



Prairielands Groundwater Conservation District



**2018
Annual Report**

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Letter from the General Manager



Two years of hard work came to fruition December 17, 2018, with the adoption of permanent rules by the PGCD Board of Directors. The Rules and Bylaws Committee, comprised of one board member from each of the District's four counties, assisted by staff and consultants, considered multiple variations and scenarios before settling on those adopted. The process included stakeholder and public meetings, and public hearings. Comments of stakeholders and the public were received, and several recommendations were incorporated into the initially proposed rules.

Throughout the rule development process, and in the permanent rules adopted, private property rights and investment backed expectations were given the highest priority. The permanent rules became effective January 1, 2019.

Another high priority of PGCD is to increase the number of monitor/observation wells, attempting to maintain a fair representation of each aquifer and aquifer subdivision. As was the case in 2017, these wells increased in number in 2018 and now total over 165 wells.

The District continued to dedicate significant resources to be a participant in important deliberations surrounding Texas groundwater policy. The interim period between the 85th and 86th Texas Legislatures was busy with numerous hearings of both the Senate Agriculture, Water and Rural Affairs Committee and the House Natural Resources Committee. The District provided input on a variety of groundwater issues and continued to work to maintain local control of the groundwater, fending off approaches to one-size-fits-all legislative policy.

The District's public awareness program continued its growth, reaching more people through use of the Water Education Trailer (WET), news articles and press releases. Additionally, District staff worked with numerous organizations disseminating information on groundwater and water conservation.

Additional effort and time were spent during 2018 to further develop plans for a District office and shop building, working with other districts in the GMA process, the continued registration of new wells and resolving a small number of compliance issues.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Jim Conkwright". The signature is written in a cursive, flowing style.

Jim Conkwright

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 Texas Commission on Environmental Quality 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. They 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 2018 directors are:

President – Charles Beseda

Term Expires August 31, 2019
Represents Hill County

Director – Kent Smith

Term Expires August 31, 2021
Represents Hill County

Secretary/Treasurer – Maurice Osborn

Term Expires August 31, 2019
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, 2019
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, 2019
Represents Somervell County

District Staff

Jim Conkwright

General Manager

Rosetta Douthitt

Office Administrator

Michael Heath

Field Technician

Stephanie Rexrode

Records Administrator

Karen Siddall

Public Relations and Education Administrator

Addendum: As this annual report went to press, the District announced a change of its General Manager and two other staff changes. These changes are not reflected in this document because they occurred after the time period under consideration for the purpose of the report.

Providing the Most Efficient use of Groundwater

Well Registrations

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

A.1. - 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.

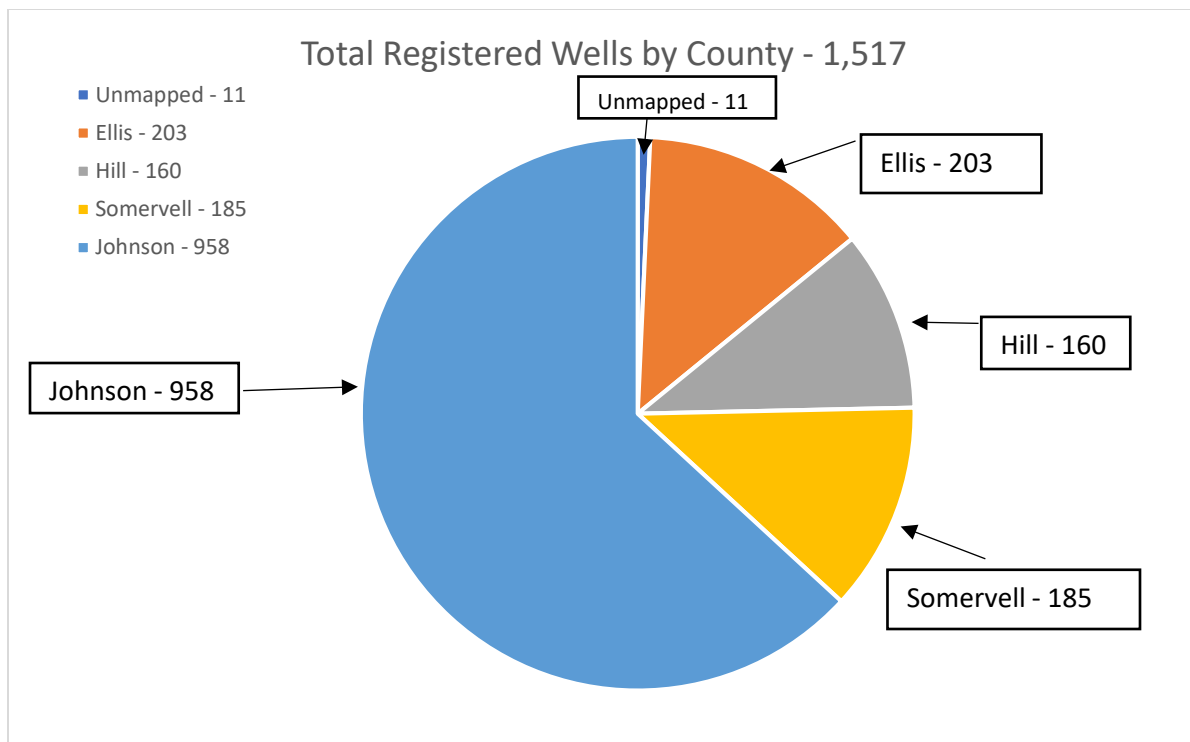
In 2018, an additional 179 wells were registered with the Prairielands GCD bringing the total number registered to 1517.

Of the new registrations:

- 172 new wells/6 existing well/1 plugged well
- 161 exempt/17 non-exempt/1 plugged

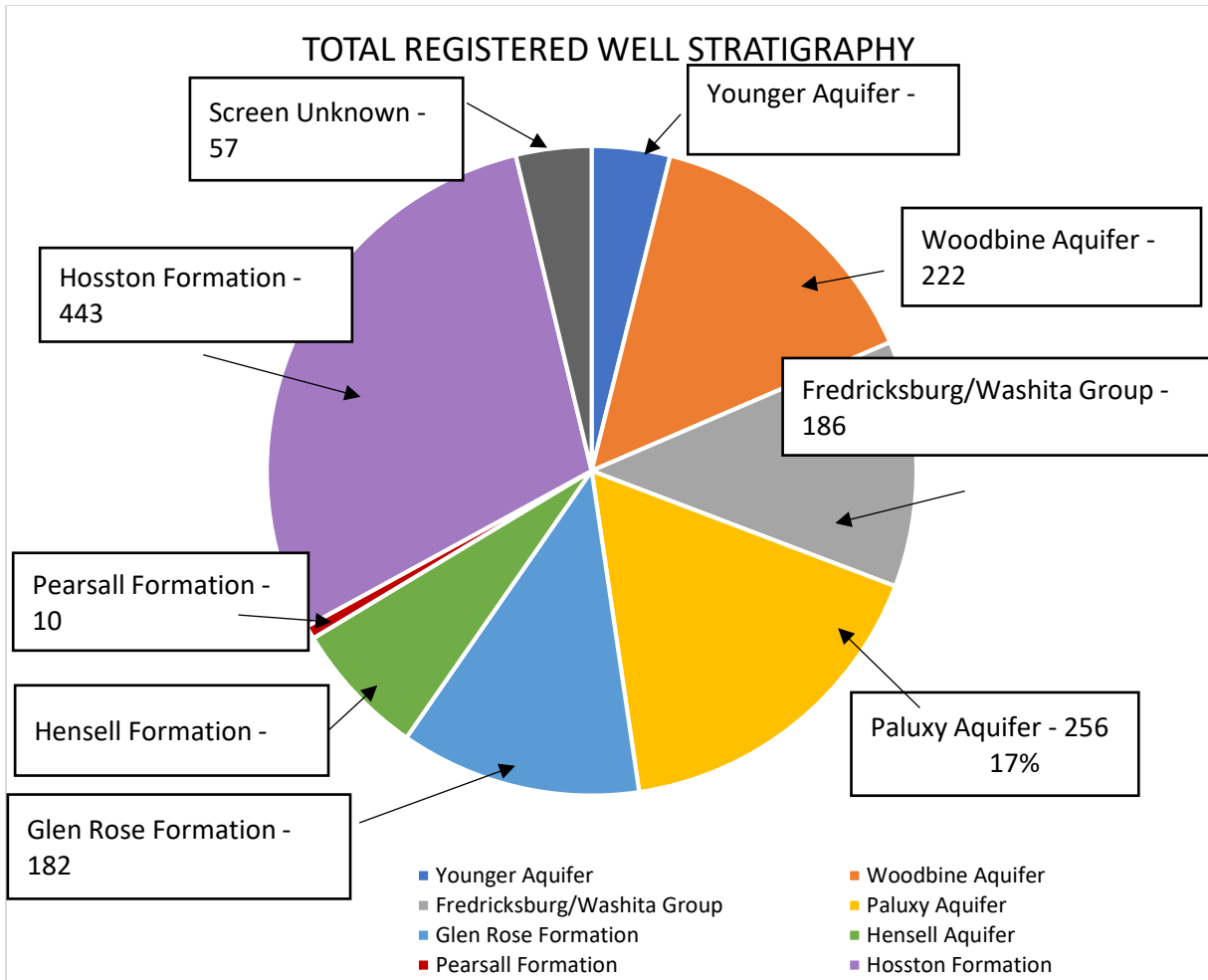
A breakdown of new registrations by county is as follows.

<p>Ellis County - 24</p> <ul style="list-style-type: none">▪ 18 new exempt▪ 6 new non-exempt	<p>Hill County - 12</p> <ul style="list-style-type: none">▪ 11 new exempt▪ 1 new non-exempt
<p>Johnson County - 126</p> <ul style="list-style-type: none">▪ 115 new exempt▪ 7 new non-exempt▪ 1 existing exempt▪ 2 existing non-exempt▪ 1 plugged	<p>Somervell County - 17</p> <ul style="list-style-type: none">▪ 14 new exempt▪ 2 existing exempt▪ 1 existing non-exempt



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 registered in 2018 by stratigraphy is as follows:

<ul style="list-style-type: none"> Younger aquifers – 4 <ul style="list-style-type: none"> Ellis County – 1 Hill County – 1 Johnson – 2 	<ul style="list-style-type: none"> Woodbine Aquifer – 39 <ul style="list-style-type: none"> Johnson County – 19 Ellis County – 15 Hill County – 5
<ul style="list-style-type: none"> Washita/Fredericksburg Group – 42 <ul style="list-style-type: none"> Johnson County – 36 Ellis County – 3 Hill County – 3 	<ul style="list-style-type: none"> Paluxy Aquifer – 29 <ul style="list-style-type: none"> Johnson County – 27 Hill County – 2
<ul style="list-style-type: none"> Glen Rose Formation – 37 <ul style="list-style-type: none"> Johnson County – 36 Somervell County – 1 	<ul style="list-style-type: none"> Hensell Aquifer – 2 <ul style="list-style-type: none"> Somervell County – 2
<ul style="list-style-type: none"> Pearsall Formation – 0 	<ul style="list-style-type: none"> Hosston Formation – 25 <ul style="list-style-type: none"> Johnson County – 6 Hill County – 1 Ellis County – 4 Somervell County – 14



The registered wells are also designated as exempt or non-exempt producers. By the close of 2018, there were 523 non-exempt and 950 exempt wells registered.

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.

A.2. - 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 will require 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.

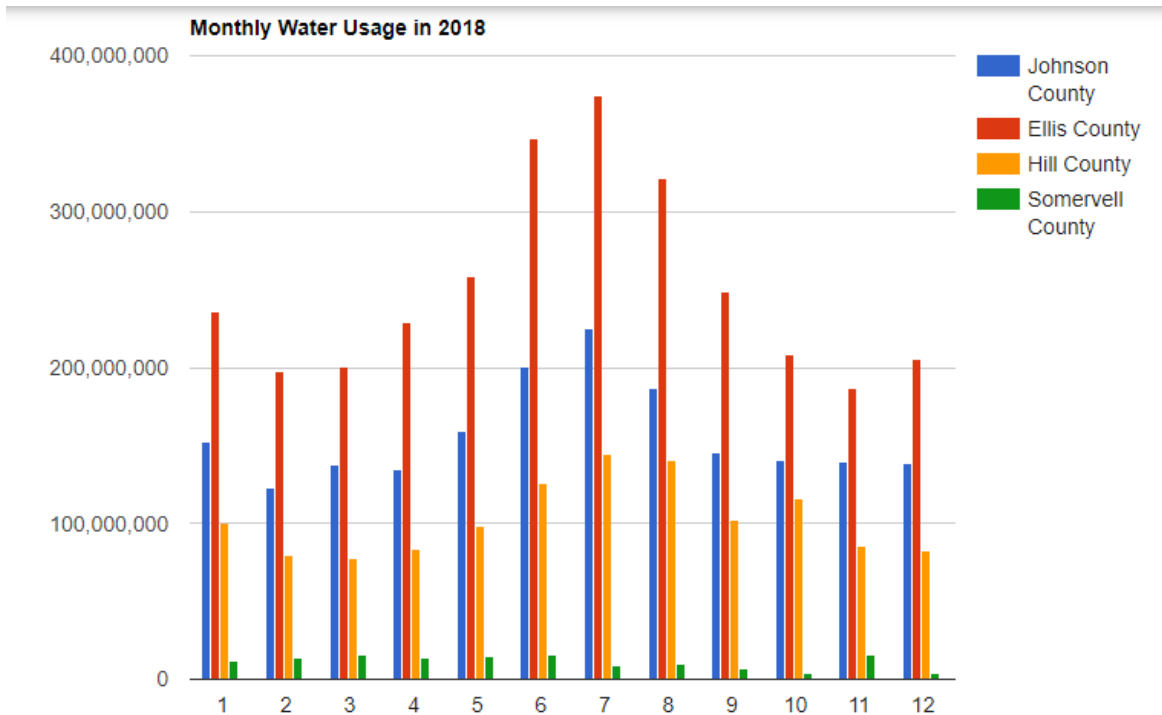
A.3. - Performance Standard: The District will require installation of meters on all non-exempt wells and reporting of production to the District. The annual production of groundwater from non-exempt wells will be included in the Annual Report provided to the Board of Directors.

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 6,263,891,043 gallons of groundwater in 2018. Owners in Ellis County pumped the most of the four counties followed by Johnson, Hill, and Somervell. The months with the greatest usage was July for Johnson, Hill and Ellis and June for Somervell. The lowest usage across the district varied with February being the lowest in Johnson County, March in Hill County, October in Somervell County and November in Ellis County.

Monthly Water Usage by County



Month	Johnson County	Ellis County	Hill County	Somervell County	Total
1	152,232,764	235,611,627	100,405,680	11,570,826	499,820,897
2	122,916,356	197,975,278	79,171,270	13,306,282	413,369,186
3	137,691,632	200,110,545	78,106,642	15,364,337	431,273,156
4	134,697,582	228,976,405	83,444,048	13,318,146	460,436,181
5	158,841,889	258,559,413	98,263,782	14,673,304	530,338,388
6	200,371,810	346,951,652	125,785,421	15,648,678	688,757,561
7	225,384,525	374,661,424	144,290,592	9,264,684	753,601,225
8	186,631,161	321,074,754	140,106,353	9,539,424	657,351,692
9	145,050,736	248,165,713	102,473,120	6,807,159	502,496,728
10	140,692,952	208,548,707	116,219,133	3,781,169	469,241,961
11	139,644,160	186,360,220	85,077,950	15,595,675	426,678,005
12	138,152,404	205,575,127	82,617,250	4,181,282	430,526,063
Total	1,882,307,971	3,012,570,865	1,235,961,241	133,050,966	6,263,891,043

District Water User Groups

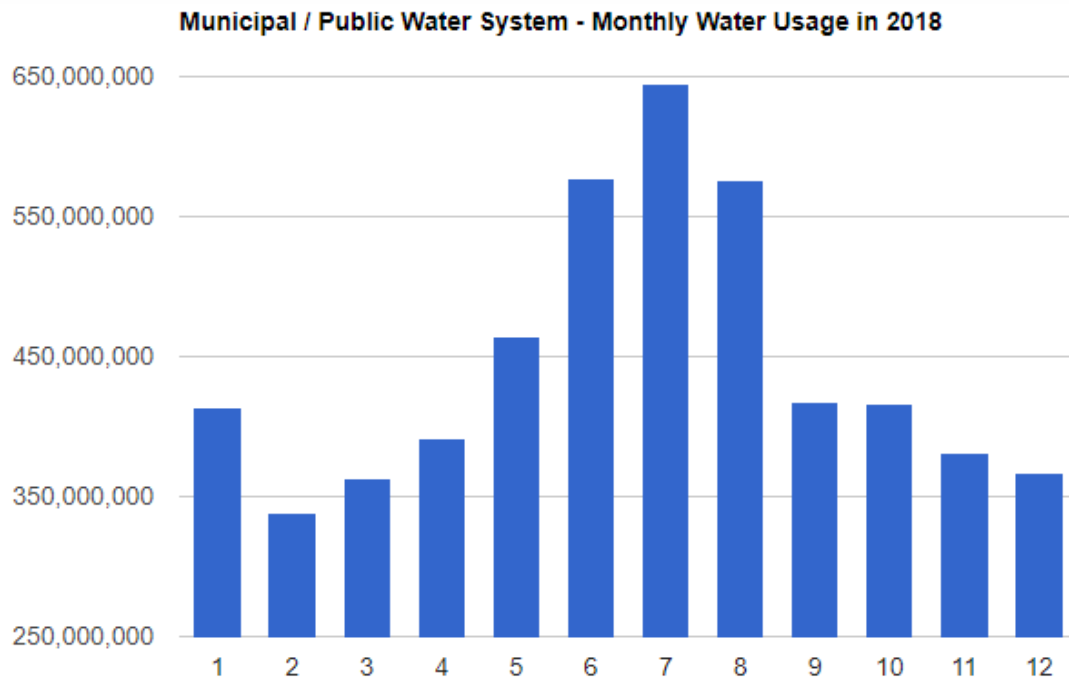
The majority of groundwater used in the district is for municipal/public water supply systems with a reported 5,351,930,445 gallons pumped in 2018. This amount is an increase of 373,038,989 gallons over totals reported for 2017. The Industrial/Manufacturing sector reported the second greatest usage at 784,480,396 gallons. This is a decrease of 85,567,200 gallons from totals reported for 2017. There has also been a large increase in surface impoundments, used mostly for irrigation.

Water User Group Water Usage		
User Group	2018 Usage	2017 Usage
Municipal/Public Water Supply	5,351,930,445	4,978,891,456
Industrial/Manufacturing	784,480,396	870,047,596
Commercial/Small Business	34,199,828	33,078,651
Golf Course Irrigation	8,302,910	6,847,664
Oil & Gas Production	10,650,197	28,881,450
Surface Impoundment/Other*	74,327,267	10,425,888
Annual totals	6,263,891,043	5,928,172,705

*Uncategorized as to water user group

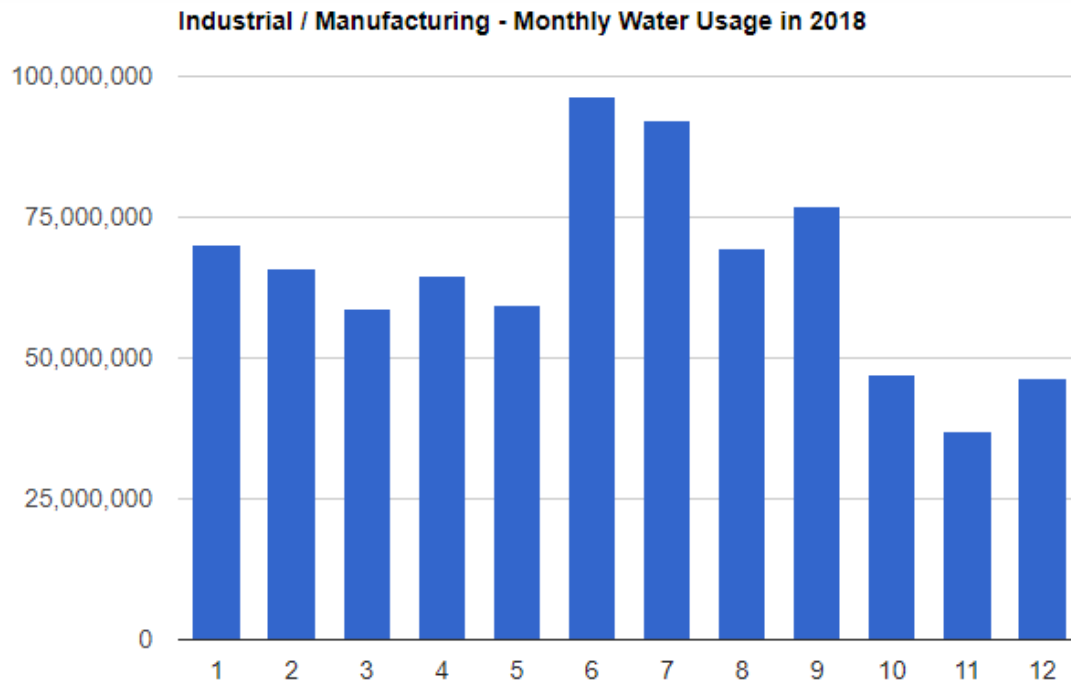


Monthly Water Usage by Sector – Municipal/Public Water Supply (2018)



Month	Usage
1	413,717,786
2	338,570,341
3	362,894,904
4	390,961,928
5	464,850,000
6	577,581,681
7	645,293,986
8	576,544,461
9	417,593,074
10	415,838,219
11	381,444,660
12	366,639,405
Total	5,351,930,445

Monthly Water Usage by Sector – Industrial/Manufacturing (2018)

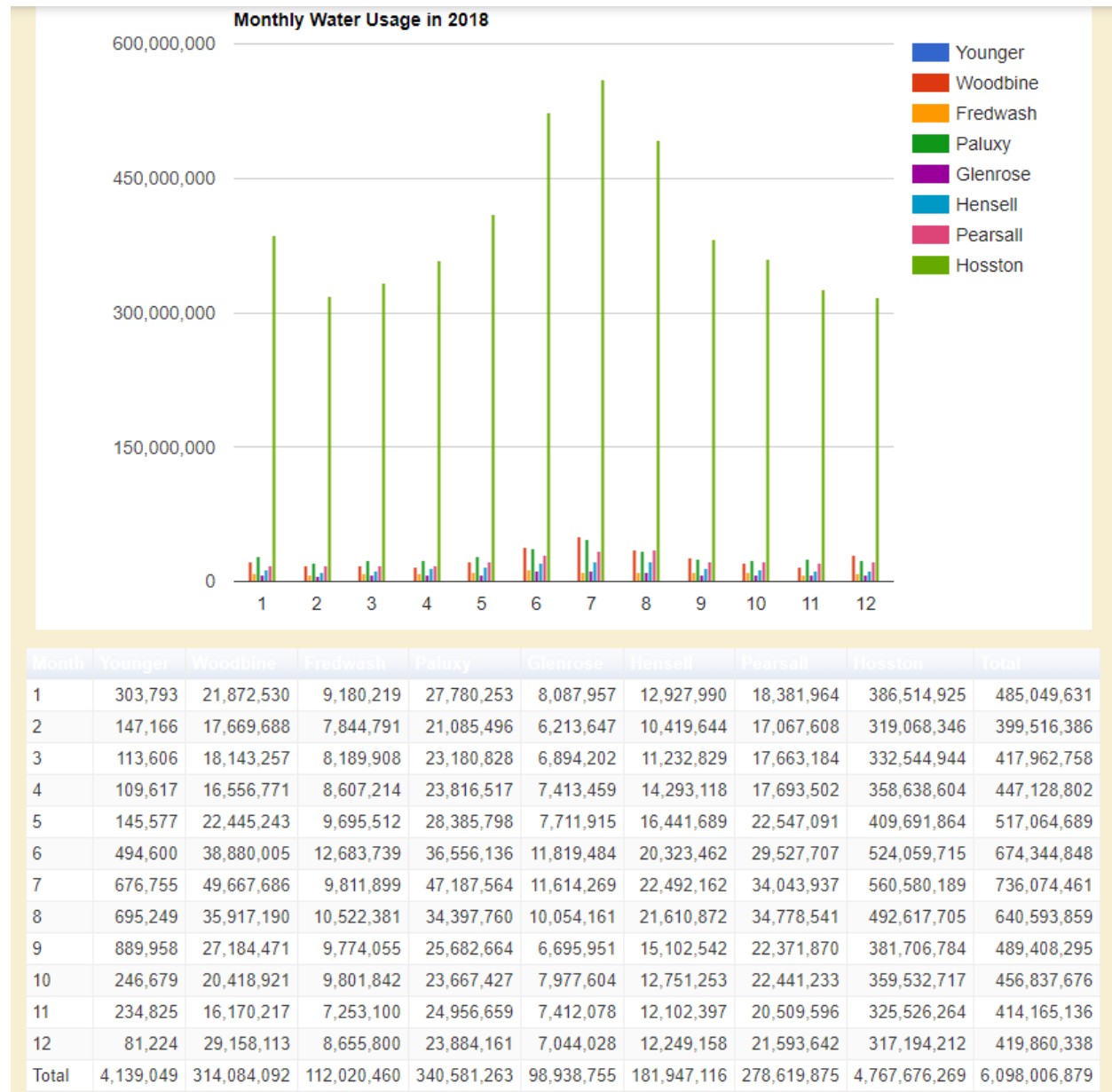


Month	Usage
1	70,156,605
2	65,927,870
3	58,648,699
4	64,545,675
5	59,303,883
6	96,472,787
7	92,163,269
8	69,605,656
9	76,890,630
10	47,213,323
11	37,092,558
12	46,459,441
Total	784,480,396

Groundwater Usage by Aquifer

One of the goals of the database is the ability to determine groundwater usage by aquifer. The following graph depicts usage reported by the aquifer being accessed.

Monthly Water Usage by Aquifer

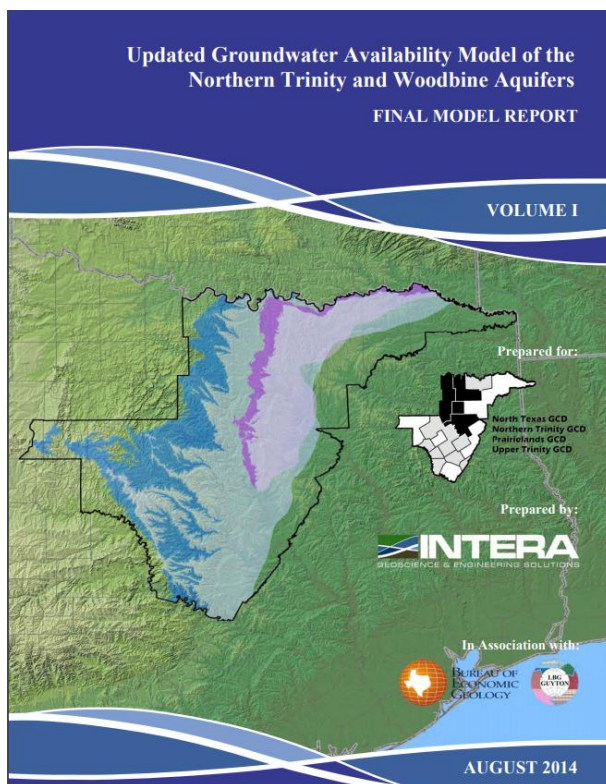


Methodology to Determine Production from Exempt Wells

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

A.4. - 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, LBG-Guyton Associates, 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 will also be 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.

B.1. - 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 *Temporary 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 2018 is 6,263,891,043 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.

B.2. - 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 2018, 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 our 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 2018 will not occur until later in 2019, a "pre-audit" total of \$1,122,815 was paid to the District in total groundwater use fees in 2018.

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.

B.3. - Performance Standard: The District will compare existing state records and field staff observations with the well registration database to identify noncompliant well owners.

Several compliance issues were encountered in 2018, most of which were for failure to report water production and pay water use fees on time. There was one non-exempt well found that had not been reporting to the district. The district collected \$2,460.67 in late fees and civil penalties.

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

B.4. - Performance Standard: Report to the Board as needed and include the number of investigations in the Annual Report.

During 2018 there was one report of groundwater waste that required district staff attention. Upon investigation, there was a well keeping a pond overflowing and flowing into the road ditch. The owner agreed to turn off the well until it was needed and understands the District's rules on groundwater waste.



Typical water meter

Addressing Conjunctive Surface Water Management Issues

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.

C.1. - 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 insure 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 Public Relations & Education Administrator attended both Region C meetings held in 2018 on April 9 and August 20. The Board President serves as a voting member of the Region G Water Planning Group and attended one of the three 2018 meetings on May 9, 2018.

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.

C.2. - 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.

Beyond interacting with the RWPGs at regional meetings, the General Manager, as chair of the Texas Water Conservation Association Groundwater Panel and served as a member of the association's Groundwater Committee which met during the legislative interim to discuss and develop strategies for the upcoming legislative session. Additionally, he served on the Legislative Committee of the Texas Alliance of Groundwater Districts and was actively engaged in meeting with lawmakers and advising legislative planning group subcommittees studying the various proposed bills related to groundwater issues.



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.

D.1. - 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 2018, 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 the interim activities prior to the 86th Session of the Texas Legislature.

Injection Well Application Monitoring

The District developed 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 (“RCT”) does not provide notification of injection well applications filed with the RCT to groundwater conservation districts, the District retained an outside contractor, *Statewide Plat Services*, to monitor all injection well applications filed with the RCT 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 RCT 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 2018, 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.

D.2. - 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.

There were two instances of non-compliance was found in 2018 with oil and gas activities. These were quickly handled and did not advance past the initial penalty stage.

Addressing drought conditions

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.

E.1. - 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 2018, 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. 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. Pumpage in the district follows annual seasonal needs.

Addressing Topics of Conservation and Public Awareness

Conservation and Public Awareness

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.

F.1. - 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, Midlothian Mirror, and the Waxahachie Daily Light*. Copies of the submitted articles follow along with the newspaper clippings of items published in 2018.



Prairielands GCD Water Education Trailer

Contact

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A Gardening To-Do When It's below 32

Cleburne, TX

January 17, 2018 – For Immediate Release

Plan changes to your existing landscape now

Here in North Central Texas, it sometimes gets too cold to go out and work in the garden. Instead of watching cat videos on YouTube all day, visit one of our area's best online gardening-help sites and start planning an upgrade or a new fresh look for your home's landscape that will also save water, time, and money.

In 2000, the North Central Texas Council of Governments along with its member cities, launched the award-winning Texas SmartScape™ program. A low-water use, low-maintenance gardening program developed especially for the Dallas-Fort Worth area, Texas SmartScape™ was originally distributed on CDs in May, 2001. In 2003, the program jumped to the updatable Internet version that it is today. (www.txsmartscape.com)

The website can walk you through redesigning your entire home landscape or just that one ugly little corner of the yard that has been annoying you since you bought your home. It will help you keep in mind your needs for your landscape as well as the needs of the landscape itself (soil, mulch, water.)

One of the site's best features is its easy-peasy plant search engine that contains only plants that are native or adapted to our area, weather, and climate. You want something that has yellow flowers that bloom in spring in full shade and will come back year after year? You can search for that (OOH, Texas Columbine), and the website will have a picture and information all about the suggested plants.

While you're staying warm inside and planning your garden facelift, keep in mind a couple of other aspects besides new plants.

- Rather than tackling the whole yard, pick a single area and focus your efforts on that. Looking at the entire yard at once can quickly become overwhelming and you may decide to throw in the towel before you even pick up a trowel.
- Group plantings according to water requirements.
- Avoid creating hard-to-mow areas to reduce the amount of future yard maintenance.
- Walkways and patios provide space that never needs to be watered or mowed. These spaces can also add value to your property.

Creating a plan for your home landscaping with these considerations in mind can save you time and money in both the short and long run. Knowing what you need before you go to the nursery later this spring gives you focus and a shopping list to work from. Having already done your research, you'll avoid buying plants that won't thrive in your landscape, and purchasing plants that are suited to our area may save you from having to repeat this process year after year. In addition, reducing grassy areas and replacing them with low-water-need plants or no-water-needed walkways will reduce the amount of supplemental watering required during the summer which will be reflected on your water bill. A lower maintenance yard may also impact the time you spend working on your yard instead of just enjoying its beauty.

For more on low-water use, low-maintenance landscaping, go to www.txsmartscape.com, and visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Contact**Karen Siddall****(817) 556-2299**

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Prairielands Groundwater Conservation District says “Get hosed this spring!” (in a good way, of course!)

Cleburne, TX

February 6, 2018 – For Immediate Release

Spring is coming to the Prairieland Groundwater Conservation District which includes Ellis, Hill, Johnson, and Somervell counties, and one of the tasks area homeowners will pick back up as the weather gets warmer is yard maintenance. To make that chore a little easier, most of us keep the necessary tools on hand. Now, while the weather is cooler, and before they're needed, is the time to give those tools a good examination to make sure they're as ready for action as you are!

One tool that many overlook is the garden hose. Using the right garden hose in good condition will not only get your watering job done, but will prevent water waste, and save you money on your water bill.

It is estimated that a good garden hose should last from 5 and 10 years which is a pretty broad range. Like most anything, that estimate is affected by age, use, and construction (not a lot of maintenance is involved with a hose other than draining and storing for winter).

Check the hose's body for cracks and holes and the couplings at either end. Depending on what you find and your skills and interests, you may not need to replace the whole hose. There are instructions and videos galore on the internet for making your own repairs. Repair kits are even available at your local hardware store.

However, if you need a new hose, there are a couple of considerations before you buy.

- 1) What are you going to use it for? – The most common uses that come to mind are for watering a lawn, irrigating a flower bed or vegetable garden, or for keeping the ground around a home foundation watered during the high heat of the summer when the ground is really, really dry.

Your uses or needs should determine the type or style of garden hose you select. Hooking up to a movable sprinkler? You're going to need a traditional hose with a round profile. Irrigating a garden or flower bed, you may want to consider a soaker hose. A soaker hose is a hose that allows water to slowly leak through its walls giving the ground around it time to fully soak up the moisture. Soaker hoses are recommended, too, because they can reduce

water waste. Because the water drops are not being hurled into the air to reach their target, less is subject to evaporation or being blown away.

You will also encounter, or are familiar with, flat hoses however, these seem to have fallen out of favor with many gardeners for a couple of reasons. One, to use the thing, you've got to roll out the whole hose whether you've got that large of an area to water or not. They can be heavy and cumbersome, and there is some water waste as drops are thrown into the air where they evaporate.

- 2) Length – Hoses typically come in multiples of 25 feet. Rather than paying for more hose that you need (or will want to move around), measure before you go to the store. If you need a hose to use in multiple areas of your yard, determine the distance to the farther place in the yard where it will be used. Select a hose just over that length.
- 3) Diameter – Who knew? Hoses come in three common diameters on the inside: ¼-inch, 5/8-inch, and ½-inch. (A quick research trip to the local hardware store revealed the majority to be of 5/8-inch variety.)

The larger the diameter, the more water will come out at one time. If the weight of the hose could be an issue for you – say you're using your hose to hand water plants and hanging baskets on your patio, the smaller, ½ inch hose may be your best bet.

- 4) Material – The big question here is rubber vs. vinyl. Rubber is said to be more durable but is heavier and pricier. Vinyl hoses are cheaper and much lighter, but they kink easier.

Another important material to consider is that of the couplings or fittings at either end. Many are made of brass or are chrome-plated, but there are plastic ones available as well. General consensus is to avoid the plastic; they break. As for the rest, check for durability of the metal. If you accidentally step on the hose coupling as it lays in the yard, is it going to bend and become misshapen? Even if it stays attached to the whatever it was connected to, a misshapen coupling will allow for water leakage and water waste. Couplings can freeze up sometimes so consider getting a hose with octagonal-shaped couplings, so you can use a wrench to loosen things up if the need arises.

Your yard should be a place of peace and enjoyment, and proper preparation may very well be the key to attaining that. Taking a little time now, in advance of the lawn maintenance season, will cut down on frustration and wasted time when the weather is beautiful, and you'd rather be out enjoying your yard and not sweating over it.

For more information about low maintenance home landscaping and water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Contact**Karen Siddall****(817) 556-2299**

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National Groundwater Awareness Week is March 11 – 17, 2018

Cleburne, TX

March 1, 2018 – For Immediate Release

The week of March 11 - 17, 2018 is National Groundwater Awareness Week. In Texas, groundwater provides 62% of all freshwater used, supplies 78% of the water used by agriculture, and is a source of drinking water (from both public and private wells) for over 11.14 million Texans.

In the Prairielands Groundwater Conservation District which includes Ellis, Hill, Johnson, and Somervell counties well owners reported using almost 6 billion gallons of groundwater in 2016 alone. The majority of those gallons, approximately 83%, were pumped to provide water to homes, businesses, and schools. The second largest category of groundwater use in the four-county area was for manufacturing or industrial uses so many of us also depend on groundwater for our livelihood.

During this week of groundwater recognition, keep in mind the following facts about this hidden resource.

- Groundwater is found in the spaces between particles and cracks in underground rock in formations known as aquifers. Even though it is out of sight, groundwater should not be far out of mind.
- Although the groundwater in the aquifers beneath our feet (the Trinity and the Woodbine aquifers) is replenishable, it does so very slowly. Groundwater is recharged by precipitation falling on the surface of the land and seeping into the water-bearing layers of sand and gravel that make up the aquifers. It takes thousands of years for water to move through the tightly-compacted layers from where it can seep into the ground to where we are located.
- Pollutants that can contaminate rainwater seeping into the ground can also contaminate the aquifer it recharges.
- It is recommended that water wells be given an annual checkup to make sure equipment is in good working order especially in advance of peak water use times of the year (spring and summer). No one likes to be out of water especially during times when it is needed the most.

Texans are fortunate to have the advantage of vast natural resources, among them clean and safe sources of drinking water. However, to ensure these continued resources we must all take a greater role in protecting our sources of drinking water through conservation and pollution prevention.

Prairielands GCD may be able to help. For ideas on how to conserve water, visit the Prairielands GCD website at www.prairielandsgcd.org. And should you encounter incidents of water waste or water pollution, please contact the district office at (817) 556-2299.

Contact

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During drought, every drop counts

Cleburne, TX

August 2, 2018 – For Immediate Release

Recently, the city of Cleburne and the Brazos River Authority asked residents to voluntarily conserve water. In a Wednesday, July 25 Cleburne Times-Review article, the city offered a couple of tips to conserve water. All are good and doable but one, in particular, can really make a dent in your family's daily water consumption. And it's one that may carry with it memories of military service for some of our family members.

That tip? Take short showers.

Short is a relative term but if you search online "What is a short shower?" one of the most common offerings is a discussion of the "navy" shower. Also referred to as a "combat," "military," "sea," or "G.I." shower., this water-conserving shower may be familiar to relatives that are veterans whose duty station necessitated strict conservation of water resources.

It is estimated that the average shower lasts 8.2 minutes. If your showerhead was manufactured before 1980, it probably produces around 5 gallons per minute of use. An 8.2-minute shower would consume 41 gallons of water (not counting the amount of unused water that went down the drain getting to the desired temperature.)

Newer showerheads typically produce 2.5 gallons per minute with the newest Water Sense-rated models emitting 2 gallons or less per each minute they run. That same 8.2-minute shower with one of the newer models would cut that consumption in half but you're still looking at 20 gallons or so.

However, the "navy" shower method can reduce your water waste even more substantially.

This method of showering involves turning OFF the water in the middle of the process. You turn on the shower to wet skin (and hair) then turn off the tap to soap up, scrub, and shampoo. The shower is turned back on to rinse. No “soaking” in the shower! The goal is to reduce the amount of time the shower is turned on to a scanty 2 minutes!

Even with the oldest showerhead, the two-minute shower would reduce your water use to 10 gallons for the entire chore! If your home has a higher-efficiency showerhead, a “navy” shower would expend 5 gallons or less for your entire shower. Multiply that savings by the number of participating family members and the number of showers taken and gallons saved can really add up to something significant.

For additional water savings, keep a clean bucket in the shower to catch some of the water expended just warming things up. Use whatever water is collected in the bucket for additional rinse water when you shampoo or for watering plants, flushing the toilet (fill the reservoir after a flush rather than letting it fill automatically), or even small cleaning jobs (washing toothpaste off the sink, mopping the floor).

A two-minute shower goal may be just too extreme for most of us, but keep in mind that the water we save today increases the amount of water we have for use tomorrow and may stave off changing volunteer conservation to mandatory restrictions.

For more information about water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

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Fall is Ideal for Planting Trees and Shrubs

Cleburne, TX

September 6, 2018 – For Immediate Release

Planting trees and shrubs that are native (or well adapted) to our area can benefit homeowners in a couple of ways. Natives have a better change of thriving in our heat and under our on-again, off-again watering restrictions so they won't need replacing after a bout of extreme weather. Also, not having to provide supplemental watering for these natural beauties saves you time, water, and money.

According to Texas AgriLife Extension, fall is the perfect time to add a new tree or grouping of shrubs to your landscape. Planting during the fall months of September through December has distinct advantages.

Plant roots grow anytime the soil temperature is 40 degrees or higher, which may occur all winter in Texas.

During the winter months, the root systems of the fall-planted specimens develop and become established. When spring arrives, this expanded root system can support and take advantage of the full surge of spring growth.

According to Bonnie Reese, owner of Beautiful Landscapes, a landscape designer and consultant, some of the best trees for our area include Chinquapin Oak, Texas or Shumard Red Oak, Cedar Elm (but only if mistletoe is not a neighborhood problem), Burr Oak, and Live Oak. These are great large native shade trees. Lacey Oak is a small native evergreen oak and Caddo or Shantung Maples are smaller shade trees but are not native to our area.

For smaller ornamental native trees, consider Vitex, Possumhaw Holly, Yaupon Holly and Carolina Buckthorn. A couple of noteworthy non-native ornamental trees are Desert Willow, Chitalpa, and Crape Myrtle.

When considering shrubs, there are just not many native shrubs that are suitable for landscapes except for Texas Sage, various yucca and agave. Non-native considerations could include many varieties of nandina, yew, holly and abelia.

When making selections, homeowners should keep in mind the ultimate size that the tree or shrub will attain and whether that will work for the location they are being planted, water needs, and the amount of sun the location receives on a daily basis. Remember new plants should be monitored and watered deeply as needed and allowed to dry between irrigations. Always water plants before a hard freeze if we have been in drought leading up to the freeze.

Texas SmartScape (www.txsmartscape.com) hosted by the North Central Texas Council of Governments was designed to help local residents determine some of these factors. The site features do-it-yourselfer design assistance as well as a simple-to-use Search function that suggests native or adapted plants that perform well in our area under a wide variety of circumstances. You can learn more about Bonnie Reese at beautifullandscapes.net.

Contact

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New Well Spacing Rules to be Discussed/Adopted

Cleburne, TX

September 22, 2018 – For Immediate Release

The Prairielands Groundwater Conservation District is finalizing permanent rules for water wells that will determine future district decisions and operations. Among the new rules are regulations setting spacing requirements for new water well installations. Existing wells are grandfathered from these rules. Well spacing rules attempt to limit a pumping well's impact on other wells but are generally not intended to regulate the total amount of pumping from a well or manage the entire aquifer.

New exempt wells, those that produce less than 17.36 gallons per minute, must be located at least 50 feet from any property line. Wells that produce more than that amount will be vetted by the district using existent groundwater data previously collected from the location of the proposed well and the aquifer in which it will be drilled.

These new rules and others will be discussed at the upcoming monthly Board Meeting and public meeting on Monday, October 15, 2018, starting at 9 a.m. in the Cross Timbers Room of the Cleburne Conference Center, 1501 W. Henderson, Cleburne, TX, 76033. Adoption of the permanent rules is slated for a public hearing on Monday, November 26, 2018, also to be held at the Cleburne Conference Center.

Once adopted, the new rules will become effective on January 1, 2019.

For more information regarding these and other proposed permanent rules, please contact the Prairielands Groundwater Conservation District at (817) 556-2299 or at the district offices located on the first floor of the Liberty Hotel, 205 S. Caddo St., Cleburne, TX, 76031.

Contact

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Don't Let Your Water Bill Become a Monster!

Cleburne, TX

October 24, 2018 – For Immediate Release

Although the recent rains have taken the outdoor watering burden off your back, there could be a monster lurking right around the corner. The holidays are fast approaching, and with them comes more family, more friends, more cooking, more cleaning, more indoor water use. To keep from creating a monster of a water bill, put a few simple water conservation practices in place now and tame that beast before it can say “BOO!”

More family, more friends at home

Turn off the water while you brush your teeth and save around two gallons per minute. If you brush for a full two minutes as dentists recommend, that's a water savings of almost four gallons every time you brush.

Adhere to using one glass for water per person per day. Each person reusing their glass cuts down on the number to wash.

For cold drinks, keep a pitcher of water in the refrigerator instead of running the tap. When running a bath, plug the tub before turning the water on, then adjust the temperature as the tub fills up. However, a short shower uses less water than a full bath.

More cooking, more cleaning

Don't use running water to thaw food. Defrost food in the refrigerator for water efficiency and food safety.

Wash fruit and vegetables in a pan of water rather than running water from the tap.

Use the garbage disposal sparingly. Compost vegetable food waste instead and save gallons of water every time you would have used it.

Soak pots and pans instead of letting the water run while you scrape them clean.

Keep in mind that a dishwasher uses less water to clean a full load of dishes than doing them by hand. Energy Star™ dishwashers use between 4 and 6 gallons of water per load depending on the cycle selected. If washing dishes by hand is necessary, fill the sink and rinse the dishes when they have all been scraped and scrubbed.

When doing laundry, match the water level to the size of the load.

Small adjustments such as these will reduce your daily water consumption, but more importantly, their daily practice can lead to them becoming long-term habits. Over time, these habits can add up to some significant savings of water and money, and instead of creating a monster your water bill will only be a ghost of its former self.

For more information about water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Contact

Karen Siddall

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New Water Well Rules Proposed

Cleburne, TX

November 16, 2018 – For Immediate Release

The Prairielands GCD is currently finalizing proposed permanent rules to assist in managing the underground water resources in our area. The district which covers Ellis, Hill, Johnson, and Somervell counties was created by the Texas legislature in 2009 and is taxed with the directive to conserve, protect and enhance the groundwater resources in its jurisdiction.

While the permanent rules largely guide the installation and operation of wells with production volumes over 17.36 gallons per minute, small household well owners may wonder about the rule provisions for smaller wells such as theirs.

According to Stephanie Rexrode, records administrator for Prairielands GCD, “The new rules will have little, if any, impact on existing household or livestock wells. However, new installations will have to comply with spacing requirements. New well placements must be a minimum of 50 feet from any property line. Certain exceptions for property line requirements and tract size limitations may be considered by the district’s board of directors.”

A copy of the proposed permanent District Rules may be requested from Ms. Rexrode by email at stephanie@prairielandsgcd.org, is available for reviewing or downloading at www.prairielandsgcd.org, and may be reviewed, inspected, or obtained in person at the District office located at 205 S. Caddo St., Cleburne, TX, 76031. For more information, contact the District’s General Manager, Jim Conkwright, at (817) 556-2299.

Resolve To Conserve Water In The New Year

At this time of year, thoughts inevitably turn to making resolutions for the future. This year, along with all our weight loss, exercise, and financial goals, the Prairielands Groundwater Conservation District encourages the public to include a couple of long-term money-savers in the mix.

If you're on Facebook, you've seen the "Save a penny today, double it tomorrow and so on" scheme that will eventually net you a pretty good-sized payoff come the end of the year. But what if you could make a few household adjustments that, once completed, would net you savings every time you turned on the tap?

Small change

Number 1: Install an aerator on every faucet in your home (and check and rinse out those already in use.) An aerator is the little screw-on device on your faucet where the water comes out. Aerator slows the flow of water coming out to a consistent 1.6 - 2.2 gallons per minute, and can be found at the local hardware/home improvement store for as little as a dollar.

They even have special little wrenches for those that need some help with removal. Restricting the flow with an aerator limits the volume and increases the pressure of the water coming out. You'll use less water per minute you have it running but it will be a stronger, more effective stream.

Number 2: Get a shower timer. You may be surprised at how long you actually stay in the shower, and reducing that time can add up to some decent water savings. Actually, the U.S. Environmental Protection Agency estimates that average shower is in the seven to 10-minute range.

Shower timers are available online for as little as \$3 for a manual "sand in the hourglass" version that runs down from a five-minute shower to higher tech types that will even restrict the water flow when time is up for around \$150 and more.

Number 3: If your shower fills a one-gallon bucket in less than 20 seconds, replace the showerhead with a water-efficient model. Water Sense-certified showerheads (they'll have a label) have been tested and determined to reduce the volume of water coming out to no more than 2.2 gallons per minute. That way, your 10-minute shower is now a 22-gallon shower. (Typically, a short shower uses less water than filling up the tub as a full-sized bathtub holds up to 75 gallons.)

New showerheads range in price, but you can pick them up at the hardware store/home improvement center for under \$20. Even some of the large "rainstorm" style showerheads are Water Sense™-certified.

Chunk O'Change

Number 4: Replace the old toilet with a new low-flow, high-efficiency model. This is a product that has really improved its performance since first being introduced. Most notable of those im-

provements is the flushing and clean evacuation of the contents in the bowl. The top complaint about the early models was that users had to flush two or three times to accomplish what the old models did in one—negating any water or money-savings in the process. But now, one flush is all that's required, and there are a variety of designs, bowl shapes, and seat heights on the market for a price range of under \$100 to high-end units over \$500.

Number 5: Replace the older dishwasher with one with an Energy Star™ rating. Although older dishwashers only used between 10 and 12 gallons of water per cycle, advancements in dishwasher and dishwasher detergents have gotten those totals down to four to six gallons depending on the cycle and the condition (how dirty the dishes are) of the load.

Pricing these dishwashers at a variety of local appliance outlets revealed that you can obtain one of these Energy Star™ rated dishwashers for less than \$250. And water savings isn't the only plus, as the name implies, you're going to use less electricity as well.

Number 6: Replace the older washing machine. Back in grandma's day, a load of washing would require about 40 gallons of water to get the job done, however, improvements in laundry technology—both from a mechanical standpoint and a chemical one—have cut that volume almost in half. New washers typically can do a full load of clothes in approximately 25 gallons.

There are a couple of high-efficiency models with settings that can reduce the requirement to a mere 12 gallons. No matter the model though, the water conserving feature that really hits the spot is the water-level adjustment. Matching the amount of water used to the size/condition of the load saves water. Choosing an Energy Star™ unit can also save you money on your energy bill. Using a laundry detergent formulated to be used in cold water can also help

get your clothes clean and reduce your energy usage. High-efficiency, Energy Star™ washers are available at numerous appliance outlets and for under \$500.

One thing to keep in mind as you consider purchasing a major appliance, such as a dishwasher or washer, is timing. Most shopping sites recommend deferring these purchases to September and October to take advantage of model year changes (when manufacturers introduce their new models).

Significant sales of new "last year's models" ensue. In recent years, Black Friday and pre-Black Friday sales are showing up and extending the saving opportunities into the month of November. But if the goal is to conserve water and save money, waiting and setting aside funds for the purchase is a plan that serves both interests.

For more information about water conservation, visit the conservation district's website at www.prairielandsgcd.org.

Plan changes to your existing landscape now

SPECIAL TO THE CTR

Here in North Central Texas, it sometimes gets too cold to go out and work in the garden. Instead of watching cat videos on YouTube all day, visit one of our area's best on-line gardening-help sites and start planning an upgrade or a new fresh look for your home's landscape that will also save water, time, and money.

In 2000, the North Central Texas Council of Governments along with its member cities, launched the award-winning Texas SmartScape program. A low-water use, low-maintenance gardening

program developed especially for the Dallas-Fort Worth area, Texas SmartScape was originally distributed on CDs in May 2001.

In 2003, the program jumped to the updatable Internet version — www.txsmart-scape.com — that it is today.

The website can walk you through redesigning your entire home landscape or just that one ugly little corner of the yard that has been annoying you since you bought your home.

It will help you keep in mind your needs for your landscape as well as the needs of the landscape itself (soil, mulch, water.)

One of the site's best features is its easy-peasy plant search engine that contains only plants that are native or adapted to our area, weather, and climate.

You want something that has yellow flowers that bloom in spring in full shade and will come back year after year? You can search for that (OOH, Texas Columbine), and the website will have a picture and information all about the suggested plants.

While you're staying warm inside and planning your garden facelift, keep in mind a couple of other aspects besides new plants.

■ Rather than tackling the

whole yard, pick a single area and focus your efforts on that. Looking at the entire yard at once can quickly become overwhelming and you may decide to throw in the towel before you even pick up a trowel.

■ Group plantings according to water requirements.

■ Avoid creating hard-to-mow areas to reduce the amount of future yard maintenance.

■ Walkways and patios provide space that never needs to be watered or mowed. These spaces can also add value to your property.

Creating a plan for your home landscaping with these

considerations in mind can save you time and money in both the short and long run.

Knowing what you need before you go to the nursery later this spring gives you focus and a shopping list to work from. Having already done your research, you'll avoid buying plants that won't thrive in your landscape, and purchasing plants that are suited to our area may save you from having to repeat this process year after year.

In addition, reducing grassy areas and replacing them with low-water-needed

plants or no-water-needed walkways will reduce the amount of supplemental watering required during the summer which will be reflected on your water bill. A lower maintenance yard may also impact the time you spend working on your yard instead of just enjoying its beauty.

For more on low-water use, low-maintenance landscaping, visit www.txsmart-scape.com, and visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Cleburne Times-Review, Thursday, January 25, 2018, p. 9



Prairielands Groundwater Conservation District Public Relations and Education Administrator Karen Siddall visits with Kauffman Leadership Academy sophomores last year. As a school of choice, KLA offers a different learning environment than public schools.

Ashley Rose/CTR

Cleburne Times-Review, Friday, January 26, 2018, p. 1



Prairielands Groundwater Conservation District Education Administrator Karen Siddall, right, speaks with a group of members from Young Professionals of Cleburne.

"This is Texas" news magazine, Cleburne Chamber of Commerce, 2018

PGCD says 'get hosed this spring' (in a good way)

SPECIAL TO THE CTR

Spring is coming to the Prairieland Groundwater Conservation District, which includes Ellis, Hill, Johnson and Somervell counties, and one of the tasks area homeowners will pick back up as the weather gets warmer is yard maintenance.

To make that chore a little easier, most of us keep the necessary tools on hand. Now, while the weather is cooler, and before they're needed, is the time to give those tools a good examination to make sure they're as ready for action as you are.

One tool that many overlook is the garden hose. Using the right garden hose in good condition will not only get your watering job done, but will prevent water waste, and save you money on your water bill.

It is estimated that a good garden hose should last from five to 10 years, which is a pretty broad range. Like most anything, that estimate is affected by age, use, and construction (not a lot of maintenance is involved with a hose other than draining and storing for winter).

Check the hose's body for cracks and holes and the couplings at either end. Depending on what you find and your skills and interests, you may not need to replace the whole hose.

There are instructions and videos galore on the internet for making your own repairs. Repair kits are even available



Courtesy photo

Jeny Siddall peruses hoses at a local store.

at your local hardware store.

However, if you need a new hose, there are a couple of considerations before you buy.

What are you going to use it for?

The most common uses that come to mind are for watering a lawn, irrigating a flower bed or vegetable garden, or for keeping the ground around a home foundation watered during the

high heat of the summer when the ground is really, really dry.

Your uses or needs should determine the type or style of garden hose you select. Hooking up to a movable sprinkler? You're going to need a traditional hose with a round profile. Irrigating a garden or flower bed, you may want to consider a soaker hose.

A soaker hose is a hose that allows water to slowly

leak through its walls giving the ground around it time to fully soak up the moisture. Soaker hoses are recommended, too, because they can reduce water waste.

Because the water drops are not being hurled into the air to reach their target, less is subject to evaporation or being blown away.

You will also encounter, or are familiar with, flat hoses however, these seem to have fallen out of favor with many

gardeners for a couple of reasons.

One, to use the thing, you've got to roll out the whole hose whether you've got that large of an area to water or not. They can be heavy and cumbersome, and there is some water waste as drops are thrown into the air where they evaporate.

Length

Hoses typically come in multiples of 25 feet. Rather than paying for more hose than you need (or will want to move around), measure before you go to the store. If you need a hose to use in multiple areas of your yard, determine the distance to the farther place in the yard where it will be used. Select a hose just over that length.

Diameter

Who knew? Hoses come in three common diameters on the inside: 3/4-inch, 5/8-inch and 1/2-inch. A quick research trip to the local hardware store revealed the majority to be of 5/8-inch variety.

The larger the diameter, the more water will come out at one time. If the weight of the hose could be an issue for you – say you're using your hose to hand water plants and hanging baskets on your patio, the smaller, 1/2 inch hose may be your best bet.

Material

The big question here is rubber vs. vinyl. Rubber is said to be more durable but is

heavier and pricier. Vinyl hoses are cheaper and much lighter, but they kink easier.

Another important material to consider is that of the couplings or fittings at either end. Many are made of brass or are chrome-plated, but there are plastic ones available as well. General consensus is to avoid the plastic; they break. As for the rest, check for durability of the metal.

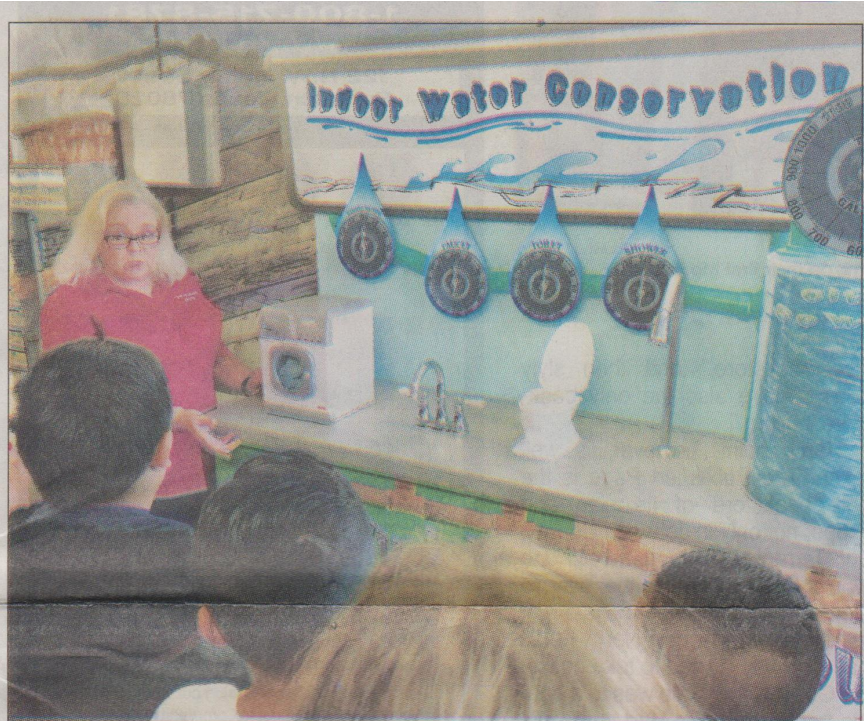
If you accidentally step on the hose coupling as it lays in the yard, is it going to bend and become misshapen? Even if it stays attached to the whatever it was connected to, a misshapen coupling will allow for water leakage and water waste.

Couplings can freeze up sometimes so consider getting a hose with octagonal-shaped couplings, so you can use a wrench to loosen things up if the need arises.

Your yard should be a place of peace and enjoyment, and proper preparation may very well be the key to attaining that. Taking a little time now, in advance of the lawn maintenance season, will cut down on frustration and wasted time when the weather is beautiful, and you'd rather be out enjoying your yard and not sweating over it.

For more information about low maintenance home landscaping and water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Cleburne Times-Review, Thursday, February 8, 2018, p. 11



Courtesy photo

Prairielands Groundwater Conservation District Public Relations & Education Administrator Karen C. Siddall discusses water issues with Coleman Elementary School fourth-graders on March 19.

Coleman hosts Prairielands Water Education Trailer and Texas AgriLife Stream Table

SPECIAL TO THE CTR

On March 19, Prairielands Groundwater Conservation District staff and agents from the Johnson County office of Texas AgriLife visited with fourth-graders at Coleman Elementary School to discuss water issues.

Prairieland's Water Education Trailer was on campus to demonstrate how aquifers, groundwater, and water wells work while the county agents unveiled their brand-new Stream Table which demonstrates erosion and how streams can change course. The two agencies were on hand that day by the arrange-

ment of Coleman science teacher Meagan Dupre.

"The Water Education trailer is basically an interactive museum on wheels and helps students better understand the water cycle and visualize the groundwater and aquifers in the geologic formations beneath our feet in our county," said Karen Siddall, public relations and education administrator for the district. "In addition, once students understand where their water comes from we discuss the ways we use water in daily life and why and how to conserve it."

Prairielands staff participating in the visit were Karen Siddall and David Miller,

trailer wrangler. The Water Education trailer is available for school and community organization presentations and public events in Johnson County at no charge.

To check availability, contact Prairielands Groundwater Conservation District at 817-556-2299 or email ka-rensiddall@prairielandsgcd.org.

Texas AgriLife county extension agents present for the event included Kristen Clark and Justin Hale, who built the Stream Table.

Contact the Johnson County office at 817-556-6370 to inquire about the Stream Table and other Extension programs.

Cleburne Times-Review, Thursday, March 29, 2018, p. 9

Conservation District Offers Spring Tips

Spring is coming to the Prairieland Groundwater Conservation District which includes Ellis, Hill, Johnson and Somervell counties, and one of the tasks area homeowners will pick back up as the weather gets warmer is yard maintenance.

To make that chore a little easier, most of us keep the necessary tools on hand. Now, while the weather is cooler, and before they're needed, is the time to give those tools a good examination to make sure they're as ready for action as you are!

One tool that many overlook is the garden hose. Using the right garden hose in good condition will not only get your watering job done, but will prevent water waste, and save you money on your water bill.

It is estimated that a good garden hose should last from five and 10 years, which is a pretty broad range. Like most anything, that estimate is affected by age, use and construction (not a lot of maintenance is involved with a hose other than draining and storing for winter).

Check the hose's body for cracks and holes and the couplings at either end. Depending on what you find and your skills and interests, you may not need to replace the whole hose. There are instructions and videos galore on the internet for making your own repairs. Repair kits are even available at your local hardware store.

However, if you need a new hose, there are a couple of considerations before you buy.

1. What are you going to use it for? – The most common uses that come to mind are for watering a lawn, irrigating a flower bed or vegetable garden, or for keeping the ground around a home foundation watered during the high heat of the summer when the ground is really, really dry.

Your uses or needs should determine the type or style of garden hose you select. Hooking up to a movable sprinkler? You're going to need a traditional hose with a round profile. Irrigating a garden or flower bed, you may want to consider a soaker hose. A soaker

hose is a hose that allows water to slowly leak through its walls giving the ground around it time to fully soak up the moisture. Soaker hoses are recommended, too, because they can reduce water waste. Because the water drops are not being hurled into the air to reach their target, less is subject to evaporation or being blown away.

You will also encounter, or are familiar with, flat hoses however, these seem to have fallen out of favor with many gardeners for a couple of reasons. One, to use the thing, you've got to roll out the whole hose whether you've got that large of an area to water or not. They can be heavy and cumbersome, and there is some water waste as drops are thrown into the air where they evaporate.

2. Length – Hoses typically come in multiples of 25 feet. Rather than paying for more hose that you need (or will want to move around), measure before you go to the store. If you need a hose to use in multiple areas of your yard, determine the distance to the farther place in the yard where it will be used. Select a hose just over that length.

3. Diameter – Who knew? Hoses come in three common diameters on the inside: 3/4-inch, 5/8-inch and 1/2-inch. A quick research trip to the local hardware store revealed the majority to be of 5/8-inch variety.

The larger the diameter, the more water will come out at one time. If the weight of the hose could be an issue for you – say you're using your hose to hand water plants and hanging baskets on your patio, the smaller, 1/2 inch hose may be your best bet.

4. Material – The big question here is rubber vs. vinyl. Rubber is said to be more durable but is heavier and pricier. Vinyl hoses are cheaper and much lighter, but they kink easier.

Another important material to consider is that of the couplings or fittings at either end. Many are made of brass or are chrome-plated, but there are plastic ones available as well. General consensus is to avoid the plastic; they break. As for the rest, check for durability of the metal.

If you accidentally step on the hose coupling as it lays in the yard, is it going to bend and become misshapen? Even if it stays attached to whatever it was connected to, a misshapen coupling will

allow for water leakage and water waste. Couplings can freeze up sometimes so consider getting a hose with octagonal-shaped couplings, so you can use a wrench to loosen things up if the need arises.

Your yard should be a place of peace and enjoyment, and proper preparation may very well be the key to attaining that. Taking a little time now, in advance of the lawn maintenance season, will cut down on frustration and wasted time when the weather is beautiful, and you'd rather be out enjoying your yard and not sweating over it.

For more information about low maintenance home landscaping and water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

REQUEST FOR
CONSTRUCTION MANAGEMENT AT RISK PROPOSAL
PRAIRIELANDS GROUNDWATER CONSERVATION DISTRICT BUILDING

It is the intent of Prairielands Groundwater Conservation District in Cleburne, Texas, to select, via a Request for Construction Management at Risk Sealed Proposals, a Construction Manager at Risk (CMaR) for the Prairielands GCD Building.

The selection process will be a one-step process. Services will be in two basic phases. Pre-construction services, such as budgeting/cost estimating services, will be included in phase one. Bidding and construction will be in phase two and include the bidding of the various aspects of the project phases and the management of the construction process including coordinating equipment to be installed by owner.

Proposals are to include the information requested, in the sequence and format prescribed. In addition to and separate from the requested information, submitting organizations may provide supplementary materials further describing their capabilities and experience.

Prairielands Groundwater Conservation District reserves the right to reject, in whole or in part, any or all sealed proposals, waive minor technicalities, and award the proposal which represents the best value and best serves the interest of Prairielands Groundwater Conservation District.

Submit Sealed Proposals (three copies and one original) to Prairielands Groundwater Conservation District, 205 South Caddo Street, Cleburne, TX 76031 on or before 2:00 p.m. local time on Tuesday May 8, 2018. Clearly mark proposals as "SEALED PROPOSAL" and direct to the attention of "Prairielands Groundwater Conservation District – Attn: Jim Conkwright". The proposals will be opened, and the proposer's name read publicly.

Prairielands Groundwater Conservation District will evaluate and rank each proposal submitted in relation to the criteria set forth in the Request for Construction Management at Risk Proposals.

Queries about the project and the request for proposals should be addressed to:

Mr. Alan R. Magee, Magee Architects, L.P., 2824 West 7th St., Suite 100, Fort Worth, Texas 76107 or call 817-731-9392.

Cleburne Times-Review, Saturday, April 21, 2018, p. 7B Legal Notice



Lion Tina Pollock, left, thanks Prairielands Groundwater Conservation District General Manager Jim Conkwright for speaking at the Wednesday club meeting.



Cleburne Lions tour the Prairielands Groundwater Conservation District Water Education Trailer on Wednesday.

Cleburne Times-Review, Saturday, May 5, 2018, p. B2

Fall is ideal for planting trees and shrubs in Texas

SPECIAL TO THE CTR

Planting trees and shrubs that are native (or well adapted) to our area can benefit homeowners in a couple of ways. Natives have a better change of thriving in our heat and under our on-again, off-again watering restrictions so they won't need replacing after a bout of extreme weather. Also, not having to provide supplemental watering for these natural beauties saves you time, water, and money.

According to Texas AgriLife Extension, fall is the perfect time to add a new tree or grouping of shrubs to your landscape. Planting during the fall months of September through December has distinct advantages.

Plant roots grow anytime the soil temperature is 40 degrees or higher, which may occur all winter in Texas.

During the winter months, the root systems of the fall-planted specimens develop and become established. When spring arrives, this expanded root system can support and take advantage of the full surge of spring growth.

According to Bonnie Reese, owner of Beautiful Landscapes, a landscape designer and consultant, some of the best trees for our area include Chinquapin Oak, Texas or Shumard Red Oak, Cedar



Courtesy photo

Elm (but only if mistletoe is not a neighborhood problem), Burr Oak, and Live Oak. These are great large native shade trees. Lacey Oak is a small native evergreen oak and Caddo or Shantung Maples are smaller shade trees but are not native to our area. For smaller ornamental native trees, consider Vitex, Possumhaw Holly, Yaupon Holly and Carolina Buckthorn. A couple of noteworthy non-native ornamental trees are Desert Willow, Chitalpa, and Crape Myrtle.

When considering shrubs, there are just not many native shrubs that are suitable for landscapes except for Texas Sage, various yucca and agave. Non-native considerations could include many varieties of nandina, yew, holly and abelia.

When making selections, homeowners should keep in mind the ultimate size that the tree or shrub will attain

and whether that will work for the location they are being planted, water needs, and the amount of sun the location receives on a daily basis. Remember new plants should be monitored and watered deeply as needed and allowed to dry between irrigations. Always water plants before a hard freeze if we have been in drought leading up to the freeze.

Texas SmartScape (txsmartscape.com) hosted by the North Central Texas Council of Governments was designed to help local residents determine some of these factors. The site features do-it-yourselfer design assistance as well as a simple-to-use Search function that suggests native or adapted plants that perform well in our area under a wide variety of circumstances.

You can learn more about Bonnie Reese at beautiful-landscapes.net.

Cleburne Times-Review, Thursday, September 13, 2018, p. 13

PGCD moving toward permit system

By MATT SMITH
MSMITH@TRCLE.COM

Johnson and surrounding counties are growing as is demand for water, Prairielands Groundwater Conservation District Attorney Brian Sledge said during Monday's meeting of the Johnson County Commissioners Court.

Prairielands covers Johnson, Ellis, Hill and Somervell counties. The

Texas Legislature created the GCD in 2009 after the Texas Commission on Environmental Quality designated the area as one expected to experience "critical groundwater problems" in the years ahead, Sledge said.

Thanks to growth, including gas explorations operations, area aquifers have experienced substantial declines from the 1950s to present.

See WATER, Page 5



Brian Sledge, an attorney representing the Prairielands Groundwater Conservation District, discusses proposals, including required permitting for some well owners, during Monday's meeting of the Johnson County Commissioners Court.

Matt Smith/CTR

Cleburne Times-Review, Tuesday, September 26, 2018, p. 1

WATER cont. from pg. 1

Since then district officials have been gathering data and conducting scientific inquiries to determine how best to meet the challenges ahead.

"We're now developing permanent rules and a permitting system as required by the Legislature," Sledge said. "We're developing rules to go from no permits to permits for the four counties, which will be controversial, but we're trying to do it in as least disruptive fashion as possible."

Prairieland is part of the larger Groundwater Management Area 8, which encom-

passes 45 counties.

"We need to develop rules that work for everybody, which isn't easy," Sledge said. "Especially given that the tools that work for one location may not work for another."

GCDs, among other things, are charged every five years with developing and adopting Desired Future Conditions, or DFCs, for aquifers, Sledge said.

"In other words, what quantitative condition do you desire for the aquifer in 50 years?" Sledge said. "Most groundwater management areas define DFCs in terms of the number of feet of water level declines in the aquifers over the 50 years."

Other factors play into the equation such as property

rights, feasibility, environmental impacts, water supply needs and so on, he said.

The district must determine the regulatory framework outlining how the district will manage, regulate and issue permits for water wells and the pumping of "groundwater resources within its boundaries."

They can do that through well registration requirements, well placing requirements, permits, production reporting requirements and other means.

Public hearings are soon to be scheduled on the proposed well registration and fee requirements, Sledge said.

The good news is that many property owners will not be affected by the well

permit requirements provided their wells are at least two acres separated. Well registration is required under such circumstances, Sledge said, but a permit to extract water is not.

"We set up the two acre on well locations to protect the water rights for our citizens," Johnson County Judge Roger Harmon said.

County Commissioner Rick Bailey asked what will happen if and when gas well drilling activity returns to Johnson County and the drillers need substantial amounts of water to frack the wells.

"Water use for fracking is subject to permitting," Sledge said. "They're exempt from permitting for drilling and exploration purposes, but not for fracking."

Cleburne Times-Review, Tuesday, September 26, 2018, p. 5

Prairielands Groundwater Conservation District hosting public hearing to finalize well water rules

Daily Light report

The Prairielands Groundwater Conservation District is finalizing permanent rules for water wells that will determine future district decisions and operations in Ellis County.

Among the new rules are regulations setting spacing requirements for new water well installations. Well spacing rules attempt to limit a pumping well's impact on other wells but are generally not intended to regulate the total amount of pumping from a well or manage the entire aquifer.

Existing wells are grandfathered from these rules.

New exempt wells, those that produce less than 17.36 gallons per minute, must be located at least 50 feet from any property line. Wells that generate more than that amount will be vetted by the district using existent groundwater data previously collected from the location of the proposed well and the aquifer in which it will be drilled.

These new rules and others will be discussed at the upcoming monthly board meeting and public meeting at 9 a.m. Monday, Oct. 15 in the Cross Timbers Room of the Cleburne Conference Center, located at 1501 W. Henderson in Cleburne.

Adoption of the permanent rules is slated for a public hearing on Monday, Nov. 26, which will also be held at the Cleburne Conference Center.

Once adopted, the new rules will become effective on Jan. 1, 2019.

For more information regarding these and other proposed permanent rules, please contact the Prairielands

Groundwater Conservation District at 817-556-2299 or at the district offices located on the first floor of the Liberty Hotel, located at 205 S. Caddo St. in Cleburne.

ABOUT PGCD

The 81st Texas Legislature with a directive to conserve, protect and enhance the groundwater resources of Ellis, Johnson, Hill and Somervell Counties created the Prairielands Groundwater Conservation District in 2009.

In 2008 and 2009, the Texas Commission on Environmental Quality designated large areas over the Trinity Aquifer from the Red River to Central Texas as Priority Groundwater Management Areas due to critical groundwater declines facing the area.

Since the establishment of the program, the district has conducted scientific research on local aquifers, educated the public about groundwater and conservation issues and registered over 1,200 wells.

The district is currently gathering aquifer level data and pumping data to better understand how water use affects groundwater supplies and minimize the chance that existing wells will be pumped dry. PGCD protects property values by preserving the quantity and quality of groundwater for future generations.

PGCD is funded entirely through registration fees and water production fees on nonexempt wells.

Domestic wells, agricultural wells and any wells that produce less than 17.36 gallons per minute are exempt from water production fee rules and well metering.



**PRAIRIELANDS GROUNDWATER
CONSERVATION DISTRICT**

Prairielands GCD Works To Finalize Permanent Rules

The Prairielands Groundwater Conservation District (GCD) is currently finalizing proposed permanent rules to assist in managing the underground water resources in our area.

The district, which covers Ellis, Hill, Johnson and Somervell counties, was created by the Texas legislature in 2009 and is taxed with the directive to conserve, protect and enhance the groundwater resources in its jurisdiction.

While the permanent rules largely guide the installation and operation of wells with production volumes over 17.36 gallons per minute, small household well owners may wonder about the rule provisions for smaller wells such as theirs.

According to Stephanie Rexrode, records administrator for Prairielands GCD, the new rules will have little, if any, impact on existing household or livestock wells.

"However, new installations will have to comply with spacing requirements. New well placements must be a minimum of 50 feet from any property line. Certain exceptions for property line requirements and tract size limitations may be considered by the district's board of directors," she added.

A copy of the proposed permanent District Rules may be requested from Rexrode by email at stephanie@prairielandsgcd.org, is available for reviewing or downloading at www.prairielandsgcd.org, and may be reviewed, inspected or obtained in person at the district office, located at 205 South Caddo Street in Cleburne.

For more information, contact the district's general manager, Jim Conkwright, at 817-556-2299.

Waxahachie Daily Light, Sunday, October 14, 2018, p. A10

Hillsboro Reporter, Monday, November 26, 2018, p. 1

Prairielands Groundwater Conservation District hosts public hearing to finalize well water rules

By Daily Light report

Posted Oct 17, 2018 at 9:26 AM

The Prairielands Groundwater Conservation District is finalizing permanent rules for water wells that will determine future district decisions and operations in Ellis County.

Among the new rules are regulations setting spacing requirements for new water well installations. Well spacing rules attempt to limit a pumping well's impact on other wells but are generally not intended to regulate the total amount of pumping from a well or manage the entire aquifer.

Existing wells are grandfathered from these rules.

New exempt wells, those that produce less than 17.36 gallons per minute, must be located at least 50 feet from any property line. Wells that generate more than that amount will be vetted by the district using existent groundwater data previously collected from the location of the proposed well and the aquifer in which it will be drilled.

These new rules and others will be discussed at the upcoming monthly board meeting and public meeting at 9 a.m. Monday, Oct. 15 in the Cross Timbers Room of the Cleburne Conference Center, located at 1501 W. Henderson in Cleburne.

Adoption of the permanent rules is slated for a public hearing on Monday, Nov. 26, which will also to be held at the Cleburne Conference Center.

Once adopted, the new rules will become effective on Jan. 1, 2019.

For more information regarding these and other proposed permanent rules, please contact the Prairielands Groundwater Conservation District at 817-556-2299 or at the district offices located on the first floor of the Liberty Hotel,

Waxahachie Daily Light online, Wednesday, October 17, 2018, p. 1

located at 205 S. Caddo St. in Cleburne.

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In 2008 and 2009, the Texas Commission on Environmental Quality designated large areas over the Trinity Aquifer from the Red River to Central Texas as Priority Groundwater Management Areas due to critical groundwater declines facing the area.

Since the establishment of the program, the district has conducted scientific research on local aquifers, educated the public about groundwater and conservation issues and registered over 1,200 wells.

The district is currently gathering aquifer level data and pumping data to better understand how water use affects groundwater supplies and minimize the chance that existing wells will be pumped dry. PGCD protects property values by preserving the quantity and quality of groundwater for future generations

PGCD is funded entirely through registration fees and water production fees on nonexempt wells.

Domestic wells, agricultural wells and any wells that produce less than 17.36 gallons per minute are exempt from water production fee rules and well metering.

Waxahachie Daily Light online, Wednesday, October 17, 2018, p. 5

Prairielands Groundwater Conservation District provides tips to lessen water bill

Daily Light report

Although the recent rains have taken the outdoor watering burden off everyone's back, there could be a monster lurking right around the corner.

The holidays are fast approaching, and with them comes more family, more friends, cooking, cleaning and indoor water use. To keep from creating an abnormality of a water bill, the Prairielands Groundwater Conservation District offers a few

simple water conservation practices to put in place before the first turkey exits the oven.

More family, more friends at home

Turn off the water while you brush your teeth and save around two gallons per minute. If you brush for a full two minutes as dentists recommend, that's a water savings of almost four gallons every time you brush.

Adhere to using one glass for water per person per day. Each person reus-

ing their glass cuts down on the number to wash.

For cold drinks, keep a pitcher of water in the refrigerator instead of running the tap.

When running a bath, plug the tub before turning the water on, then adjust the temperature as the tub fills up. However, a short shower uses less water than a full bath.

More cooking, more cleaning

Don't use running water to thaw food. Defrost food in the refrigerator for

water efficiency and food safety.

Wash fruit and vegetables in a pan of water rather than running water from the tap.

Use the garbage disposal sparingly. Compost vegetable food wastes instead and save gallons of water every time you would have used it.

Soak pots and pans instead of letting the water run while you scrape them clean.

Keep in mind that a dishwasher uses less

water to clean a full load of dishes than doing them by hand. Energy Star dishwashers use between four and six gallons of water per load, depending on the cycle selected. If washing dishes by hand is necessary, fill the sink and rinse the dishes when they have all been scraped and scrubbed.

When doing laundry, match the water level to the size of the load.

Small adjustments such as these will reduce your daily water consumption,

but more importantly, their daily practice can lead to them becoming long-term habits. Over time, these habits can add up to some significant savings of water and money, and instead of creating a monster your water bill will only be a ghost of its former self.

For more information about water conservation, visit the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.

Waxahachie Daily Light, Wednesday, October 31, 2018, p. A2

**PRAIRIELANDS GROUNDWATER CONSERVATION DISTRICT
NOTICE OF PUBLIC HEARING
NOVEMBER 26, 2018**

NOTICE IS HEREBY GIVEN to all interested persons in Ellis, Hill, Johnson, and Somervell Counties, Texas:

That the Board of Directors of the Prairielands Groundwater Conservation District ("District") will hold a public hearing, accept public comment, and may act to adopt the permanent District Rules regulating water wells within the boundaries of the District, including Ellis, Hill, Johnson, and Somervell Counties, Texas. Prior to its adoption of these permanent rules, the District operated under its Temporary Rules for Water Wells, initially adopted by the District's Board of Directors ("Board") on November 15, 2010. The proposed permanent District Rules include without limitation the following: (1) classification of wells and applicable requirements for each type of well based on size, capacity, purpose of use of groundwater, and date of drilling; (2) requirements for registration and/or permitting of water wells, including Historic Use Permits and Operating Permits, and application requirements related thereto; (3) well metering, fees, and reporting requirements for registered or permitted wells; (4) well location, spacing, completion, and minimum tract size requirements, and the process for seeking exceptions to any such requirements; (5) pumping reductions and other aquifer management measures to be implemented as necessary to meet desired future conditions for an aquifer or layer of an aquifer within the District; (6) requirements specific to wells owned or operated by retail public utilities; (7) enforcement policy and penalty schedule, including administrative and civil penalties for a violation of District Rules; and (8) hearings processes and procedures relating to permits and amendments to permits, rulemaking, enforcement, and desired future conditions. These proposed permanent District Rules, along with any other changes to the proposed rules, may be considered and adopted without further notice or hearing based on comments received at the hearing. The Board may act at the hearing or at a hearing or meeting at a later time or date.

This hearing will be held on Monday, November 26, 2018, beginning at 9:00 a.m., at the Cleburne Conference Center located at 1501 W. Henderson, Cleburne, Texas 76033. Any person who desires to appear at the hearing and present comment or other information on the proposed adoption of permanent District Rules may do so in person, by legal representative, or both. Comments may be presented verbally or in written form. Limits may be placed on the amount of time that each person is allowed to present verbal comments. Persons interested in submitting written comments on the proposed amendments may do so by sending any such comments to P.O. Box 3128, Cleburne, Texas 76033. The Board may act to adopt the rules as proposed or with additional changes based upon comments and discussion at the hearing. The hearing posted in this notice may be recessed from day to day or continued where appropriate.

The public hearing is available to all persons regardless of disability. If you require special assistance to attend the hearing, please contact the Prairielands Groundwater Conservation District at (817) 556-2299 at least 24 hours in advance of the hearing.

A copy of the proposed permanent District Rules may be requested by email at stephanie@prairielandsgcd.org, is available for reviewing or downloading at www.prairielandsgcd.org, and may be reviewed, inspected, or obtained in person at the District office located at 205 S. Caddo Street, Cleburne, Texas 76031. For more information, contact the District's General Manager, Jim Conkwright, at (817) 556-2299.

WA-00101000

Waxahachie Daily Light, Wednesday, October 31, 2018, p. 8B

Don't let your water bill become a monster

SPECIAL TO THE CTR

Although the recent rains have taken the outdoor watering burden off your back, there could be a monster lurking right around the corner.

The holidays are fast approaching, and with them comes more family, more friends, more cooking, more cleaning and more indoor water use.

To keep from creating a monster of a water bill, put a few simple water conservation practices in place now and tame that beast before it can say "BOO!"

More family, more friends at home

Turn off the water while you brush your teeth and save around two gallons per minute. If you brush for a full two minutes as dentists recommend, that's a water savings of almost four gallons every time you brush.

Adhere to using one glass for water per person per day. Each person reusing their glass cuts down on the number to wash.

For cold drinks, keep a pitcher of water in the refrigerator instead of running the tap.

When running a bath, plug the tub before turning the water on, then adjust the temperature as the tub fills up. However, a short shower uses less water than a full bath.

More cooking, more cleaning

Don't use running water to thaw food. Defrost food in



Courtesy photo

Jeny Siddall reminds you to watch your water usage so you don't have a monster of a bill.

the refrigerator for water efficiency and food safety.

Wash fruit and vegetables in a pan of water rather than running water from the tap.

Use the garbage disposal sparingly. Compost vegetable food waste instead and save gallons of water every time you would have used it.

Soak pots and pans instead of letting the water run while you scrape them clean.

Keep in mind that a dishwasher uses less water to clean a full load of dishes than doing them by hand. Energy Star dishwashers use between 4 and 6 gallons of water per load depending on the cycle selected.

If washing dishes by hand is necessary, fill the sink and

rinse the dishes when they have all been scraped and scrubbed.

When doing laundry, match the water level to the size of the load.

Small adjustments such as these will reduce your daily water consumption, but more importantly, their daily practice can lead to them becoming long-term habits.

Over time, these habits can add up to some significant savings of water and money, and instead of creating a monster your water bill will only be a ghost of its former self.

For information about water conservation, visit the Prairielands Groundwater Conservation District website at prairielandsgcd.org.

Cleburne Times-Review, Thursday, November 1, 2018, p. 13

PRAIRIELANDS GROUNDWATER CONSERVATION DISTRICT
NOTICE OF PUBLIC HEARING
NOVEMBER 26, 2018

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Cleburne Times-Review, Friday, November 2, 2018, p. 9

PRAIRIELANDS GROUNDWATER CONSERVATION DISTRICT NOTICE OF PUBLIC HEARING

NOVEMBER 26, 2018

NOTICE IS HEREBY GIVEN to all interested persons in Ellis, Hill, Johnson, and Somervell Counties, Texas:

That the Board of Directors of the Prairielands Groundwater Conservation District ("District") will hold a public hearing, accept public comment, and may act to adopt the permanent District Rules regulating water wells within the boundaries of the District, including Ellis, Hill, Johnson, and Somervell Counties, Texas. Prior to its adoption of these permanent rules, the District operated under its Temporary Rules for Water Wells, initially adopted by the District's Board of Directors ("Board") on November 15, 2010. The proposed permanent District Rules include without limitation the following: (1) classification of wells and applicable requirements for each type of well based on size, capacity, purpose of use of groundwater, and date of drilling; (2) requirements for registration and/or permitting of water wells, including Historic Use Permits and Operating Permits, and application requirements related thereto; (3) well metering, fees, and reporting requirements for registered or permitted wells; (4) well location, spacing, completion, and minimum tract size requirements, and the process for seeking exceptions to any such requirements; (5) pumping reductions and other aquifer management measures to be implemented as necessary to meet desired future conditions for an aquifer or layer of an aquifer within the District; (6) requirements specific to wells owned or operated by retail public utilities; (7) enforcement policy and penalty schedule, including administrative and civil penalties for a violation of District Rules; and (8) hearings processes and procedures relating to permits and amendments to permits, rulemaking, enforcement, and desired future conditions. These proposed permanent District Rules, along with any other changes to the proposed rules, may be considered and adopted without further notice or hearing based on comments received at the hearing. The Board may act at the hearing or at a hearing or meeting at a later time or date.

This hearing will be held on Monday, November 26, 2018, beginning at 9:00 a.m., at the Cleburne Conference Center located at 1501 W. Henderson, Cleburne, Texas 76033. Any person who desires to appear at the hearing and present comment or other information on the proposed adoption of permanent District Rules may do so in person, by legal representative, or both. Comments may be presented verbally or in written form. Limits may be placed on the amount of time that each person is allowed to present verbal comments. Persons interested in submitting written comments on the proposed amendments may do so by sending any such comments to P.O. Box 3128, Cleburne, Texas 76033. The Board may act to adopt the rules as proposed or with additional changes based upon comments and discussion at the hearing. The hearing posted in this notice may be recessed from day to day or continued where appropriate.

The public hearing is available to all persons regardless of disability. If you require special assistance to attend the hearing, please contact the Prairielands Groundwater Conservation District at (817) 556-2299 at least 24 hours in advance of the hearing.

A copy of the proposed permanent District Rules may be requested by email at stephanie@prairielandsgcd.org, is available for reviewing or downloading at www.prairielandsgcd.org, and may be reviewed, inspected, or obtained in person at the District office located at 205 S. Caddo Street, Cleburne, Texas 76031. For more information, contact the District's General Manager, Jim Conkwright, at (817) 556-2299.

Glen Rose Reporter, Friday, November 2, 2018, p. A11

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Hillsboro Reporter, Thursday, November 1, 2018, p. 7A

New water well rules proposed special to the ctr

The Prairielands GCD is finalizing proposed permanent rules to assist in managing the underground water resources in our area. The district which covers Ellis, Hill, Johnson and Somervell counties was created by the Texas legislature in 2009 and is taxed with the directive to conserve, protect and enhance the groundwater resources in its jurisdiction.

While the permanent rules largely guide the installation and operation of wells with production volumes over 17.36 gallons per minute, small household well owners may wonder about the rule provisions for smaller wells such as theirs.

"The new rules will have little, if any, impact on existing household or livestock wells," said Stephanie Rexrode, records administrator for Prairielands GCD.

"However, new installations will have to comply with spacing requirements. New well placements must be a minimum of 50 feet from any property line.

"Certain exceptions for property line requirements and tract size limitations may be considered by the district's board of directors."

A copy of the proposed permanent district rules may be requested from Rexrode by email at stephanie@prairielandsgcd.org, is available for reviewing or downloading at prairielandsgcd.org, and may be reviewed, inspected or can be obtained in person at the district office, 205 S. Caddo St. in Cleburne. For more information, contact the district's general manager Jim Conkwright at 817-556-2299.



Courtesy photo

Wednesday, 11/21/2018 Page 07

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New water well plans proposed by Prairielands Groundwater Conservation District

Daily Light report

The Prairielands Groundwater Conservation District is currently finalizing proposed permanent rules to assist in the management of the underground water resources throughout the district.

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CONTRIBUTED

The Prairielands Groundwater Conservation District is finalizing new water well rules for Ellis, Hill, Johnson and Somervell Counties.

Waxahachie Daily Light, Wednesday, November 21, 2018, p. A2

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

F.2. - 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.

As mentioned in Performance Standard F.1. above, the district developed and produced its own quarterly newsletter, the *Prairielands eLine*, that is distributed in print and electronically.

Water conservation topics covered in the *Prairielands eLine* in 2018 included the following.

Winter 2018 Issue:

“When Lost Water = Lost Revenues”
“Happy Holiday Dishes”

Spring 2018 Issue:

“Free Water Cycle Presentations for Schools”
“Get “Hosed” This Spring”
“Coleman Hosts Prairielands Water Education Trailer and Texas AgriLife Stream Table”

Summer 2018 Issue:

“Weather (or not) to Water!”
“Hill County Schools Get WET!”

Fall 2018 Issue:

“Prairielands at Fall Farm Fun Day in Ellis County”
“Prairielands at Russell Farm for Pioneer Day”
“Don’t Let Your Water Bill Become a Monster!”
“Fall is Ideal for Planting Trees and Shrubs”

Prairielands eLine

Prairielands Groundwater Conservation District
www.prairielandsgcd.org

Evolution of Groundwater Law in Texas – Part 1

Annually, groundwater professionals from across the state gather at the Texas Groundwater Summit conference to discuss and learn about new developments in the groundwater arena. This year's attendees had the opportunity to hear about the evolution in the law that governs groundwater decisions in our state.

With 35 years on the bench of the Texas Supreme Court, the speaker, Chief Justice Nathan L. Hecht, is in a unique position to relate this history, he was serving on the court when a number of the cases that have come to define groundwater law were decided.

In Texas, our groundwater law is based on "the rule of capture." This concept has its roots in English common law. Basically, common law is a method of developing law through court decisions. The law evolves slowly over time by taking each case that is filed,



looking at previous court decisions on similar matters and determining the current case based on how those previous cases were decided. Decisions tend to maintain a consistency through the years.

The case that historians point to as establishing the rule of capture actually occurred in England in 1843 - *Acton v. Blundell* in which the deciding court determined that the person that owns the land surface could dig and use anything he finds there to his own purposes. Draining the groundwater under his neighbor's prop-

erty or intercepting the surface water is not actionable.

In Texas, the first deciding case in groundwater, the one that linked its path to English common law and the rule of capture, originated in Denton and is known as *Houston & Texas Central Railroad Co. v. East* in 1904.

In the case, Mr. East had a shallow water well on his property that went dry after the railroad drilled a deeper well on their neighboring property and started pumping

See EVOLUTION, p. 2

Winter 2018

Volume 4, Issue 1

Inside this issue:

Rotary Club Presentation	2
Upcoming Board Meetings	3
Leak Detection	3
Holiday Water Conservation	4

Special points of interest:

- Texas groundwater law is based on "the rule of capture."
- General Manager updates Cleburne Rotary Club members on district activities.
- Next board meeting set for January 15.
- Unaccounted for water losses can mean financial losses to water providers.
- Hand-washing holiday drives can use more water than your dishwasher.

Prairielands eLine

Prairielands Groundwater Conservation District
www.prairielandsgcd.org

Monitor Well Program Expanding

Spring 2018

Volume 4, Issue 2

Inside this issue:

Free water presentations for schools	2
Groundwater Law in Texas	2
Buying the right garden hose	3
Coleman Hosts the WET	4

Special points of interest:

- The district well monitor program continues to add new locations.
- Texas' Conservation Amendment turned 100 this past year.
- Check your gardening tools, including water hoses, for the coming season.
- The Water Education Trailer serves as an interactive classroom on wheels for children and adults.

Since the creation of the district, a main goal has been to increase the base of knowledge of the groundwater levels in the aquifers in this area. One aspect of this is the development of a comprehensive monitor well program covering all four counties of the Prairie Lands district. Monitor wells are water wells that are equipped with in situ equipment that measures the distance of the top of the groundwater column in the well to the surface of the land where the well is drilled. A specific goal of the program at this time is to increase the number of aquifers represented in each county.

During this past year, District Field Technician Michael Heath has been consistently on the lookout for possible additions to the program and has made great strides in expanding the monitor well inventory. He has talked to individual well owners in all counties regarding the monitor program and underlying geological layers of these areas. Many well owners are unaware of the characteristics of their property or their wells.

In addition to individuals,

Heath has been successful in gaining program support with a couple of major water providers in the district. The Saddle-Lone Elm Water System in Ellis County added two of these wells to the monitor program - one in the Trinity Group and one in the Woodbine aquifer.

Johnson County Special Utility District allowed the district access to 17 of their wells located in both northern and southern Johnson County for the Texas Water Development Board observation well program - nine in the Palmy formation, one in the Glen Rose, and seven additional Trinity Group installations (mostly Houston and one multivertical).

Heath worked with the district's consulting hydrologist, WSP USA, Inc., for guidance in identifying the areas in the district most in need of information that could be obtained through monitoring.

The district also completed the annual measurement of 64 Texas Water Development Board observation wells in December 2017.



Saddle-Lone Elm Water Supply is one of the recent additions in the district monitor well program.



Monitoring and satellite equipment have been installed at Saddle-Lone Elm locations. For more information about participating in the monitor well program, contact Michael Heath by email at fieldtech@praairielandsgcd.org or call (817) 556-2199.

Prairielands eLine, Winter 2018

Prairielands eLine, Spring 2018

Prairielands eLine

Prairielands Groundwater Conservation District
www.prairielandsgcd.org

State Validates Groundwater District's Management Practices

In May, 2018, the Texas Commission on Environmental Quality (TCEQ) accepted a petition filed against the Fort Oak Savannah Groundwater Conservation District (POSGCD) by a local resident who believed the District was not doing enough to protect the groundwater in Milton and Burleson counties. After consideration of all information, the TCEQ Commission voted unanimously to dismiss the petition. The Commission also agreed POSGCD was following the law and meeting the needs of the local landowners, while providing long term protection of the groundwater in the aquifers of the District. Both the TCEQ Executive Director and the TCEQ Office of Public Interest Council recommended in April to dismiss the petition, noting the petitioners had not provided evidence to support his claims.

This marks the second time in three years the commissioners of TCEQ have voted unanimously to dismiss a petition challenging the District's management of groundwater resources. Burleson County Judge, Mike

Burleson said, "This validates the District's management of the aquifer, and should give the citizens in our two counties even more confidence in how the Board of Directors manages, regulates, and protects our precious resources." POSGCD General Manager Greg Westbrooks added, "Our Board takes seriously the concerns of citizens in our District. Fort Oak's rules have always been designed to protect the aquifer below each landowner's property while preserving each landowner's right to produce their water." POSGCD Board President Sidney Youngblood stated, "Today's ruling is truly significant. It underscores that POSGCD's Board is committed to pursuing our Mission Statement taking on this responsibility at a very high level. This Board will continue on a never-compromising path of respectfully representing all landowners understanding that we must continue to build trust and confidence with Burleson and Milton County citizens to ensure that we are truly successful as a Board in protecting the valuable water resources that lie beneath both counties."

Cited at the TCEQ meeting was also the fact that POSGCD is going above and beyond the state minimum responsibilities by regulating production and building a robust water level monitoring network, currently at almost 170 wells, with wells strategically located in all aquifers of the District. This network is designed to provide the most up-to-date information on the health of the aquifer. The TCEQ Commission commended the landowners that he could work within the District to participate in the direction and decisions made by the Directors.

However, a motion to rehear the complaint was



Burleson and Milton counties are located in west-central Texas.

Summer 2018

Volume 4, Issue 3

Inside this issue:

Weather (or not) to Water	2
Groundwater Law	3
Hill Country Schools Get WET	3
Texas 4-H Ambassadors Program	4

Filed by the landowners with the TCEQ on Monday, May 21, 2018.

Prairielands eLine

Prairielands Groundwater Conservation District
www.prairielandsgcd.org

Now Scheduling Water Education Trailer School Programs



Even the youngest visitors to the Prairielands Water Education Trailer, like these students from Glen Rose Elementary School Kindergarten, can learn about our watery environment.

Don't get left out!

Now is the time to schedule the Prairielands Water Education Trailer (the "WET") for a classroom visit in either the fall or spring semesters.

Presentations with exhibit demonstrations of our local aquifers,

groundwater, and water conservation topics are tailored to the needs of the teacher, class, age group, and are FREE.

Presentations support TEKS standards and provide lesson enrichment.

At this time, the WET

still has dates available for classroom or school-wide presentations and demonstrations.

To schedule the WET at your school, contact Prairielands GCD at (817) 556-2199 or email karenaidall@praairielandsgcd.org

Fall 2018

Volume 4, Issue 4

Inside this issue:

New Rules and Impact on Home Wells	2
Family Farm Fun Day in Ellis County	2
Pioneer Day Event at Russell Farm	2
Prevent Monitor Water Sills	3
New Well Spacing and Permitting Rules	3
Fall Tree and Shrub Planting	4

Special points of interest:

- The Water Education Trailer is available for school and community presentations.
- New well spacing and permitting rules being finalized.
- Fall is the perfect time to introduce new native or adapted shrubs and trees into your home landscape.

Prairielands eLine, Summer 2018

Prairielands eLine, Fall 2018

Outreach Activities

Public education and awareness about groundwater and water conservation is one of the main goals of the District.

Schools

Over the course of 2018, Prairielands GCD staff presented 9 programs at schools in three of the four counties in the district: Ellis – 1, Hill – 7, and Johnson – 4.

Date	School	ISD	County	Grade Levels	Number of Participants
2/23/18	Howard Junior High	Waxahachie	Ellis	6 th	27
3/19/18	Coleman Elementary	Cleburne	Johnson	4 th	85
4/2/18	Alvarado Junior High	Alvarado	Johnson	7 th	168
4/3/18	Alvarado Junior High	Alvarado	Johnson	7 th	122
4/16/18	Hillsboro Intermediate	Hillsboro	Hill	4 th	165
4/18/18	Abbott, Mt Calm, Bynum, Covington, Penelope	Various	Hill	4 th – 5 th	130
4/19/18	Whitney Intermediate	Whitney	Hill	5 th	140
4/20/18	Venus Elementary	Venus	Johnson	2 nd & 5 th	354
4/26/18	Various Elementary & Homeschooled	Various	Johnson	3 rd	235
Totals	9 School visits	12 Unique ISDs	3	All	1,426

Community Groups

In 2018, Prairielands staff made 11 presentations to community groups or appearances at public events. Programs were completed in three of the four district counties (Ellis – 2, Hill – 1, and Johnson – 7) and, by special request*, at one event outside the district.

Date	Event	Location	County	Participants
3/19/18	Johnson County Master Gardeners Monthly Meeting	Cleburne	Johnson	30
3/24/18	Ellis County Master Gardeners Lawn & Garden Expo	Waxahachie	Ellis	150
4/13/18	Boys & Girls Club of Hillsboro	Hillsboro	Hill	66
4/14/18	Johnson County Master Gardeners Annual Plant Sale	Cleburne	Johnson	100
4/17/18	Groundwater Educational Outreach Collaborative Quarterly Meeting	Stephenville	Erath*	25
4/25/18	Burleson Library Girls Inc Program	Burleson	Johnson	50
4/28/18	Burleson Trash Off	Burleson	Johnson	60
4/28/18	Rio Brazos Master Naturalists	Cleburne	Johnson	30
5/2/18	Cleburne Lions Club	Cleburne	Johnson	40
9/30/18	Ellis County Rural Heritage Farm Fun Day	Waxahachie	Ellis	200
11/2/18	Russell Farm Heritage Day	Burleson	Johnson	700
Totals	11 Events	5 Unique Cities	4	1,451

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

F.3. - 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 85th 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 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.

F.4. - Performance Standard: The District shall 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.

During 2018, the District sponsored the following programs.

2018 - Texas 4-H Water Ambassadors – This new program (it's only in its second year) strives to target students between the 9th and 11th grade 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.”

8/28-30/18 - Texas Groundwater Summit – This annual conference covers a variety of timely groundwater topics. The 2018 presentations and discussions included “Groundwater Availability,” “Groundwater Management Toolbox,” “Managed Recharge – Beyond the ASR Well,” and “Conservation & Stewardship in Texas Groundwater.”

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.

F.5. - 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.

Over the course of 2018, Prairielands GCD staff presented 9 programs at schools in three of the four counties in the district: Ellis – 1, Hill – 7, and Johnson – 4.

Date	School	ISD	County	Grade Levels	Number of Participants
2/23/18	Howard Junior High	Waxahachie	Ellis	6 th	27
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Totals	9 School visits	12 Unique ISDs	3	All	1,426

Addressing Desired Future Conditions

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.

G.1. - 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 2018 was to continue increasing the number of aquifers, or layers of an aquifer, represented in each county. The Field Technician 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 WellIntel to 5 wells into the monitor program. One in Hill County, three in Johnson County, and one in Somervell County.
- Acquired 4 wells to install monitor equipment when the pumps are removed.
- Completed the annual measurement of all 165 wells in the four-county area.
- Enhanced the ArcGIS collector app with the shape files of each county.
- 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 as specified in the Monitoring Program within the District.

G.2. - 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. The following information depicts the maximum drawdown and water availability data reviewed by the District in 2018, and the type of daily information that might be expected from the monitor wells for review and analysis in the future.

The current DFCs are listed in Table 1. These values are the maximum drawdown (in feet) allowed over the 50-year planning period. The associated MAGs (in acre-feet per year) are shown in Table 2.

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

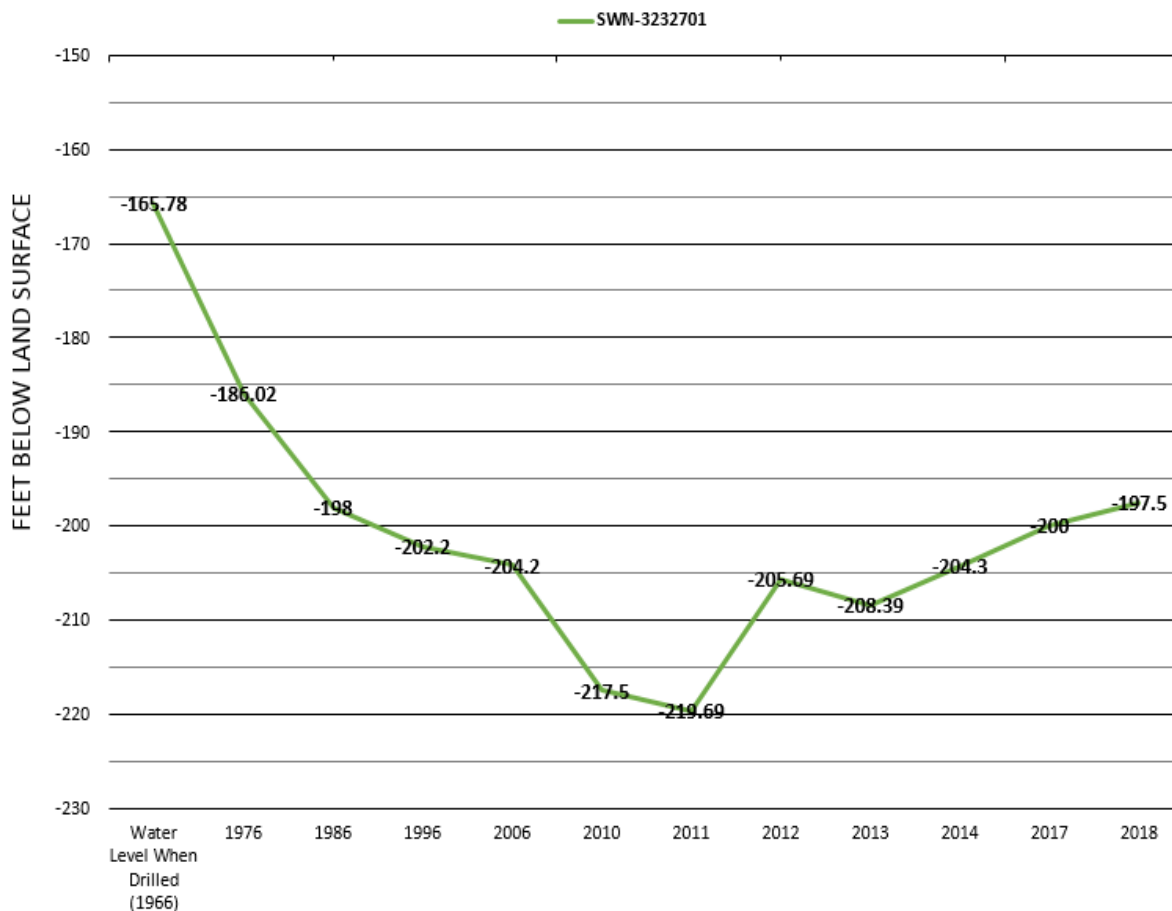
	Woodbine	Paluxy	Glen Rose	Hensell	Hosston
Ellis	2,078	443	50	0	5,040
Hill	588	353	115	226	3,281
Johnson	1,985	2,447	1,636	1,086	3,863
Somervell	Not present	14	146	1,978	845

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

Observation Wells

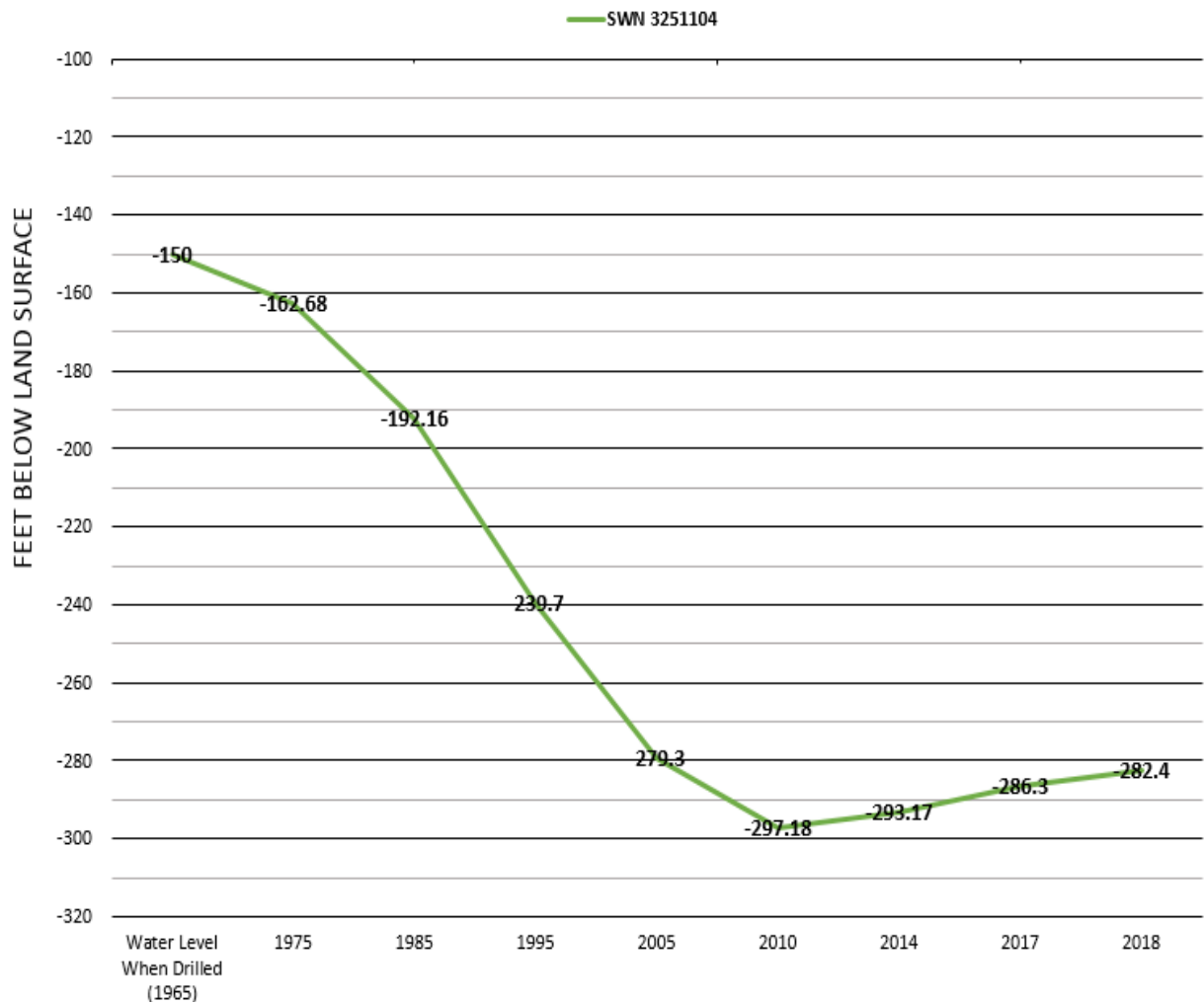
The Prairielands Ground Conservation District acquired 52 observation wells previously measured and maintained by the Texas Water Development Board in 2015. The PGCD staff has continued the program into 2018 with the wells now totaling 165. These wells are located in all four counties.

State Well # 3232701 Well Measurements

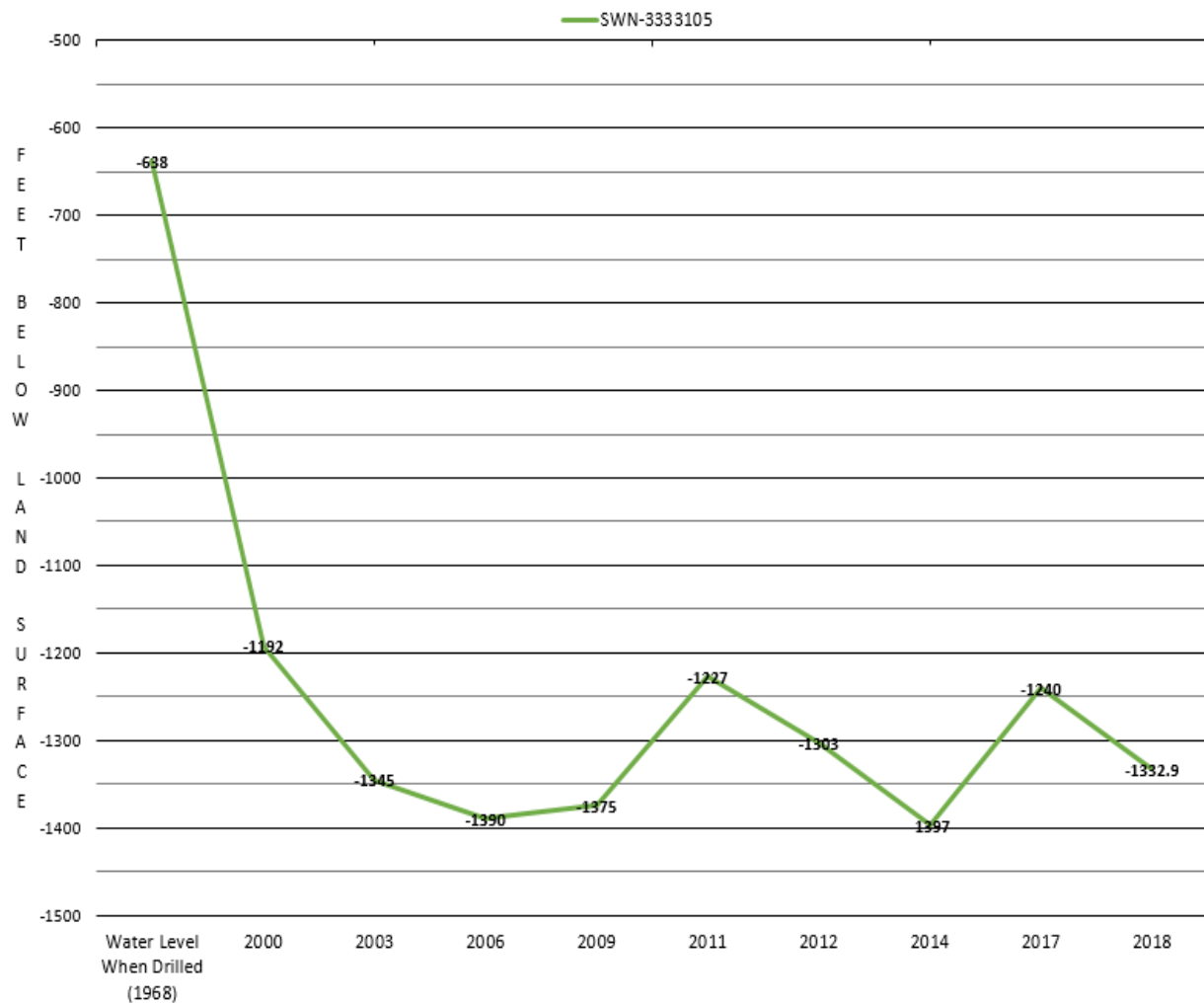


Well #3232701 was drilled in 1966 in Johnson County and has a total depth of 240 feet which is in the Woodbine aquifer. Since 1970 the TWDB has measured the well on a yearly basis.

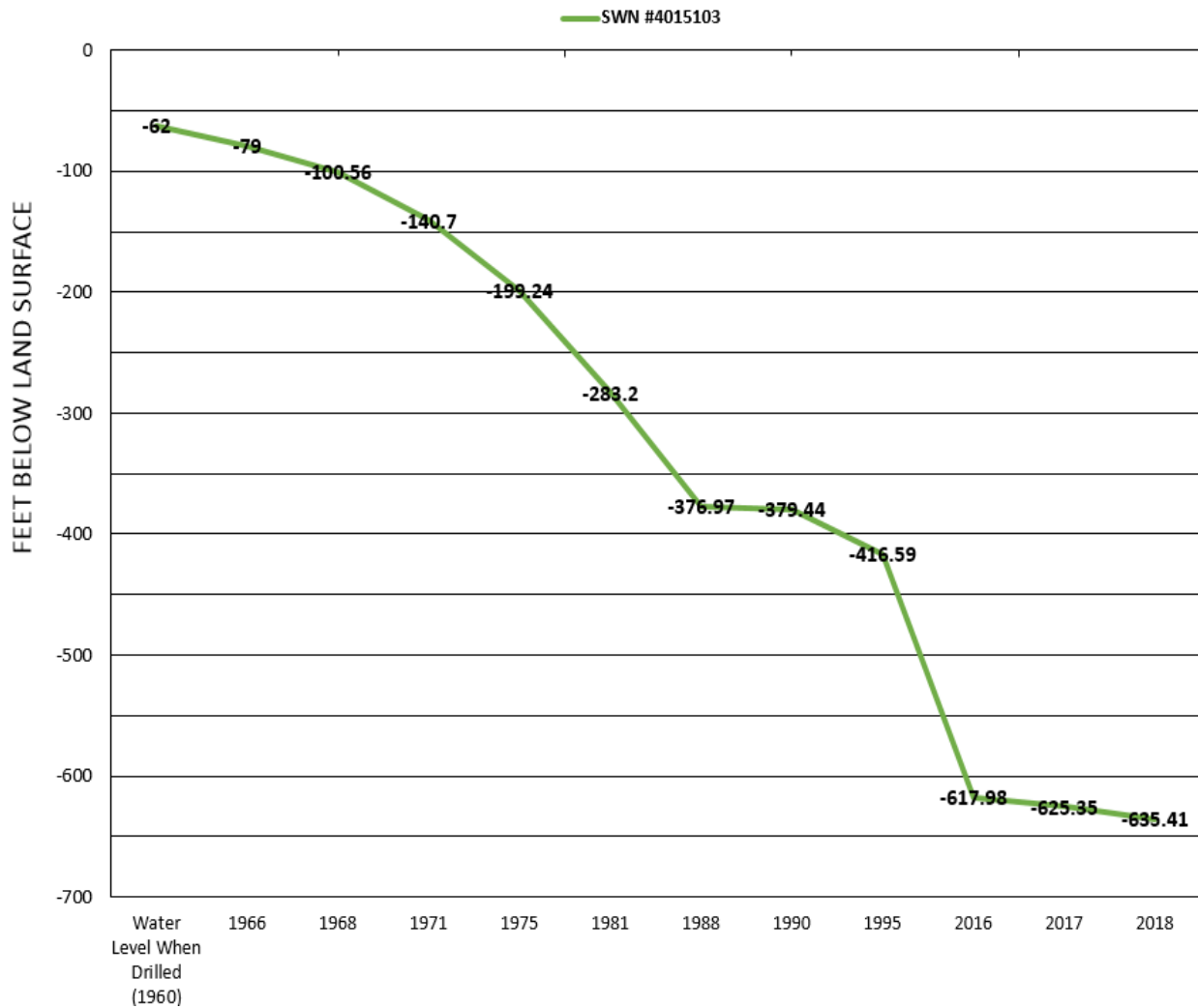
State Well # 3251104 Well Measurements



Well #3251104 was drilled in 1965 in Somervell County and has a total depth of 376 feet which is in the Hensell aquifer. In 1970 the TWDB began measuring the well on a yearly basis.

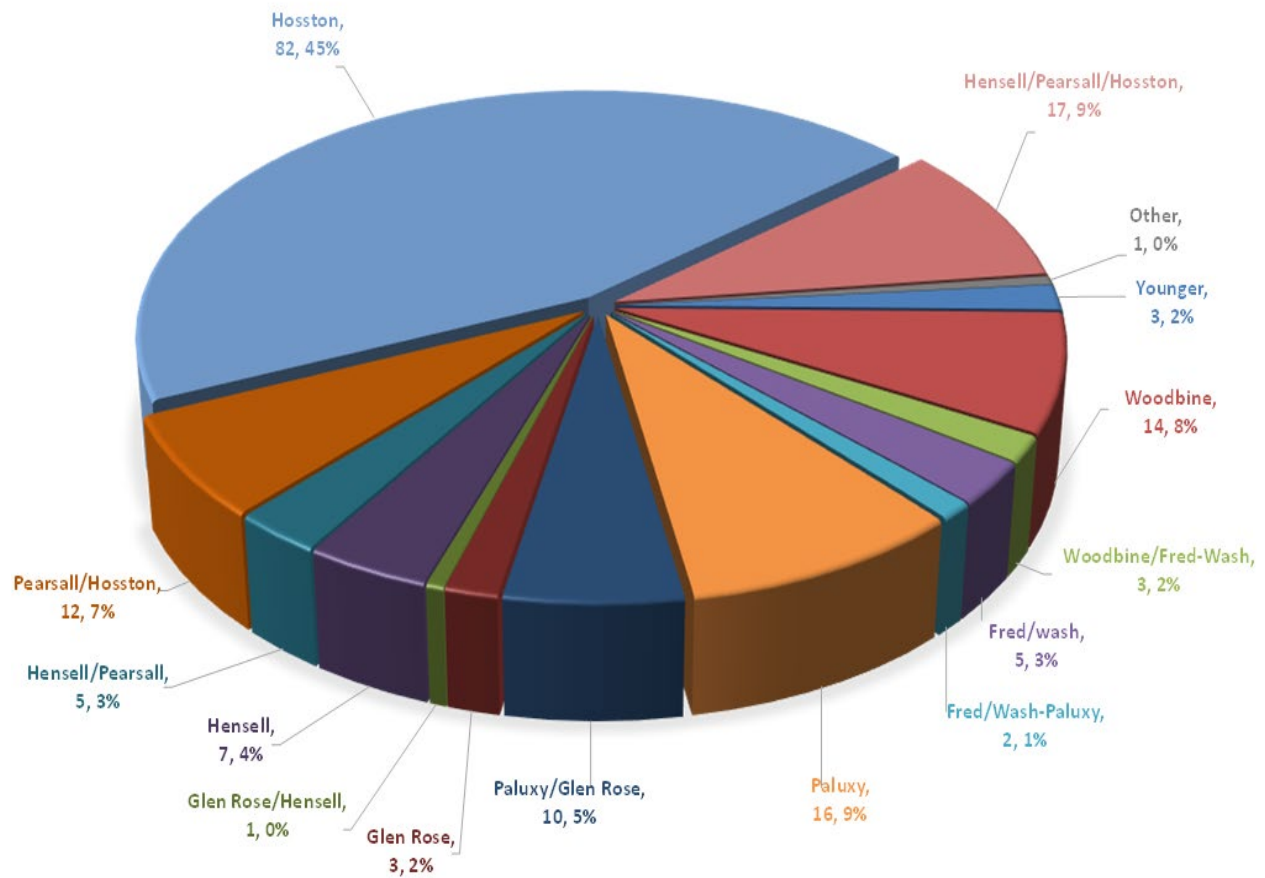


Well #3333105 was drilled in 1968 in Ellis County and has a total depth of 2400 feet which is in the Hosston aquifer. Since 1999 the TWDB has measured the well on a yearly basis.



Well #4015103 was drilled in 1960 in Hill County and has a total depth of 1378 feet which is in the Hosston aquifer. Since 1966 the TWDB measured the well on a yearly basis. It became a monitor well for PGCD in June 2016.

PGCD MONITOR/OBSERVATION WELL DISTRIBUTION



The pie chart breaks down the monitor/observation well network by aquifer, number of wells measured, and the percentage of wells in that aquifer from within the Prairielands Groundwater Conservation District.

Desired Future Conditions and Groundwater Use by Non-Exempt Wells

G.3. - Management Objective: Monitor non-exempt pumping within the District for use in evaluating District compliance with aquifer desired future conditions.

G.3. - Performance Standard: Annual Reporting of the groundwater used by non-exempt wells will be included in the Annual Report provided to the District's Board of Directors.

As discussed previously, water usage by non-exempt wells during 2018 was 6,263,891,043 gallons.



Pulling a pump to install monitor equipment

Status of Permanent Rules Development

G.4. - Management Objective: Develop permanent rules including a water well permitting and groundwater allocation system that will achieve the desired future conditions of the aquifers in the District. In doing so, the District will strive to protect private property rights, including investments by existing well owners.

G.4. - Performance Standard: By 2022, the District will develop and adopt permanent rules that will achieve the desired future conditions of the aquifers in the District.

Over the past several years, Prairielands staff, consultants, and Board of Directors have researched every option, outcome, and effect that a new set of rules will encounter. In 2018 the District held a course of several stakeholders' meetings to get outside input, sent letters to every non-exempt well owner to be sure everyone was aware of the upcoming rule change, and held a Public Hearing on the proposed Permanent Rules. On December 17, 2018 the Board of Directors approved the Permanent Rules. These rules have an effective date of January 1, 2019.