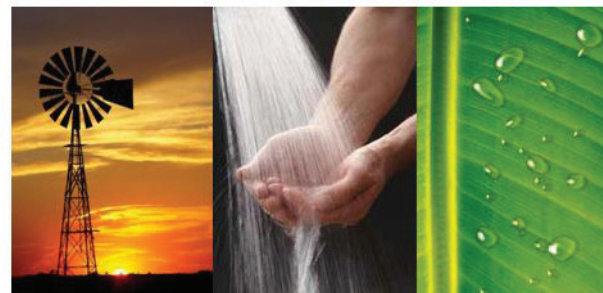


North Plains Water News



A Publication of the NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

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SUMMER 2018

House Committee Visits Panhandle for Public Input

The Texas Legislature ended its 85th session in the summer of 2017, but your legislators are hard at work in the interim period until they return to the Capitol in 2019. In both the House and the Senate, policy makers have honed in on water law, permitting, and groundwater conservation districts. North Plains Groundwater Conservation District was given a unique opportunity to meet with members of the House Natural Resources Committee to share the geology of the region, district rules and permitting processes, and the success of agricultural conservation programs.

As an overview, 31 senators and 150 representatives make up the Texas Legislature. The 8-county area that makes up the North Plains Groundwater Conservation District is represented by Sen. Kel Seliger. In the House of Representatives, Dallam and Hartley counties are served by Rep. John Smithee; Sherman, Moore, and Hutchinson counties are served by Rep. Four Price; and Hansford, Ochiltree, and Lipscomb counties are served by Rep. Ken King. In every odd-numbered year, the Legislature convenes in January at the state Capitol in Austin for a 140-day regular session to develop and vote on bills that may become law. When not in session, legislative committees are asked to research and seek public input on interim charges. Last October, Lt. Gov. Dan Patrick issued 81 interim charges to the Senate, and Speaker Joe Straus issued 230 interim charges to the House.

At a public hearing held on June 4th at the Capitol, the Senate Committee on Agriculture, Water, and Rural Affairs received testimony from several groundwater professionals regarding the interim charge titled “Regulatory Framework of Groundwater Conservation Districts and River Authorities.” Russell Johnson is an attorney based in Austin who described himself as the voice of negativity before he explained that “regulation should be by aquifer, or at least by regions of aquifers, and not by groundwater district boundaries.” After declaring that GCD boundaries are “ridiculous” everywhere except for the Texas Panhandle, Johnson said “Your fair share shouldn’t depend on which side of the county line you live on.”

C.E. Williams, General Manager of Panhandle GCD, discussed data from a study regarding similar rules among GCDs in the joint planning group Groundwater



House Natural Resource Committee members (left to right) Four Price, DeWayne Burns, Paul Workman, and Chairman Lyle Larson learn about subsurface drip irrigation at the North Plains Water Conservation Center.

Management Area 1 (GMA-1). A 100-question survey among the 4 districts revealed that their rules were at least 92% similar to one another, meaning that a very large portion of the Ogallala Aquifer in Texas is being managed consistently over the many square miles, water uses, and diverse geography in GMA-1. Williams explained some of the variation with his closing statement: “Local management is the most difficult way to manage groundwater, but it’s also the best because it takes into account the producers and the people that have to comply with the rules on a day to day basis, and it protects their private property rights.”

Sen. Charles Perry serves as the chair of the Committee on Agriculture,
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Conservation Demonstrations Underway at WCC and Partner Sites

About 95% of the groundwater pumped within North Plains Groundwater Conservation District is used for irrigated agriculture, and that’s why the district is committed to helping local farmers use less water. Sharing knowledge and cutting-edge research through our education field days and the Master Irrigator program is effective in promoting water conservation, but when you must see it to believe it, that is where the North Plains Water Conservation Center and our other demonstration sites shine. Real farmers put their time and money on the line to prove that water-saving practices are worth it. North Plains Groundwater Conservation District is supporting the following demonstrations during this growing season.

One of our demonstrations this growing season is the use of on-farm weather station data to assist in irrigation decisions. Weather stations were installed at the Water Conservation Center and the properties of demonstration partners Danny Krienke, Harold Grall, and Jeff Becker. The stations will record site-specific soil moisture, wind speed, temperature, rainfall, evapotranspiration, and more. Having more accurate weather and moisture data should help producers make better decisions about water use.

Harold Grall, President of the North Plains GCD Board of Directors, farms in Moore County and is currently participating in a variety trial of four corn hybrids. Two of the varieties are designated as drought tolerant, meaning that they have been

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NPGCD Directors Danny Krienke (bottom left) and Harold Grall (bottom right) met with Governor Greg Abbott (bottom center) and TCEQ Commissioners (top, left to right) Toby Baker, Bryan Shaw, and Jon Niermann on May 16, 2018 to receive the Texas Environmental Excellence Award for the district’s Master Irrigator program.

House Committee Visits Panhandle for Public Input

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Water, and Rural Affairs. His response to Williams recognized the unique issues present within the Texas Panhandle and GMA-1, stating that the population density is different than in other parts of Texas. Perry also addressed the region’s reliance on agriculture as a factor in determining Desired Future Conditions, or DFCs: “You guys have different DFCs in parts of that, because you can’t grow corn where there’s no water anymore. Y’all are very much exactly the example where I think science supports the differences in pumping and well spacing... Similar rules doesn’t mean everybody’s the same, similar rules means that the approach and logic for the rule was the same.”

On the same day of the Senate committee public hearing, staff and directors of the North Plains Groundwater Conservation District (NPGCD) welcomed members of the House Committee on Natural Resources to the North Plains Water Conservation Center north of Dumas. In attendance were Committee Chair Lyle Larson, Four Price, DeWayne Burns, Paul Workman, and several of their staff members. The committee learned about the district’s production limits and metering requirements, economic development of the area, alternative crops, geology of the district and its boundaries, inflows from New Mexico, and conservation education.

Four Price expressed his pride in NPGCD’s innovative Master Irrigator adult education program, which recently garnered the district its second Texas Environmental Excellence Award. Representatives and their staff toured the Water Conservation Center to see agricultural conservation in practice on the district’s 320-acre demonstration farm. With two center pivot irrigation fields and 40 acres outfitted with subsurface drip irrigation, the farm is an authentic example of how producers can use water more efficiently and maintain or even increase their yield and profitability. Committee members asked many questions, and at the end of the day Chairman Larson praised the conservation efforts of farmers in the Panhandle. Recognizing that most groundwater use in Texas is for crop irrigation, he suggested that people in urban centers need to be made aware of the strides that are being made in agricultural water conservation.



NPGCD Director Bob Zimmer speaks to Chairman Lyle Larson about innovations in center pivot irrigation.

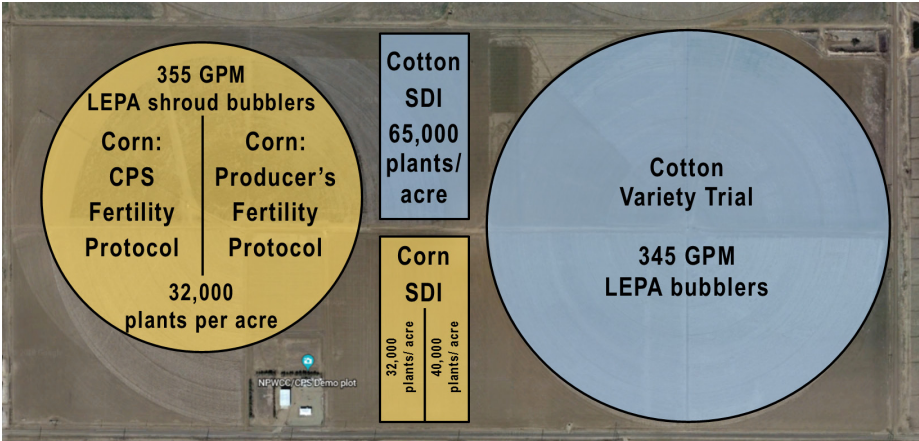
Armed with an enhanced knowledge of water use in the Texas Panhandle, The House Committee on Natural Resources took their turn at a public hearing at Palo Duro Canyon State Park on Tuesday, June 5th. The testimonies at the House committee hearing were very similar to those heard at its Senate counterpart, with many of the invited speakers traveling straight from the Senate hearing to testify at the House hearing. The interim charge issued to the committee was to evaluate the status of groundwater policy in Texas, including issues regarding case law development, consistency in aquifer-wide management, improvements to permitting processes, brackish groundwater research, water supplier service areas, and data needs.

After the public hearings, committee members will use what they learned to produce an interim report to be delivered to their leadership and made public. The report will guide the committee members as they develop and evaluate bills in the regular session beginning next January. The legislative interim period is an important process for our lawmakers and a time for the public to provide vital information to the legislators.

Go to www.northplainsgcd.org/news-events/ to read more about the public hearings. 💧

Conservation Demonstrations Underway at WCC and Partner Sites

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2018 crop plan for the North Plains Water Conservation Center

genetically modified to improve the plant’s ability to use water more efficiently. Data acquired by the farming community regarding the effectiveness of hybrids under low water use conditions can be analyzed by seed companies to guide further development of varieties for water-scarce areas like the Texas Panhandle.

Taking the trial a step further, Grall is also experimenting with conservation tillage. The hybrids are planted on both a stripped-tilled section of the field and in a no-till zone, for side-by-side comparison of the two tillage practices. Conservation tillage describes a variety of methods to minimize soil disturbance by mechanical tilling. Reducing tilling frequency or intensity was originally intended to prevent soil erosion, but conservation tillage is now often practiced in combination with residue management and cover crops to improve soil health. Leaving plant stubble on the surface after harvest shields the moisture in the topsoil from sun and wind evaporation and can improve soil chemistry and microbial populations over many growing seasons. No-till practices require more weed control, and it may take several years before results can be seen.

At the 320-acre North Plains Water Conservation Center (WCC), farm operator, Stan Spain has planted 120 acres of cotton in the East Pivot field, and 20 acres of cotton in the North Zone of the subsurface drip irrigation (SDI) field. The 80-acre West Pivot field and the 20-acre South Zone SDI field are planted in corn. This plan reflects crop rotation to enhance soil health and manage weeds and pests. Spain has partnered with Crop Production Services to run variety trials, and segments of both pivots are under varying fertility protocols. The East field is under low elevation precision application (LEPA) bubblers, and the West field is irrigated by LEPA shroud bubblers. While the bubbler spray pads deliver aerated water gently in a stream, the shrouds deflect the water to create a gentle dome effect to cover more area. Outcomes of both of these irrigation methods will be compared to the SDI fields.

Spain has also begun a cover crop demonstration by planting winter oats on last season’s cotton circle. Spain planted the oats at the end of January and, because of the dry winter, had to apply almost four inches of irrigation to germinate the crop and help it develop. Spain will monitor irrigation on the corn crop that has been planted on that circle to determine if the cover crop improves water holding capacity and crop yield.

On the heels of the corn-focused 200-12 and 3-4-5 GPM demonstrations, North Plains GCD is exploring the future of cotton in this region and alternative methods of increasing irrigation efficiency among all crops. At the end of the growing season, data will be collected on yields, irrigation inches, technologies used, and more. As the Ogallala aquifer continues to decline, it is imperative to improve irrigation efficiency while maintaining crop profitability. 💧

Save Paper and Water by Choosing our E-Newsletter

North Plains GCD now offers our district newsletters by email. If you would like us to send you a digital copy of the newsletter, you can go online at www.northplainsgcd.org/sign-e-news/ and fill out the form, or just email info@northplainsgcd.org. You can also go online to download previous newsletters, and find us on Facebook, Twitter and Instagram.





Students at the Save the Planet's Water Festival in Dumas explore the creative side of nature in Aquatic Art.



Water user groups must share a common water source as they try to get water into their team's bucket.

2018 Water Festival Wrap-Up

Over 800 4th grade students in the North Plains experienced a one-of-a-kind educational extravaganza during the Save the Planet's Water Festivals in Dumas, Dalhart and Perryton. From water-soaked relay races to an awe-inspiring magic show, a variety of activities were offered to help students understand our water resources and ways that they can protect and conserve them.

North Plains GCD would like to thank this year's partners and volunteers: Valero McKee Refinery, Frank Phillips College-Allen Campus, Amarillo College Moore County Campus Lions Club, Moore County AgriLife Extension & 4-H, Dumas High School Leo Club, Panhandle Chapter Master Naturalists, Texas Corn Producers Board, Dalhart High School, Dallam-Hartley 4-H, Associate Professor Bonnie Pendleton from WTAMU, City of Dalhart Public Works Department, Ochiltree County Soil & Water Conservation District, Ochiltree County NRCS, Steve Swanson, and Tom and Thelma Cannon. ♦

Show Off Your Xeric Zone!

Editorial cartoonist Lou Erickson once said "Gardening requires lots of water – most of it in the form of perspiration." While statistics on sweat have not been published, we do know that water used for landscaping accounts for over half of municipal water use in the hot Panhandle summer months. The new Xeric Zone program from North Plains Groundwater Conservation District will recognize residences and businesses that have made a commitment to use xeriscaping to reduce outdoor water consumption.

If you know of a business or residence that uses any water-friendly landscaping practices, please send us a tip to info@northplainsgcd.org or call Julia at 806-930-6934. You can also find a nomination form on our website. We'll get in touch with the home or business owner and adorn their landscape with a special Xeric Zone sign. Feel free to nominate your own xeriscape, or any that you see! Read below to learn more about what xeriscaping means and how you can make your yard a Xeric Zone.

A xeriscape is a landscape design that does not require much water, usually utilizing native or drought-tolerant plants and hardscape elements such as rocks or pavers. A fully xeriscaped yard will usually group plants by water use. The arid zone of a landscape should thrive on natural moisture alone, with no irrigation required after plants have established roots. The transitional zone has plants that may require partial shade and infrequent watering. Planting beds or areas close to the home can serve as an oasis zone, with rainwater falling from the roof line serving as additional irrigation for more thirsty plants. Xeriscaping also promotes soil health through the use of organic amendments and moisture-locking mulch. Complete overhaul of your yard isn't necessary to see water savings. Check out these easy fixes to bring some xeric elements into your landscape:

1. The biggest water-waster in a landscape is the turf. Look into turf replacements like buffalo grass and various groundcovers.
2. Replace high-maintenance annuals with perennial xeric plants that will come back year after year! Some of our favorites are Red Autumn Sage, Chocolate Flower, Prairie Zinnia, and Iceplants.
3. Consider replacing turf with pavers or flagstones in high-traffic areas.
4. For the ultimate low-maintenance yard, add rock garden elements and well-chosen succulents or cacti.

One of our favorite resources for xeriscape planning in the Texas Panhandle is the dedicated staff of Canyon's Edge Plants in Canyon, and the accompanying website, CanyonsEdgePlants.com. HighCountryGardens.com and HighPlainsGardening.com are great websites for research as well. ♦

Summer Showers Water Conservation Campaign Coming to a City Hall Near You

North Plains Groundwater Conservation District (NPGCD) is challenging its residents to take advantage of Operation: Summer Showers. Operation: Summer Showers is a program that stresses the importance of saving water at home by providing free water-saving survival kits during the hottest, peak water-use period of the year.

With support from area cities and local media, NPGCD has supplied these water conservation tools to the North Plains for the last five years.

The Operation: Summer Showers kits include a water bottle, low-flow showerhead, rain/sprinkler gauge, faucet drip gauge, and leak detector tablets. These kits are available free of charge at the District's office at 603 E 1st Street in Dumas, or at City Hall in Booker, Spearman, Stinnett, Stratford, Dumas, Dalhart, and Perryton.

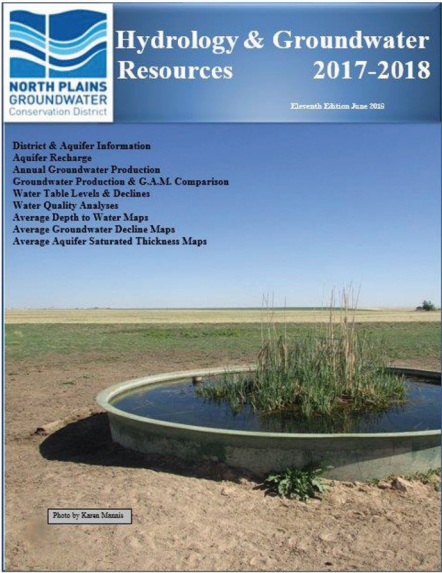
"Summer showers gives residents an opportunity to upgrade outdated showerheads, to conserve water in their homes, and potentially save on their water bill, too. They can be water efficient by checking for potential leaks in their toilets and more efficiently using their sprinkler systems with the rain/sprinkler gauge," said Kirk Welch, Assistant General Manager – Outreach.

Water saving tips and more information can be found at northplainsgcd.org. ♦



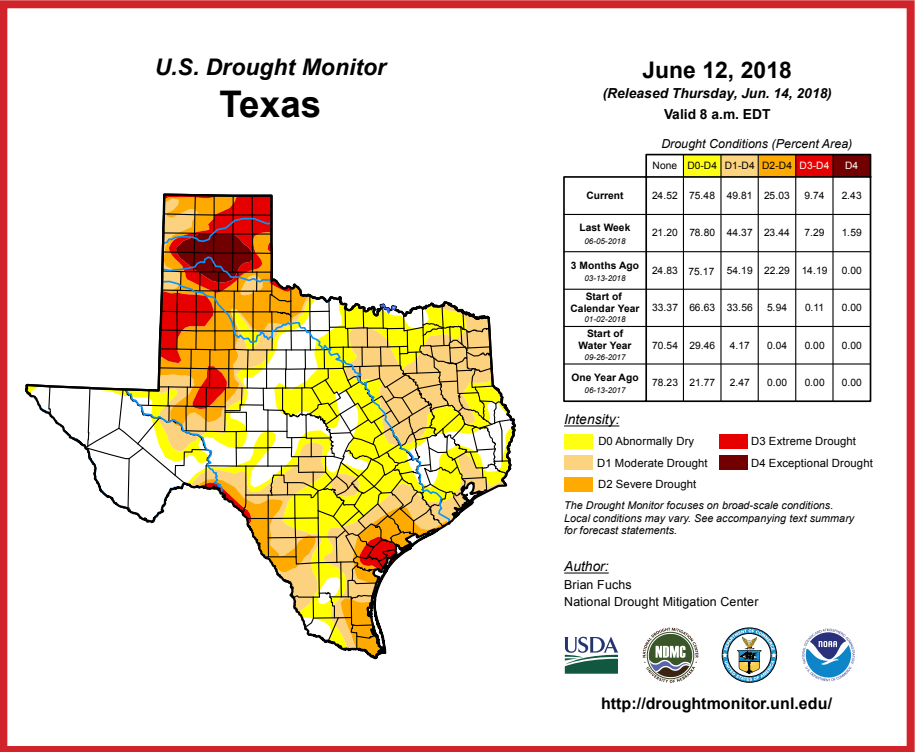
Contents of Summer Showers water conservation kit

2017 Hydrology Report Available



Annually, the North Plains Groundwater Conservation District publishes a “Hydrology and Groundwater Resources” report. The 2017-2018 Hydrology and Groundwater Resources report was presented to the Board of Directors at the June meeting. The report contains information about the district’s history, annual groundwater pumping, water quality, water level declines, aquifer recharge and more. There are also three sections of maps depicting the declines, the depth to water and the amount of saturated aquifer remaining for each of the counties in the district. The report is available at northplainsgcd.org and copies are available in the district office at 603 E. 1st Street in Dumas. 💧

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Water Well Training & Screenings

Texas Well Owner Network, a branch of Texas A&M AgriLife Extension, will be in the Panhandle in July to test well water samples and provide information about water quality and well protection. You can pick up sample kits for \$10 at the Ochiltree, Lipscomb, Sherman, or Hansford County AgriLife Extension offices starting July 10th. Sampling instructions will be provided, and you’ll return your sample from 8:30-10am on Tuesday, July 17th. All counties except Sherman will receive their results at an informational meeting held at the Ochiltree County Extension Office at 7pm on Wednesday, July 18th. The follow-up meeting for Sherman County will be held at 6pm on Tuesday, July 24th at the extension office. To learn more, please visit www.twon.tamu.edu or call Drew Gholson at 979-845-1461. 💧



2018 Master Irrigator Graduates	
Dustin Borden	Janet Reinart
Clinton Born	Colt Reynolds
Paul Breland	Eddy Riggins
Ann Burton	Justin Ritchey
Dorland Burton	Dustin Sargent
Glen Green	Everett Timmons
Dennis Holubec	Nathan Webb
Mark Howard	Willie Wieck
Ridgel Koehn	Linda Williams
Kenton Laubhan	Misty Williams