-219.76		-303.65											
6/1/2018 9:50																										-457.11							
6/1/2018 9:55																			-261.6														
6/1/2018 10:05																							-339.9										
6/1/2018 11:20																					-410.6												
6/1/2018 11:44																						-302.88											
6/3/2018 19:00				-297.57																													
6/3/2018 20:00					-360.85																												
6/4/2018 0:00									-372.20															-503.7									
6/4/2018 1:00							-254.66																										
6/4/2018 2:00						-479.43																											
6/4/2018 8:10																		-495.5															
6/4/2018 8:50																											-184.84						
6/5/2018 12:00														-204.01																			
6/21/2018 12:00										-528.55																							
6/29/2018 12:00																				-245.17		-296.72											
7/1/2018 0:00																								-508.4									
7/3/2018 9:17																			-261.3														
7/3/2018 9:18																							-342.2										
7/5/2018 0:00							-255.80		-371.80																								
7/5/2018 11:04																										-458.91							
7/5/2018 12:00				-297.28	-361.65									-204.41																			
7/5/2018 13:05																									-187.89								
7/5/2018 13:30																					-412.5												
7/5/2018 14:00								-468.61																									
7/31/2018 12:00																				-284.44		-296.72											
8/1/2018 0:00																								-515.4									
8/5/2018 12:00														-204.77																			
8/6/2018 0:00									-371.90																								
8/6/2018 12:00				-297.43																													
8/6/2018 14:52																											-179.11						
8/6/2018 18:00										-543.86																							
8/7/2018 9:15																			-262.6														
8/7/2018 9:16																							-343										
8/13/2018 12:00				-297.80	-363.13	-481.89	-257.19																										
8/31/2018 12:00																				-286.75		-299.03											

Clearwater UWCD - Lower Trinity Monitor Wells

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State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
9/3/2018 12:00				-297.72	-363.60	-483.00	-257.91			-539.51																							
9/3/2018 14:52																											-185.51						
9/4/2018 12:00									-375.60																								
9/4/2018 12:08																		-493.5															
9/5/2018 12:00														-205.05																			
9/10/2018 14:00																											-185.45						
9/11/2018 9:11																			-257.5														
9/11/2018 9:14																							-353.3										
9/27/2018 9:42																										-461.46							
9/27/2018 12:00						-482.72	-258.25																										
9/27/2018 13:55																									-191.07								
9/27/2018 14:25																					-414.3												
9/27/2018 15:21								-469.29																									
9/28/2018 12:00				-297.72					-371.60	-531.08																							
10/2/2018 10:18																											-185.51						
10/4/2018 9:08																			-259.4														
10/4/2018 9:09																							-343.3										
10/5/2018 12:00														-205.31																			
10/29/2018 11:23																											-184.59						
10/29/2018 11:40																									-191.41								
10/29/2018 12:45													-338.4																				
10/29/2018 13:41																										-452.85							
10/31/2018 12:00																				-286.75		-299.03											
11/2/2018 15:55																			-252.2				-343.3										
11/5/2018 12:00				-298.09			-258.82		-371.40	-527.84																							
11/5/2018 15:00						-482.26																											
12/3/2018 12:00					-362.84		-259.20		-371.90	-527.17										-284.44		-296.72											
12/3/2018 15:00						-482.10																											
12/4/2018 12:00				-297.94																													
12/5/2018 15:10																			-263.5				-349.5										
12/26/2018 12:00				-298.46						-526.69																							
12/27/2018 12:00							-258.79																										
12/27/2018 13:15																									-191.19								
12/27/2018 15:00						-482.08		-467.63																									
12/31/2018 12:00									-371.20											-289.06		-292.1											
12/31/2018 21:29																											-180.47						
1/2/2019 0:00																								-498.5									
1/2/2019 8:00																		-488.3															
1/7/2019 15:53																										-461.23							
1/8/2019 14:05																			-261.1				-343										
2/1/2019 0:00																								-502.7									
2/1/2019 12:26																										-463.23							
2/1/2019 12:29																											-187.31						
2/4/2019 12:00				-298.31	-363.52		-258.76		-371.40	-525.85																							
2/4/2019 14:30																			-261				-347										
2/10/2019 12:00														-211.57																			
2/28/2019 0:00																								-488.4									
3/1/2019 12:00																				-284.44		-296.72											
3/1/2019 12:29																											-189.27						
3/4/2019 12:00				-298.46	-363.29	-481.37	-259.21		-371.70	-524.53																							
3/4/2019 13:26																									-191.7								
3/5/2019 12:00														-211.22																			
3/6/2019 14:00																			-262				-344.2										
3/26/2019 12:00				-298.09						-529.59	-293.99																						
3/27/2019 2:00						-481.48																											
3/28/2019 11:38																										-463.4	-188.97						
3/28/2019 12:00					-363.47		-259.02																										
3/28/2019 14:32																									-191.97								
3/28/2019 16:25								-467.01																									
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4/2/2019 0:00																								-497.3									
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5/1/2019 11:49																										-463.55							
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5/2/2019 0:00																								-540.3									
5/2/2019 10:23																							-343										
5/2/2019 10:24																			-262.9														
5/2/2019 10:57																		-522.6															
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5/6/2019 4:00										-523.79																							
5/6/2019 7:00				-298.90																													
5/6/2019 8:00					-362.76																												
5/6/2019 12:00						-480.89	-258.81		-370.70																								
6/1/2019 11:55																										-471.05							
6/1/2019 12:24																											-190.48						
6/3/2019 0:00																								-504									
6/3/2019 10:56																		-489.3															
6/3/2019 12:00				-298.24	-363.09	-481.25	-258.99		-370.90	-524.25																							
6/5/2019 11:15																									-192.32								
6/5/2019 12:00														-210.01																			
6/7/2019 12:14																			-262.6														
6/7/2019 12:15																							-373.1										
6/26/2019 12:00				-298.31						-524.88																							
6/27/2019 9:38								-468.62																									
6/27/2019 10:28																									-192.22								
6/27/2019 12:00					-363.04	-481.34	-259.46																										
7/1/2019 10:45																										-464.25							
7/1/2019 12:00									-371.00																								
7/1/2019 12:15																											-190.95						
7/1/2019 13:56																		-492.1															
7/1/2019 13:57																								-504.6									
7/5/2019 12:00														-209.64																			
7/5/2019 14:18																			-262.5														
7/5/2019 14:19																							-353										
8/2/2019 9:14																		-583.7															
8/2/2019 9:15																								-541.6									
8/5/2019 9:30																			-262.2														
8/5/2019 9:31																							-344.3										
8/5/2019 12:00				-298.39	-364.04	-483.12	-260.34		-371.50	-534.19	-296.31			-209.18																			
8/26/2019 10:30															-353.59																		
9/2/2019 12:00									-371.80											-286.75		-299.03											
9/3/2019 10:55																		-501.5															
9/3/2019 10:59																								-534.2									
9/3/2019 12:00				-298.46	-364.84		-260.80			-529.56	-298.72																						
9/3/2019 13:57																											-201.77						
9/3/2019 14:10																										-465.8							
9/3/2019 15:00						-484.88																											
9/5/2019 12:00														-209.04																			
9/6/2019 10:45																			-264.4														
9/6/2019 10:47																							-357.1										
9/26/2019 9:40																					-411.5												
9/26/2019 10:14								-478.91																									
9/26/2019 12:00					-364.66		-261.82																										
9/26/2019 13:35																									-193.89								
9/27/2019 12:00				-298.83						-533.14	-300.66																						
9/27/2019 13:47															-354.18																		
10/1/2019 10:54																		-502.3															
10/1/2019 11:00																								-530.8									
10/1/2019 12:00																				-284.44		-317.51											
10/3/2019 13:57																											-212.42						
10/3/2019 18:10																										-485.03							
10/5/2019 12:00														-207.94																			
10/7/2019 10:44																			-264.9														
10/7/2019 10:47																							-350.2										
10/7/2019 12:00									-372.10																								
10/9/2019 10:50													-384.2																				
11/1/2019 12:00																				-286.75		-299.03											
11/4/2019 10:44																			-265.5														
11/4/2019 10:47																							-351.9										
11/4/2019 10:54																		-496.1															
11/4/2019 11:00																								-570.8									
11/4/2019 12:00				-299.27	-365.88		-262.89		-372.00	-531.84	-301.88																						
11/4/2019 14:05																											-190.85						
11/4/2019 14:25																									-193.86								
11/5/2019 12:00														-209.15																			
12/1/2019 12:00							-262.78																										
12/2/2019 6:00									-372.70																								
12/2/2019 12:00				-299.13	-365.79					-533.80	-301.5									-289.06		-301.34											
12/2/2019 15:00						-485.68																											
12/4/2019 10:43																			-262.9														
12/4/2019 10:48																							-346.4										
12/4/2019 10:52																		-496.7															
12/4/2019 11:01																								-512.4									
12/26/2019 6:00									-372.90																								
12/26/2019 12:00				-299.79						-533.16	-301.43																						
12/26/2019 14:04																-366.61																	
12/30/2019 10:42								-476.93																									
12/30/2019 11:33																					-421.09												
12/30/2019 12:00					-366.03		-262.70																										

Clearwater UWCD - Lower Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88
12/30/2019 12:02											
12/30/2019 15:00						-485.78					
1/2/2020 12:00											
1/3/2020 10:41											
1/3/2020 10:42											
1/8/2020 10:25											
1/8/2020 13:55											
2/2/2020 15:00						-485.70					
2/3/2020 6:00									-372.80		
2/3/2020 12:00				-299.86	-366.32		-263.24			-530.43	-300.89
2/5/2020 9:27											
2/5/2020 9:28											
2/5/2020 10:10											
2/6/2020 9:29											
3/2/2020 6:00									-372.60		
3/2/2020 10:00											
3/2/2020 12:00				-299.94	-366.43		-263.21			-528.79	-300.34
3/2/2020 12:05											
3/2/2020 12:22											
3/2/2020 15:00						-485.48					
3/4/2020 9:24											
3/4/2020 9:25											
3/5/2020 9:26											
3/5/2020 9:27											
4/1/2020 9:17											
4/1/2020 11:08											
4/1/2020 11:24											
4/1/2020 12:00											
4/3/2020 8:57											
4/3/2020 10:03											
4/3/2020 10:12											
5/1/2020 12:00											
5/2/2020 21:00						-485.45					
5/4/2020 5:00									-372.60		
5/4/2020 9:15											
5/4/2020 12:00				-299.50	-366.94		-263.43			-527.26	-300.29
5/6/2020 9:50											
5/6/2020 10:01											
5/14/2020 10:03											
5/14/2020 10:12											
6/1/2020 12:00				-299.57	-367.13	-484.92				-527.34	-301.43
6/2/2020 5:00									-372.90		
6/3/2020 9:53											
6/3/2020 10:01											
6/3/2020 10:04											
6/3/2020 10:11											
6/4/2020 0:33											
6/5/2020 1:06											
6/25/2020 5:00									-373.20		
6/25/2020 12:00				-299.57							-303.06
6/26/2020 10:03								-478.28			
6/26/2020 10:48											
6/26/2020 15:27										-528.99	
7/1/2020 10:00											
7/7/2020 8:20											
7/8/2020 9:08											
7/8/2020 12:28											
7/8/2020 12:29											
7/29/2020 12:43											
7/31/2020 10:00											
8/1/2020 22:20											
8/3/2020 5:00									-373.90		
8/3/2020 8:08											
8/3/2020 12:00				-300.01	-370.26	-488.79	-266.16			-531.33	-306.52
8/12/2020 10:05											
8/12/2020 10:11											
8/13/2020 14:15											
9/1/2020 18:29											
9/3/2020 9:55											
9/3/2020 9:59											
9/4/2020 10:05											
9/4/2020 10:08											
9/4/2020 21:57											
9/7/2020 5:00									-374.00		
9/7/2020 12:00				-299.86	-371.13	-490.42	-267.35			-533.26	-309.24
9/10/2020 11:52											
9/25/2020 9:15											
10/1/2020 11:29											
10/1/2020 11:52								-480.29			
10/1/2020 11:59											
10/1/2020 12:00				-299.72	-371.34	-490.15	-267.58			-531.39	-309.85
10/1/2020 12:35											
10/1/2020 13:02											
10/1/2020 13:45											
10/2/2020 9:55											
10/2/2020 9:59											
10/12/2020 10:06											
10/12/2020 10:08											
11/2/2020 9:57											
11/2/2020 9:58											
11/2/2020 12:00											
11/3/2020 13:36											
11/4/2020 0:25											
11/18/2020 14:30											
11/18/2020 14:38											
11/18/2020 15:20											
12/1/2020 0:25											
12/1/2020 12:00					-371.38		-267.68			-529.26	-310.57
12/2/2020 11:15											
12/2/2020 11:34											
12/3/2020 9:56											
12/3/2020 9:58											
12/3/2020 10:06											
12/3/2020 10:07											
12/30/2020 9:30								-475.80			
12/30/2020 10:00											
12/30/2020 10:25											
12/30/2020 10:45											
12/30/2020 12:00					-371.91		-267.40			-529.88	-310.37
12/30/2020 12:27											
12/30/2020 12:35											
12/30/2020 12:43											
12/30/2020 13:07											
1/4/2021 0:25											
1/4/2021 9:57											
1/4/2021 12:00											
1/4/2021 15:01											
1/13/2021 10:17											
1/13/2021 10:18											
2/1/2021 6:00									-373.70		
2/1/2021 12:00					-372.23					-530.37	-309.74
2/5/2021 15:00											
3/1/2021 6:00									-373.30		
3/1/2021 12:00					-373.12					-531.03	-309.65
3/2/2021 14:58											
3/2/2021 14:59											
3/2/2021 15:36											
3/30/2021 12:00										-530.91	
3/31/2021 5:00									-373.30		
3/31/2021 9:44								-479.26			
3/31/2021 10:18											
3/31/2021 10:52											
3/31/2021 12:00					-373.51	-491.05	-272.87				-309.7
3/31/2021 12:27											
3/31/2021 13:12											
3/31/2021 13:32											
3/31/2021 13:43											
3/31/2021 13:55											
3/31/2021 14:17											
4/1/2021 8:25											
4/1/2021 8:26											
4/1/2021 12:00											
4/7/2021 10:48											
4/7/2021 10:49											
5/3/2021 5:00									-373.10		
5/3/2021 10:40											
5/3/2021 10:41											
5/3/2021 12:00				-301.27						-530.67	-310.51
5/5/2021 0:40						-491.87					
5/5/2021 13:03					-374.78						
5/6/2021 9:45							-269.40				
5/13/2021 11:11											
5/13/2021 11:12											
6/1/2021 10:42											

State #	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301
CUWCD #	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P
Well Name	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2
Highest	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00
Lowest	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00
12/30/2019 12:02											
12/30/2019 15:00											
1/2/2020 12:00									-289.06		-303.65
1/3/2020 10:41								-265.5			
1/3/2020 10:42											
1/8/2020 10:25											
1/8/2020 13:55				-355.37							
2/2/2020 15:00											
2/3/2020 6:00											
2/3/2020 12:00									-289.06		-301.34
2/5/2020 9:27							-495.1				
2/5/2020 9:28											
2/5/2020 10:10											
2/6/2020 9:29								-262.2			
3/2/2020 6:00											
3/2/2020 10:00											
3/2/2020 12:00									-279.82		-299.03
3/2/2020 12:05											
3/2/2020 12:22											
3/2/2020 15:00											
3/4/2020 9:24								-266.1			
3/4/2020 9:25											
3/5/2020 9:26							-494.2				
3/5/2020 9:27											
4/1/2020 9:17											
4/1/2020 11:08											
4/1/2020 11:24											
4/1/2020 12:00									-282.13		-299.03
4/3/2020 8:57							-493.3				
4/3/2020 10:03								-265.8			
4/3/2020 10:12											
5/1/2020 12:00									-284.44		-296.72
5/2/2020 21:00											
5/4/2020 5:00											
5/4/2020 9:15											
5/4/2020 12:00											
5/6/2020 9:50											
5/6/2020 10:01							-492.5				
5/14/2020 10:03								-266.4			
5/14/2020 10:12											
6/1/2020 12:00									-282.13		-294.41
6/2/2020 5:00											
6/3/2020 9:53											
6/3/2020 10:01							-497.7				
6/3/2020 10:04								-265.4			
6/3/2020 10:11											
6/4/2020 0:33											
6/5/2020 1:06											
6/25/2020 5:00											
6/25/2020 12:00											
6/26/2020 10:03											
6/26/2020 10:48										-422.72	
6/26/2020 15:27											
7/1/2020 10:00							-503.7				
7/7/2020 8:20											
7/8/2020 9:08											
7/8/2020 12:28								-267			
7/8/2020 12:29											
7/29/2020 12:43											
7/31/2020 10:00							-508.5				
8/1/2020 22:20											
8/3/2020 5:00											
8/3/2020 8:08											
8/3/2020 12:00									-295.99		-305.96
8/12/2020 10:05								-269.2			
8/12/2020 10:11											
8/13/2020 14:15						-272.94					
9/1/2020 18:29											
9/3/2020 9:55											
9/3/2020 9:59							-506.7				
9/4/2020 10:05								-270			
9/4/2020 10:08											
9/4/2020 21:57											
9/7/2020 5:00											
9/7/2020 12:00											
9/10/2020 11:52											
9/25/2020 9:15						-211.35					
10/1/2020 11:29											
10/1/2020 11:52											
10/1/2020 11:59											
10/1/2020 12:00									-289.06		-305.96
10/1/2020 12:35										-426.19	
10/1/2020 13:02											
10/1/2020 13:45				-363.01							
10/2/2020 9:55											
10/2/2020 9:59							-505				
10/12/2020 10:06								-270			
10/12/2020 10:08											
11/2/2020 9:57											
11/2/2020 9:58							-502				
11/2/2020 12:00									-284.44		-305.96
11/3/2020 13:36											
11/4/2020 0:25											
11/18/2020 14:30											
11/18/2020 14:38											
11/18/2020 15:20											
12/1/2020 0:25											
12/1/2020 12:00									-284.44		-305.96
12/2/2020 11:15											
12/2/2020 11:34						-227.84					
12/3/2020 9:56											
12/3/2020 9:58							-497.9				
12/3/2020 10:06								-270.8			
12/3/2020 10:07											
12/30/2020 9:30											
12/30/2020 10:00										-423.31	
12/30/2020 10:25											
12/30/2020 10:45						-229.18					
12/30/2020 12:00											
12/30/2020 12:27											
12/30/2020 12:35											
12/30/2020 12:43											
12/30/2020 13:07					-377.31						
1/4/2021 0:25											
1/4/2021 9:57							-497.6				
1/4/2021 12:00									-286.75		-301.34
1/4/2021 15:01											
1/13/2021 10:17								-269.5			
1/13/2021 10:18											
2/1/2021 6:00											
2/1/2021 12:00									-307.54		-305.96
2/5/2021 15:00								-271.7			
3/1/2021 6:00											
3/1/2021 12:00											
3/2/2021 14:58							-505.3				
3/2/2021 14:59											
3/2/2021 15:36						-229.89					
3/30/2021 12:00											
3/31/2021 5:00											
3/31/2021 9:44											
3/31/2021 10:18										-424.72	
3/31/2021 10:52											
3/31/2021 12:00											
3/31/2021 12:27											
3/31/2021 13:12				-367.29							
3/31/2021 13:32											
3/31/2021 13:43											
3/31/2021 13:55											
3/31/2021 14:17					-379.12						
4/1/2021 8:25							-505.4				
4/1/2021 8:26											
4/1/2021 12:00									-291.37		-296.72
4/7/2021 10:48								-272.7			
4/7/2021 10:49											
5/3/2021 5:00											
5/3/2021 10:40							-522.7				
5/3/2021 10:41											
5/3/2021 12:00									-289.06		-299.03
5/5/2021 0:40											
5/5/2021 13:03											
5/6/2021 9:45											
5/13/2021 11:11								-266.3			
5/13/2021 11:12											
6/1/2021 10:42											

State #	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
12/30/2019 12:02			-193.85								
12/30/2019 15:00											
1/2/2020 12:00											
1/3/2020 10:41											
1/3/2020 10:42	-346.5										
1/8/2020 10:25					-191.64						
1/8/2020 13:55											
2/2/2020 15:00											
2/3/2020 6:00											
2/3/2020 12:00											
2/5/2020 9:27											
2/5/2020 9:28		-512.2									
2/5/2020 10:10			-194.82								
2/6/2020 9:29	-344.3										
3/2/2020 6:00											
3/2/2020 10:00				-466.25							
3/2/2020 12:00											
3/2/2020 12:05					-191.45						
3/2/2020 12:22			-194.84								
3/2/2020 15:00											
3/4/2020 9:24											
3/4/2020 9:25	-365.1										
3/5/2020 9:26											
3/5/2020 9:27		-509.7									
4/1/2020 9:17				-466.35							
4/1/2020 11:08					-191.53						
4/1/2020 11:24			-195.04								
4/1/2020 12:00											
4/3/2020 8:57											
4/3/2020 10:03											
4/3/2020 10:12	-347.8										
5/1/2020 12:00											
5/2/2020 21:00											
5/4/2020 5:00											
5/4/2020 9:15			-194.34								
5/4/2020 12:00											
5/6/2020 9:50		-507									
5/6/2020 10:01											
5/14/2020 10:03											
5/14/2020 10:12	-347.3										
6/1/2020 12:00											
6/2/2020 5:00											
6/3/2020 9:53		-587.3									
6/3/2020 10:01											
6/3/2020 10:04											
6/3/2020 10:11	-347.1										
6/4/2020 0:33					-195.25						
6/5/2020 1:06				-451.03							
6/25/2020 5:00											
6/25/2020 12:00											
6/26/2020 10:03											
6/26/2020 10:48											
6/26/2020 15:27											
7/1/2020 10:00											
7/7/2020 8:20					-197.98						
7/8/2020 9:08				-456.7							
7/8/2020 12:28											
7/8/2020 12:29	-348.6										
7/29/2020 12:43			-195.42								
7/31/2020 10:00											
8/1/2020 22:20					-198.61						
8/3/2020 5:00											
8/3/2020 8:08				-449.74							
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8/12/2020 10:05											
8/12/2020 10:11	-346.4										
8/13/2020 14:15											
9/1/2020 18:29				-424.41							
9/3/2020 9:55		-539.7									
9/3/2020 9:59											
9/4/2020 10:05											
9/4/2020 10:08	-350.3										
9/4/2020 21:57					-201.75						
9/7/2020 5:00											
9/7/2020 12:00											
9/10/2020 11:52			-198.75								
9/25/2020 9:15											
10/1/2020 11:29				-417.08							
10/1/2020 11:52											
10/1/2020 11:59					-218.26						
10/1/2020 12:00											
10/1/2020 12:35											
10/1/2020 13:02			-198.14								
10/1/2020 13:45											
10/2/2020 9:55		-583.3									
10/2/2020 9:59											
10/12/2020 10:06											
10/12/2020 10:08	-350.9										
11/2/2020 9:57		-513.1									
11/2/2020 9:58											
11/2/2020 12:00											
11/3/2020 13:36			-199.04								
11/4/2020 0:25					-192.34						
11/18/2020 14:30								-389.81			
11/18/2020 14:38							-348.35				
11/18/2020 15:20									-380		
12/1/2020 0:25					-195.77						
12/1/2020 12:00											
12/2/2020 11:15			-196.83								
12/2/2020 11:34											
12/3/2020 9:56		-511.8									
12/3/2020 9:58											
12/3/2020 10:06											
12/3/2020 10:07	-351.8										
12/30/2020 9:30											
12/30/2020 10:00											
12/30/2020 10:25			-198.41								
12/30/2020 10:45											
12/30/2020 12:00											
12/30/2020 12:27									-377.12		
12/30/2020 12:35							-350.84				
12/30/2020 12:43								-392.59			
12/30/2020 13:07											
1/4/2021 0:25					-225.6						
1/4/2021 9:57											
1/4/2021 12:00											
1/4/2021 15:01				-470.11							
1/13/2021 10:17											
1/13/2021 10:18	-351.4										
2/1/2021 6:00											
2/1/2021 12:00											
2/5/2021 15:00	-352.3										
3/1/2021 6:00											
3/1/2021 12:00											
3/2/2021 14:58											
3/2/2021 14:59		-458.6									
3/2/2021 15:36											
3/30/2021 12:00											
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3/31/2021 9:44											
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3/31/2021 13:43							-350.91				
3/31/2021 13:55								-391.52			
3/31/2021 14:17											
4/1/2021 8:25											
4/1/2021 8:26		-355									
4/1/2021 12:00											
4/7/2021 10:48											
4/7/2021 10:49	-352.8										
5/3/2021 5:00											
5/3/2021 10:40											
5/3/2021 10:41		-500.4									
5/3/2021 12:00											
5/5/2021 0:40											
5/5/2021 13:03											
5/6/2021 9:45											
5/13/2021 11:11											
5/13/2021 11:12	-353.7										
6/1/2021 10:42		-514.4									

Clearwater UWCD - Lower Trinity Monitor Wells

Staff measures wells quarterly in order to closely monitor the aquifer levels as part of our statuatory responsibility. The Texas Water Development Board conducted some of the measurements, shown in red. The measurements in blue were taken by the Clearwater staff. The Texas Water Development Board provides information through publication of continuous monitoring data on the measurements of the TxDOT wells and an additional well in Salado, shown in red.

State #		58-03-410	58-03-411	40-57-602	40-62-501	40-54-701	40-61-509	40-53-405		40-35-404	58-02-303	58-10-303	58-17-902	58-29-603	58-03-404	58-02-505	58-06-102	40-53-406	58-05-202	40-63-501	40-62-401	58-06-301	58-05-502	40-53-507	58-06-201	58-04-203	58-06-202	40-54-201	58-03-406	58-03-407	58-03-408	58-03-409	58-02-601
CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
6/1/2021 10:45																		-501.4															
6/8/2021 10:46																			-267.4														
6/8/2021 10:49																							-361.3										
6/29/2021 5:00									-373.30																								
6/30/2021 9:48								-481.82																									
6/30/2021 10:15						-492.02																											
6/30/2021 10:56																												-466.15					
6/30/2021 11:46							-269.77																										
6/30/2021 12:00				-301.18	-374.72					-531.71	-310.38									-272.89		-299.03				-470.42							
6/30/2021 12:10																					-425.97												
6/30/2021 12:34																									-199.92								
6/30/2021 12:53																	-233.18																
6/30/2021 13:40															-367.9																		
6/30/2021 13:52																															-379.72		
6/30/2021 14:03																													-351.43				
6/30/2021 14:13																														-390.55			
6/30/2021 14:40																-384.41																	
7/2/2021 10:44																								-511.5									
7/2/2021 10:45																		-509															
7/9/2021 14:33																			-273.1				-363.4										
7/28/2021 9:30																																	-415.2
8/3/2021 9:17																		-522.5						-596.7									
8/23/2021 10:45		-375.38																															
8/23/2021 11:22			-373.16																														
9/3/2021 14:07																		-518.5															
9/3/2021 14:08																								-561.1									
9/9/2021 11:33																			-275.8														
9/9/2021 11:34																							-363.1										
9/29/2021 9:00						-497.02																											
9/29/2021 9:13								-488.37																									
9/29/2021 10:20																					-428.74												
9/29/2021 11:57		-368.41																															
9/29/2021 12:00				-302.16	-377.91		-277.81			-534.37	-314.08									-270.58		-294.41											
9/29/2021 12:07			-374.18																														
9/29/2021 12:26															-369.88																		
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9/29/2021 13:20																													-353.95				
9/29/2021 13:29																														-398.01			
10/6/2021 11:30																		-517.6															
10/6/2021 11:31																								-530									
10/11/2021 10:05																			-276.6														
10/11/2021 10:06																							-362.3										
11/1/2021 10:07																		-508.4															
11/1/2021 10:08																								-524.9									
11/1/2021 12:00				-301.98	-377.94	-496.73	-279.81			-533.45	-315.64									-272.89		-299.03											
11/8/2021 10:04																			-277.1														
11/8/2021 10:06																							-357.8										
11/8/2021 15:18	-580.40																																
11/8/2021 15:37		-368.79																															
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11/8/2021 16:03															-370.72																		
11/8/2021 16:15																																-398.05	
11/8/2021 16:22																															-384.69		
12/1/2021 12:00																				-275.2		-294.41											
12/3/2021 11:06																		-509															
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12/6/2021 12:20																									-203.6								
12/6/2021 13:37																					-429.03												
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12/29/2021 9:54						-496.83																											
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12/29/2021 12:00				-302.65	-377.16		-279.80			-534.76	-315.89																						
12/29/2021 12:49		-371.02																															
12/29/2021 13:03			-373.31																														
12/29/2021 13:28															-371.82																		
12/29/2021 13:39																																-398.27	
12/29/2021 13:49																															-386.44		
12/29/2021 14:09																														-404.01			
12/29/2021 14:18																											-202.05						
12/29/2021 14:34																-389.72																	
12/29/2021 15:27																										-477.9							
12/29/2021 20:58																													-373.58				
12/30/2021 11:23																									-198.83								
1/5/2022 18:00																		-509.7					-357.6	-516.8									
1/6/2022 1:00																			-276														
2/1/2022 18:00																				-270.58		-296.72	-359.9	-514.3									
2/2/2022 1:00																			-275.4														
2/7/2022 18:00				-302.43	-376.57		-280.08			-534.31	-315.25																						
3/1/2022 18:00																				-275.2													
3/2/2022 3:30																						-299.03											
3/4/2022 17:16																									-200.54								
3/8/2022 18:00																			-276.3				-355.9										
4/1/2022 17:00																				-277.51		-296.72											
4/4/2022 11:00																								-535.1									
4/6/2022 11:00				-303.25	-377.72		-279.91			-534.76									-277.4				-355.8			-472.86	-201.26						
4/6/2022 11:55																													-373.65				
4/6/2022 13:55								-486.28																									
4/6/2022 14:34																												-464.05					
4/6/2022 15:10																					-428.72												
4/6/2022 16:55		-374.33																															
4/6/2022 17:00											-315.2														-198.34								
4/6/2022 17:03			-378.62																														
4/6/2022 17:16															-375.27																		
4/6/2022 17:36																																-390.19	
4/6/2022 17:46																															-390.65		
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5/2/2022 17:00																				-279.82													
6/29/2022 7:55																											-200.79						
6/29/2022 8:32																										-478.7							
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6/29/2022 10:44																															-391.6		
6/29/2022 10:53																													-371.92				
6/29/2022 11:00				-303.76						-543.62	-319.45																						
6/29/2022 11:01																														-416.05			
6/29/2022 12:00																																	-426.21
6/29/2022 14:25																					-430.36												
6/29/2022 15:02																												-469.23					
6/29/2022 15:38								-487.70																									
6/29/2022 17:00					-380.22		-276.32																										
6/29/2022 19:40																									-203.72								
7/1/2022 11:00																						-296.72		-547.8									
7/1/2022 17:00																		-515.8		-279.82													
7/6/2022 11:00																			-278.3				-362.6										
8/1/2022 11:00							-280.62				-323.41											-301.34											
8/1/2022 17:00					-381.63															-282.13													
8/3/2022 13:02				-304.15																													
8/4/2022 11:00																		-512.1						-523.3									
8/8/2022 11:00																			-280.6				-360.9										
8/22/2022 11:00				-304.44	-382.90		-293.44				-325.56																						
9/1/2022 11:00																			-278.8			-317.51	-360.6										
9/1/2022 17:00																		-509.1		-284.44				-520.9									
9/6/2022 11:00				-304.40	-382.66		-294.40			-551.70	-326.18																						
9/6/2022 15:18																									-204.52								
10/5/2022 8:30								-489.45																									
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10/5/2022 11:00					-382.15					-555.22	-328.16							-518.6	-280			-319.82	-360.3	-530.9					-366.52	-406.38			
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10/5/2022 12:29																-441.94																	
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10/5/2022 16:32																									-203.66								
10/5/2022 17:00																				-289.06													
11/1/2022 11:00				-305.25	-383.09		-278.33			-551.53	-328.94							-518.5	-282.1				-361.1	-530.7									
11/1/2022 17:43																									-205.13								
12/1/2022 12:00																						-312.89											
12/1/2022 18:00																				-284.44													
12/2/2022 12:00																		-520.7						-533.4									
12/6/2022 0:00					-383.56																												
12/6/2022 12:00				-305.72	-383.56		-278.80			-545.49																							
12/28/2022 18:00										-544.50																							
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12/29/2022 16:40																					-434.2												
12/29/2022 17:14																									-206.88								
12/29/2022 17:26																											-204.34						
12/29/2022 18:00				-305.95	-383.56		-279.06																										
12/29/2022 18:23																										-480.95							
12/29/2022 19:18															-389.39																		
12/29/2022 19:34																													-362.47				

Clearwater UWCD - Lower Trinity Monitor Wells

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CUWCD #	E-20-120P	E-22-006P	E-22-007P	M-09-002P	M-13-005G	M-13-006G	M-13-007G	M-13-039G	M-17-CTGCD_Carlil	M-18-TWDB-Gatesville	M-19-001P	M-5810303	M-5817902	M-5829603	N1-18-004P	N1-19-003P	N2-02-001G	N2-02-022G	N2-02-024G	N2-02-034G	N2-03-001G	N2-04-010P	N2-10-001P	N2-13-001P	N2-13-002P	N2-14-004P	N2-14-005P	N2-15-002P	N2-20-002P	N2-20-003P	N2-20-004P	N2-21-004P	N2-21-005P
Well Name		llman Valley Ranchettes Well	tillman Valley Ranchettes Well #	Copperas Cove - Lower	Acres-City of Temple #1	arley-City of Templ	Ridge-City of Templ	-Tanglewood Moni	Carlile		RRR Hosston	City of Florence	Westwood Boys Ranch	City of Taylor #3	Justin Scott	Gary Kelley	Bell Co. WCID #2	Moffat WSC #1	Armstrong WSC #1	East Bell WSC #1	en. TX Vet. Hospit	East Bell WSC #2	Armstrong WSC #2	Moffat WSC #2	Trinity Oasis LLC (Jack Hilliard Dozer and Materials)	CTWSC Doc Curb	CTWSC System Split Well	City of Troy #2	Hines Texas, LLC #1	Hines Texas, LLC #2	Hines Texas, LLC #3	Hines Texas, LLC #4	Nathan & Danielle McNeal
Highest	-580.40	-368.41	-373.16	-290.13	-136.13	-259.00	-31.00	-268.60	-370.70	-477.64	-293.99	-289.96	-220.40	-37.90	-353.59	-366.61	-36.00	-329.70	-245.80	-217.45	-404.70	-268.00	-305.80	-355.00	-173.40	-417.08	-179.11	-464.05	-348.35	-389.81	-377.12	-390.19	-415.20
Lowest	-580.40	-375.38	-378.67	-308.85	-389.90	-497.02	-294.40	-499.07	-375.80	-555.22	-331.88	-588.72	-384.20	-211.57	-397.63	-441.94	-318.80	-583.70	-287.50	-307.54	-441.34	-378.00	-375.20	-596.70	-213.51	-490.18	-229.40	-481.06	-377.46	-434.22	-403.13	-398.27	-443.71
12/29/2022 19:46																														-410.43			
12/29/2022 20:08																																	-427.34
12/29/2022 20:20																-399.87																	
1/3/2023 18:00																			-281.10	-272.89		-305.96	-365.90										
2/6/2023 6:00									-374.90																								
2/6/2023 18:00				-306.25	-383.65		-279.01			-543.43	-326.32							-518.40	-281.20	-275.20				-525.30			-212.56						
3/1/2023 18:00																		-524.80	-281.60	-277.51		-305.96	-362.10	-550.90									
3/6/2023 6:00									-375.10																								
3/6/2023 15:00																											-209.69						
3/6/2023 18:00				-306.22	-384.01		-279.08			-542.79	-325.76											-329.91											
3/29/2023 5:00									-375.30																								
3/29/2023 14:15								-493.77																									
3/29/2023 14:45																												-472.50					
3/29/2023 15:23																					-435.22												
3/29/2023 15:48																									-204.88								
3/29/2023 16:08																	-318.80																
3/29/2023 16:35																										-481.46							
3/29/2023 17:00				-306.34	-384.41		-279.40			-542.66	-325.45																						
3/29/2023 17:27															-397.63																		
3/29/2023 17:46																													-377.46				
3/29/2023 17:56																														-415.59			
3/29/2023 18:20																																	-423.41
3/29/2023 18:31																-395.24																	
3/30/2023 0:00																											-201.17						
4/3/2023 17:00																		-532.80	-281.70	-275.20			-364.70	-535.70									
5/1/2023 5:00									-375.20																								
5/1/2023 6:00																											-211.32						
5/1/2023 17:00				-306.79	-384.51		-279.91			-543.27	-325.40							-530.90	-282.00	-272.89				-548.30									
5/2/2023 19:10																						-323.68											
6/5/2023 5:00									-375.50																								
6/5/2023 17:00				-307.00	-384.76		-280.26			-542.45	-325.45																						
6/6/2023 0:00																											-209.92						
6/6/2023 2:00																						-316.69											
6/28/2023 5:00									-375.40																								
6/28/2023 14:15								-499.07																									
6/28/2023 14:20																												-474.18					
6/28/2023 15:23																					-436.19												
6/28/2023 15:52																									-209.55								
6/28/2023 16:08																	-241.70																
6/28/2023 16:50																										-482.45							
6/28/2023 17:00				-307.18	-385.38		-280.89			-542.79	-326.02																						
6/28/2023 17:26															-389.40																		
6/28/2023 17:41																															-403.13		
6/28/2023 17:56																														-428.59			
6/28/2023 18:28																-438.15																	
6/28/2023 23:19																											-211.45						
6/29/2023 1:55																						-314.94											
6/30/2023 15:10																																	
7/5/2023 17:00																		-533.90	-282.60	-279.82			-372.50	-541.60									
8/1/2023 12:07																						-316.06											
8/1/2023 17:00																			-285.30	-275.20			-361.40										
8/2/2023 1:17																											-224.17						
8/2/2023 17:00																		-515.70						-530.60									
8/7/2023 5:00									-375.80																								
8/7/2023 10:00																											-224.24						
8/7/2023 15:00																									-212.09								
8/7/2023 17:00				-307.55	-387.91		-282.22			-545.57	-329.22																						
8/8/2023 2:29																						-316.21											
9/1/2023 17:00																			-283.80	-279.82			-375.20										
9/1/2023 23:50																						-316.80											
9/5/2023 15:30																									-213.51								
9/5/2023 17:00				-307.86	-389.04					-548.33	-331.88							-525.90						-549.90									
9/6/2023 4:01																						-316.43											
9/6/2023 4:30																											-224.85						
9/29/2023 12:15																							-361.04										
9/29/2023 12:45																						-317.54											
9/29/2023 13:50								-497.15																									
9/29/2023 14:24																												-479.06					
9/29/2023 14:51																					-438.98												
9/29/2023 15:06					-389.63																												
9/29/2023 15:25																									-212.20		-225.60						
9/29/2023 17:00				-307.79			-284.12			-547.19	-331.29							-528.50	-286.70					-532.30									
9/29/2023 17:10															-387.14																		
9/29/2023 17:29																															-400.88		
9/29/2023 17:40																													-375.30				
9/29/2023 18:14																																	-443.71
9/29/2023 18:24																-426.32																	
9/30/2023 3:40																	-245.83																
9/30/2023 4:07																										-485.90							
11/6/2023 13:22																											-229.40						
11/6/2023 18:00				-308.23	-389.88		-284.63			-547.59	-329.35								-287.50	-277.51													
11/6/2023 20:40																							-360.37										
11/6/2023 23:09																						-320.30											
12/4/2023 18:00				-308.45	-389.90		-284.50			-547.22	-328.37							-521.60	-287.50	-277.51				-533.40			-213.09						
12/5/2023 0:57																							-360.90										
12/5/2023 1:46																						-314.19											
12/29/2023 15:22																							-357.53										
12/29/2023 15:50								-495.25																									
12/29/2023 16:26																												-481.06					
12/29/2023 16:37																											-207.83						
12/29/2023 17:00																																	
12/29/2023 17:19																					-441.34				-212.54								
12/29/2023 17:31																	-239.16																
12/29/2023 18:00				-308.85	-389.59		-284.35				-327.60							-523.80	-287.20	-279.82				-535.00									
12/29/2023 19:05																										-490.18							
12/29/2023 19:39															-394.38																		
12/29/2023 20:34																													-372.48				
12/29/2023 20:42																														-434.22			
12/29/2023 21:05																																	-435.37
12/29/2023 21:20																-403.70																	
12/30/2023 4:09																						-310.67											
Since Last																																	
Historical																																	

E-line Measurement
Sonic Measurement
TWDB Measurement
Air line Measurement
No Reading Available

The desired future conditions established by Clearwater Underground Water Conservation District for the Lower Trinity is no more than 319 feet of drawdown after 50 years.

The average drawdown goal per year is -6.38 feet.

Minimum Number of Measurements:	3
Average Drawdown	**-4.97 ft/yr**
Drawdown of Water Level	
Increase of Water Level	

Appendix P

22nd Annual Bell County Water Symposium

"Water Resiliency While Battling the Never Ending Drought"

November 14, 2023 8:00 A.M. — 3:30 P.M.

Cadence Bank Center - Assembly Hall

This event is free but requires RSVP by November 9th

Program at a Glance

8:00 a.m. Doors Open for Registration
9:00 a.m. Welcome & Introductions

9:05 a.m. Issues of the Day on Water
Honorable Judge David Blackburn, Bell County

9:20 a.m. Understanding Today and Tomorrow's Water Needs
Mr. Tony Smith, Associated Vice President, Carollo Engineers

9:50 a.m. Brazos River Authority Update
Mr. Brad Brunett, Lower/Central Basin Region Manager, Brazos River Authority

10:15 a.m. Break

10:30 a.m. Bell County Groundwater Resource Update "*Concerns, Conservation and Future*"
Mr. Leland Gersbach, Board President, Clearwater UWCD
Mr. Dirk Aaron, General Manager, Clearwater UWCD
Mr. Mike Keester, Geoscientist, RW Harden & Associates

11:15 a.m. The 88th Texas Water Session
Mr. Ty Embrey, Principal, Lloyd Gosselink Rochelle & Townsend, P.C.
Ms. Madison Huerta, Associate, Lloyd Gosselink Rochelle & Townsend, P.C.

12:00 p.m. Lunch
12:30 p.m. Keynote Address — *Dr. Hal Needham, Extreme Weather & Disaster Scientist Galveston, Texas*

1:30 p.m. ASR Panel "*Aquifer Storage & Recovery the New Reservoir*"
Moderator: Honorable Judge David Blackburn, Bell County
Panelist: Dr. Steve Young, INTERA; Dr. Neil Deeds, INTERA; Mr. Ricky Garrett, WCID No. 1;
Mr. Rick Kasberg, KPA Engineers; Mr. David Olson, City of Temple; Mr. Brian Dosa, DPW Ft. Cavazos
Ms. Andrea Croskrey, Geoscientist ASR Lead, TWDB; Mr. David Smith,

2:15p.m. Designing Your Home with Rainwater Catchment
Mr. Alan Standen, LRE Water (2023 Texas Rainwater Catchment Award Winner)

The Clearwater Underground Water Conservation District and Bell County

are Pleased to Announce the 22nd Annual

Bell County Water Symposium

"Water Resiliency While Battling the Never Ending Drought"

November 14, 2023

8:00 a.m. - 3:30 p.m.

Location

Cadence Bank Center - Assembly Hall

301 W Loop 121, Belton, TX

This event is open to the public free of charge

Please RSVP by November 9th

254-933-0120
tsmith@cuwcd.org

Clearwater Underground Water Conservation District and Bell County would like to extend a special thank you to the sponsors of the 22nd Annual Bell County Water Symposium.