



2024
**ANNUAL
REPORT**

**PANHANDLE GROUNDWATER
CONSERVATION DISTRICT**

"Conserving Water For Future Generations"

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WHO ARE WE?



PANHANDLE GROUNDWATER
CONSERVATION DISTRICT

Mission

The Panhandle Groundwater Conservation District will strive to develop, promote and implement water conservation, augmentation and management strategies, to protect water resources for the citizens, economy and environment of the District.

50/50 Standard: Our Motto

We want to preserve at least 50 percent of current water supplies for 50 years from now.



Created in 1955
by Texas
Legislature.

Derives its
authority from
Chapter 36, Texas
Water Code.

Funded by ad
valorem taxes.

MANAGER'S ADDRESS

Fiscal year 2023-2024 was a busy and successful year for PGCD Board members and staff. Each November we start our fiscal year with our Field Technicians beginning our annual winter water level program. This is our longest-running program, and we have data on many wells dating back to the 50s in some areas. Our Technicians obtain these measurements starting in November because our demand for groundwater is generally lower in the winter months. The data for these wells will be published in our Panhandle Water News July Newsletter. For anyone wishing to sign up for our newsletter, please use the signup box at the bottom of our homepage at www.pgcd.us.

Once the field technicians completed the measurements for the ranch country portion of the District, they switched focus and read meters across the entire District. In a span of 6-8 weeks, the three Technicians read around 1,500 meters. The meter usage data was evaluated and usage reports was sent to over 750 operators. This information is vital for area producers to understand how much groundwater is being produced from their land. This information also helps the District Board of Directors make policy decisions and it's also used as part of the regional water planning process.

In February 2024, we, along with our many sponsors, hosted our seventh biennial water conservation symposium. We had about 200 attendees and the day featured speakers from all across the state of Texas. Our keynote speaker was Senator Kevin Sparks who spoke on his interim priorities leading up the 89th Texas Legislative Session set to convene in January 2025.

In April, we kicked off the 24th year of our precipitation enhancement program. We had a fantastic season with a record number of seeding days. Overall, the program had 38 seeding missions and flew over 100 hours.

In the summer months, our field staff was busy collecting water quality samples. We sample about 180 wells each year and these samples are taken to a local certified lab for testing. Overall, we are not seeing anything that is too concerning for our District. When we do have a sample come back with higher than normal levels, we immediately notify the landowner and let them know the corrective steps to take. After the water quality program is finished the field staff began summer meter readings.

In August, the District Board of Directors adopted an annual budget and proposed the next fiscal year's tax rate. The tax rate is calculated using local certified property values from the appraisal districts.

In September, after proper postings, the Board adopted the tax rate. For fiscal 2023-2024, they reduced the tax rate by \$0.000718 cents. Budgets and tax documents can be found on PGCD's website at www.pgcd.us/public-information.



BOARD OF DIRECTORS



Chancy Cruse
President
Serving since 2013



Devin Sinclair
Vice President
Serving since 2021



Lee Peterson
Secretary
Serving since 2021



Charles Bowers
Director
Serving since 1990



John R. Spearman Jr.
Director
Serving since 2000



William Breeding
Director
Serving since 2013



David Hodges
Director
Serving since 2020



Marcus Hardcastle
Director
Serving since 2023



Wes Stockett
Director
Serving since 2023



DESIRED FUTURE CONDITIONS

The main purpose of a management plan is to develop goals, management objectives, and performance standards that, when successfully implemented, will work together to achieve the adopted DFCs. Goals 2 through 10 directly and/or indirectly support Goal 1. DFCs adopted for the Ogallala and Dockum aquifers by GMA 1 on November 1, 2016, and subsequently adopted by the Panhandle GCD Board of Directors on July 14, 2016, for the District are described below (note, the Blaine Aquifer in Wheeler County is now classified by GMA 1 as non-relevant for joint planning). A 50-year planning horizon was used in setting the DFCs. Throughout the joint planning process, the District actively worked with the other District Representatives and stakeholders within GMA 1 to determine the DFCs for each relevant aquifer located within each district.

Management Objective 1.1

The cornerstone of the many programs and activities of the District is the 50/50 management Standard which drives its Rules and this Management Plan. The 50/50 Management Standard states that 50 percent of the current volume within the Ogallala Aquifer will remain in 50 years. This 50/50 Management Standard is the tool by which the District will ensure that it meets or exceeds the 50/50 DFC outlined in Rule 1, 3, and 4, which states the maximum allowable volume of pumping from the Ogallala Aquifer is 1-acre foot per acre per year. In order to ensure that the 50/50 Management Standard is being met, the District goes through an annual review process to identify and act upon Contiguous Acreage Tracts exceeding the maximum allowable volume of pumping from the Ogallala Aquifer utilizing flow meter data.

In order to complete Management Objective 1.1, the following Performance Standards will be met. Actions by the District Board of Directors that may result from this review include the enforcement actions stipulated in Rule 3.3, as required.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
1.1 A	Quantify all permitted pumping volumes for individual Contiguous Acreage Tracts based on flow meter readings and report to the Board in the Annual Report	December 1st	Presented at the Board of Directors Meeting on 3/28/24	Completed
1.1 B	Evaluate all Ogallala Aquifer measurements collected during WLM and report to the Board	August 31st	Presented at the Board of Directors Meeting on 5/2/24	Completed
1.1 C	The Board of Directors will conduct a Sunset Review to evaluate the effectiveness of the maximum allowable volume of production	Must be conducted by 01/01/25 and every 5 years thereafter	Discussed and Reviewed at a Board of Directors Meeting on 3/28/24	Completed

Management Objective 1.2

The District maintains an integrated geodatabase system based on the District's Observation Well Network and computer mapping programs to annually track and evaluate current supplies by a baseline (1998) Ogallala Aquifer saturated thickness dataset in the District. This analysis is utilized to track and review changes in water supplies.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
1.2 A	Update Ogallala Aquifer Saturated Thickness Maps on District's Website	Every 5 Years	Maps were updated, sealed and approved on 2/23/21 https://www.pgcd.us/mapping	Completed

Dockum Aquifer DFCs

The Dockum Aquifer is classified by the TWDB as a minor aquifer that is present primarily in the western portions of the District and is generally under confined (artesian) conditions. Based on our current understanding of water resources in the Dockum Aquifer, DFCs have been adopted for Armstrong, Carson, and Potter counties within the District. Due to the predominantly confined nature of the Dockum Aquifer, a different approach was taken in adopting DFCs for the Dockum Aquifer. The DFCs adopted for the Dockum Aquifer in GMA 1 are that the average decline in water levels will be no more than 30 feet within the District over the next 50 years. The maximum allowable volume of pumping from the Dockum Aquifer is 1-acre foot per acre per year.

The estimates of modeled available groundwater for the Dockum Aquifer were extracted from predictive simulations performed for GMA 1 using the updated High Plains Aquifer System.

Management Objective 1.3

While there are tens of thousands of data points collected over time relative to the Ogallala Aquifer, the opposite is the case for the Dockum Aquifer. This can primarily be attributed to dominance of the Ogallala Aquifer in the region and the general prevalence of poor water quality and yields from the Dockum Aquifer. Due to declining water levels in the Ogallala Aquifer, there are areas where the Dockum Aquifer is becoming a more important water resource. There are localized areas of good water quality and where technological advances are being made using brackish groundwater desalination.

Due to the scarcity of data regarding the Dockum Aquifer, the District is primarily focused on data collection and trend analysis on wells completed in the Dockum Aquifer currently included in the District's Observation Well Network. This management objective is to monitor and report on Dockum Aquifer wells in the District's Observation Well Network that are experiencing declines for which the trend is in excess of the DFC of 30 feet.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
1.2 B	Report data collection and trend analysis to the Board concerning Dockum Aquifer wells within District's OWN	August 31st	Presented at the Board of Directors Meeting on 5/2/24	Completed

MODELED AVAILABLE GROUNDWATER BY AQUIFER

Calculated by the Texas Water Development Board

Ogallala							
County	2020	2030	2040	2050	2060	2070	2080
Armstrong	56,940	51,726	45,757	40,241	35,089	30,685	27,137
Carson	163,315	166,024	159,756	149,768	141,251	134,365	121,774
Donley	72,747	78,267	77,157	72,601	67,032	60,915	53,337
Gray	177,633	181,648	173,602	160,382	147,045	133,802	121,936
Hutchinson	8,524	10,589	11,798	11,784	11,427	10,775	9,606
Potter	24,022	22,245	19,590	16,477	13,607	10,990	8,821
Roberts	358,704	409,300	394,930	369,335	344,109	317,529	286,594
Wheeler	119,602	132,615	132,787	128,472	121,852	114,269	106,929
District Total	981,487	1,052,414	1,015,377	949,060	881,412	813,330	736,134

Dockum							
County	2020	2030	2040	2050	2060	2070	2080
Armstrong	5,313	7,102	8,122	8,601	8,849	8,904	8,914
Carson	6	6	6	6	6	6	6
Potter	30,160	37,699	37,853	36,963	35,881	34,685	33,571
District Total	35,479	44,807	45,981	45,570	44,736	43,595	42,491

***Estimates of Modeled Available Groundwater for Ogallala and Dockum Aquifers (Anaya, 2023)

MANAGEMENT OF GROUNDWATER

Throughout its history, the District has operated on the core principle (or goal) that groundwater should be used as efficiently as possible for beneficial purposes. In order to achieve this goal, the District maintains a qualified staff to assist water users in protecting, managing, and conserving groundwater resources. The Board of Directors has in the past and continues today to base its decisions on the best data available to treat all water users as equitably as possible. Once data is collected, the District utilizes a wide variety of forums to provide important information to water users throughout the District so that sound decisions regarding the efficient use of groundwater can be made. The District's Observation Well Network will continuously be reviewed and maintained in order to monitor changing storage conditions of groundwater supplies within the District. The District will continue to undertake and cooperate with technical investigations of groundwater resources within the District. The following management objectives and performance standards have been developed and adopted to collect needed information, disseminate information, and provide opportunities through the District's Agricultural Water Conservation Equipment Loan Program to ensure the efficient use of groundwater.

Management Objective 2.1

The Observation Well Network, with approximately 850 water wells located throughout the District is continuously maintained and monitored. Wells in the Observation Well Network produce groundwater from the Ogallala Aquifer, the Dockum Aquifer, and also other minor aquifers in the area. Water levels are measured by District staff in as many wells as possible, with the management objective being to measure water levels in at least 90 percent of the wells in the Observation Well Network each year. This data is then processed for quality assurance/quality control, entered into the District's geodatabase, analyzed, mapped, and used to make decline calculations and update historic trend lines (hydrographs). Water level measurements from wells in the District's Observation Well Network are used to generate annual decline maps. The District will strive to install additional monitoring wells in locations when necessary in order to evaluate the effects of high-impact pumping operations as necessary.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
2.1 A	Measure Water Levels in at least 90% of the Wells in the District's Network	April 1st	Measured 97.5% on April 1, 2024	Completed
2.1 B	Prepare Annual Depletion Map on publish it in the District's Newsletter	July 31st	Map was prepared and published in the July 2024 Newsletter	Completed
2.1 C	Prepare Ogallala Aquifer water table decline map for us in the IRS annual depletion program, provide the results to participating producers.	January 31st	Map was sealed on 1/08/24 and results were sent to participating producers on 1/11/24	Completed

Management Objective 2.2

The District encourages efficient groundwater use by continued promotion of low pressure and other efficient sprinkler systems, drip irrigation systems, and other recognized water conservation measures, which will decrease the utilization of less efficient row irrigation techniques. This will be accomplished by increasing the use of the District's Agricultural Water Conservation Equipment Loan Program, as long as TWDB Agricultural Loan Program funds are available and economically competitive. The District will enhance awareness of the loan program by utilizing local newspapers and the PWN. The District website will have information on availability of funds and guidelines for applicants. The District will strive to provide timely responses to loan applicants.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
2.2 A	Ag Loan Remind in PWN	Twice a year	No Ag Loan in 2023-2024	Completed
2.2 B	Review Ag Loan Applications Timely	Within 60 Days of Receipt	No Ag Loan in 2023-2024	Completed

Management Objective 2.3

The District encourages the efficient use of groundwater by disseminating educational information regarding current best management practices and trends in water conservation for agricultural, municipal, and industrial applications. The District publishes a newsletter quarterly that contains resources for water users interested in water conservation. In addition, the District also attends and participates in public events throughout the District including the annual Amarillo Farm and Ranch Show as often as possible.

Performance Standard

2.3 A	Publish Panhandle Water News	Quarterly	www.pgcd.us/newsletters	Completed
2.3 B	Attend the Amarillo Farm and Ranch Show	Annual	November 28-30, 2023	Completed

Management Objective 2.4

In order to ensure that the Board of Directors and District constituents are aware of and informed on the most current information on water conservation, groundwater management, and emerging policy issues related to groundwater resources, District staff actively participate in a broad grouping of professional associations that focus on water resource issues. District staff will report at the next available regularly scheduled Board of Directors meeting in the General Manager's Report on any activities resulting from participation with the following active affiliations: Texas Alliance of Groundwater Districts (TAGD), Texas Water Conservation Association (TWCA) and Groundwater Management Districts Association (GMDA).

Performance Standard

2.4 A	Attend and participate in 75% of TAGD, TWCA and GMDA Meetings	Annually	Attended/participated in 7 out of 8 meetings - 87.5%	Completed
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MANAGEMENT OF GROUNDWATER CONTINUED

Management Objective 2.5

The District has adopted rules that require an approved metering method on all wells producing more than 35 gallons per minute. The District believes that when a water user understands the volume of groundwater being used, they are better able to adopt best management practices that result in the efficient use of groundwater. Therefore, the District is committed to continuing the program focused on requiring a metering method for wells pumping more than 35 gallons per minute, flow meter monitoring, and data collection and analysis of water use by cop and irrigation type. To achieve this objective the District will read and record meter data from installed, registered, and accessible meters in the District annually. The information from the District's metering program will be published in the District's Annual Report. Additionally, the District will provide water-users with meter data production reports. Finally, the Board will consider meter data with respect to individual Contiguous Acreage Tracts in order to document compliance with the District maximum allowable production rate.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
2.5 A	Read and record flow meter data for 90% of required meters	Annually	100% of the meters were read in December 2023 through January 2024	Completed
2.5 B	Send Production Reports to Operating Permit Holders	September 1st	All production reports were sent to Operators by 4/11/2024	Completed
2.5 C	Review and prepare revised estimates to TWDB annual agriculture water estimates	Within timeframe requested by TWDB	It was requested and sent to TWDB on 11/23/2023	Completed

GROUNDWATER WASTE PREVENTION

Management Objective 3.1

The District is continuously working to take positive and prompt action to identify and address all reported wasteful practices and instances of waste located by District Staff within the District. This effort involves the following actions to be taken by the District.

- Report each complaint to the landowner and/or operator within five working days
- Resolve the complaint and note the corrective action taken
- Report resolution of each complaint to the landowner/operator and to the Board at the next regularly scheduled meeting during the General Manager's Report

Performance Standard

3.1 A	All complaints of waste are recorded, investigated and discussed with the landowner	Within 5 Working Days	No official reports of waste in 2023-24	Completed
3.1 B	Report each complaint to the Board of Directors	As necessary	No official reports of waste in 2023-24	Completed

DROUGHT PLANNING

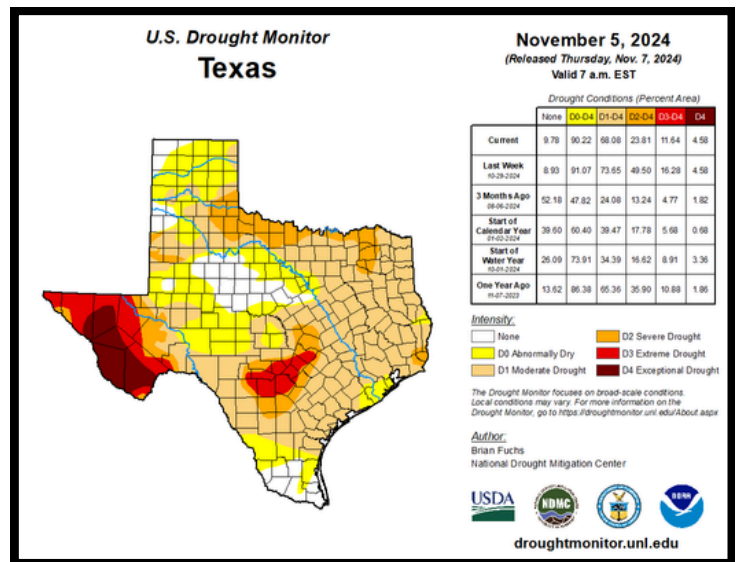
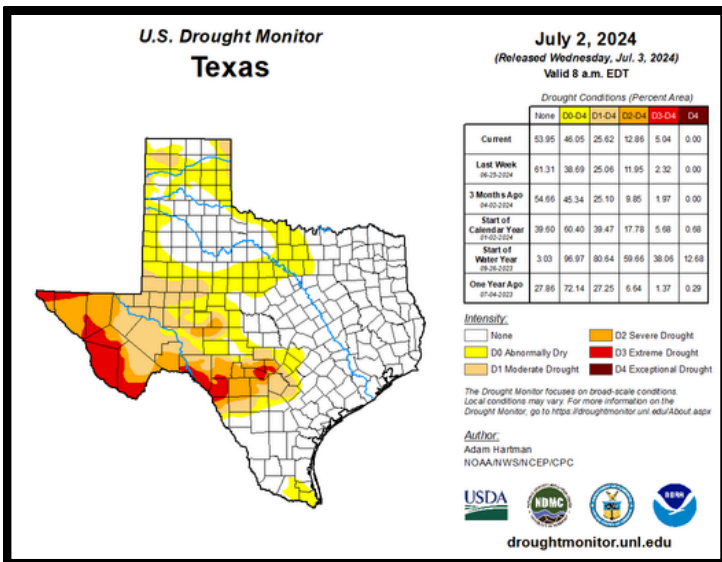
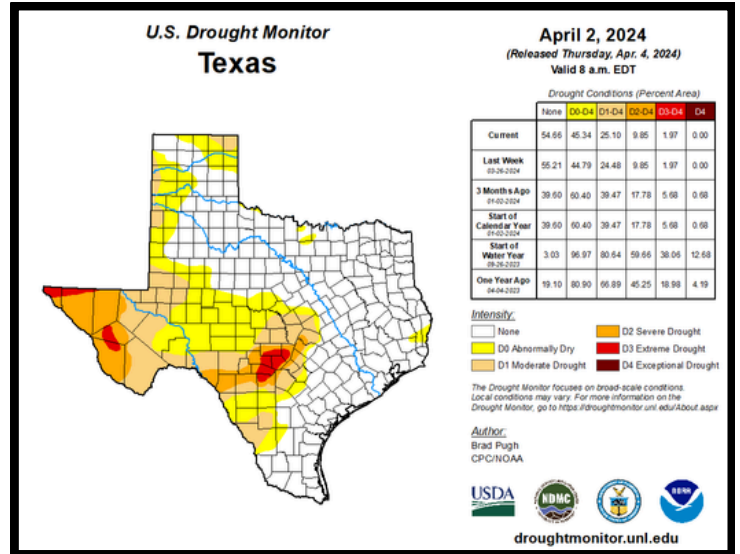
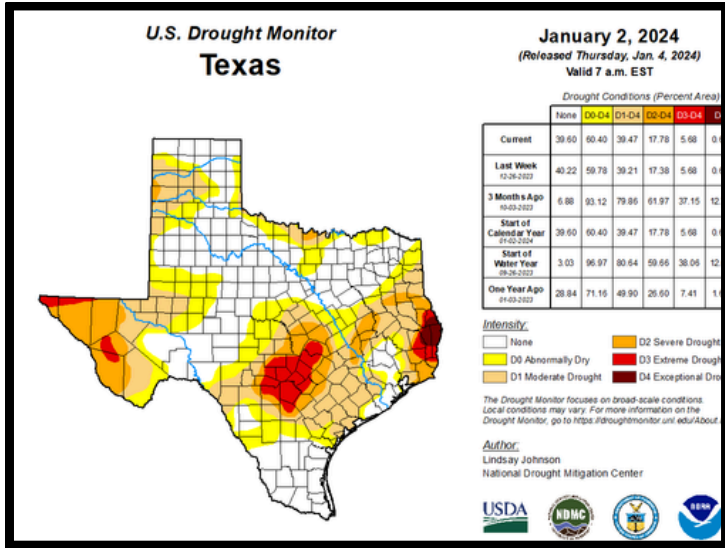
Management Objective 4.1

In order to provide ongoing information regarding water conditions in the District, establish and maintain links to National Oceanic and Atmospheric Administration Drought Monitor indices are on the District website.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
4.1 A	Updates links to NOAA Drought Monitor on the District's website	Annually	www.pgcd.us/links	Completed

2024 TEXAS DROUGHT MONITOR MAPS



JOINT MANAGEMENT EFFORTS

The Canadian River Municipal Water Authority (CRMWA) supplements member city allocations of groundwater with supplies from Lake Meredith. The CRMWA system is the largest conjunctive use water provider in the State of Texas, providing a combination of groundwater and surface water to 11 member cities. All current CRMWA groundwater supplies are produced within the boundaries of the District.

The Greenbelt Water Authority (GWA) is the second surface water user with supplies inside the boundaries of the District. GWA is now also utilizing groundwater resources from the Ogallala Aquifer. The District will communicate with regard to rules and technical data as it applies to conjunctive use within the District.

Management Objective 5.1

In order to continually monitor the impact of declining surface-water availability on groundwater resources within the District, the General Manager or designee will participate in the Panhandle Water Planning Group (PWPG) with the two surface-water entities currently operating within the District. This activity helps facilitate regular communication and cooperation with regards to conjunctive use issues in the District.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
5.1 A	The District Manager or Designee will participate in 75% of PWPG Meetings	2019-2024	Attended 100% of scheduled meetings.	Completed

NATURAL RESOURCE ISSUES

As part of the umbrella goal of achieving the adopted DFCs, the District recognizes that the protection of water quality is equally as important as working to ensure adequate water quantity. In order to protect the District's most important natural resource, the abundant, high quality groundwater resources, the District has for many years maintained and operated a water quality sampling program sampling different areas each summer which yields a complete set of data biennially.

Management Objective 6.1

In order to control and prevent the contamination of groundwater, the District maintains and works to expand the groundwater quality monitoring. As part of this effort, an annual sampling program will be conducted within the District's Water Quality Network. The objective will be to sample at least 80 percent of the wells in the District's Water Quality Network on a biennial basis. Also, upon request the District will conduct analysis of water within current District sampling capabilities, including sites near oil and gas industry injection well sites.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
6.1 A	Sample 80% of the Water Quality Network and report results to the Board by September 1st	Biennially (spans over 2 years)	WQ 2 was sampled in 2024 and staff sampled 115 of 135 wells (85.2%)	Completed
6.1 B	Record Water Quality data in District's database	Within 30 Days	All data was recorded within 30 days and can be viewed by request.	Completed

CUSTOMER SERVICE

Management Objective 7.1

Customer service is of great importance to the Board of Directors and Staff of the District. As detailed in the corresponding performance standards, the District will continue to provide timely response to customer assistance requests in the following areas:

- Pump flow tests
- Processing of well drilling permits
- Review and revision of District Rules, as necessary, to incorporate revisions required by new legislation and as necessary to achieve adopted Desired Future Conditions
- Well camera recordings

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
7.1 A	Provide requested flow tests and enter into database	Within 5 working days	All flow tests were completed within the timeframe requested	Completed
7.1 B	Manager's action on well drilling permits	Within 10 working days	All permits were reviewed and either approved, amended or denied within the timeframe	Completed
7.1 C	Provide well camera service and return information to the landowner and archive the information at the District	Within 5 working days	Provided the service and documented within the timeframe	Completed



PRECIPITATION ENHANCEMENT

Management Objective 8.1

The District will continue to operate its Precipitation Enhancement Program throughout the planning horizon of this management plan. The program will operate within budget. A rain gauge network will be maintained and monitored to confirm precipitation enhancement results. Flight records will be collected and archived.

The program will abide by Texas Department of Licensing and Regulation requirements for testing, monitoring, and reporting in order to ensure compliance with permit guidelines. Results of the District's Precipitation Enhancement Program will be presented to the Board of Directors.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
8.1 A	Conduct program from April to September 30	Annually	April 1 - September 30	Completed
8.1 B	Calculate the baseline costs for program	Annually	\$0.05	Completed
8.1 C	Collect and record rain gauge readings	At least quarterly	Rain data from NOAA was monitored and reported to the Board on 11/21/24.	Completed
8.1 D	Maintain all flight records on all precipitation enhancement operations and make available for review upon request	Annually	Current Flight Tracks on our website - www.pgcd.us/flight-tracks	Completed
8.1 E	Provide precipitation enhancement annual report to Texas Department of Licensing and Regulation	Annually	Provided to TDLR on 11/28/24	Completed

2024 Program Summary	
Number of Seeding Days	32
Number of Seeding Missions	38
Number of Recon Flights	24
Total Flares Used	770
Total Cost per Acre	\$0.05



Management Objective 8.2

Educate the public with regards to the benefits of the District's Precipitation Enhancement Program through informational articles in the PWN and local newspapers, public presentations, and program summaries in the District's Annual Report each year.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
8.2 A	Publish an article about precipitation enhancement in at least 2 of the quarterly issues of PWN	Twice a year	October 2023 and April 2024	Completed
8.2 B	Provide at least 1 article about the program to all local newspapers	Annually	Sent to all local newspapers on 8/26/24	Completed
8.2 C	Provide at least 2 presentations to a public or civic group	Annually	Water Conservation Symposium 2/28/24 and City of Amarillo Meeting on 5/7/24	Completed
8.2 D	Complete the Program Summary Report and include in the District's annual report	Annually	See Table and Summary Below	Complete

PROGRAM SUMMARY

PGCD recently completed its 24th Precipitation Enhancement season. During April, dry and rollercoaster temperatures were seen as the area was in a battle zone between a retreating polar air mass to the north and a springtime air mass to the south. Unfortunately, precipitation that did occur happened on days when temperatures were too cool for deep convection to form. Therefore, only one recon mission was flown during that month. As May approached, temperatures continued to fluctuate as highs reached 90°F on the 1st and then cooled into the 60s on the 4th. With the warmer air, the first seeding mission took place on the 1st. However, the rest of the month proved challenging as strong winds, low/high ceilings, and overnight activity prevented additional seeding opportunities. This quickly changed in June, when eight flights occurred within the first nine days, six of which were seeding flights. For the month, 17 total missions took place. This active period continued through August, with eight seeding flights in July and 12 in August. In addition to the very active season, temperatures were historic as a potent upper-level ridge gave way to several 100°F+ days. The highest temperature ever recorded in August was seen on the 22nd at 108°F. Additionally, 10 consecutive days of 100°F+ (breaking a record) were observed, with a total of 17 100°F+ days. By September, the monsoon started to shut down, bringing fewer chances of rainfall to the Panhandle. However, four seeding flights did take place, with the last one of the season on the 18th. After this period, conditions became quiet, with temperatures ranging from five to 15 degrees above average. Compared to previous years, this year was very active, with well above average seeding days (32 versus 20). This is due in large part to earlier launch times, which allowed the aircraft to get up before severe warnings were issued. Additionally, monsoonal moisture from the west and continuous shortwaves/frontal boundaries further enhanced the convective potential. Total flight hours for the year added up to 100, with 60 flights, and 38 seeding missions being conducted. For the season, 724 glaciogenic flares and 46 hygroscopic flares were used.

CONSERVATION EDUCATION

Texas Water Code Section 36.0015 states, in part, that, "In order to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater... Groundwater conservation districts may be created... are the state's preferred method of groundwater management through rules developed, adopted, and promulgated by a district in accordance with the provisions of this chapter." It is noteworthy that in this overview section of Texas water law addressing groundwater management that "conservation" is the first action groundwater conservation districts are to pursue. The 50/50 Management Standard can only be achieved if our groundwater resources are conserved in a manner that ensures adequate water resources will be available for future generations. While water District's programs, the following represent management objectives most focused on water conservation.

Management Objective 9.1

Continue and expand, when possible, the District's Groundwater Conservation Education program. District staff will make presentations on the importance of water conservation to at least 5 civic organizations and in at least 30 educational settings. Annually, the District will award at least three college scholarships to students in the District based on participation in a water conservation essay competition. The District will maintain an Internet information page and launch an aggressive conservation education initiative called "Water Warriors", as well as work with other entities to present an ongoing Panhandle area water conservation symposium.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
9.1 A	Make at least 5 civic education presentations	Annually	Texas State University Groundwater Class - 10/23/23, Biennially Water Conservation Symposium - 2/28/24, Yellow City Green Thumbs - 5/2/24, White Deer Library - 6/18/24, Groom Library - 7/19/24	Completed
9.1 B	Present water conservation presentations in 30 educational settings	Annually	Total for the Fiscal Year: 30	Completed
9.1 C	Provide at least 3 scholarships to graduating seniors	Annually	1st Place - Ja'Zhana Henderson-McCall, 2nd Place - Whitney Kennedy, 3rd Place - Gage Whatley	Completed
9.1 D	Provide Water Warrior Presentation to at least 3 public school settings outside of school	Annually	WISE 2023, White Deer Library, and Groom Library	Complete

RAINWATER HARVESTING

Rainwater harvesting is becoming an increasingly important strategy for meeting water supply needs, especially in the more rural areas of Texas. While rainwater harvesting is one of the many topics included in the District's water conservation education programs, the following management objective and performance standards are specifically focused on rainwater harvesting.

Management Objective 10.1

The District has established and maintains a rainwater harvesting system and provides educational tours to the public regarding the many benefits of the system. Tours of the District office rainwater harvesting system are provided upon request. A link to an informational page highlighting the rainwater harvesting system will be maintained and updated as necessary on the District's website. In addition, a link to the TWDB website on rainwater harvesting will also be maintained on the District's website.

Performance Standard

Goal	Goal Description	Due Date	Achievement Description	Status
10.1 A	Webpage highlighting the District's rainwater harvesting rebate program	Update Annually	https://www.pgcd.us/rainwater-harvesting	Completed
10.1 B	Provide a link to TWDB rainwater harvesting webpage	Annually	https://www.pgcd.us/links	Completed



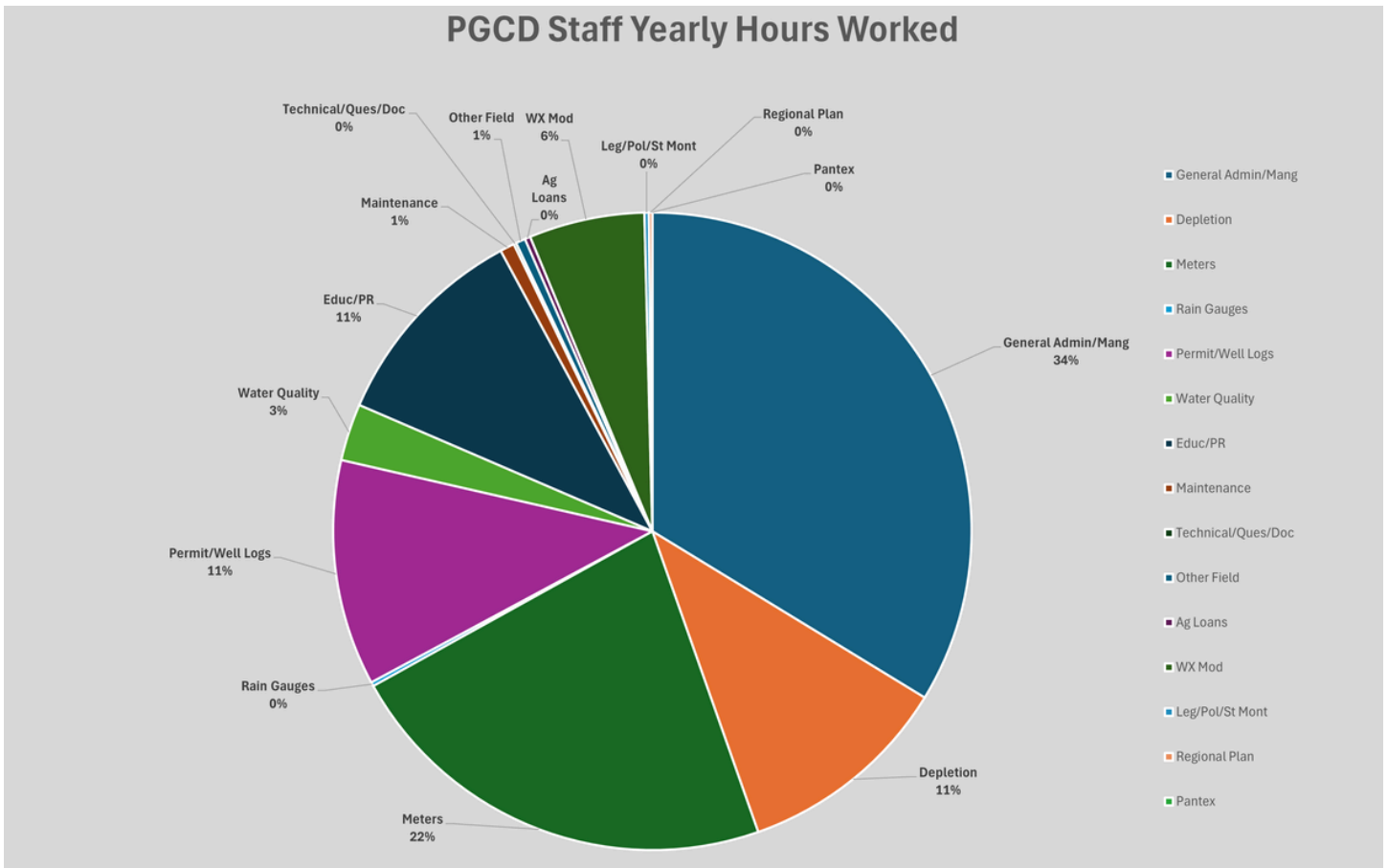
PGCD's rainwater harvesting tanks as its office have been used for many years to supplement the use of water from the City of White Deer. The District maintains a line item within its budget for the Rainwater Harvesting Rebate Program each fiscal year.

2023-2024 EXPENDITURES

Service Awards	\$3,750.00
Merchant Deposit Fees	\$1,348.76
Rainwater Harvesting Rebate	\$32,950.00
Capital Operating Improvements	\$159,526.64
Symposium Expenses	\$27,044.51
Assessing and Collection Fees	\$38,374.54
Board Expenses	\$15,299.26
Capitol Exp. A (Monitoring Well Program)	\$17,225.00
Car Expenses	\$26,518.74
Dues	\$9,534.79
Field Supplies	\$2,982.26
Insurance (Health, Auto & Liability)	\$173,853.65
Labor	\$624,556.08
Meters	\$61,391.75
Miscellaneous	\$682.52

Office	\$17,699.22
Postage	\$4,000.37
PR/Education	\$39,049.46
Professional Services	\$86,614.87
Regional Planning	\$12,688.27
Repairs	\$14,866.36
Scholarship	\$12,125.00
Service Charges	\$71.50
Tax Increment Payment	\$16,478.00
Special Studies/Database Development	\$12,000.00
Travel & Training	\$24,832.42
Utilities	\$21,380.51
Water Quality	\$10,935.99
Precipitation Enhancement Program	\$205,182.74
Total Expenses	\$1,672,963.21

TIME TRACKING



PERMITTING AND REGISTRATION

Well Permits Approved

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Armstrong	0	5	5	6	0
Carson	13	19	14	12	14
Donley	3	12	7	16	5
Gray	8	9	8	5	5
Hutchinson	0	0	0	0	0
Potter	1	2	1	1	0
Roberts	5	8	1	2	2
Wheeler	16	16	6	5	5
Total	46	71	42	47	31

Domestic, Stock and Rig Supply Well Registrations Received

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Armstrong	17	31	20	16	14
Carson	8	24	48	50	18
Donley	28	32	62	33	19
Gray	26	32	42	36	30
Hutchinson	0	0	0	0	0
Potter	59	60	56	25	60
Roberts	7	36	21	13	9
Wheeler	26	37	32	30	26
Total	171	252	281	203	176

Observation, Monitoring and Remediation Well Registrations Received

	2023-2024	2022-2023	2021-2022	2020-2021	2019-2020
Armstrong	0	0	0	0	0
Carson	7	45	26	23	45
Donley	0	0	0	0	0
Gray	0	0	0	0	0
Hutchinson	0	0	0	0	0
Potter	4	19	0	6	7
Roberts	0	0	0	0	0
Wheeler	0	0	0	0	4
Total	64	26	29	56	43

Operating Permits Approved

	2023-2024
Armstrong	1
Carson	7
Donley	7
Gray	12
Hutchinson	0
Potter	2
Roberts	5
Wheeler	6
Total	40

It is important to remember that all water wells drilled to the water table must have a completed application, signed by the landowner, before it is drilled. This statement is made every year, but is important because without the application prior to drilling, a fine will be assessed to the driller and the landowner. It is as simple as giving the District a call before drilling. "Spacing and Placing" the blue PGCD Logo Flag is has worked out extremely well. There is no mistaking if that blue PGCD Logo Flag is on the location where the water well is to be drilled.

Currently, wells drilled pumping 17.5 gallons per minute or less, which are most commonly domestic and stock wells, is considered an exempt well and is required to be registered with the District prior to drilling, and may require being spaced from property lines and other wells. Rig supply wells generally produce more than 17.5 gallons per minute, but they are defined as an exempt use in Chapter 26 of the Texas Water Code.

Any well that produces more than 17.5 gallons per minute must be permitted. This requires being spaced both from property lines and other water wells. Once the proposed well location meets these requirements and is approved by our field technicians, by placing a blue PGCD flag with latitude, longitude, date spaced and initials, the well may be drilled at the landowner's risk. The application must be approved by the Board of Directors.

YEAR AT A GLANCE

October 2023

10.03	Carson County Playa Festival
10.11	CRMWA Board Meeting
10.24	Panhandle Water Planning Group Meeting
10.25	Presentation to Grad Students at Texas State University
10.27	PGCD Board Meeting

November 2023

11.01-11.03	TWCA Fall Meeting
11.11	WISE Presentation
11.15	GMA 1 Meeting
11.28-30	Amarillo Farm and Ranch Show

December 2023

12.05	PGCD Rules Committee Meeting
12.14	PGCD Board Meeting

January 2024

1.10	GMA 1 Meeting
1.11	PGCD Rules Hearing and Board Meeting
1.23-1.26	GMDA Winter Conference
1.29-1.31	TAGD Winter Business Meeting

February 2024

2.06	Panhandle Water Planning Group Meeting
2.07	PGCD Rules Committee Meeting
2.28	Biennial Water Conservation Symposium

March 2024

3.06-3.08	TWCA Annual Convention
3.19-3.20	TWCA Legislative Meeting
3.20-3.22	Ogallala Commons: Stewarding Our Water Future
3.28	PGCD Board Meeting

April 2024

4.10	TWDB Board Meeting
4.16	PGCD Rules Committee Meeting
4.18	Texas Weather Modification Association Meeting
4.25	Panhandle Water Planning Group Ag Committee Meeting

May 2024

5.02	PGCD Board Meeting
5.02	Yellow City Green Thumbs Meeting
5.07	Precipitation Enhancement Meeting with the City of Amarillo
5.09	GMA 1 Meeting
5.13	PGCD Rules Committee Meeting

June 2024

6.06	PGCD Board Meeting
6.06-6.07	TAGD Business Meeting
6.11-6.14	TWCA Summer Conference

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July 2024

- 7.17-7.19 GMDA Summer Conference
- 7.18 GMA 1 Meeting
- 7.22-7.24 Region 16 STEM Conference

August 2024

- 8.06 PGCD Board Meeting
- 8.07-8.09 Agriculture Water Sustainability Conference
- 8.12 Texas Weather Modification Association Meeting
- 8.20-8.22 TAGD Groundwater Summit

September 2024

- 9.13 WTAMU Precipitation Enhancement Meeting
- 9.19 TWDB High Plains Aquifer System - Model Update Meeting
- 9.24 Texas House Natural Resources Committee Meeting
- 9.24 Annual Rainmaker Dinner

WATER CONSERVATION SYMPOSIUM 2024



PGCD STAFF MEMBERS AND JOB TITLES

- Britney Britten, General Manager
- Julie Bennett, Permitting Administrator
- Jake Robinson, Meter Compliance Officer
- Katie Hodges, Office Manager
- Korri Packard, PR/Education Coordinator
- Ashley Ausbrooks, Hydrogeologist/ Program Manager
- Rita Poor, Administrative Assistant
- Shawn Craig, Field Technician
- David Dees, Field Technician
- Corey Clay, Meteorologist



PANHANDLE GROUNDWATER
CONSERVATION DISTRICT