Middle Pecos Groundwater Conservation District 2022- Annual Report

General Manager: Ty Edwards







Middle Pecos Groundwater Conservation District 2022 Annual Report

Table of Contents

Letter from General Manager – Ty Edwards

Maps of Pecos County Groundwater Levels:

- > Frequency Distribution 2022/2023
- Water Level Surface 2023
- Water Level Surface 2022
- Water Level Surface 2021
- Water Level Surface 2020
- Water Level Surface 2019
- Water Level Change 2022-2023
- > Water Level Change 2012-2023
- Water Level Change 2021-2022
- Water Level Change 2012 to 2022
- Water Level Change 2020 to 2021
- Water Level Change 2012 to 2021
- Water Level Change 2019 to 2020
- Water Level Change 2012 to 2020
- Water Level Change 2018 to 2019
- > Water Level Surface 2012 to 2019
- TexMesonet Weather Station 2022

Texas Drought Monitor Map:

January 2022- December 2022

Comanche Springs:

- Comanche Springs
- Prison

The Nature Conservancy:

Diamond Y/ Euphrasia Spring

Pecos River:

- Pecos River- Girvin, Texas
- Pecos River- Sheffield, Texas

Fort Stockton Holdings:

- FSH Agreed Threshold Monitoring
- > FSH Remaining Threshold and Well Locations
- > FSH Threshold Table

Conservation Letters:

- Rainwater Harvesting
- Annual Newspaper Article for Publics Information Regarding Groundwater Conservation

MIDDLE PECOS GROUNDWATER CONSERVATION DISTRICT

P.O. Box 1644 Fort Stockton, TX 79735 Phone (432)336-0698 Fax (432)336-3407
405 North Spring Drive Fort Stockton, Texas 79735
Email: mpgcd@mpgcd.org Website: www.middlepecosgcd.org

Directors

Jerry McGuairt, President Janet Groth, Vice President M. R. Gonzalez, Secretary/Treasurer Alvaro Mandujano, Jr. Vanessa Cardwell Ronald Cooper Weldon Blackwelder Allan Childs Jeff Sims Puja Boinpally Larry Drgac

Employees

Ty Edwards, General Manager
Office: Gail Reeves Field Technician: Anthony Bodnar

2022 Annual Manager's Report

MPGCD Board of Directors

The District was very busy this year working towards a resolution for the abandoned well problem in Pecos County. The District staff and Board spent a significant amount of time and money on addressing the issues. Banner Public Affairs, LLC was hired to find a funding solution at the Federal level. Banner has arranged for numerous meetings with Congressional members and staff over the last several months, along with Federal agencies overseeing programs that could help with the problem. The District has continued the efforts at the State level including testifying at the RRC, State Capitol and onsite visits with committee and staff members. The Texas Legislative session will start on January 10, 2023, and the District has 3 draft bills ready to be filed to address the P-13 issues at the RRC.

The District has continued to tend to MPGCD business in managing the groundwater resources of Pecos County. A summary of that work is below. Annual groundwater production and number of registered water wells in the District are:



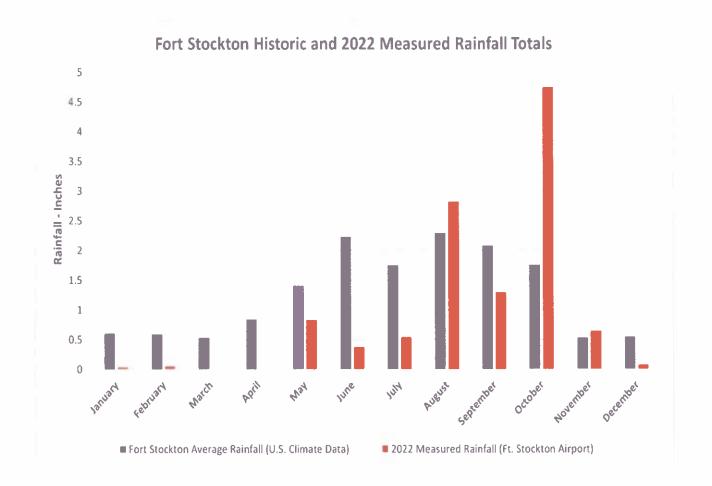
NUMBER OF WELLS 3,671 Total 2,896 Exempt 973 Non-Exempt



Wells +

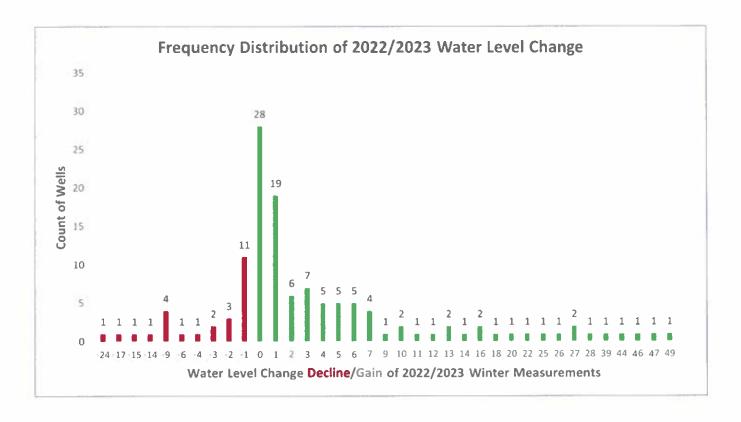
2022 Rainfall

The 2022 year began with most of Pecos County in severe or extreme drought. These conditions worsened throughout the spring and into the summer months, and much of the County experienced exceptional drought. Significant rainfall events began to alleviate the drought in August and the County ended the year without a drought declaration. Much of the observed rainfall was experienced between August and November with western Pecos County being the main beneficiary. Fort Stockton 2022 rainfall was below the historic average of 15.15", with the City receiving ~75% of its average annual rainfall despite the above average late year rainfall totals.



• Winter Water Levels

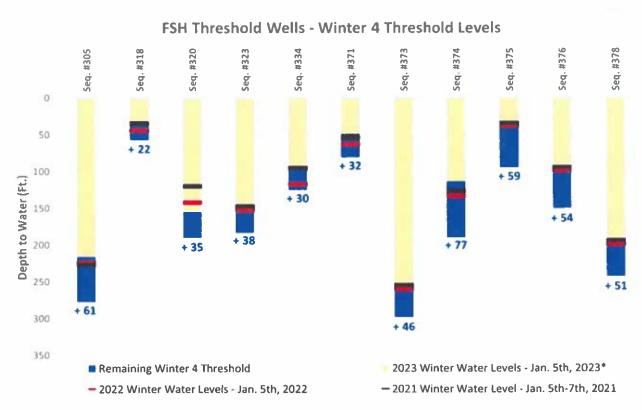
Steady water level declines, consistent with drought were observed throughout the first half of 2022. As drought ended many of these declines were quickly erased and most monitor well water levels are higher than were observed this time last year (Figure 2). This turnaround highlights the importance of rainfall to the overall health of the aquifer systems within Pecos County, TX.



Currently 133 water wells are monitored in Pecos County with roughly 75% of monitor wells exhibiting a gain or recovery when compared to their 2022 winter measurement. Of the 26 wells experiencing drawdowns, 22 showed less than 10 feet of decline while the other four wells showed declines between 14 and 24 feet. The most significant signs of recovery were observed within Management Zone 1. When comparing 2011-12 water levels to current measurements, the general trend is flat to slightly downward, with most drawdowns being observed in Management Zone 3 and along the Reeves County border. Monitor well #230 in southern Pecos County has shown the most significant decline over the period, a reoccurring trend that has been observed over the last several years.

- In Corporation with local landowners 50 water samples have been collected across Pecos County in 2022.
- Fort Stockton Holdings 28,400 ac/ft export permit was renewed for a 3-year permit term effective July 18, 2020-2023, in accordance with District Rule 11.8(f) and Texas Water Code 36.1145. FSH and MPGCD approved a Joint Study to be proactive, to develop scientific data that will provide FSH, the District, and other stakeholders with more certainty about conditions in the Edwards-Trinity Aquifer. FSH agreed to pay \$250,000 to contribute to the study. As of this date the District has installed transducers, which are recording pressure, temperature, and conductivity at the 11 Threshold monitor well sites.

FSH Threshold Well Dashboard is available at https://mpgcd.halff.com/Dashboard.



*Seq. #375 was measured by E-Line on January 6th, 2023

- COCKRELL #1- Cockrell Investment Partners, L.P v. Middle Pecos Groundwater Conservation District, Cause NO. P-12176-112-CV was filed in District court over denial of Party status to the Fort Stockton Holdings (FSH) Hearings. Judge Ables ruled in favor of the District on December 17, 2020 granting the District Pleas to the Jurisdiction and awarded attorney fees. This case has been appealed to El Paso Court of Appeals, Appellate Case No. 08-21-00017-CV. Waiting on a ruling from the court.
- COCKRELL #2- Cockrell Investment Partners, L.P v. Middle Pecos Groundwater Conservation
 District, Cause NO. P-8277-83-CV (Second Law Suite Permit Renewal). Signed by the parties
 noting that Cockrell Investment Partners has agreed to pay the mandatory awarded fees. Cockrell
 Investment Partners has appealed Judge Ables decision to the El Paso Court of Appeals. Waiting
 on a ruling from the court.
- Diamond Y Spring-The Nature Conservancy has installed Telemetry in Diamond Y Springs. The Conservancy has created an extensive groundwater monitoring program to track spring flows, water quality, and the health of the pupfish and other species. Over the last few years, we have seen a decrease in flows during the summer months and a recovery in winter months. Diamond Y Spring Preserve protects one of the largest and last remaining Cienega systems in West Texas. The District updated the geologic model in 2021, around the Diamond Y Spring area and was able to map several faults. Work is ongoing.
- Santa Rosa Spring- continues to remain dry. The spring bed is being monitored and we are tracking changes in pressure during rain fall events.

- Comanche Spring- is continually monitored for flow, pressure, and conductivity during the Winter Spring Season. The Spring began flowing on December 15, 2022.
- The District was awarded a FY 21 TWDB Agricultural Water Conservation Grant for metering in Management Zone 1. Outreach is ongoing and hope to begin installation of meters in early 2023.
- The District Board approved the drilling of a **Monitor Well at the MPGCD Office located at 405 North Spring Drive**. The purpose of the well will be to have an educational monitoring site outside the office. An 8ft Areomotor windmill has been installed over the well with full time In-Situ monitoring equipment downhole. A full exhibit has been erected at the site.
- San Andres Flowing Wells- Research is continuing pertaining to the artesian wells around the Imperial area. Currently seven wells have been plugged. The District budgeted \$150,000 for fiscal year 2022-2023 to start a plugging effort to address the remaining well issues. Banner Public Affairs, LLC has been hired to help with outreach at a Federal level. State outreach is ongoing with several bills filed to address the P-13 issue including Boehmer Lake.
- Phase 1 of building a groundwater flow model have begun with completion of the model anticipated for 2024. The objective is to develop a tool that would assist the District in groundwater management. The google link for the tech memos is available at:

https://drive.google.com/drive/folders/1HYj8JRV4omAgKPJWBta-T20hZUbtyaPS.

Specific uses that are contemplated include:

- DFC development without the need to use regional GAM's.
- Provide a quantitative basis for future updates to the District's rules that set a threshold on well size/pumping amount for requiring permit applicants to prepare hydrologic reports.
- Provide a tool that can be used to review permit applications by quantifying the potential impacts of new pumping for any formation/aquifer in the District on a regional scale.
- Assess the relationship between groundwater pumping and spring flow at Comanche Springs on a monthly time scale.
- The **third round of joint planning** for Groundwater Management **Areas 3 and 7** is complete and the fourth round of joint planning is underway. For this round, the statutory deadline to propose desired future conditions (DFC's) is May 1, 2026, and the deadline to submit final DFC's to the Texas Water Development Board is January 5, 2027. I attended 100% of all the GMA 3 and GMA 7 meetings held in 2022.

https://www.twdb.texas.gov/groundwater/management_areas/gma3.asp

https://www.twdb.texas.gov/groundwater/management areas/gma7.asp

• The Region F Water Planning Group is tasked with developing and adopting a regional water plan in accordance with Texas Senate Bill 1 and Texas Senate Bill 2. The 2021 Region F Plan was submitted to the Texas Water Development Board, and we held our last meeting to adopt the 2021 plan on September 17, 2020. The sixth cycle of regional planning is underway for the 2026 State

Water Plan. I am a voting member of Region F representing Groundwater Management Area 3 and have attended 100 percent of the scheduled meetings for Region F in 2022.

https://www.twdb.texas.gov/waterplanning/rwp/plans/2021/index.asp

• The Texas Legislature is underway starting **January 10, 2023**. Pecos County is in State House District 53 (Andrew Murr) and Senate District 29 (Cesar Blanco).

House Committee on Natural Resource held hearings on issues affecting groundwater management policy and regulatory framework. The Committee heard testimony related to the following topics:

(1) Large-Scale Transfers

The Legislature should examine the outdated export fee structure to help provide additional funding for continued monitoring and developing science for assessing and addressing impacts from large-scale water transfers.

(2) Desired Future Conditions

The state should encourage progress towards achievement of DFCs by requiring representatives in a GMA – using groundwater availability models – to adopt intermediate DFCs for each five-year period in the 50-year plan.

The Legislature should appropriate additional funding and full-time staff to the Texas Water Development Board (TWDB) to support state-of-the-art groundwater availability modeling, and to provide technical and financial support to GCDs as they develop their DFCs.

(3) Transparency in the Permit Application Process

The Legislature should consider legislation providing that in GCDs with rules requiring well spacing from other existing wells, a notice of a permit application should be provided to neighboring landowners who own land within the spacing distances from other existing wells and whose right to drill a well on their property would be impacted under the spacing rules if the district approves the application for which the notice is provided.

(4) Abandoned and Deteriorated Water Wells & Orphan Oil and Gas Wells.

The Railroad Commission (RRC) has jurisdiction over P-13 (Oil Wells transferred to Water Wells) wells and is the only regulatory agency with the expertise, personnel, and funding necessary to address the issue. The RRC should take steps to plug abandoned oil wells including P-13 wells. The RRC is properly positioned to address sulfur wells despite any jurisdictional confusion and should work to address the issue.

(5) Promote Conservation and Achieve Waste.

The Committee made recommendations to revise and clarify the definitions of "waste" and "beneficial use" throughout the Texas Water Code.

Senate Committee on Agriculture, Water & Rural Affairs published their Interim Report to the 88th Legislature. Based on testimony presented during the hearings, the Committee made the following recommendations:

- Groundwater Conservation Districts (GCDs) should be encouraged to maximize tools such as export fees and contracts to adequately plan for mitigation and to educate landowners on the benefits of data for the use of well meters.
- The state should invest in updated groundwater availability models at TWDB; consider grants to GCDs to employ the best available science at a local level; and replenish Agriculture Conservation grant funding to incentive drip irrigation and other conservation technologies.
- The public should be better educated on the importance of water conservation. This work can start in public schools.

Senate Committee on Natural Resources and Economic Development also published an Interim Report. The Report focuses more on economic development issues than natural resource issues. There was mention of abandoned oil and gas wells that is summarized below.

Monitoring HB 3973 relating to a study on abandoned oil and gas wells and the use of the oil and gas regulation and cleanup fund.

- The 82nd Legislature established the Oil and Gas Regulation and Cleanup Fund (OGRC) to manage the state's plugging program, address orphaned wells, and clean up abandoned oil field locations. Last session, HB 3973 created a joint interim committee to study matters related to abandoned oil and gas wells in the state, including the costs associated with plugging abandoned wells. However, the joint interim committee was never appointed and, therefore, failed to meet. The Committee determined that P-13 wells should continue to be monitored and the Legislature should address the current oversight of the agencies involved and make changes, as necessary.
- As General Manager of the District, I would like to thank MPGCD Directors for all the hard work and time you dedicated to 2022.

Ty Edwards, General Manager

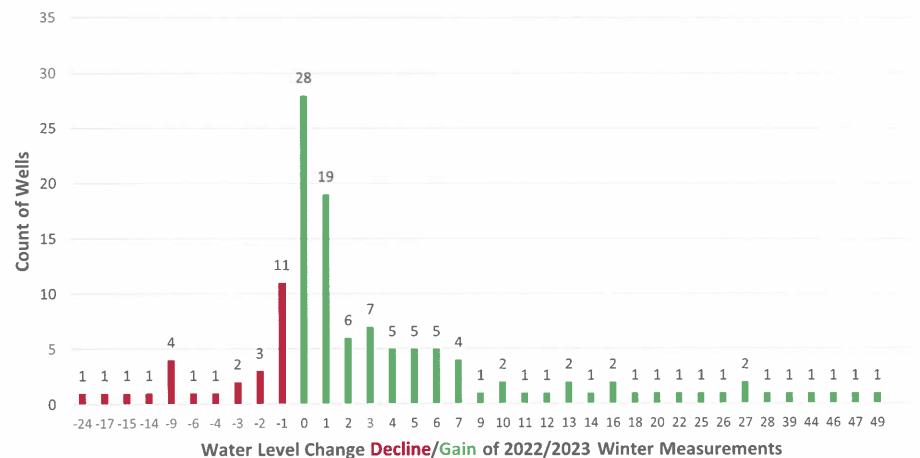


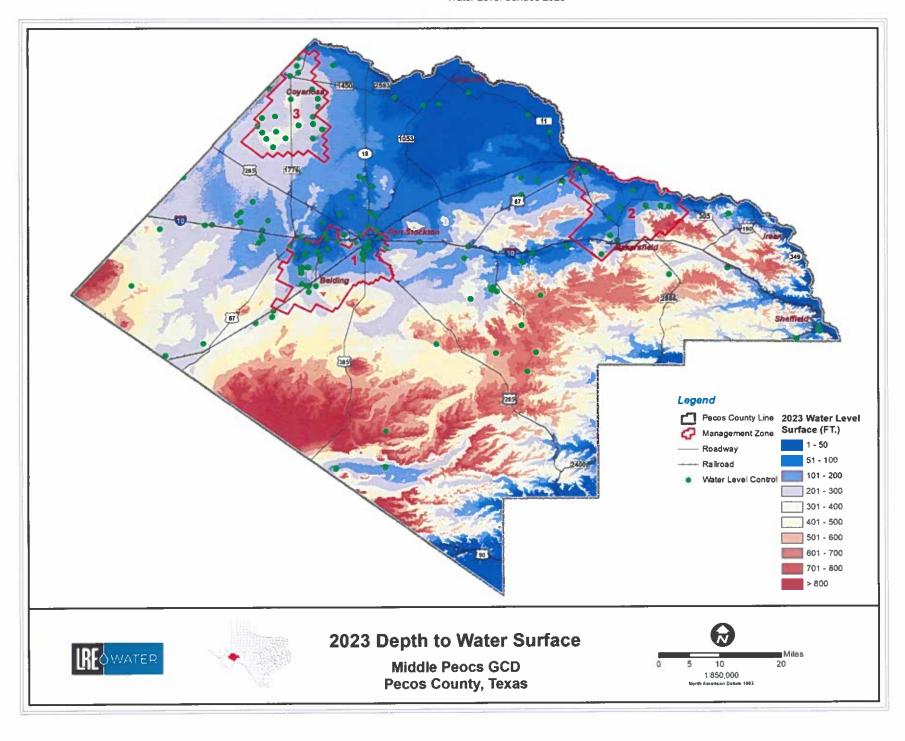
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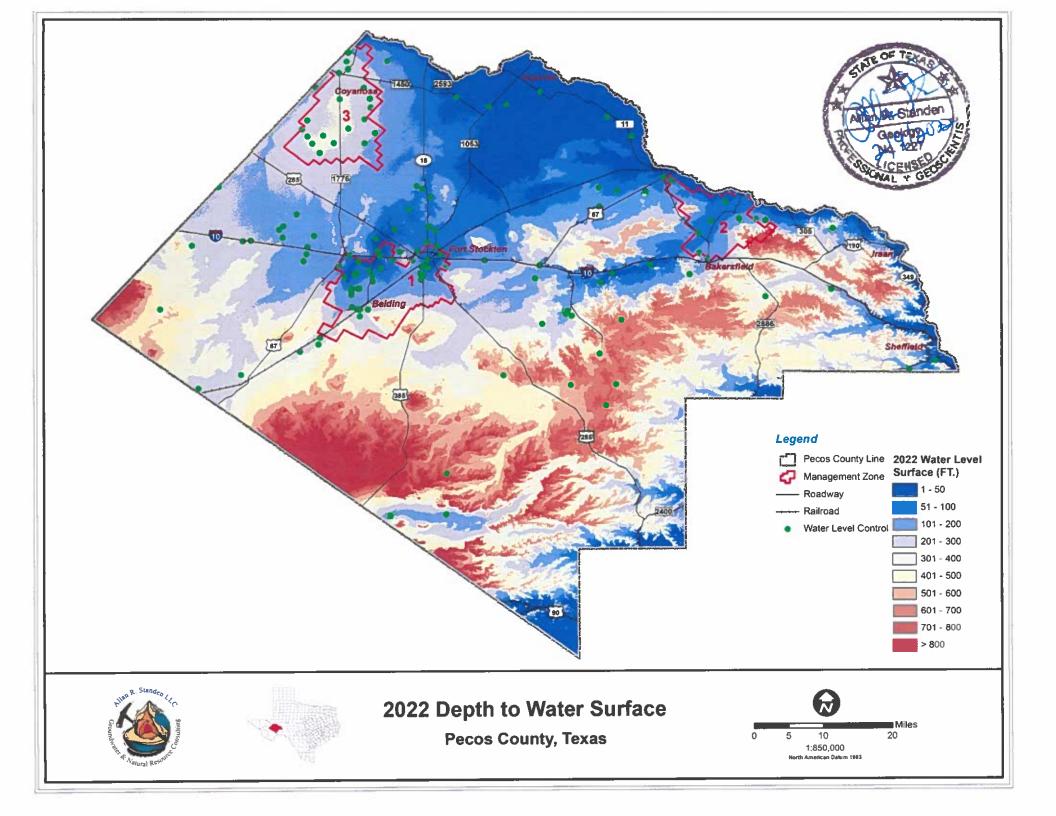


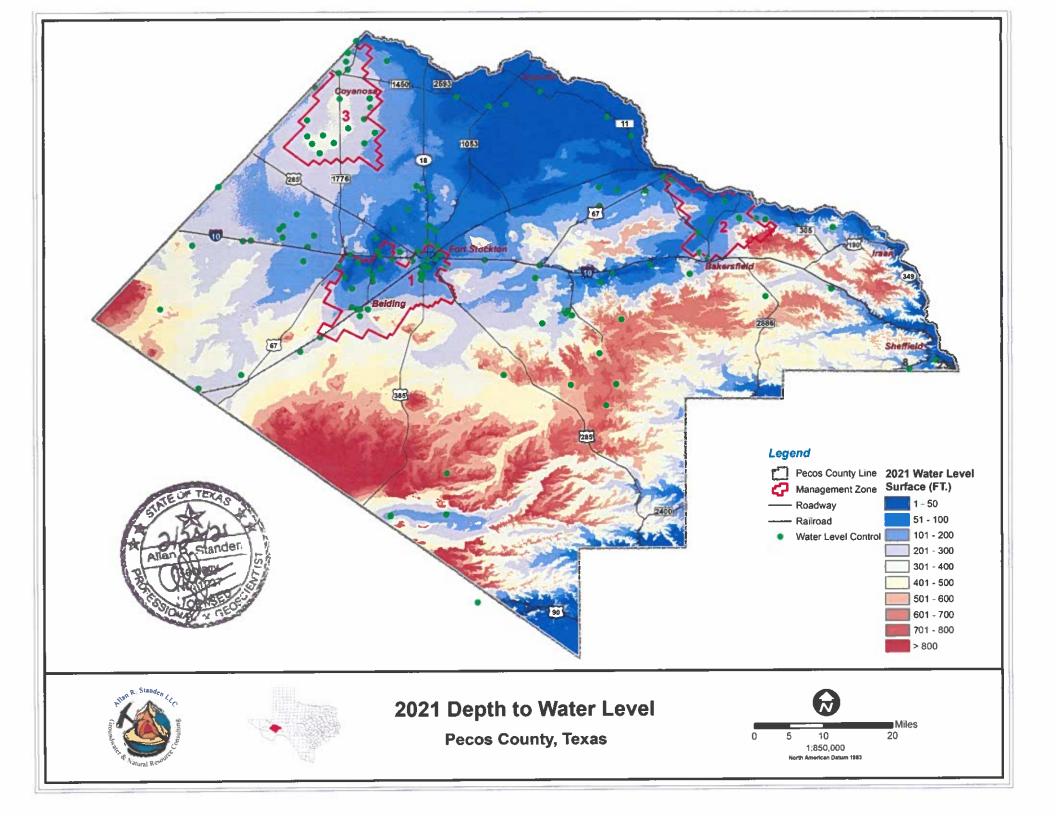
Wells +

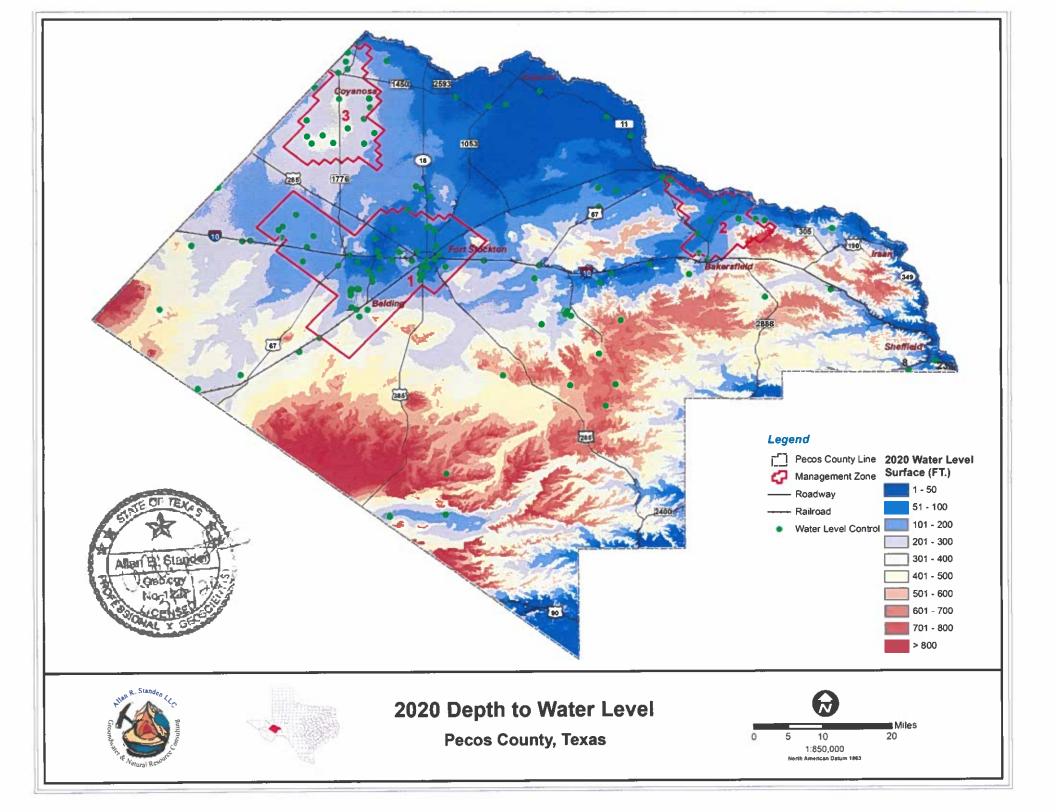


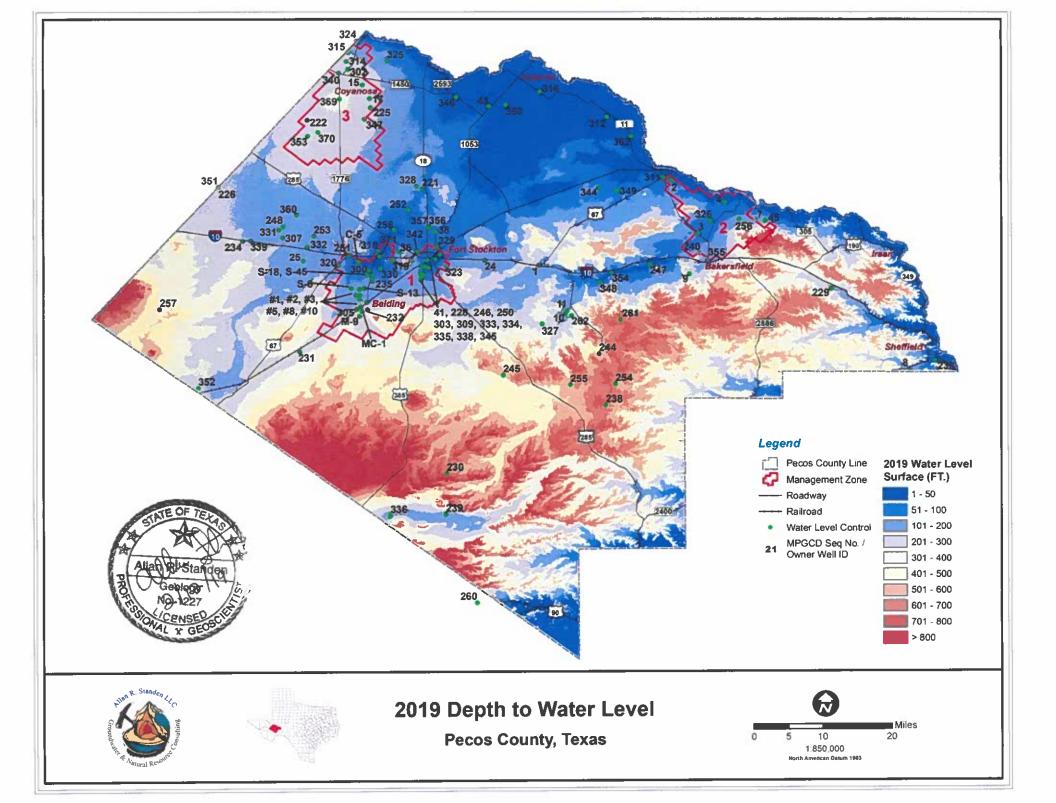


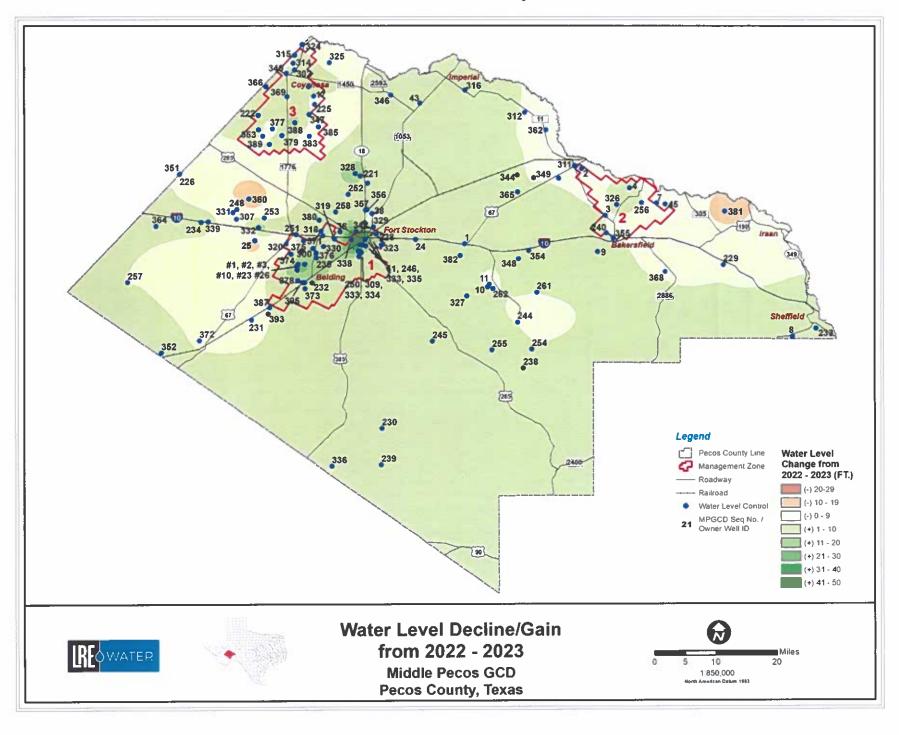


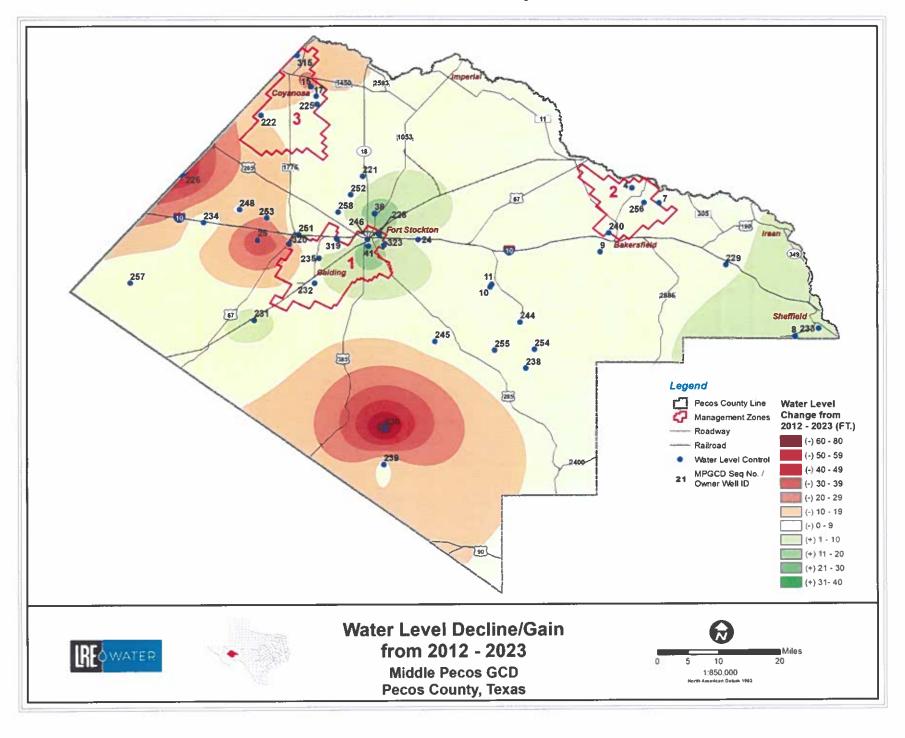


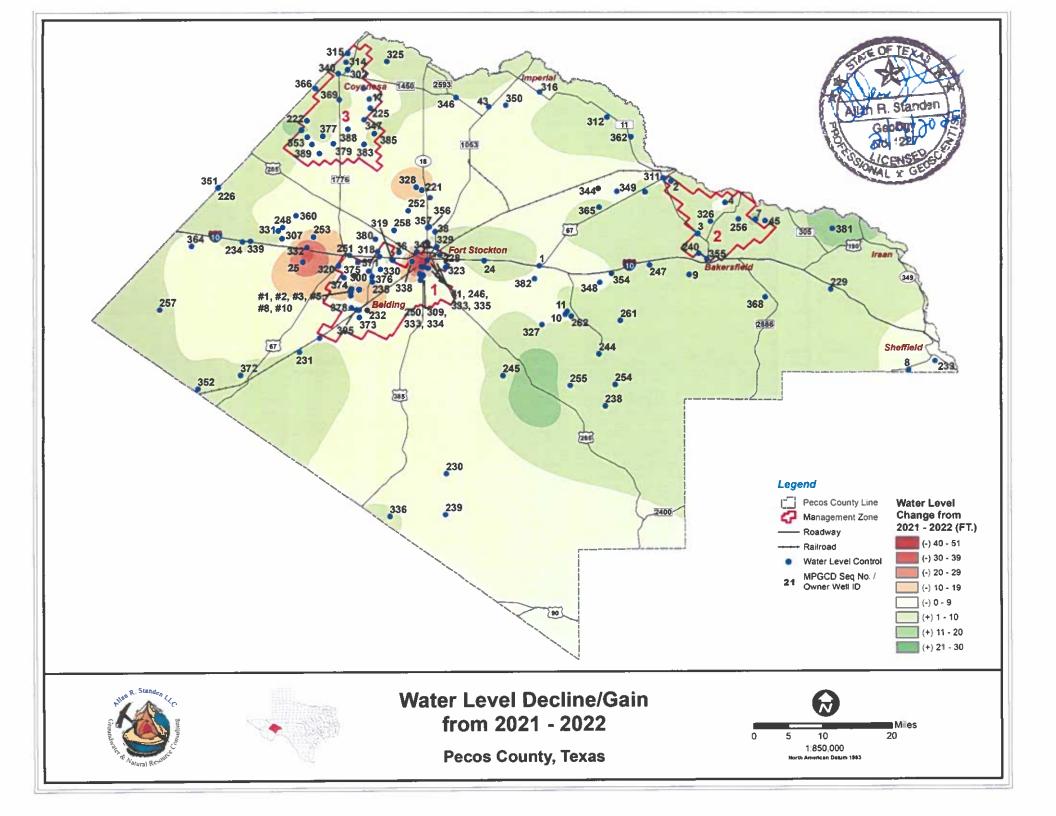


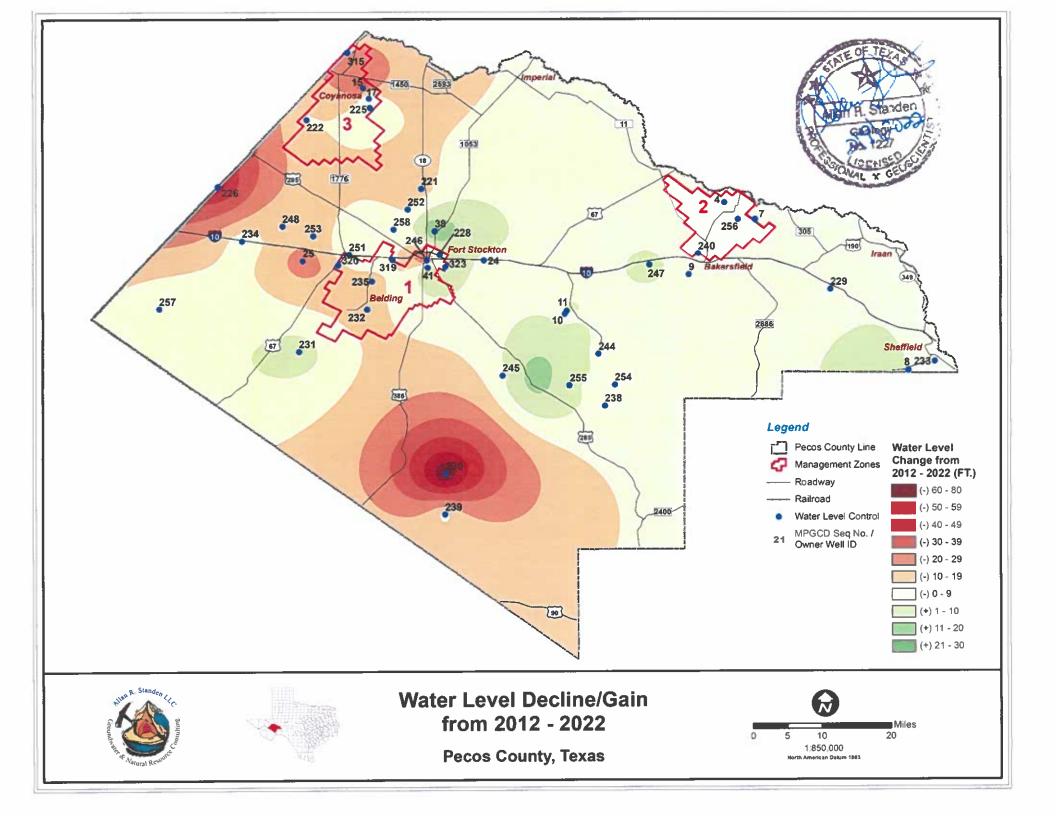


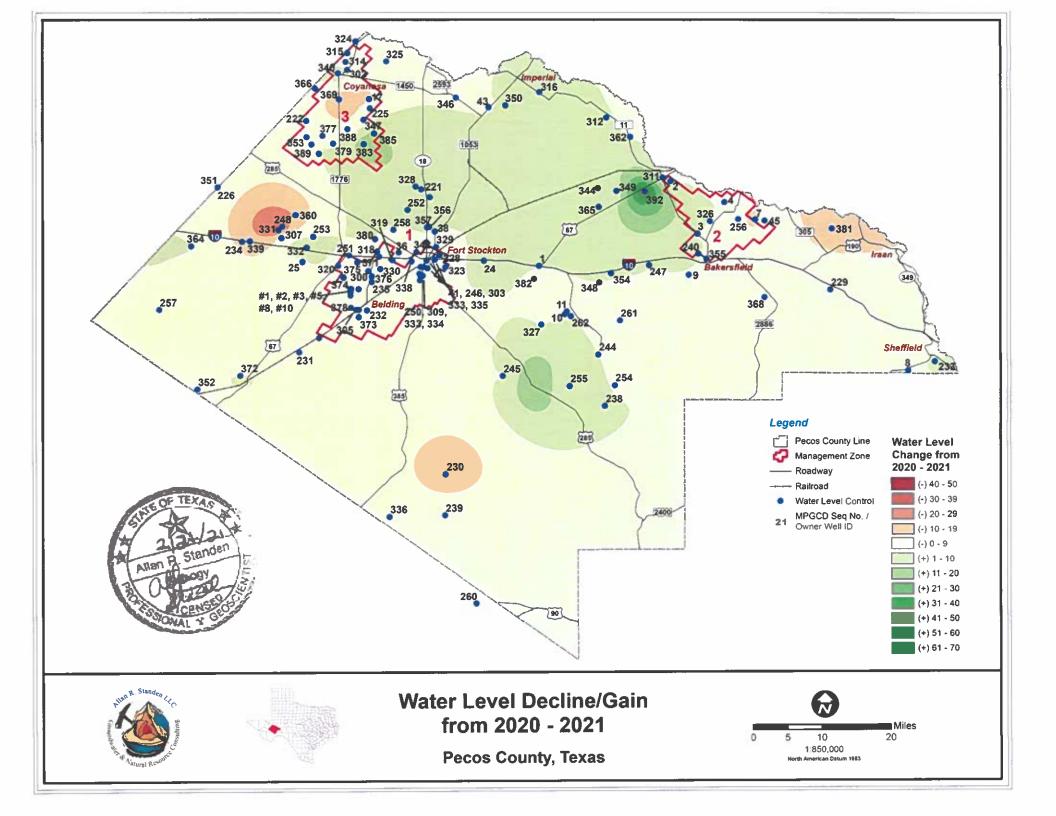


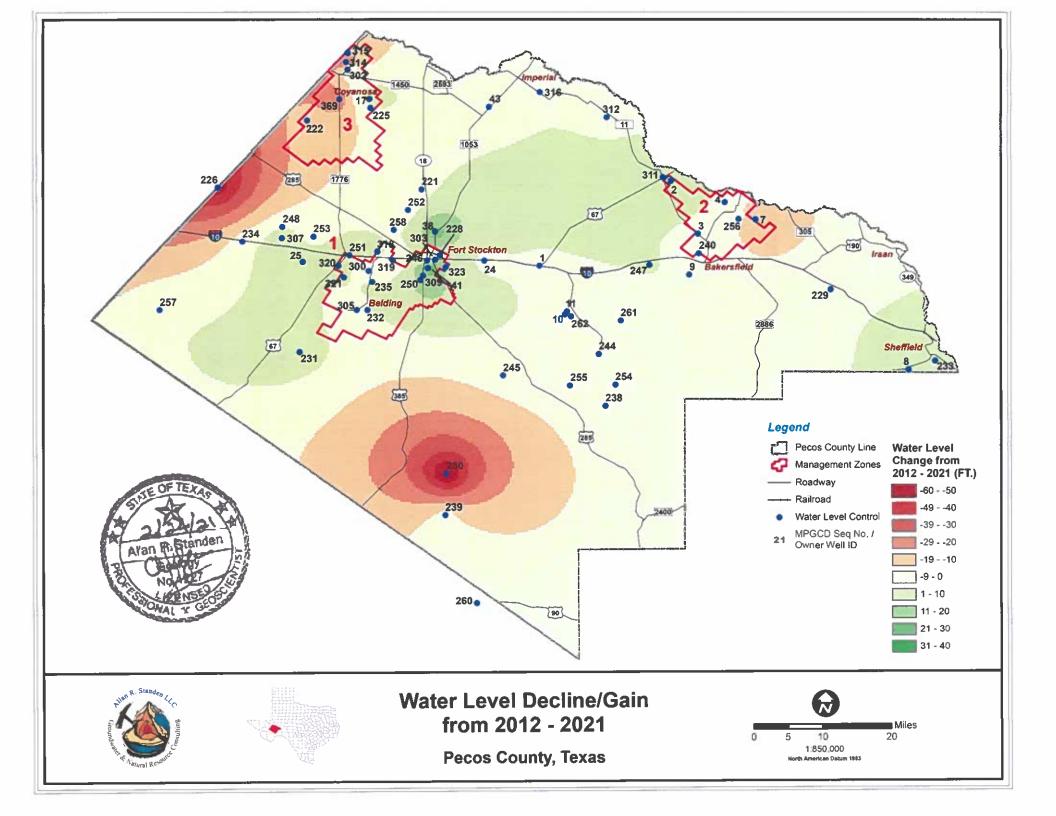


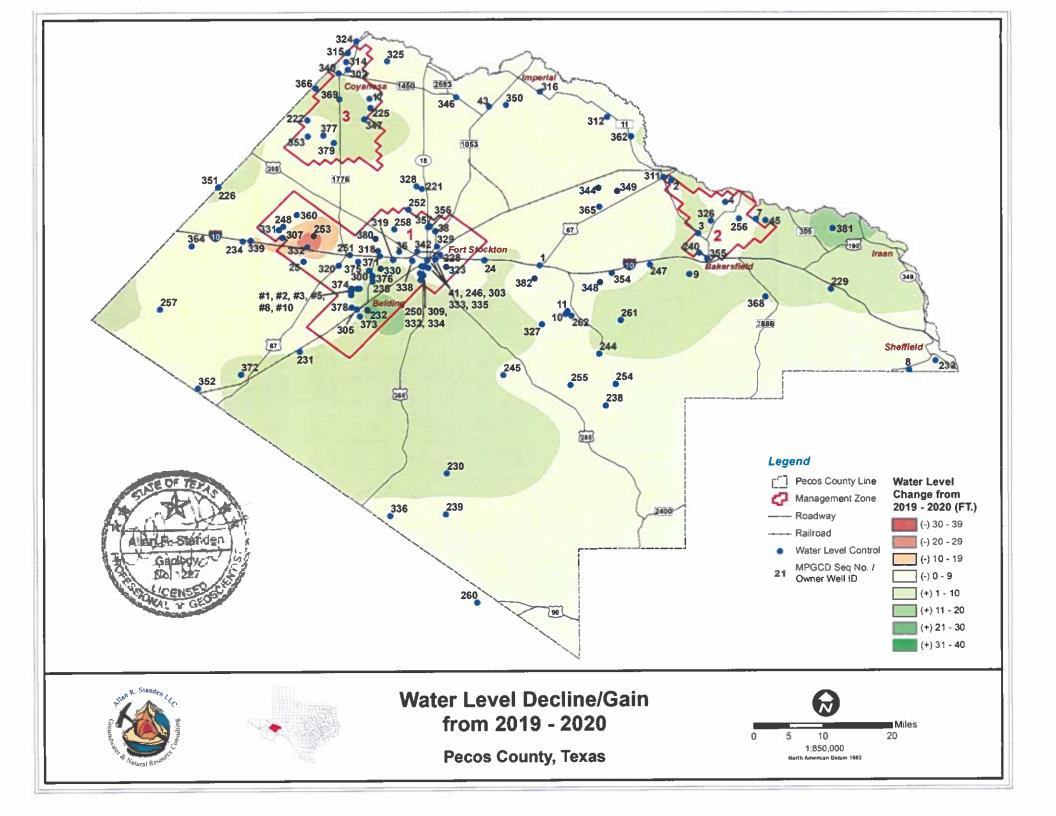


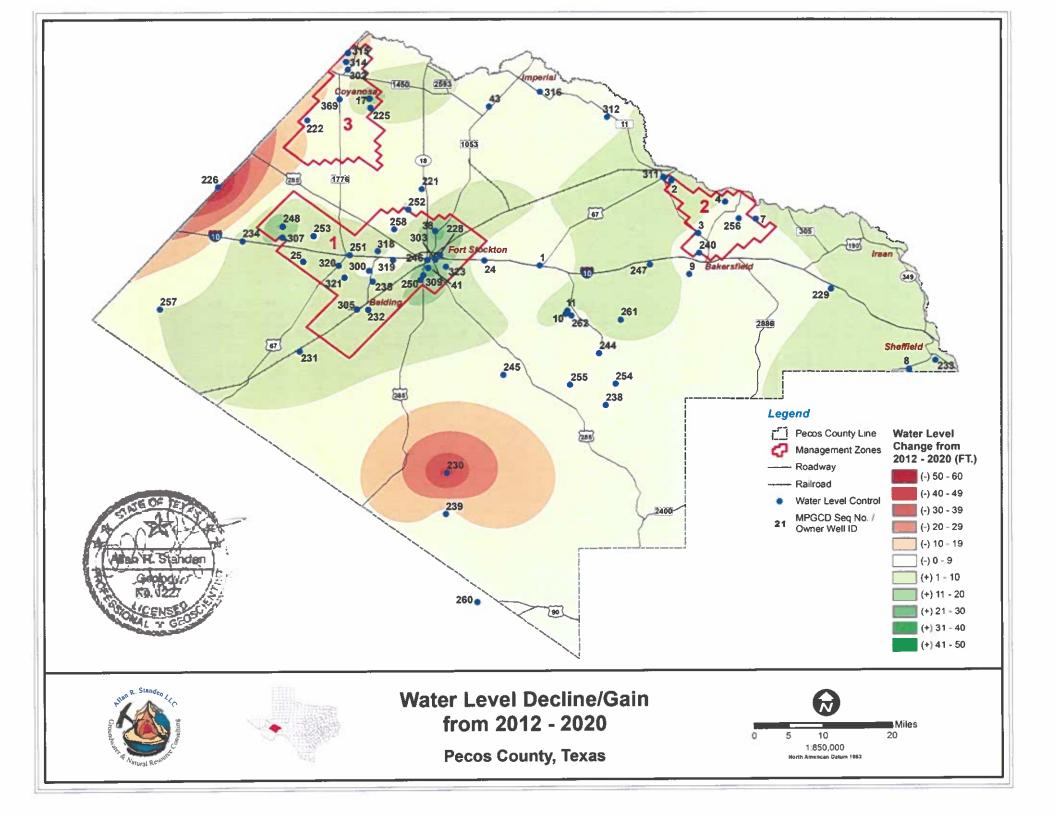


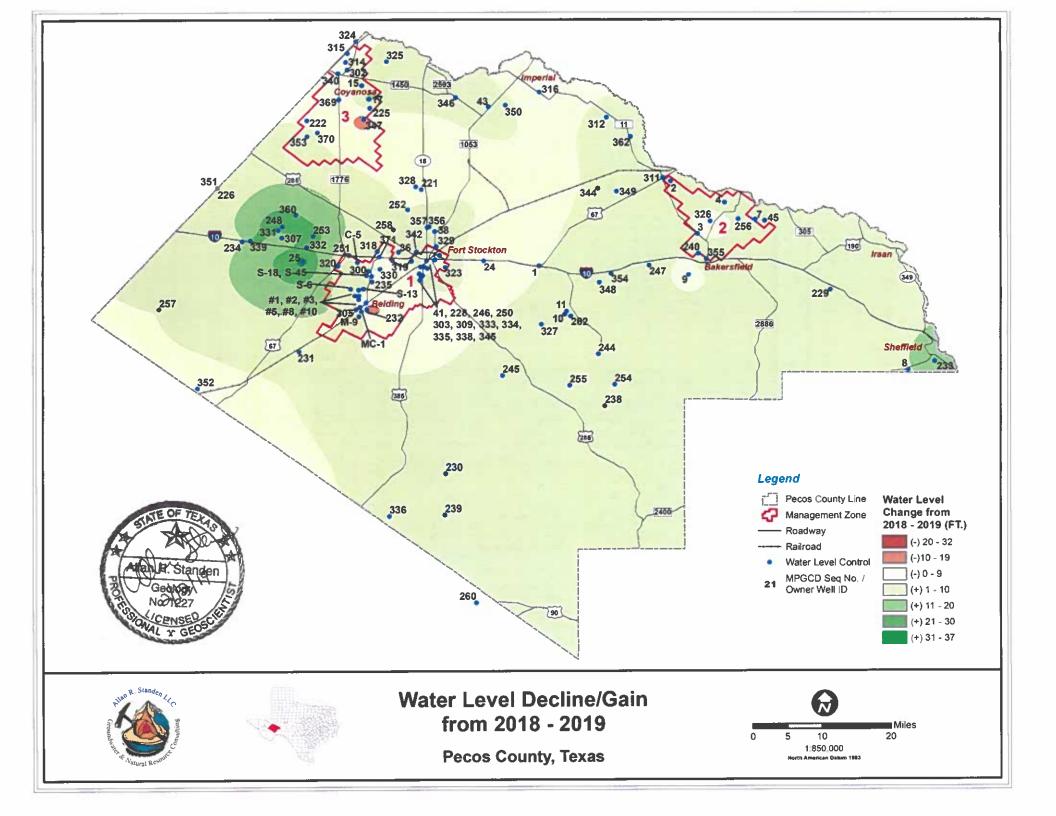


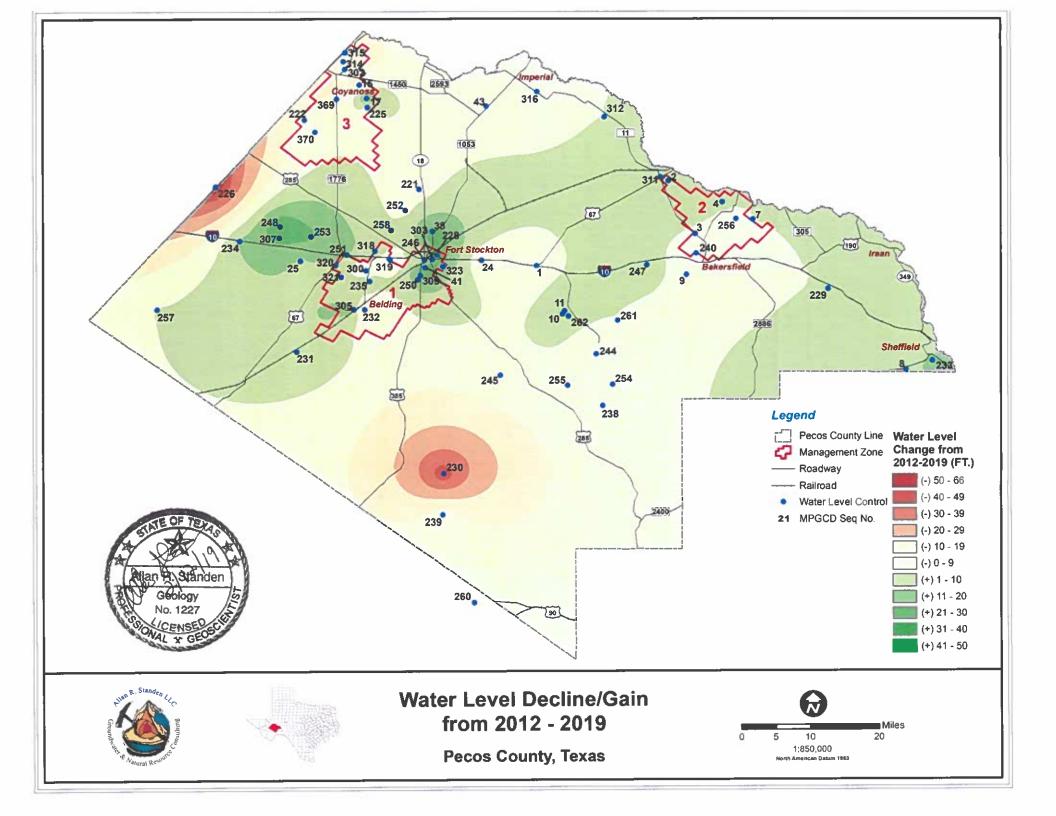


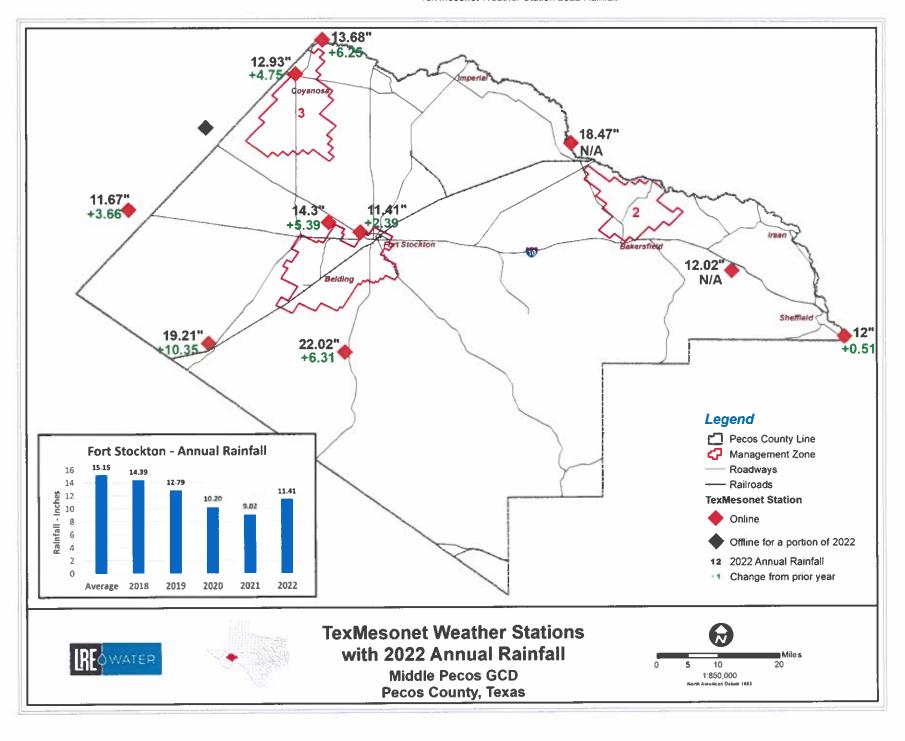












January 4, 2022

(Released Thursday, Jan. 6, 2022)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.58	92.42	79.83	54.25	16.69	0.00
Last Week 12-28-2021	13.02	86.98	67.27	36.58	10.65	0.00
3 Months Ago 10-05-2021	55.05	44.95	8.26	0.27	0.00	0.00
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 01-05-2021	17.37	82.63	58.34	37.80	19.24	8.20

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP









February 8, 2022

(Released Thursday, Feb. 10, 2022)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.83	88.17	78.09	55.00	23.88	0.00
Last Week 02-01-2022	7.04	92.96	83.79	69.20	31.56	0.00
3 Months Ago 11-09-2021	38.58	61.42	32.22	5.62	0.00	0.00
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 02-09-2021	25.73	74.27	46.98	30.24	18.16	5.56

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Author:

Deborah Bathke National Drought Mitigation Center









March 8, 2022

(Released Thursday, Mar. 10, 2022)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3.95	96.05	89.93	68.43	36.38	6.39
Last Week 03-01-2022	6.66	93.34	80.71	56.71	24.47	0.00
3 Months Ago 12-07-2021	18.80	81.20	55.01	20.05	0.14	0.00
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 03-09-2021	10.83	89.17	62.49	32.36	18.27	6.11

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Author:

Brian Fuchs
National Drought Mitigation Center









April 5, 2022

(Released Thursday, Apr. 7, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

3	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.95	95.05	84.73	71.45	40.56	9.78
Last Week 03-29-2022	4.90	95.10	88.22	70.79	42.10	7.03
3 Months Ago 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 04-06-2021	8.55	91.45	74.45	38.46	23.57	8.53

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Author:

Deborah Bathke National Drought Mitigation Center









May 3, 2022

(Released Thursday, May. 5, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.83	91.17	80.02	67.29	50.91	23.19
Last Week 04-26-2022	6.21	93.79	82.11	70.28	50.25	19.62
3 Months Ago 02-01-2022	7.04	92.96	83.79	69.20	31.56	0.00
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 05-04-2021	33.23	66.77	45.00	27.61	16.73	7.85

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Author:

David Simeral Western Regional Climate Center









June 7, 2022

(Released Thursday, Jun. 9, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.75	88.25	78.81	64.99	40.11	15.60
Last Week 05-31-2022	14.11	85.89	78.44	66.35	44.07	17.91
3 Months Ago 03-08-2022	3.95	96.05	89.93	68.43	36.38	6.39
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 06-08-2021	77.24	22.76	12.57	7.71	4.47	1.16

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

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Author:

Brad Pugh CPC/NOAA









July 5, 2022

(Released Thursday, Jul. 7, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.47	97.53	86.79	66.05	45.91	16.11
Last Week 06-28-2022	3.71	96.29	86.39	64.99	43.79	15.82
3 Months Ago 04-05-2022	4.95	95.05	84.73	71.45	40.56	9.78
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 07-06-2021	87.07	12.93	5.98	1.17	0.00	0.00

Intensity:

None
D2 Severe Drought
D0 Abnormally Dry
D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Author:

Brad Pugh CPC/NOAA









August 2, 2022

(Released Thursday, Aug. 4, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.82	99.18	97.11	87.92	61.86	21.31
Last Week 07-26-2022	0.82	99.18	97.40	85.15	60.06	18.80
3 Months Ago 05-03-2022	8.83	91.17	80.02	67.29	50.91	23.19
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 08-03-2021	94.72	5.28	1.10	0.00	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Curtis Riganti National Drought Mitigation Center









September 6, 2022

(Released Thursday, Sep. 8, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	20.57	79.43	62.32	33.57	9.26	0.90
Last Week 08-30-2022	9.53	90.47	76.03	52.48	26.38	5.28
3 Months Ago 06-07-2022	11.75	88.25	78.81	64.99	40.11	15.60
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 09-07-2021	89.25	10.75	0.48	0.00	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

David Simeral Western Regional Climate Center









October 4, 2022

(Released Thursday, Oct. 6, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	10.94	89.06	71.07	43.13	14.01	1.63
Last Week 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
3 Months Ago 07-05-2022	2.47	97.53	86.79	66.05	45.91	16.11
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago 10-05-2021	55.05	44.95	8.26	0.27	0.00	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Brad Pugh CPC/NOAA









November 1, 2022

(Released Thursday, Nov. 3, 2022)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.10	91.90	69.56	40.13	13.43	1.73
Last Week 10-25-2022	6.59	93.41	74.73	43.05	13.04	1.39
3 Months Ago 08-02-2022	0.82	99.18	97.11	87.92	61.86	21.31
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago 11-02-2021	38.20	61.80	32.90	6.44	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

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Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Brian Fuchs
National Drought Mitigation Center









December 6, 2022

(Released Thursday, Dec. 8, 2022)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3 D4	D4
Current	25.79	74.21	52.44	29.26	9.23	1.39
Last Week 11-29-2022	25.86	74.14	51.97	29.26	9.23	1.39
3 Months Ago 09-06-2022	20.57	79.43	62.32	33.57	9.26	0.90
Start of Calendar Year 01-04-2022	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago 12-07-2021	18.80	81.20	55.01	20.05	0.14	0.00

Intensity:

None
D2 Severe Drought
D0 Abnormally Dry
D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

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Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

David Simeral Western Regional Climate Center









December 27, 2022

(Released Thursday, Dec. 29, 2022)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	27.57	72.43	48.59	25.88	7.13	1.24
Last Week 12-20-2022	27.57	72.43	48.59	25.88	7.13	1.24
3 Months Ago 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
Start of Calendar Year	7.58	92.42	79.83	54.25	16.69	0.00
Start of Water Year 09-27-2022	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago 12-28-2021	13.02	86.98	67.27	36.58	10.65	0.00

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Richard Heim NCEI/NOAA



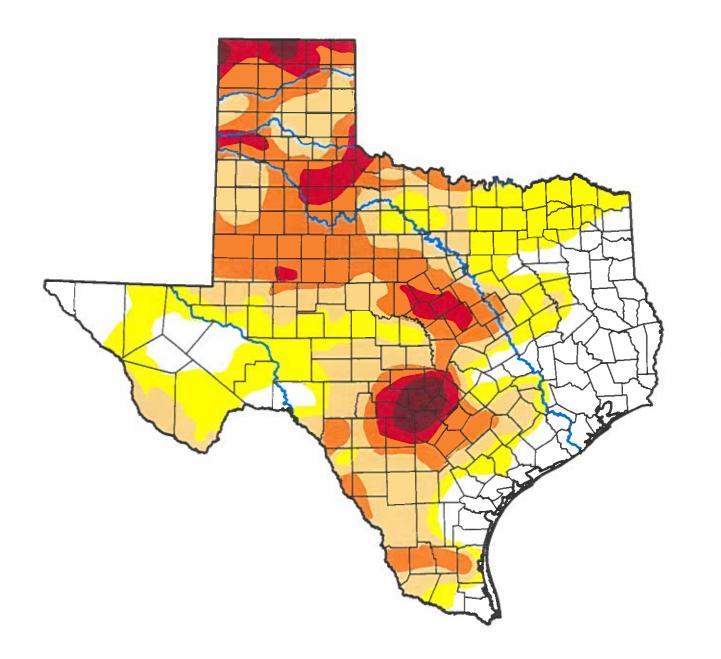






January 17, 2023

(Released Thursday, Jan. 19, 2023)
Valid 7 a.m. EST



Intensity:

____ None

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

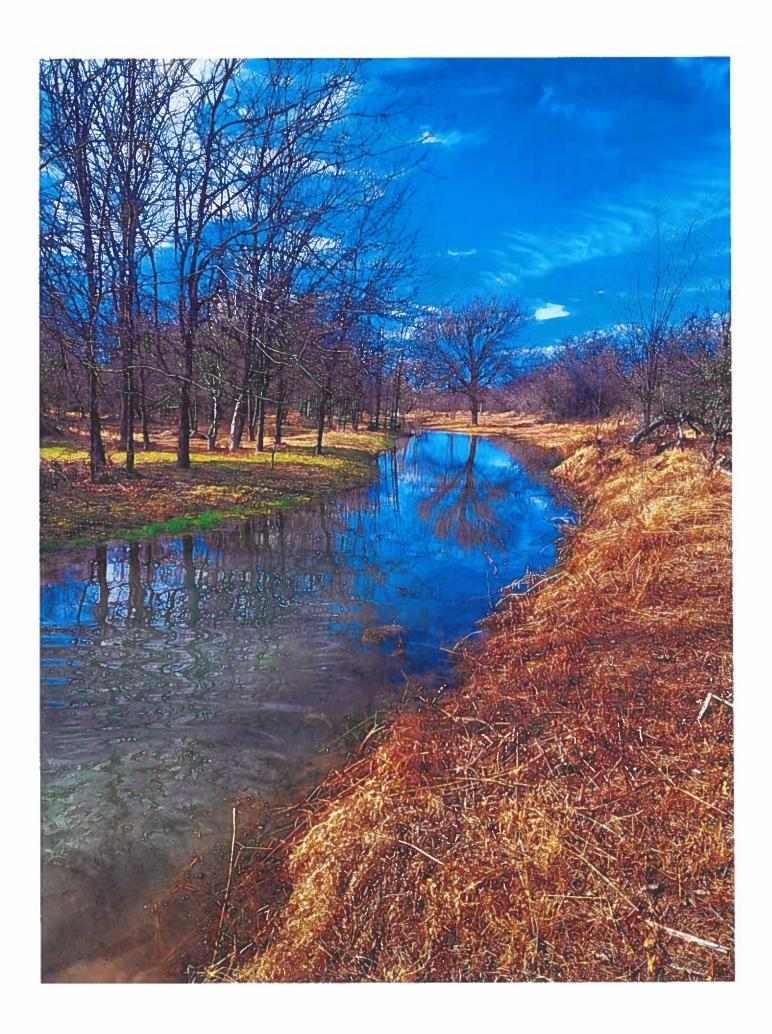
Deborah Bathke National Drought Mitigation Center

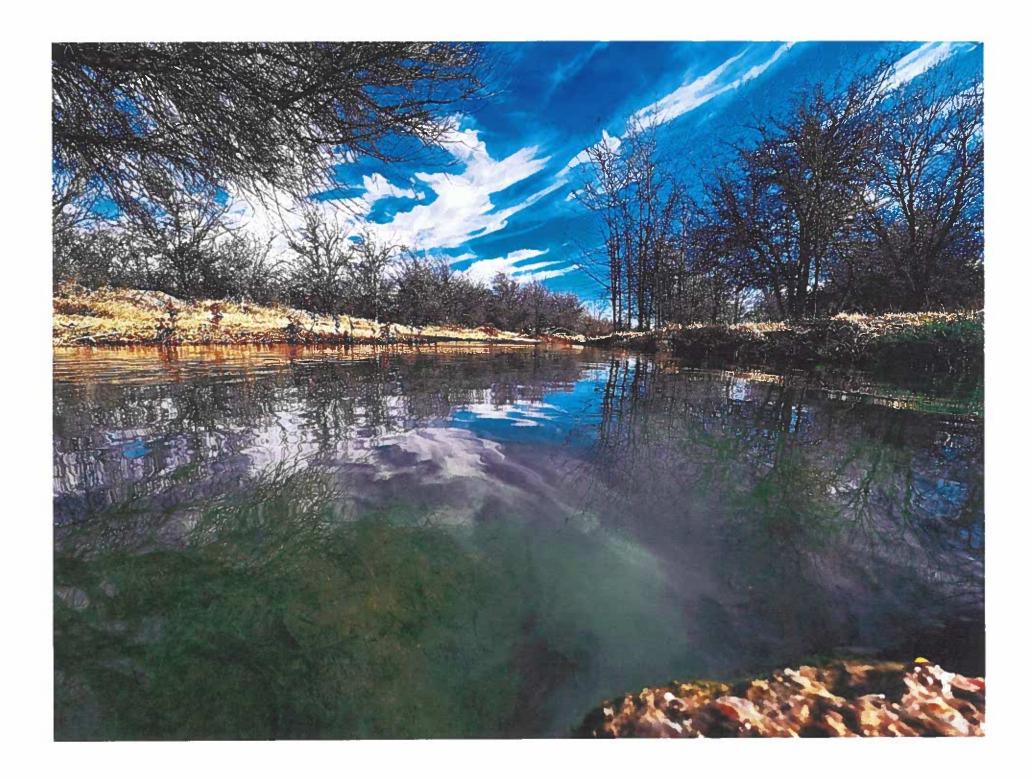




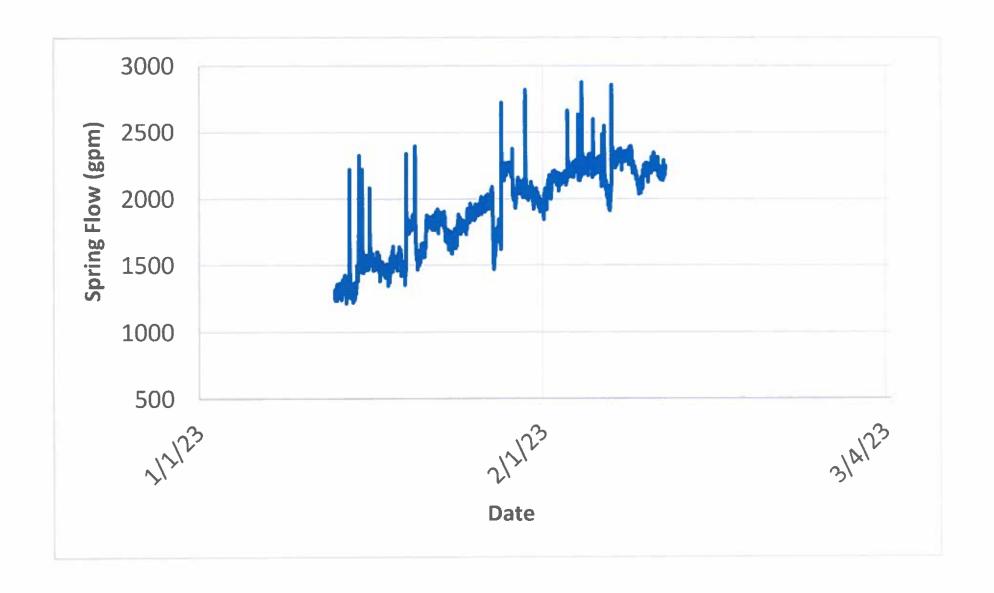




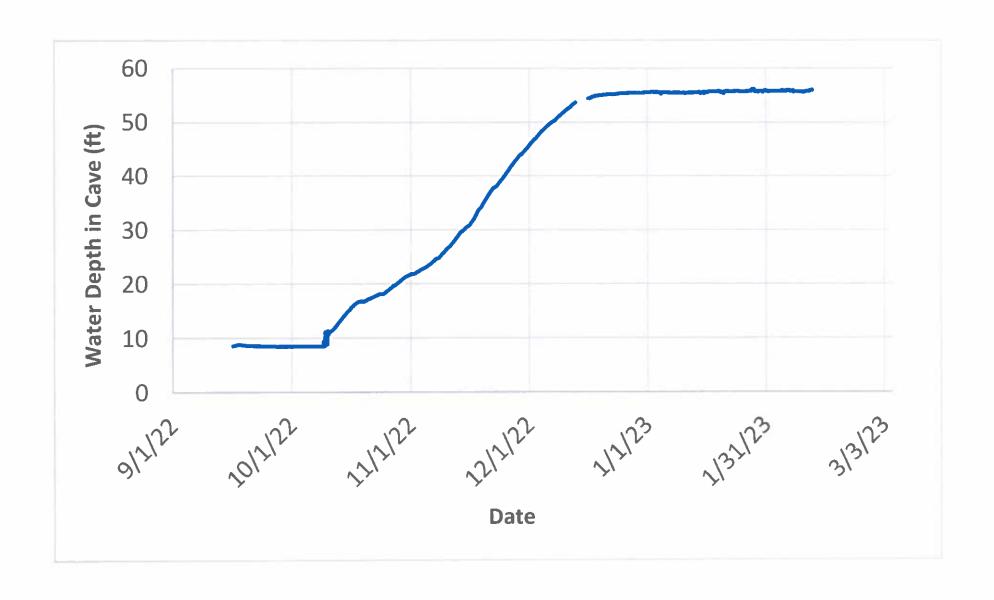




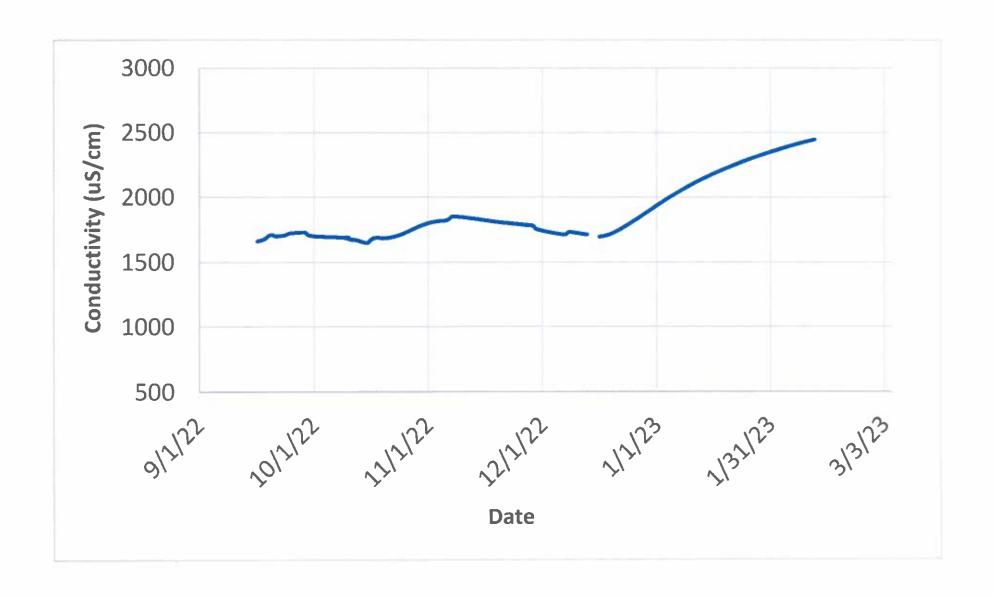
Comanche Springs - Flow (gpm)



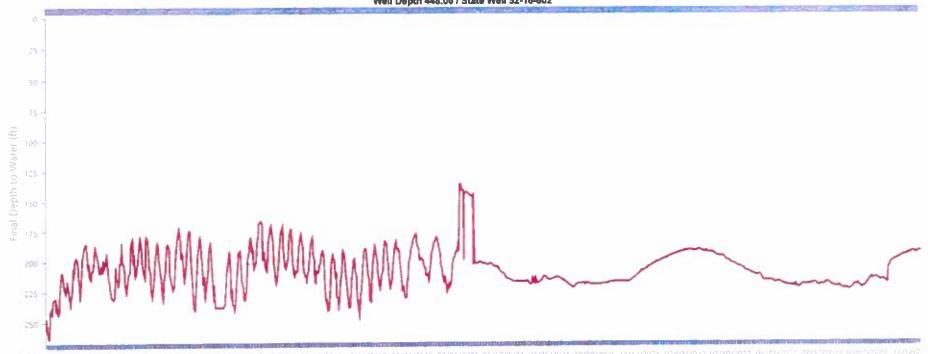
Comanche Springs Cave - Gauge Depth (ft)



Comanche Springs Cave - Conductivity (uS/cm)



Monitor #378 Prison Well-TWDB Monitor/City of Fort Stockton Static Water Level Well Depth 448.00 / State Well 52-16-802



DIZZOZITE 09/15/1987 11/15/1997 08/01/2021 07/02/2006 01/01/2011 05/01/2015 01/01/2019 03/01/2021 02/26/2021 10/19/2021 02/02/2021 02/02/2021 02/02/2021 03/30/2022 03/30/2020 03/30/2022 03/30/2022 03/30/2022 03/2022 03/2022 03/2022 03/2022 03/2022 03/20

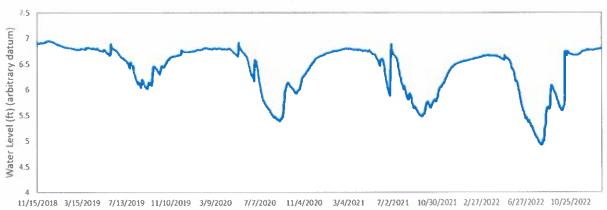
Collection Date

Date	Measurement Method	Measurement Source	Pumping Status	Final Depth To Water	
1/20/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	246.88	
3/17/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	252 18	
5/9/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	256.38	
7/13/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	263.22	ľ
9/15/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	263 1	Z
12/21/1976	E-Line/ Monitored by TWDB via Te	MPGCD	Unkлown	24472	
2/16/1977	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	240 36	
10/17/1977	E-Line/ Monitored by TWDB via Te	MPGCD	Unknown	243,33	
12/1/1977	E-Line/ Monitored by TWD8 via Te	MPGCD	Unknows	234.45	Z,
12/1/12/1					

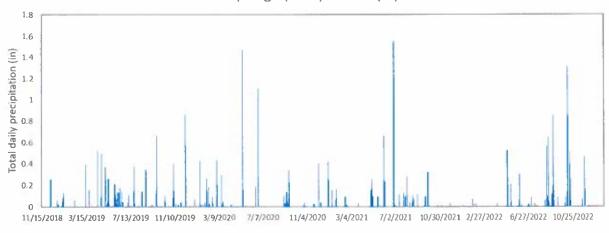
Diamond Y Spring

The Nature Conservancy/UT Bureau of Economic Geology

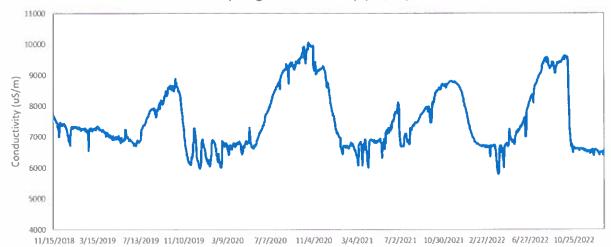


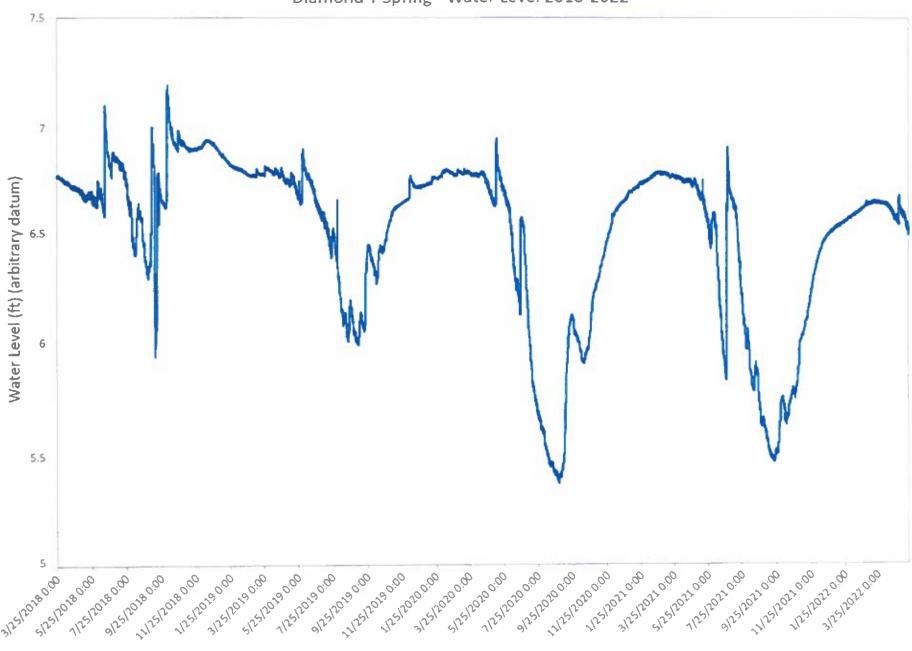


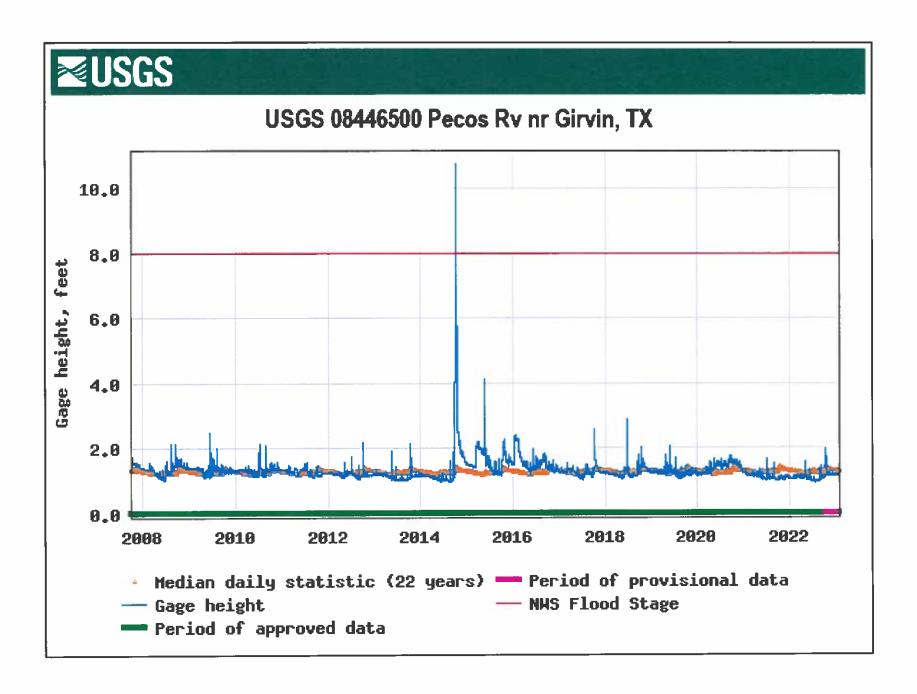
Diamond Y Spring - precipitation (in) 2018-2023

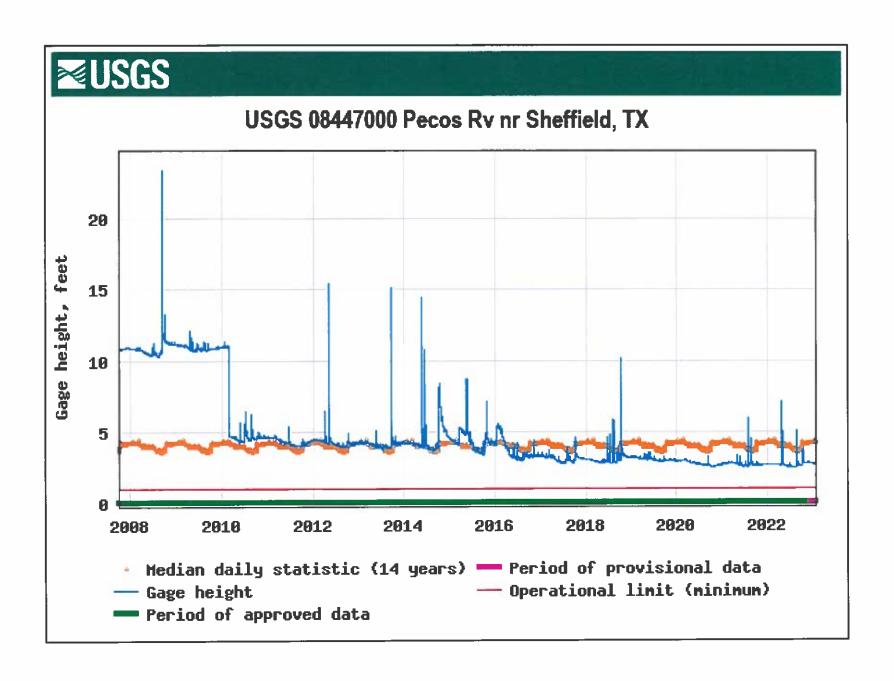


Diamond Y Spring - conductivity (uS/m) 2018-2023





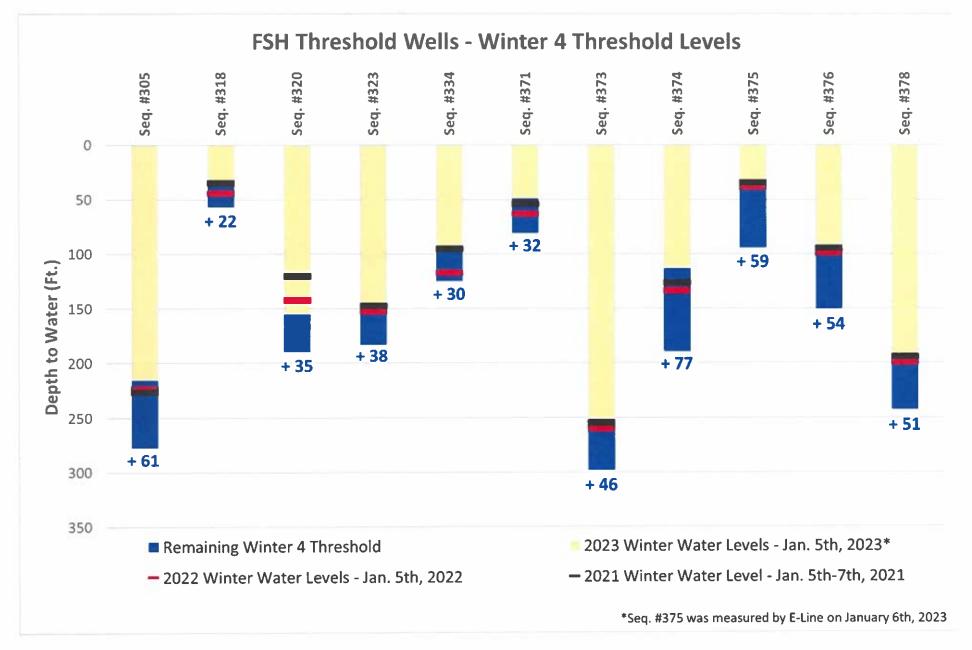




Threshold Table

Show more the	reshold data Q										
Well		Reference Point Elevation	t Thresh	Winter Threshold 2 (Historic Minimum)	Winter Threshold 3	Winter Threshold 4	Summer Threshold	Most recent D	epth to Water	Winter Max Depth to Water	r Depth
Short T Name	Long Name	(ft	Depth to Water	▼ Depth to Water	▼ Depth to Water	▼ Depth to Water	▼ Depth to Water		Measure T Date		to Water
Mpgcd320	King, Woodward, #320	3068	3 205	200	195	190	245	154.73	01/24/2023	159.55	147.09
Mpgcd323	Ft Stockton, Cemetery, #323	3031	198	193	188	183	208	143.09	01/25/2023	152.25	146.48
C-5	C-5, FSH Well	3009	110	105	100	95	177	32.29	01/24/2023	60	46.95
M-9	M-9, FSH Well	3261	313	308	303	298	356	249.03	01/25/2023	276.75	261.6
S-45	S-45, FSH Well	3067	165	160	155	150	216	92.91	01/24/2023	117.65	107.58
S-6	S-6, FSH Well	3123	205	200	195	190	262	105.8	01/24/2023	154.25	112.25
Mpgcd305	Cockrell_Belding, #305	3233	3 292	287	282	277	362	212.79	01/25/2023	229	225.44
Mpgcd318	Goldman Ranch, Well 1	2957	7 72	67	62	57	100	33.54	01/25/2023	51.5	38.57
Mpgcd334	Carpenter, #334	3051	140	135	130	125	171	94.03	01/25/2023	118.89	99.16
Interstate	Interstate Well, FSH Well	2988	3 96	91	86	81	141	48.29	01/24/2023	69.45	53.58
Prison	TDCJ, Prison Well	3199	258	253	248	243	293	189.75	01/24/2023	218.8	3 202.08

HydroVu Water Levels +



Rainwater Harvesting



For centuries, people have relied

on rainwater harvesting to supply water for household, landscape, livestock, and agricultural uses. Before the advent of large centralized water supply systems, rainwater was collected from roofs and stored on site in tanks known as cisterns. With the development of large, reliable water treatment and distribution systems and more affordable well drilling equipment, rain harvesting was all but forgotten, even though it offered a source of pure, soft, low-sodium water.

A renewed interest in this time-honored approach of collecting water has emerged in Texas and elsewhere because of escalating environmental and economic costs of providing water by centralized water systems or by well drilling. The health benefits of rainwater and potential cost savings associated with rainwater collection systems have further spurred this interest.

Texas is one of only a few states in the nation that has devoted a considerable amount of attention to rainwater harvesting and has enacted many laws regulating the practice of collecting rainwater.

- Texas Tax Code 151.355 allows for a state sales tax exemption on rainwater harvesting equipment.
- Texas Property Code 202.007 prevents homeowners associations from banning rainwater harvesting installations.
- Texas House Bill 3391 requires rainwater harvesting system technology to be incorporated into the design of new state buildings and allows financial institutions to consider making loans for developments using rainwater as the sole source of water supply.

For in-depth descriptions of rules in Texas and other states, visit the

National Conference of State Legislatures.

Recent Maps

Texas Rain Catcher Award Winners



Protect, Conserve and Prevent Waste of Groundwater

Our mission at *Middle Pecos Groundwater Conservation District (MPGCD)* is to develop and implement an efficient, economical and environmentally sound groundwater management program to protect, maintain and enhance the groundwater resources of the District, and to communicate and administer to the needs and concerns of the citizens of Pecos County associated with these groundwater resources.

We have an 11-member Board of Directors that is elected by the citizens of Pecos County. There are two directors representing each county precinct, one representing the City of Fort Stockton, one representing the City of Iraan, and one representing Pecos County at large. Your current Directors are: Jerry McGuairt, Janet Groth, Weldon Blackwelder, Puja Boinpally, Vanessa Cardwell, Allan Childs, Jr., Ronnie Cooper, Larry Drgac, M. R. Gonzalez, Alvaro Mandujano, Jr., and Jeff Sims.

In keeping an eye on Pecos County groundwater, the District monitors 128 water wells that are scattered throughout Pecos County. We check water quality analysis and depth of water levels monthly.

The public is invited to join us at our monthly Board Meetings that are normally held on the 3rd Tuesday of each month at our office located at 405 North Spring Drive in Fort Stockton, Texas. Our agendas are posted on our website 72 hours before our meetings and can be reviewed at: https://www.middlepecosgcd.org/.

MPGCD requires water well owners to register all water well(s) with the District. A non-potable analysis can be provided by the District at no cost. MPGCD can carry out the overall responsibility of protecting our water supply by knowing where and how many wells we have in Pecos County. Examples of protection are oil/gas activity, excessive water production, monitoring water levels/analysis, and contamination.

Our office is willing to discuss any concerns, issues, etc., pertaining to our most precious natural resource – GROUNDWATER. You may contact us at 432-336-0698 or come by 405 North Spring Drive, Fort Stockton, Texas.

Efforts to Control and Prevent Waste of Groundwater and Promote Conservation

To promote conservation and prevent waste of groundwater related to agricultural, the following are the best management practices as stated by the Texas Water Development Board Conservation Division: * Irrigation water use management - irrigation scheduling, measurement of irrigation water use, crop residue management and conservation tillage, irrigation audit; * land management systems – furrow dikes, land leveling, contour farming, conversion of supplemental irrigated farm land to dry land, brush management; * on-farm water delivery systems – lining of on-farm irrigation ditches, replacement of on-farm irrigation ditches and pipelines, low-pressure center pivot sprinkler irrigation systems, drip/micro-irrigation systems, gated and flexible pipe for field water distribution systems, surge flow for field water distribution systems, and linear move sprinkler irrigation systems; * Water district delivery systems – lining of district delivery systems, replacement of irrigation district canals and lateral canals with pipelines; * Miscellaneous systems – tailwater recovery and reuse system, nursery production systems.

Other ways to promote conservation and prevent waste of groundwater: Sweep rather than hose driveways and other areas; use drip irrigation rather than spray irrigation; wash your car at a car wash; downsize your lawn area and/or Xeriscape; irrigate during the coolest part of the day; never water on windy days; protect plants with mulch and compost to reduce water loss; install low flow shower heads; insulate hot water pipes; reduce showering time; operate dishwasher and washing machine on full loads; install an aerator on kitchen faucet; and turn the water off while brushing teeth and on to rinse. If you see signs of contaminating substances on the surface, remember it could end up contaminating the water source below, so please report to us if you find signs of contamination that need to be checked out.

Middle Pecos Groundwater Conservation District 2022

Directors		
Jerry McGuairt	President: Director Since February 19, 2013	Precinct 1
Janet Groth	Vice President: Director Since June 15, 2010	Precinct 1
M. R. Gonzalez	Secretary/Treasurer: Director Since December 11, 2000	Precinct 2
Puja Boinpally	Director Since April 18, 2017	Precinct 2
Weldon Blackwelder	Director Since August 16, 2011	Precinct 3
Larry Drgac	Director Since August 13, 2019	Precinct 3
Alvaro Mandujano, Jr.	Director Since November 5, 2002	Precinct 4
Ronnie Cooper	Director Since September 15, 2009	Precinct 4
Vanessa Cardwell	Director Since July 21, 2009	City of Fort Stockton
Jeff Sims	Director Since November 8, 2016	City of Iraan
Allan Childs, Jr.	Director Since November 8, 2016	At Large
Current Employees		
Ty Edwards	General Manager: Since January 17, 2017	Assistant Manager: Since December 2, 2013
Gail Reeves	Office Secretary: Since June 3, 2013	
Anthony Bodnar	Field Technician: Since May 7, 2018	