

2019

ANNUAL REPORT



PGCD

PRAIRIELANDS GROUNDWATER
CONSERVATION DISTRICT
JOHNSON • ELLIS • HILL • SOMERVELL

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Letter from the General Manager



Kathy Turner Jones
General Manager

As my inaugural year comes to a close, it is a time for reflection. As you read through this annual report, you will quickly see that 2019 was a year of growth, change and achievement for Prairielands GCD. In 2019, we saw the implementation of the Permanent Rules adopted on December 17, 2018 that went into effect January 1, 2019. The implementation of these rules was a testament to the dedicated work of the District's Rules and Bylaws Committee, staff members, and consultants who considered many important factors and situations in their development.

One of the major developments this year was the start of the permitting system through Historic Use Permits and Operating Permits. One of the ways the District can accomplish several of its goals is through this permitting program, which helps the District promote sound management of groundwater. The District also completed another notable accomplishment in June 2019 with the approval of the District's management plan by the Texas Water Development Board.

Prairielands GCD saw the retirement of James C. "Jim" Conkwright as General Manager in April. As an active participant in groundwater affairs for over 30 thirty years, Jim has been a major contributor to Texas groundwater policy, providing testimony before legislative committees on proposed bills affecting groundwater, and earning recognition from the Texas Senate and Texas House of Representatives. I want to wish Jim and his wife, Janice, the best as Jim begins his well-deserved retirement.

Property tax and school finance reform dominated the 86th Texas Legislature, while the legislative response to Hurricane Harvey in the form of flood and disaster planning was the primary focus of discussions on water. Due to the focus on flooding, popular policy topics such as groundwater took a back seat this past session, even though numerous groundwater bills were filed and discussed. We expect a renewed focus on these issues in 2021, especially with respect to GCDs over the same aquifer adopting similar rules, attorneys' fees, permit moratoriums, consideration of a water provider's service area in groundwater permitting, and the standard of review for an appeal of GCD's decision on a groundwater permit.

In September 2019, Prairielands GCD celebrated ten years of conserving, protecting, and enhancing groundwater resources in Johnson, Hill, Ellis and Somervell Counties. Within that ten-year span, there has been significant amounts of time and skill put in by previous general managers, board members, consultants and staff members to establish this District and create a collaborative presence amongst the communities, joint planning groups, and local government within the District, and I look forward to continuing that legacy and seeing what the future holds as we go in to a new decade.

Throughout 2019, District staff and directors worked to identify improvements to support the District's efforts in managing our groundwater resources. In October 2019, the Board of Directors adopted amendments to the District's Rules that include increasing the initial annual groundwater production allowable per contiguous controlled acre, revising the fee payment structure for water use fees for non-exempt wells, delayed implementation of the revised fee payment structure and revised reporting structure until January 1, 2021, and eliminated the requirement for submission of well completion report deposits by well drillers, as well as other non-substantive clarifying and conforming changes.

Other efforts included updating database features and accessibility, involvement in joint planning efforts and regional water planning groups, staying informed and involved with legislative updates, and also seeing the beginning of the construction of the District's new office building. In addition to saying goodbye to two retiring staff members, The District also welcomed several new faces to the team.

In conclusion, Prairielands GCD will continue to keep the public informed as we continue to carry out our directive to conserve, protect and enhance the groundwater resources of Ellis, Johnson, Hill and Somervell Counties in Texas. On a personal note, I welcome the opportunity to work with our communities, business leaders and local and state legislators on water conservation and supply matters in 2020.

Mission Statement

The Mission of the Prairielands Groundwater Conservation District ("District") is to develop rules to provide protection to existing wells, prevent waste, promote conservation, provide a framework that will allow availability and accessibility of groundwater for future generations, protect the quality of the groundwater in the recharge zone of the aquifer, insure that the residents of Ellis, Hill, Johnson, and Somervell Counties maintain local control over their groundwater, and operate the District in a fair and equitable manner for all residents of the District.

Brief District History

Prairielands Groundwater Conservation District was created in response to a finding by the Texas Commission on Environmental Quality (TCEQ) that groundwater shortages were expected in Ellis, Hill, Johnson, and Somervell counties over the next 25 years. The TCEQ finding required local residents to create a groundwater conservation district, or else the TCEQ would mandate one, enabling legislation for the Prairielands GCD to be created in 2009 by the 81st Texas Legislature.

The TCEQ designated a large area over the Trinity Aquifer from the Red River to Central Texas as a Priority Groundwater Management Area (PGMA) due to the critical groundwater declines facing the area. The Prairielands GCD is located in the north prairies of Texas, encompassing a four-county area. The District spans 2,870 square miles and overlays the Trinity Aquifer.

Prairielands GCD is here to manage, protect and conserve groundwater and seeks to balance the needs of all groundwater users with the requirements of a sustainable aquifer. The District operates in a fair and equitable manner through a management plan and rules, which are designed to prevent waste, collect data, plan for future resources, and educate people about water conservation and aquifer protection.

District Creation

The Prairielands Groundwater Conservation District ("District") was created by the 81st Texas Legislature under the authority of Section 59, Article XVI, of the Texas Constitution, and in accordance with Chapter 36 of the Texas Water Code ("Water Code"), by the Act of May 3rd, 2009, 81st Leg., R.S., Ch. 1208, 2009 Tex. Gen. Laws 3859, codified at TEX. SPEC. DIST. LOC. LAWS CODE ANN. Ch. 8855. ("The District Act"). The District is a governmental agency and a body politic and corporate. The District was created to serve a public use and benefit and is essential to accomplish the objectives set forth in Section 59, Article XVI, of the Texas Constitution.

Board of Directors

The Prairielands Groundwater Conservation District's Board of Directors is composed of two members per county, appointed by the counties' Commissioners' Courts. The 2019 directors are:

President – Charles Beseda

Term Expires August 31, 2023
Represents Hill County

Director – Kent Smith

Term Expires August 31, 2021
Represents Hill County

Secretary/Treasurer – Maurice Osborn

Term Expires August 31, 2023
Represents Ellis County

Second Vice-President – Randel Kirk

Term Expires August 31, 2021
Represents Ellis County

First Vice-President – Dennis Erinakes

Term Expires August 31, 2023
Represents Johnson County

Director – Paul Tischler

Term Expires August 31, 2021
Represents Johnson County

Director – Marty McPherson

Term Expires August 31, 2021
Represents Somervell County

Director – Tod Sandlin

Term Expires August 31, 2023
Represents Somervell County

District Staff

Jim Conkwright

General Manager (*January - April*)

Sinclair Newby

Public Relations and Education Director

Kathy Turner Jones

General Manager (*April - Present*)

Rosetta Douthitt

Bookkeeper

Michael Heath

Field Operations Coordinator

Rusty Zent

Field Technician

Stephanie Rexrode

Permitting Coordinator

Annette Kinney

Office Assistant

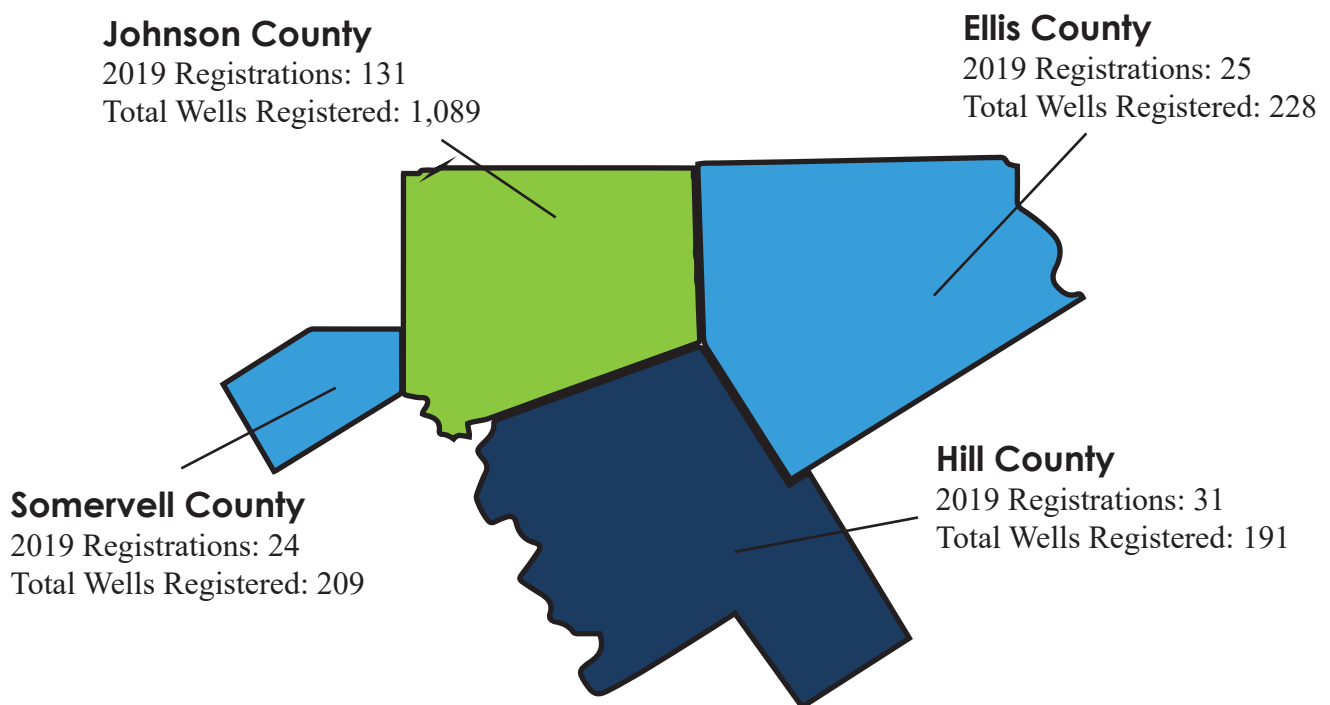
Well Registration

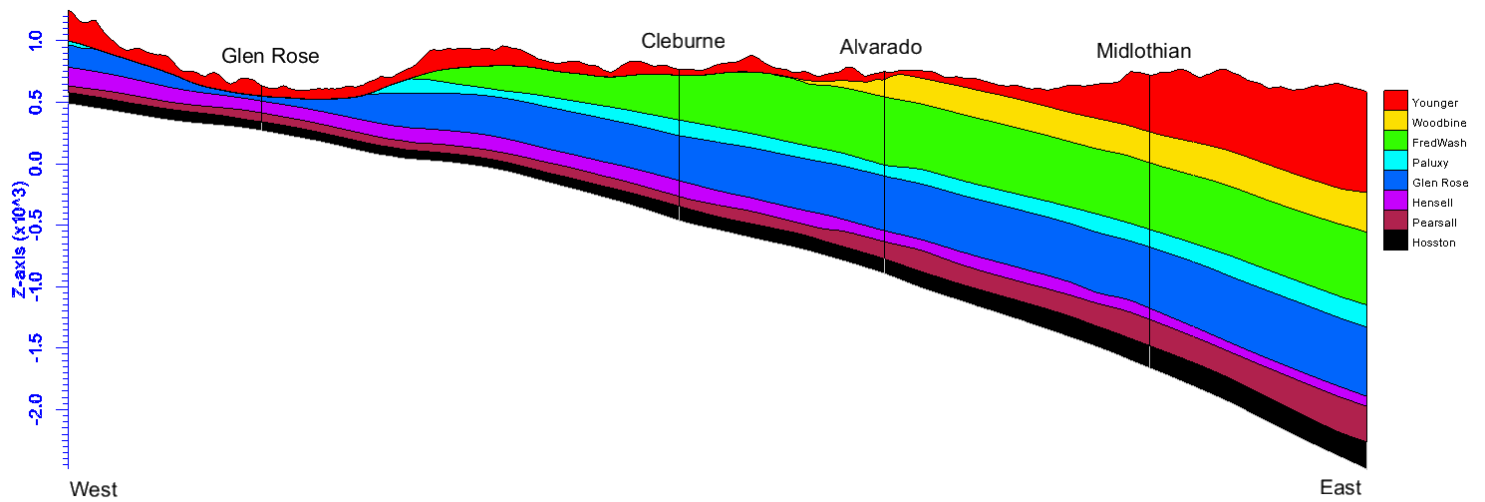
A.1. Management Objective: *The District will require that all wells be registered in accordance with its rules.*

Performance Standard: *Each year the staff will report well registration statistics. A summary of registration activity by county and aquifer will be included in the District's Annual Report.*

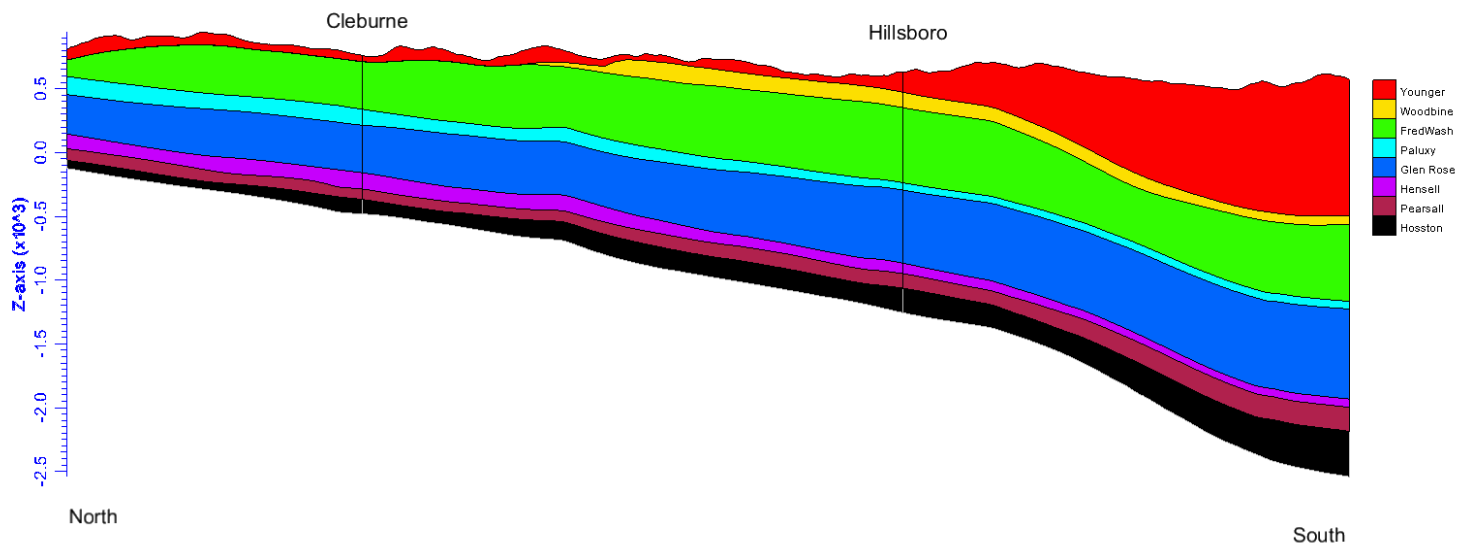
By the end of 2019, an additional 224 wells were registered with the Prairielands GCD bringing the total number registered to 1,743. Of the new registrations, there were 180 new wells, 44 existing wells and two plugged wells. These new well registrations were comprised of 196 exempt wells and 26 non-exempt wells.

Well Registrations by County





West to East Cross Section Stratigraphy Map of the District

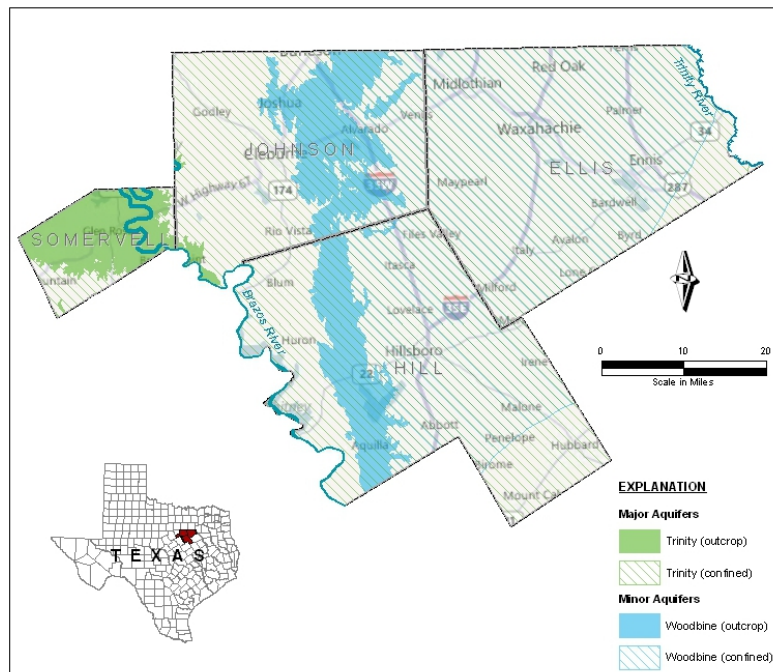


North to South Cross Section Stratigraphy Map of the District

Well Registrations by Aquifer

To register wells by aquifer formation, the District used data from the update of the Northern Trinity/Woodbine Groundwater Availability Model (NTWGAM). The District uses the data in its online registration and reporting geo-database to apply aquifer formations to registered wells based on location, depth, and screen interval. Many wells, however, are screened across multiple formations in the Trinity aquifer. For this report, the layer with most of the screen was chosen for those wells. The breakdown of wells with available screen interval data registered in 2019 by stratigraphy is as follows:

Younger aquifers – 9 <ul style="list-style-type: none"> · Ellis County – 3 · Hill County – 4 · Somervell County – 2 	Woodbine Aquifer – 28 <ul style="list-style-type: none"> · Johnson County – 21 · Ellis County – 20 · Hill County – 6
Washita/Fredericksburg Group – 44 <ul style="list-style-type: none"> · Johnson County – 36 · Ellis County – 2 · Hill County – 6 	Paluxy Aquifer – 46 <ul style="list-style-type: none"> · Johnson County – 35 · Hill County – 11
Glen Rose Formation – 37 <ul style="list-style-type: none"> · Hill County – 2 · Johnson County – 31 · Somervell County – 4 	Hensell Aquifer – 5 <ul style="list-style-type: none"> · Johnson County – 2 · Hill County – 1 · Somervell County – 2
Pearsall Formation – 2 <ul style="list-style-type: none"> · Somervell County – 1 · Johnson County – 1 	Hosston Formation – 19 <ul style="list-style-type: none"> · Johnson County – 5 · Somervell County – 14



Installation of Meters and Annual Production of Groundwater from Non-Exempt Wells

A.2. - Management Objective: *Each year the District will monitor annual production from all non-exempt wells within the District. The District will compile records and develop a database of non-exempt wells to help assess the aquifer units from which groundwater production occurs.*

Performance Standard: *The District will require installation of meters on all non-exempt wells and reporting of production to the District.*

The District's Rules require all non-exempt well owners to install and maintain accurate water meters on their wells. Based upon the meter readings, the Rules further require well owners to record the amount of groundwater produced from their wells and to report the amount of groundwater production to the District on either a semi-annual or monthly basis. Beginning in 2019, the District required all non-exempt wells to either hold an Operating Permit or a Historic Use Permit to help regulate groundwater usage.

A.3. - Management Objective: *The District will compile records and develop a database of non-exempt wells to help assess in which aquifer units groundwater production occurs.*

Performance Standard: *The District will require installation of meters on all non-exempt wells and reporting of production to the District. The annual production of groundwater from non-exempt wells will be included in the Annual Report provided to the Board of Directors.*

The District operates an extensive geo-database that houses all well and water usage information. This database is used by the District to classify wells as exempt/non-exempt, verify coordinates of well locations, input/verify meter readings, easily assess the quantity of water pumped by county, well owner, or use, locate wells, and approve new well registration applications. It is also available to well drillers and well owners to apply for new wells or report meter readings, and to pay for their non-exempt water usage. Any non-exempt well owner that reports online monthly receives a 10% discount. This helps to minimize error and reduce administrative time and costs. Non-exempt well owners may also report online for a semi-annual period, but there is not an incentive program in place. Not only can non-exempt well owners report their meter readings, but they have 24/7 access to their meter readings archive, past water use fee orders, and driller's reports. Furthermore, they have access to a change-meter tool in situations in which their meter is malfunctioning. This improves accuracy of the readings without having to contact the office.

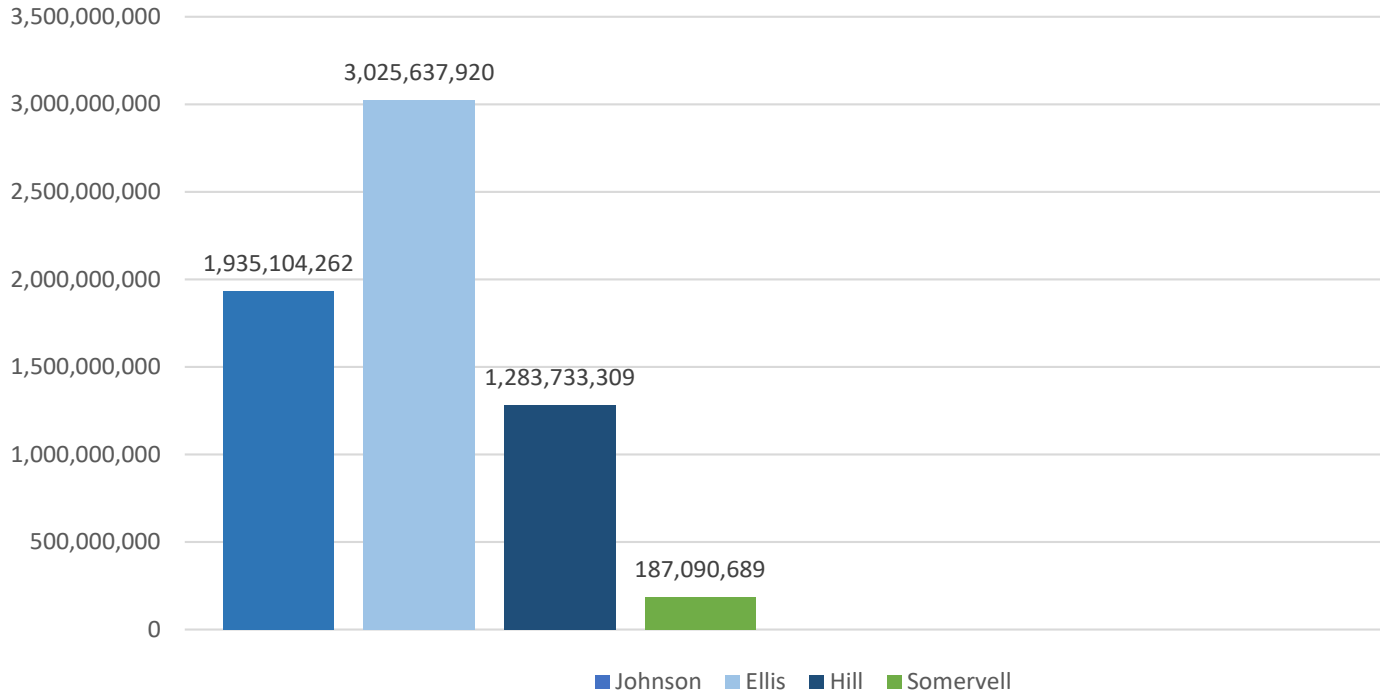


District Well Production

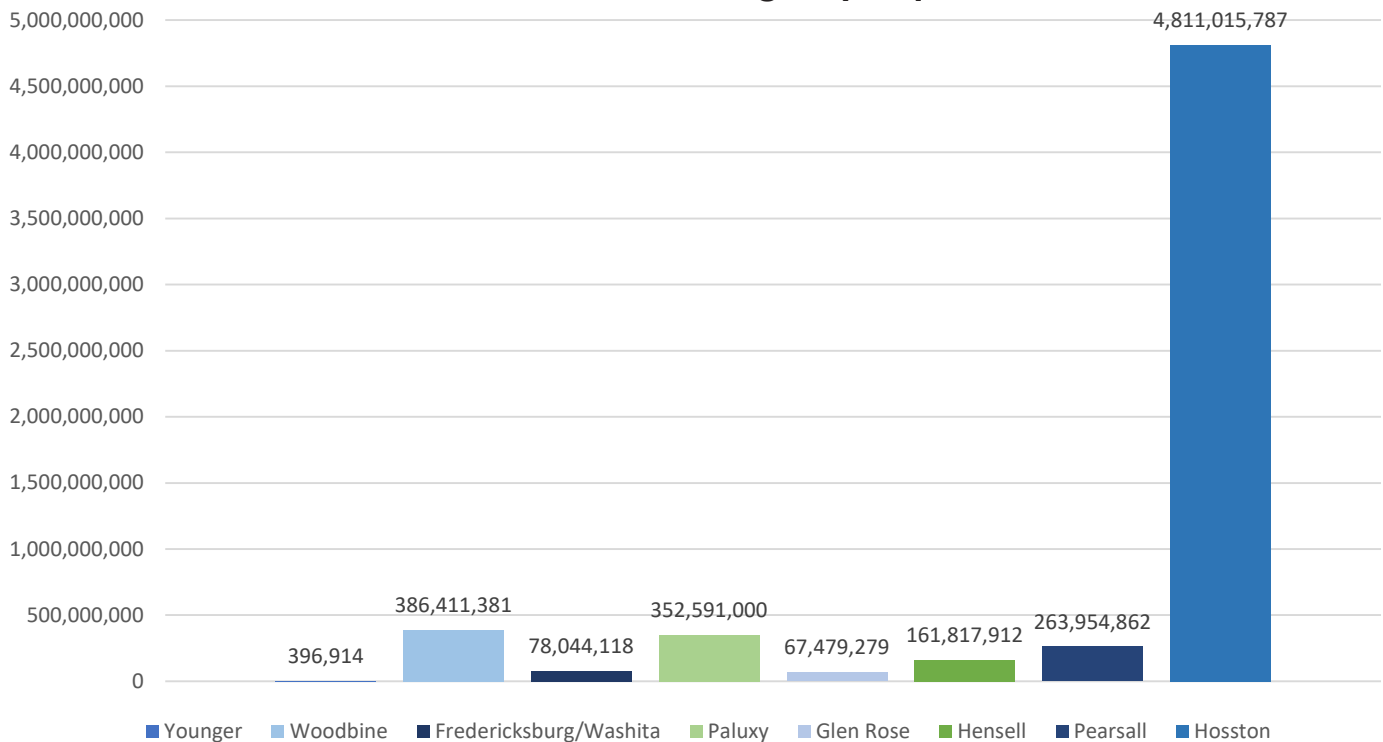
Non-exempt well owners in the District reported that they pumped a total of 6,431,566,181* gallons of groundwater in 2019. Owners in Ellis County pumped the most of the four counties followed by Johnson, Hill, and Somervell. The months with the greatest usage was September for Johnson, Hill and Ellis and December for Somervell. The lowest usage across the District varied with February being the lowest in Johnson County, Hill County, and Ellis County, and October in Somervell County.

**Data received as of April 1, 2020. The reported pumping for 2019 is incomplete due to incomplete reporting by a small number of permittees.*

2019 Water Usage by County



2019 Water Usage by Aquifer



District Water User Groups

Most of the groundwater used in the District is for municipal/public water supply systems with a reported 5,373,025,036* gallons pumped in 2019. The Industrial/Manufacturing sector reported the second greatest usage at 877,097,106* gallons. This is an increase of 92,616,710 gallons from totals reported for 2018. There has also been a large increase in the filling of ponds or other surface impoundments, used mostly for irrigation.

**Data received as of April 1, 2020. The reported pumping for 2019 is incomplete due to incomplete reporting by a small number of permittees.*

Water User Group Water Usage		
User Group	2019 Usage	2018 Usage
Municipal/Public Water Supply	5,373,025,036	5,351,930,445
Industrial/Manufacturing	877,097,106	784,480,396
Filling a Pond or Other Surface Impoundment	81,855,498	26,030,267
Commercial/Small Business	45,014,230	34,199,828
Oil & Gas Production	38,768,761	10,650,197
Golf Course Irrigation	11,256,400	8,302,910
Other*	4,549,150	48,297,000
Annual Totals	6,431,566,181	6,263,891,043

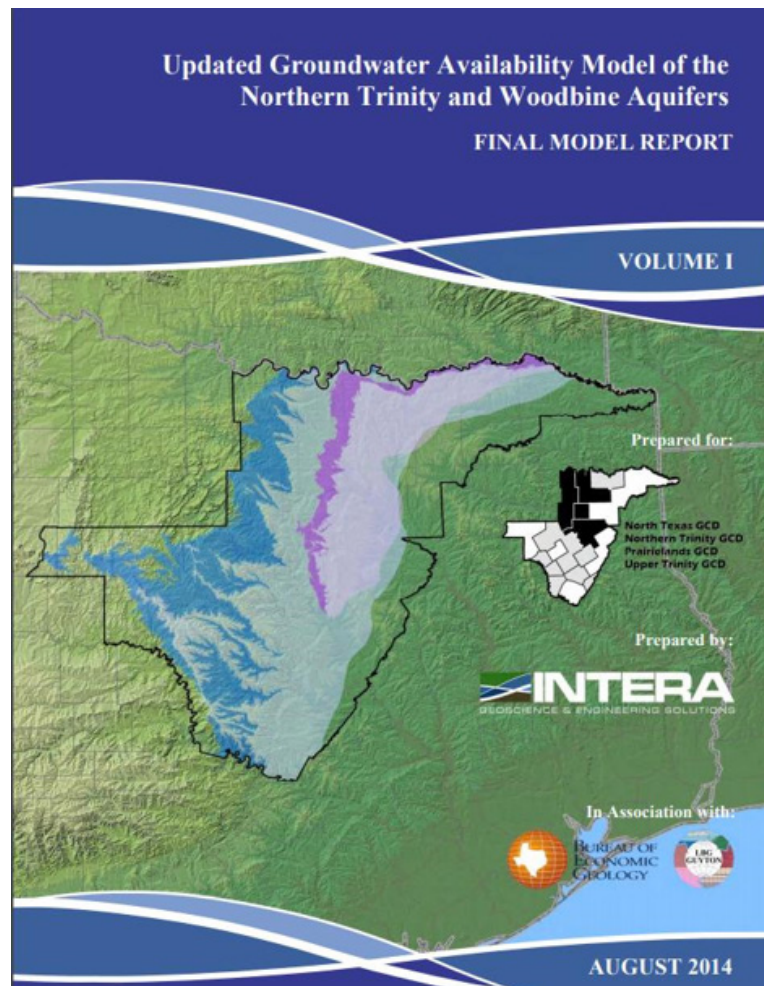
**Uncategorized as to water user group*

Methodology to Determine Production from Exempt Wells

A.4. - Management Objective: *The District will develop a methodology to quantify current and projected annual groundwater production from exempt wells.*

Performance Standard: *The District will provide the TWDB with its methodology and estimates of current and projected annual groundwater production from exempt wells. The District will also utilize the information in the future in developing and achieving desired future conditions and in developing and implementing its production allocation and permitting system and rules. Information related to implementation of this objective will be included in the Annual Report to the Board of Directors.*

It has been recommended by the District's consulting hydrogeologist, WSP, that the District use the same methodology and estimates of current and projected annual groundwater production from District-defined exempt wells as was used in the TWDB-adopted Northern Trinity/Woodbine Groundwater Availability Model ("NTWGAM"). This methodology is consistent with that used by the TWDB, historically, and based on projected changes in population and the distribution of domestic and livestock wells in the area using census block data to estimate population distribution. In addition, TWDB and Texas Department of Licensing and Regulation ("TDLR") well and geospatial land use databases are utilized in determining spatial distribution of exempt water use.



Controlling and Preventing Waste of Groundwater

Metering, Reporting, Usage Fees, and Compliance Monitoring

B.1. - Management Objective: *Each year the District will monitor annual production from all non-exempt wells within the District.*

Performance Standard: *The District will require installation of meters on all non-exempt wells and reporting of production to the District. The annual production of groundwater from non-exempt wells will be included in the Annual Report provided to the Board of Directors.*

Prairielands Groundwater Conservation District requires all non-exempt wells to have meters installed and maintained on each wellhead. The District records the meter readings in its database and determines production within the District. Based upon the meter readings, the District Rules further require well owners to record the amount of groundwater produced from their wells and to report the amount of groundwater production to the District on either a semi-annual or monthly basis. The District's estimate of the total amount of production from non-exempt wells in 2019 is *6,130,717,108 gallons.

B.2. - Management Objective: *The District will encourage the elimination and reduction of groundwater waste through the collection of a water use fee for non-exempt wells within the District.*

Performance Standard: *Annual reporting of total groundwater used and total water use fees paid by non-exempt wells will be included in the Annual Report provided to the Board of Directors.*

In 2019, Prairielands GCD encouraged elimination and reduction of groundwater waste by collecting water use fees for non-exempt wells, identifying and investigating compliance issues, and looking for instances of potential waste of groundwater. The District charges a fee rate of \$0.20 per 1,000 gallons for non-exempt usage. There is an additional \$0.10 per 1,000 gallons for transporting water out of the District. There is a 10% discount for any non-exempt well owner that reports their meter readings

monthly online through the District's database, and there is a 3% flushing discount for well owners required by TCEQ to flush their lines. Although Prairielands GCD's financial audit for 2019 will not occur until later in 2020, a "pre-audit" total of \$1,143,889 was paid to the District in total groundwater use fees in 2019.

B.3. - Management Objective: *The District will identify well owners that are not in compliance with District well registration, reporting, and fee payment requirements and bring them into compliance.*

Performance Standard: *The District will compare existing state records and field staff observations with the well registration database to identify noncompliant well owners.*

Three compliance issues were encountered in 2019, two of which were for failure to report water production and pay water use fees on time. There was also one non-exempt well that had failed to install a meter.

B.4. - Management Objective: *The District will investigate instances of potential waste of groundwater.*

Performance Standard: *Report to the Board as needed and include the number of investigations in the Annual Report.*

During 2019, there was one report of groundwater waste that required District staff attention. A resident in Hill County contacted the District about a potential natural spring. However, upon investigation, it was determined to be a water leak that was coming up through the surface of the ground. The water provider was contacted, and the leak was repaired.

State and Regional Water Planning Review and Participation

C.1. - Management Objective: *The District will actively participate in the Region C and Region G regional water planning processes to stay abreast of water demand projects and supply strategies in the District and to coordinate the District's groundwater management strategies with the regional water planning groups and foster an understanding of regional management practices.*

Performance Standard: *The District will review the most recently approved State Water Plan to gain an understanding of water demand projections and supply strategies in the District. The District will monitor future proposed amendments to the Region C and Region G regional water plans as they pertain to the District and ensure that supply strategies impacting groundwater resources in the District are identified in the appropriate regional water plan. The District's General Manager or designated representative will attend meetings of the Region C and Region G regional water planning groups when feasible. A summary of the District's interactions with the regional water planning groups will be included in the Annual Report provided to the Board of Directors.*

The Board of Directors, General Manager, and PGCD staff all strive to stay informed on any matters related to groundwater supply in Ellis, Hill, Somervell and Johnson counties. Critical sources of pertinent information include familiarity and understanding of regional and state water plans, and attendance and participation in the Region C and Region G Water Planning Groups quarterly meetings. The Board President and General Manager continued to stay abreast of proposed amendments to the Region C and G regional water plans so that supply strategies impacting groundwater resources in the District were properly identified.

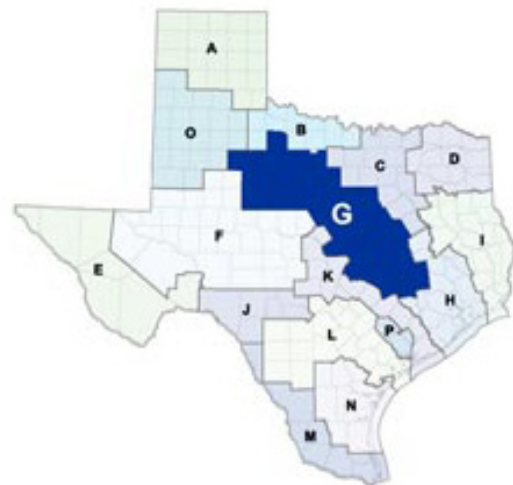
Additionally, the District attempts to have a representative at each of the Region C & G water planning group meetings. The General Manager attended the Region C meeting on May 22, 2019. The General Manager also attended the Region G meetings on July 10, September 25, November 20,

and December 16. The Board President serves as a voting member of the Region G Water Planning Group and attended meetings on May 1, May 22, June 27, August 29, September 25, and November 20.

C.2. - Management Objective: *The District will: 1) seek to better understand groundwater and surface water interactions, including groundwater base flow discharges to surface water courses and aquifer recharge from surface water flows; 2) identify existing and planned surface water and other alternative supplies to meet anticipated demand growth; 3) explore possible groundwater to surface water conversions in the District and facilitate the process, and 4) understand current and planned surface water supplies and how they affect groundwater demands.*

Performance Standard: *A summary of the progress and interaction with RWPGs will be included in each Annual Report.*

The District's interactions with the regional water planning groups not only included attendance and participation in meetings but coordination with the groups to keep them up-to-date on groundwater-related activities in Ellis, Johnson, Hill and Somervell counties as well. The District can assist the groups with groundwater usage amounts included in regional water plans.



Addressing Natural Resource Issues

Injection Wells/Oil and Gas

D.1. - Management Objective: *The District will develop a program to monitor and assess injection well activities in the District.*

Performance Standard: *The District will monitor and review injection well applications filed with the Railroad Commission of Texas and the Texas Commission on Environmental Quality that propose injection wells to be located within the boundaries of the District to identify contamination threats to groundwater resources in the District. The General Manager will bring to the attention of the Board any applications that the General Manager determines in his discretion threaten the groundwater resources in the District, and any outcomes of actions taken by the District will be included in each Annual Report.*

In 2019, Prairielands GCD addressed natural resource issues that impacted the use and availability of groundwater and which are impacted using groundwater. District activities fell into three categories:

1. monitoring and assessing injection well activities in the District;
2. monitoring compliance by oil and gas companies with District registration, metering, production reporting, and fee payment requirements; and
3. participating in legislative activities with the start of the 86th Session of the Texas Legislature.

The District utilizes an effective Underground Injection Control (“UIC”) monitoring program that included the review of all applications for injection wells proposed to be located within the District’s boundaries to ensure injection well activities do not endanger groundwater resources. Because the Railroad Commission of Texas (“RCC”) does not provide notification of injection well applications filed with the RCC to groundwater conservation districts, the District retained an outside contractor, Statewide Plat Services, to monitor all injection well applications filed with the RCC and notify the District and District’s legal counsel of each injection well application proposed to be located within the District’s boundaries. Upon receiving a copy of an injection well application, District staff performs an internal review of the injection

well application to identify the GPS location and examine the pressures, depths, and volumes relative to the completion of the well. If the District’s legal counsel determines the injection well application warrants further technical review, it is submitted to the District’s UIC technical consultants to perform an in-depth review of the application to determine whether the proposed injection well is a possible source of contamination of protected groundwater resources. In the event such a risk does exist, the District’s legal counsel seeks authorization from the District to initiate a protest on behalf of the District at the RCC against the injection well application. The District works with injection well applicants to modify or abandon the application in a manner that ensures that groundwater resources are adequately protected. During 2019, the District did not receive any UIC applications.

D.2. - Management Objective: *The District will monitor compliance by oil and gas companies of the well registration, metering, production reporting, and fee payment requirements of the District’s rules.*

Performance Standard: *As with other types of wells, instances of non-compliance by owners and operators of water wells for oil and gas activities will be reported to the Board of Directors as appropriate for enforcement action. A summary of such enforcement activities will be included in the Annual Report.*

The oil and gas companies have continued to comply with the well registration, metering, production reporting, and fee payment requirements of the District’s rules. In 2019, as the District’s new permitting program was launched, the oil and gas companies have complied with the requirements to apply for permits consistent with the requirements of the District Rules to the best of the District’s knowledge. No enforcement actions were initiated by the District in 2019.

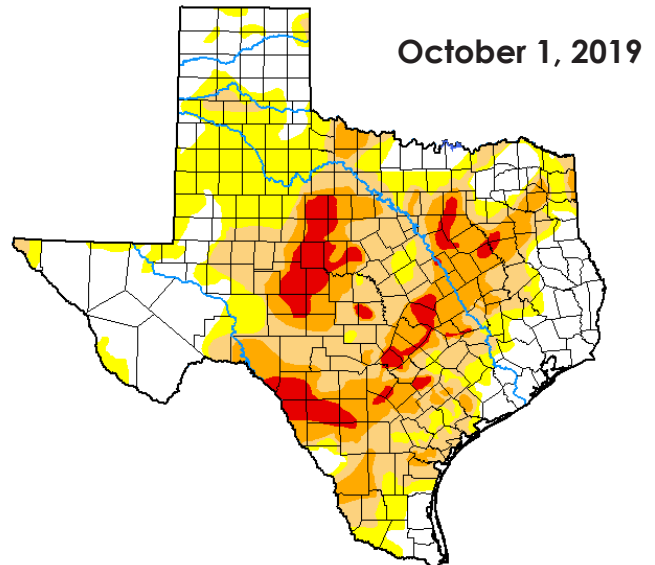
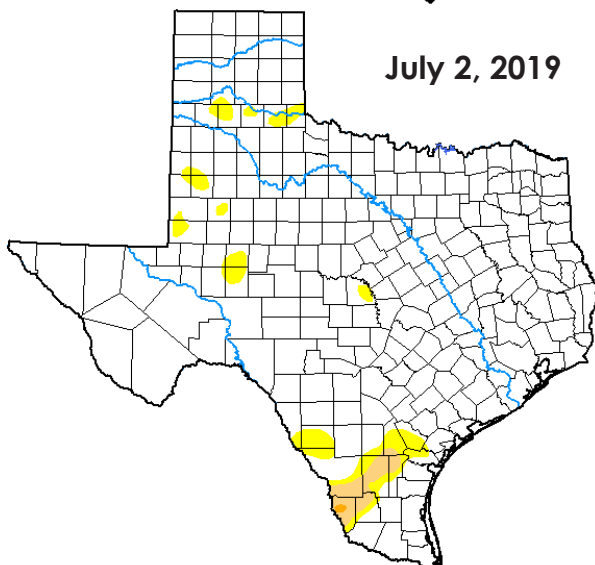
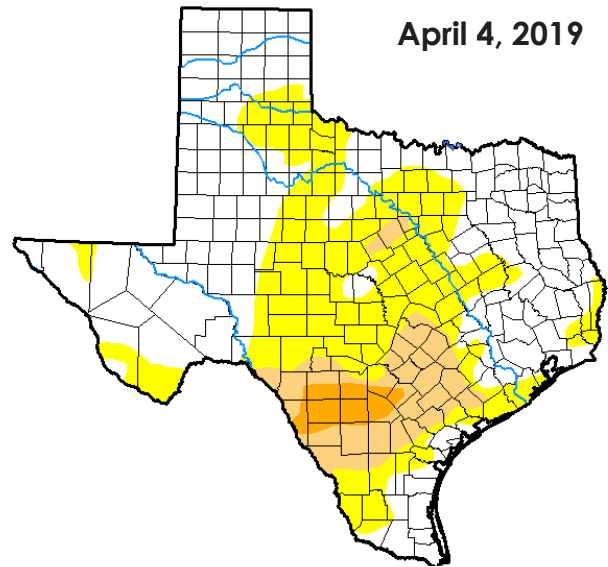
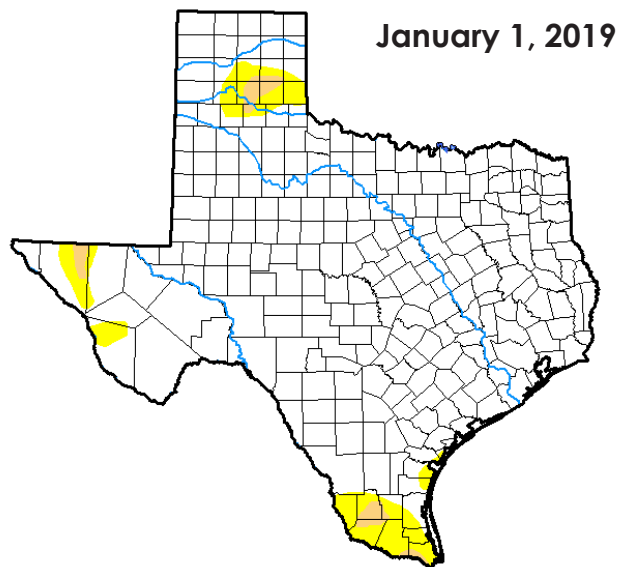
Drought Conditions & Monitors

E.1. - Management Objective: *Monthly review of drought conditions within the District using the Texas Water Development Board's Monthly Drought Conditions.*

Performance Standard: *An annual review of drought conditions within the District will be included in the Annual Report provided to the Board of Directors. Reports will be provided more frequently to the Board as deemed appropriate by the General Manager to timely respond to drought conditions as they occur.*

Throughout 2019, Prairielands staff provided U.S. Drought Monitors for Texas and water usage reports to the Board of Directors during each month's Regular Board Meeting. The Board and staff kept up to date on drought conditions not only in the District, but also in the state of Texas and southern region of the United States. Below are four examples of the Texas Drought Monitor Maps that are used by the District for addressing drought conditions.

2019 Texas Drought Monitor Maps

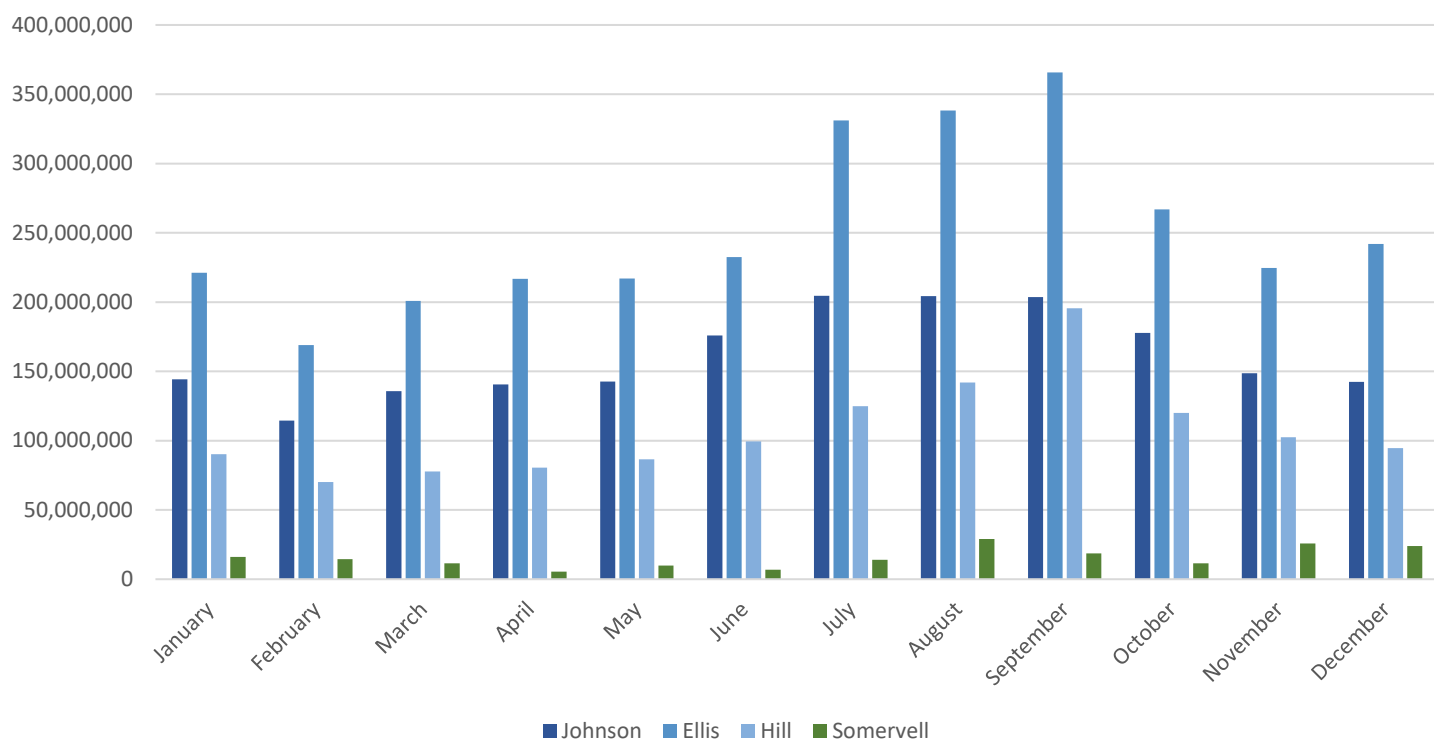


E.2. - Management Objective: *The District will develop information to understand the relationships between drought conditions, increased pumping, and the impacts of both on water levels and shallow wells in the outcrops and subcrops of the aquifer subdivisions in the District. The District will also determine areas where it may be suitable for the District to implement pumping restrictions during drought times in order to protect public safety and welfare, as well as areas in which the District may wish to allow overpumping during drought periods to promote conjunctive management when surface water supplies become unavailable to water user groups due to drought conditions.*

Performance Standard: *The District will monitor and assess drought impacts on aquifer outcrops and subcrops, including effects of increased pumping. By 2022, the District will complete studies and rules and regulatory plan development for drought pumping restrictions or over-pumping allowables.*

Throughout 2019, Prairielands GCD staff provided U.S. Drought Monitors for Texas and water usage reports to the Board of Directors during each month’s Regular Board Meeting. The Board and staff are kept up to date on drought conditions not only in the District, but also in the state of Texas and southern region of the United States. The monitors and usage reports were compared periodically to look for any correlation between the drought conditions and pumping amounts within the District. There appeared to be little correlation between drought conditions and increased pumpage. As shown in the chart below, pumpage in the District follows annual seasonal needs. In the quarterly drought maps shown on the previous page, the significant period of drought within the District and the state cumulated in the last quarter of the year. In the graph of monthly water use by each county, pumping rates decreased during the last three months of 2019. The Board and District staff will continue to monitor drought impacts on aquifer outcrops and subcrops, including the effects of increased pumping.

2019 Monthly Water Use by County



Addressing Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, and Brush Control

Conservation and Public Awareness Articles

F.1. - Management Objective: *The District will annually submit at least one article regarding water conservation, rainwater harvesting, or brush control for publication to at least one newspaper of general circulation in the District counties.*

Performance Standard: *Each year, a copy of each conservation article will be included in the District's Annual Report to be given to the District's Board of Directors.*

Press releases of various District activities were sent to newspapers in all four counties throughout the year: Cleburne Times-Review, Glen Rose Reporter, Hillsboro Reporter, Ellis County Press and the Waxahachie Daily Light. Copies of the submitted press releases are included in the following pages.

Press Release #1: This article is about the transition in management of the District as Jim Conkwright retires after 31 years working in groundwater management, and Kathy Turner Jones is welcomed to the District as the new General Manager.

Press Release #2: This article highlights the TWDB's approval of the District's management plan, which is used to identify the goals of the District and to document the management objectives and performance standards that will be used to accomplish those goals, as well as identify the water supply resources and water demands that will shape the decisions of the District.

Press Release #3: This article discusses the District's 10 year anniversary and the many water conservation efforts and strides in groundwater management the District has accomplished within its first decade.

Press Release #4: This article is about the adopted amendments to the District Rules on October 21, 2019 which address a number of issues, including increasing the initial annual groundwater production allowable per contiguous controlled acre, revising the fee payment structure for water use fees for non-exempt wells, delayed implementation of the revised fee payment structure and revised reporting structure until January 1, 2021 and eliminating the requirement for submission of well completion report deposits by well drillers, as well as other non-substantive clarifying and conforming changes. The adopted amendments to the District Rules are necessary to support the District's efforts in managing the groundwater resources within the boundaries of the District.

In addition to submitting the following articles, the District also launched an extensive digital and social media initiative in 2019 with the revamping of the District's Facebook, Twitter, and LinkedIn profiles and started utilizing email campaign software to distribute e-blasts to non-exempt and exempt well owners, elected officials, business owners, educators, and media contacts and anyone in the public who had requested to receive them. The content in these social and digital media posts include conservation tips, groundwater awareness, important meetings or events in the District, education event information, and general information about the District. These approaches provide an excellent resource for networking, distributing educational materials, sharing important news and information, and building brand identity and recognition among the public.

Press Release #1



Prairielands Groundwater Conservation District Welcomes New General Manager

March 13, 2018 – For Immediate Release

Cleburne - On March 18, Prairielands Groundwater Conservation District (PGCD) will welcome its new General Manager, Kathy Turner Jones, to the district office in Cleburne, TX. Jones comes to the district from a successful tenure with the Lone Star Groundwater Conservation District (LSGCD) in Conroe, TX, where she served as General Manager for 16 years.

Under her direction, the LSGCD established its offices, built a core staff, established a well permitting and registration program, and adopted rules. Additionally, Jones led the LSGCD through the process of compiling hydrologic information on the characteristics of the Upper Gulf Coast Aquifer, engineering planning, information on water usage and water supply in Montgomery County, and implementing policies and procedures associated with the district's rules.

Jim Conkwright, the retiring General Manager of PGCD, said he could not think of anyone better to replace him in this position due to Jones' background in groundwater management, regional water planning, personnel management, and organizational planning and development.

"Kathy brings in a wealth of knowledge and experience to Prairielands," Conkwright said, "and she is recognized by her peers as a true leader in groundwater management."

Conkwright will retire on April 27, after working for 31 years in groundwater management, with the last five of those years as the General Manager for PGCD. While at PGCD, he worked with legal counsel, hydrologists, and the District's Rules and Bylaws Committee to develop permanent rules for the District. In addition, he served as alternate voting delegate for GMA-8 Joint Planning Group.

"I believe this will be a seamless transition in management," Conkwright said, "and I look forward to co-managing with Kathy for the next six weeks."

The Prairielands Groundwater Conservation District was created in 2009 by the 81st Texas Legislature with a directive to conserve, protect, and enhance the groundwater resources of Ellis, Johnson, Hill, and Somervell Counties. For ideas and information on how to conserve groundwater, please visit the PGCD website at www.prairielandsgcd.org or call the district office at 817-556-2299.



Prairiels Groundwater Conservation District Receives State Approval of Groundwater Management Plan

June 17, 2019 – For Immediate Release

Cleburne, TX - The Prairielands Groundwater Conservation District received notification this week from the Executive Administrator of the Texas Water Development Board, notifying the District that its groundwater management plan had been approved as complete and in compliance in accordance with Texas Water Code § 36.1071(a) and (e).

The purpose of a groundwater conservation district's groundwater management plan is to identify the goals of the district and to document the management objectives and performance standards that will be used to accomplish those goals. The 75th Texas Legislature in 1997 enacted Senate Bill 1 to establish a comprehensive statewide water planning process and contained provisions that require each groundwater conservation district to prepare a management plan to identify the water supply resources and water demands that will shape the decisions of the district.

The process the Texas Water Development Board uses for reviewing a groundwater district's management plan includes analyzing the District's estimates of annual amounts of groundwater usage, annual amounts of aquifer recharge, projected surface water supply, and projected total demand for water. After addressing these topics, the management plan must provide management goals, methodology for tracking progress, management objectives, and performance standards used to evaluate the effectiveness of district activities.

The next five-year management plan review will be due on May 31, 2024. A full copy of the management plan can be found online at www.prairielandsgcd.org.

The Prairielands Groundwater Conservation District is committed to manage and protect the groundwater resources within Ellis, Hill, Johnson and Somervell Counties and to work with others to ensure a sustainable, adequate, high quality, and cost-effective supply of water, now and in the future. The District strives to develop, promote, and implement water conservation management strategies to protect water resources for the benefit of the citizens, economy, and environment of the District.



Prairielands Groundwater Conservation District Celebrates 10 Years of Protecting Groundwater Resources

September 4, 2019 - For Immediate Release

Cleburne, TX – September 1, 2019 marked ten years since the Prairielands Groundwater Conservation District’s enabling legislation was created in 2009 by the 81st Texas Legislature in response to a finding by the Texas Commission on Environmental Quality that groundwater shortages were expected in Ellis, Hill, Johnson, and Somervell counties over the next 25 years.

Located in the northern prairies of Texas and headquartered in Cleburne, the District encompasses 2,870 square miles across its four-county area. The District’s mission is to protect existing water wells, promote conservation, ensure availability and quality of groundwater for future generations, and allow residents to maintain local control over their groundwater.

The District is led by a Board of Directors, two from each of the four counties, who are appointed by the County Commissioners in their respective counties. Board President, Charles Beseda, has served the District since it was created, and said he started his years of continued service in hopes of finding an opportunity to make a difference in his home and community.

“I wanted to make this place better than I found it and have a place for my kids to grow up and enjoy and I felt like getting involved in water conservation was a way I could help make a difference,” Beseda said. “Water is a main concern in this area when we think about our future, and we have to be more aware of our resources and how we can conserve.”

Serving as a director for ten years has allowed Beseda to be involved in many of the important milestones and accomplishments of the District, along with the rest of the directors and an office staff that serves in different aspects of running the operations of the District.

“The best way to build an organization is from the ground up, and I feel like we’ve really done a good job at that,” Beseda said. “We’ve got a great organization that continues to get better through its leadership, staff, technical studies, and programs.”

Some of the significant achievements in the last ten years of the District’s existence began in 2012 with the development of the ongoing aquifer water level monitoring program. This program allows the District to implement its regulatory and permitting program and monitor water level trends. In 2014, Jim Conkwright joined the District as the new General Manager after previously working in groundwater management in the Lubbock, TX area.

“While my previous experience had been with different aquifers than those within the bounds of Prairielands GCD, declines due to years of over-pumping in the North Texas Trinity and Woodbine aquifers presented issues that were all too familiar,” Conkwright said. “The residents of the four counties were aware of this when the district came into being in 2009, and when I arrived, there was already progress on the development of the new North Texas Trinity and Woodbine Groundwater Availability Model, in cooperation with other groundwater conservation districts in the same management area.”

From 2012 to 2014, the District conducted technical studies of the local aquifers and groundwater use to help develop the groundwater availability model utilized in the Groundwater Management Area 8 joint planning process to determine Desired Future Conditions for aquifers. Upon its completion, the model was adopted by the Texas Water Development Board as the official Groundwater Availability Model for this area. By 2017, the District developed and adopted these Desired Future Conditions.

Starting in 2017, additional research was conducted to look at water well interference which helped develop the 2-acre minimum tract size requirements for new wells. The number of registered wells in the District has grown from 938 in 2013 to 1,517 in 2018.

Most recently, following multiple public hearings, the District adopted permanent rules on December 17, 2018, as a requirement of Chapter 36 of the Texas Water Code to provide protection to existing wells, prevent waste, promote conservation, provide a framework that will allow availability and accessibility of groundwater for future generations, protect the quality of the groundwater, and to ensure local control over our groundwater resources. The District also received stake approval of its management plan adopted on January 21, 2019. The District rules and management plan are designed to prevent waste, collect data, plan for future resources, and educate the public about water conservation and aquifer protection.

Conkwright also listed the other noteworthy accomplishments during his tenure with the District were the development of a talented district staff, establishing leadership recognized across the state in the areas of groundwater management and conservation, and the naming of a well-respected and highly qualified General Manager, Kathy Turner Jones, upon his retirement in late April of this year. Jones joined to the District after a successful tenure with the Lone Star Groundwater Conservation District in Conroe, TX, where she served as General Manager for 16 years.

“I am fortunate to transition into management of such a successful District,” Jones said. “The previous general managers worked very hard to establish this District and create a collaborative presence amongst the communities, joint planning groups, and local government within the District, and I look forward to continuing that legacy.”

Moving forward into its tenth year of groundwater management, the District is establishing the water well permitting system to achieve the Desired Future Conditions as mandated by the Texas legislature. To find out more information about the Prairielands Groundwater Conservation District, please visit our website at www.prairielandsgcd.org.



Prairiels GCD Board of Directors Adopt Amendments to District Rules

October 30, 2019 – For Immediate Release

Cleburne, TX - The Board of Directors for the Prairielands Groundwater Conservation District held a public hearing on October 21, 2019 to adopt amendments to the District Rules regulating water wells within the boundaries of the District, including Ellis, Hill, Johnson and Somervell Counties.

Over the months leading up to the meeting, the District staff and directors worked diligently to identify needed rules improvements in the course of implementing the District Rules that were adopted on December 17, 2018, and the Board's Rules and Bylaws Committee worked to develop recommended amendments to the District Rules to address such improvements.

Publication of the proposed amendments to the District Rules were made available to the public on September 27, 2019 and a public notice of a hearing on the consideration of adopting the amended rules was published in newspapers across the four county district no less than 20 days prior to the public hearing. At the public hearing, which was held in the meeting room inside the Liberty Hotel in downtown Cleburne, the Board received and considered oral and written comments from the public on the proposed amendments to the District Rules, and after taking up and considering the proposed amendments to the District Rules, the Board adopted the same during the regular board meeting of the District on October 21, 2019.

The adopted amendments to the District Rules address a number of issues, including increasing the initial annual groundwater production allowable per contiguous controlled acre, revising the fee payment structure for water use fees for non-exempt wells with an option to prepay annually or submit quarterly payment of fees for groundwater production, delayed implementation of the revised fee payment structure and revised reporting structure until January 1, 2021 and eliminating the requirement for submission of well completion report deposits by well drillers, as well as other non-substantive clarifying and conforming changes.

The adopted amendments to the District Rules are necessary to support the District's efforts in managing the groundwater resources within the boundaries of the District. Information about the public hearing and copies of the amended District Rules are available on the District's website at www.prairielandsgcd.org, and physical copies can be obtained by visiting the District office at 205 South Caddo Street in Cleburne.

F.2. – Management Objective: *Each year, the District will include at least one informative flier on water conservation, rain water harvesting, or brush control within at least one mail out to groundwater non-exempt users distributed in the normal course of business for the District. The District will also consider additional fliers or initiating other public awareness campaigns and outreach efforts on water conservation during drought conditions.*

Performance Standard: *Each year, a copy of each mail-out flier or email and a summary of all other public awareness water conservation campaigns and outreach efforts will be included in the District's Annual Report to be given to the District's Board of Directors.*

The District develops and produces its own quarterly newsletter, the Prairielands eLine, that is distributed in print and electronically. In 2019, the eLine newsletter was revamped to include a wider variety of content. It was increased from four pages to eight to ten pages each edition. Online email software was also utilized starting in 2019 in order to streamline and quantify reach of the newsletter. The distribution list has increased from approximately 100 recipients at the start of 2019 to 590 recipients by the end of 2019. Water conservation topics and other items covered in the Prairielands eLine in 2019 included the following:

Winter 2019

- New Permanent Rules Effective January 1st
- Worried About Your Water Well?
- Prairielands GCD Funds Outdoor WaterWise Program
- Watch Out for Winter Weather Woes

Spring 2019

- Groundwater Monitoring Program Provides Valuable Insight into Water Levels
- Four Ways to Save More Water This Spring
- Update on PGCD Adopted Permanent Rules

Summer 2019

- Under the Weather: New TexMesonet Station Provides Valuable Data
- Update from the Groundwater Management Area 8 Meeting
- How to Maintain a Sustainable Landscape this Summer
- PGCD Receives State Approval of Management Plan
- PGCD Sponsors 4-H Water Ambassador Program
- Well Spacing Simplified with New Interactive Spacing Tool

Fall 2019

- A Guide to Conserving Water During the Holidays
- How to Identify and Manage Abandoned Wells
- 4-H Water Ambassador Shares Experiences with Prairielands GCD Board of Directors
- Book a Presentation with the District Water Education Trailer
- Update from the Groundwater Management Area 8 Meeting



District staff also made several presentations to community and civic groups, as well as making appearances at public events. These outreach initiatives with public organizations and events are a great way to educate individuals about water conservation, as well as building relationships and recognition within the four counties of the District. A summary of public events and presentations is listed below:

Date	Event	Location	County	Participants
4/1/2019	Birome Water Supply Corp. Annual Meeting	Mount Calm	Hill	40
4/2/2019	Waxahachie Lions Club meeting	Waxahachie	Ellis	30
4/13/19	Johnson County Master Gardeners Annual Plant Sale	Cleburne	Johnson	100
4/28/19	Exploring Prairie Wildlife and Wildflowers	Waxahachie	Ellis	50
4/29/19	Joshua YMCA Healthy Kids Day	Joshua	Johnson	141
5/15/19	Boys and Girls Club of Hillsboro	Hillsboro	Hill	50
6/29/19	Texas Heritage Festival	Burleson	Johnson	300
9/18/19	Hillsboro Rotary Club meeting	Hillsboro	Hill	13
9/19/19	Johnson County SUD Open House	Joshua	Johnson	35
9/29/19	Farm Heritage Day	Waxahachie	Ellis	200
10/10/19	Lake Whitney Garden Club	Whitney	Hill	29
10/22/19	Hillsboro Lions Club	Hillsboro	Hill	24
11/5/19	Tuesday Forum	Cleburne	Johnson	50
11/6/19	Glen Rose Lions Club	Glen Rose	Somervell	40
11/8/19	Ag Days at Russel Farm	Burleson	Johnson	400
11/15/19	Burleson Rotary Club	Burleson	Johnson	38
Total				1,580



F.3. - Management Objective: *The District will investigate the feasibility of recharge enhancement and aquifer storage and recovery projects in the District.*

Performance Standard: *By 2022, the District will complete studies and an initial assessment regarding the feasibility of recharge enhancement and aquifer storage and recovery projects in the District.*

During the 86th session of the Texas Legislature, the District was active in working on proposed legislation related to recharge enhancement and aquifer storage and recovery projects in addition to staying abreast of legislation addressing the development of brackish groundwater.

F.4. Management Objective: *The District will periodically support or sponsor an education seminar addressing conservation, recharge enhancement, rainwater harvesting, precipitation enhancement, or brush control.*

Performance Standard: *The District will support or sponsor such a seminar at least once every other year. A summary of such educational activities will be included in the District's Annual Report.*

In 2019, The District was a Platinum Level sponsor for the Texas Water Conservation Association Fall Conference on October 16-18, 2019 at the Wyndham San Antonio Riverwalk Hotel. The Texas Water Conservation Association is an association of water professionals and organizations in the state of Texas representing river authorities, municipalities, navigation and flood control districts, drainage and irrigation districts, utility districts, municipalities, groundwater conservation districts, all kinds of water users, and general/environmental water interests. The 2019 Fall Conference included an update on groundwater-related activities by the Texas Water Development Board, a produced water update from the Water Environment Association of Texas, a panel about getting the most out of collecting weather data, and many other relevant and informative sessions.



TWCA Fall Conference
Wyndham San Antonio Riverwalk
October 16-18, 2019



The District was also a Legacy Sponsor for the Texas 4-H Youth Water Ambassador program in 2019. This program strives to target students between the 9th and 11th grades to encourage their interest in the water industry. The program also seeks to bring students of varying backgrounds together to gain advanced knowledge and practice leadership skills related to the science, technology, and management of water in Texas. Through an application process, up to 30 high school youth are selected each spring to participate in a summer 4-H2O Leadership Academy and commit service hours annually in a variety of ways. The Leadership Academy is a multi-day tour of Texas exposing youth to a wide diversity of water resources, water uses, sensitive ecosystems, and water quality concerns, as well as the applied research and technologies employed to conserve this valued resource. Ambassadors gain insight into water

law, policy, planning, and management as they interact with representatives from state water agencies, educators, policy-makers, and water resource managers. Water Ambassadors commit a minimum 40 hours of service over a 12-month period following the Academy. Service hours may include delivering water education at local 4-H clubs, schools, fairs, and community events. Ambassadors also earn credit by assisting local water utilities, water conservation districts and Extension agents as they conduct water outreach activities and demonstration projects.

F.5. - Management Objective: *Each year, the District will seek to provide an educational outreach regarding water conservation to at least one elementary school in each county of the District.*

Performance Standard: *Each year, a list of schools that participate in the educational outreach will be included in the District's Annual Report to be given to the District's Board of Directors.*

Increasing public awareness about groundwater conservation through education and outreach is one of the main goals of the District. The WET, or Water Education Trailer, is a mobile classroom that features exhibits that provide demonstrations about rainwater harvesting, indoor water conservation tips, pollution prevention, how a water well works, and features a working aquifer model. The presentations included in the WET meet TEKS standards and provide STEM-based learning activities. In 2019, seven schools participated in educational outreach activities.

Date	School	County	Grade	Participants
4/10/19	Acton Elementary	*Hood	3 rd	180
4/22/19	Venus Elementary	Johnson	5 th	180
4/24/19	Hillsboro Intermediate	Hill	4 th and 5 th	164
4/25/19	Abbott, Mt Calm, Bynum, Penelope, Covington	Hill	5 th and 8 th	285
5/20/19	Italy High School	Ellis	7 th -10 th	120
5/21/19	Ovilla Christian School	Ellis	3 rd -5 th	65
10/3/19	Covington Elementary	Hill	5 th and 6 th	48
<i>*by special request</i>			Total	1,002



Groundwater Monitoring Program and Desired Future Conditions

G.1. - Management Objective: *The District will develop a Groundwater Monitoring Program within the District to monitor water well levels (and baseline water quality) in wells in each aquifer and subdivision thereof in the District. The District will review the geographic and vertical distribution of existing monitoring wells in the District with historical data from the TWDB, USGS, TCEQ, and other agencies and develop a plan to partner with those agencies as appropriate to ensure continued availability of the monitoring wells and data from them to the District. The District will also develop a plan to acquire or install new monitoring wells to fill in gaps in geographic or vertical distribution. The District will then develop an annual goal of how many monitoring wells it will add each year and a priority system for their installation based upon data deficiencies and needs for the geo-database. The District will take periodic readings from the monitoring wells and input the data into the District's geo-database. The District will utilize the information to help implement its regulatory and permitting program and monitor water level trends and actual achievements of DFCs.*

Performance Standard: *Upon development, a summary of the District Groundwater Monitoring Program will be included in the District's Annual Report to be given to the District's Board of Directors.*

The primary goal of the monitor program in 2019 was to continue increasing the number of aquifers, or layers of an aquifer, represented in each county. The field staff accomplished this through talking with well owners in all counties regarding the monitor program and underlying geological layers of their area, seeking well data on prospective new sites.

- Added Wellntel to seven wells into the monitor program. Five in Johnson County, one in Hill County, and one in Somervell County.
- Completed the annual measurement of all 201 wells in the four-county area.
- Continued to work with the District's consulting hydrologist, WSP, to identify the most needed areas in the District for monitoring.

G.2. - Management Objective: *Upon approval of the District Monitoring Program, conduct water level measurements within the District as specified in the Monitoring Program.*

Performance Standard: *Annual evaluation of the water-level trends and the adequacy of the monitoring network to monitor aquifer conditions within the District and to monitor achievement of applicable desired future conditions. The evaluation will be included in the District's Annual Report to be given to the District's Board of Directors.*

As previously discussed, the District continues to develop its monitoring program. On full implementation, District staff will take water level measurements to determine water level movements and will evaluate the trends in relation to the achievement of desired future conditions.



Prairielands GCD General Manager, Kathy Turner Jones, discussing future water needs with Rep. Lyle Larson and Texas A&M University Chancellor, John Sharp, at the Texas Groundwater Summit in August 2019.

G.3. - Management Objective: *The District will monitor non-exempt pumping within the District for use in evaluating the District's compliance with aquifer desired future conditions.*

Performance Standard: *Annual reporting of groundwater used by non-exempt wells will be included in the Annual Report provided to the District's Board of Directors.*

In 2019, non-exempt wells in the District reported groundwater use of 6,431,566,181* gallons.

*Data received as of April 1, 2020. The reported pumping for 2019 is incomplete due to incomplete reporting by a small number of permittees.

2019 Water Usage by Aquifer

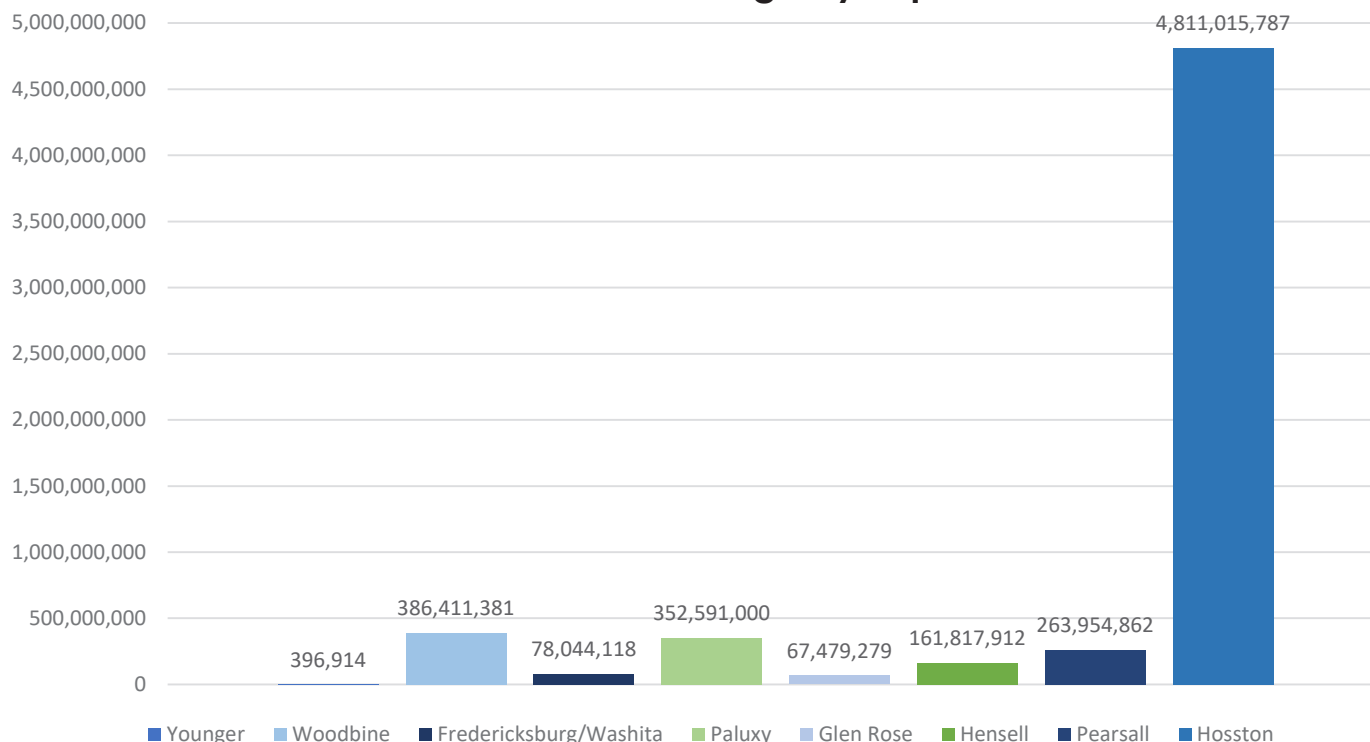


Table 1. Summary of Desired Future Conditions in Prairielands GCD

	Woodbine	Paluxy	Glen Rose	Hensell	Hosston
Ellis	61	107	194	263	310
Hill	20	38	133	186	337
Johnson	2	-61	58	126	235
Somervell	Not present	1	4	26	83

Note: All values are in feet.

Table 2. Summary of Modeled Available Groundwater in Prairielands GCD

	Woodbine	Paluxy	Glen Rose	Hensell	Hosston
Ellis	2,078	443	50	0	5,040
Hill	588	353	115	226	3,281
Johnson	1,985	2,447	1,636	1,086	3,863
Somervell	Not present	14	146	1,978	845

Note: All values are in acre-feet per year.



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