

North Plains Water News



A Publication of the NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

VOLUME 63, NO. 2

SUMMER 2017

Irrigation Conservation Initiative Grant Program

Agricultural irrigators in the district will soon have more funds available to assist with the purchase of certain irrigation efficiency equipment, including soil moisture probes, pivot monitoring and control systems, telemetry and on-farm weather stations. The program is made possible by \$300,000 in grants from the Texas Water Development Board (TWDB) as part of the Agricultural Conservation Grant Program.

The program requires irrigating producers to participate in at least one of the district's educational programs or activities to be eligible for cost share. Qualifying programs include the Master Irrigator intensive irrigation conservation training, the "3-4-5 GPM Project" or its associated field days, and other approved irrigation related events the district may present in the future.

"The Irrigation Efficiency Initiative is an extension and complement to the Master Irrigator Program as it will allow the district to continue to move from demonstrating irrigation conservation, to facilitating understanding and ultimately encouraging adoption," said Steve Walthour, General Manager, North Plains Groundwater Conservation District.

One of the major obstacles to wider adoption of these proven conservation

technologies and practices is the learning curve to successful implementation. Without the understanding of how to maximize the function of a piece of equipment or a practice, the optimum results may not be achieved, leading to a reduction in potential adoption. "The idea of the Irrigation Efficiency Initiative and the Master Irrigator Program is to provide the information and support necessary to ensure the producer's success and, therefore, increase adoption," said Walthour.

The cost share program will cover up to half of the cost of the selected technology or practice. The program is expected to be operational with funds available in time for the 2018 growing season. 💧



New grant will cost share telemetry, soil moisture probes, etc.

North Plains Water Conservation Center Planting Dates and Plans in 2017

In 2014, North Plains Groundwater Conservation District (district) refocused and renamed the North Plains Research Field at Etter, TX as the North Plains Water Conservation Center (WCC). In partnership with Crop Production Services (CPS) and local farmer Stan Spain, the WCC is in its third year of demonstrating graduated irrigation regimens of 3, 4, and 5 gallons per minute (GPM) pumping capacity to simulate the conditions faced by most producers in the district.

The following is a timeline for what has taken place recently at the WCC in 2017.

The district and CPS kicked-off the second year of the Master Irrigator Program on March 22, 2017 by sharing planting plans for the WCC with participants. At the end of May, CPS planted a circle and 20 acres of drip irrigation containing the dicamba cotton trials. This cotton has been genetically engineered to resist dicamba, an herbicide designed to reduce weeds.

On June 22, 2017, the National Corn Growers Association Board came to the WCC while in the Texas panhandle, where they learned about the district's

demonstration projects and how the district is exploring various ways growers can get more crop for every drop of precious groundwater.

After applying 2" of water for the assistance of corn germination at the end of May, irrigation stopped for about a month. It wasn't until June 28th that irrigation at the WCC began again. On June 30th, the dry land wheat was harvested.

Phytech, an ag service company that develops plant-based practice applications, installed three tensiometers at each of the six demonstration plots at the WCC on July 6. Tensiometers measure the plant's stress by whether the plant swells or shrinks to determine whether more or less water should be applied.

Follow us on social media and look for the Fall edition of the district's newsletter for updates on the continuing activities at the WCC. To read more on the "3-4-5 GPM" project, go to <http://northplainsgcd.org/conservationprograms/agricultural-conservation/3-4-5-demonstration-project/>, or contact Kirk Welch at (806) 935-6401 or email kwelch@northplainsgcd.org. 💧

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NPGCD Currently Achieving its Adopted Desired Future Conditions

In June, the district’s board adopted desired future conditions (DFCs) for each of the aquifers in the district, completing the current joint planning cycle for Groundwater Management Area 1 (GMA 1). A DFC is a quantitative description of the desired condition of the groundwater resources in a management area at one or more specified future times. The Ogallala aquifer’s DFCs also include the Rita Blanca aquifer located in Dallam County, and they are the same DFCs that were adopted in 2010. The board adopted that the Ogallala and Rita Blanca aquifers’ DFCs remaining in 50 years, for the period 2012-2062 are as follows:

- At least 40 percent of volume in storage collectively in Dallam, Hartley, Moore, and Sherman counties; and
- At least 50 percent of volume in storage collectively in Hansford, Lipscomb, and Ochiltree counties and that portion of Hutchinson County within North Plains GCD.

The Dockum aquifer’s DFC is similar to that adopted in 2009. The board adopted that the Dockum aquifer DFC is at least 40 percent of the available drawdown remaining in 50 years for the period 2012-2062 collectively for Dallam, Hartley, Moore, and Sherman counties.

The Texas Water Development Board released the Modeled Available Groundwater (MAG) to the district on April 19, 2017. The collective MAG for the aquifers in the district are as follows (Table 1):

Table 1: Collective MAG for Aquifers in NPGCD							
County	2016	2020	2030	2040	2050	2060	2062
Dallam ^{[A][B]}	435,583	401,663	301,393	239,759	181,074	127,048	117,442
Hartley ^[A]	440,083	402,386	276,055	216,814	158,850	104,696	95,103
Moore ^[A]	242,451	226,455	183,387	149,846	115,576	84,199	78,545
Sherman ^[A]	422,960	398,183	349,022	281,817	212,871	148,647	136,869
Hansford	275,929	275,016	272,656	271,226	270,281	269,589	269,479
Hutchinson	61,964	62,803	64,522	65,652	66,075	66,027	65,956
Ochiltree	243,725	243,778	243,932	244,002	244,051	244,082	244,085
Lipscomb	266,852	266,809	266,710	266,640	266,591	266,559	266,557
West	1,541,077	1,428,687	1,109,857	888,236	668,371	464,590	427,959
East	848,469	848,406	847,820	847,520	846,998	846,257	846,077
Total	2,389,546	2,277,093	1,957,677	1,735,756	1,515,369	1,310,847	1,274,036

[A] Counties with the Dockum aquifer included in their MAG.

[B] Counties with the Rita Blanca aquifer included in their MAG.

The district requires all owners of non-exempt water wells to annually report their groundwater production. Table 2 below shows the groundwater volumes reported to the district from 2012 through 2016. Over the last five years, groundwater withdrawals in the district averaged 1.7 million acre-feet per year. The eastern four counties’ (Hansford, Hutchinson, Lipscomb, and Ochiltree) groundwater production averaged 399 thousand acre-feet per year, while the western four counties’ (Dallam, Hartley, Moore, and Sherman) production averaged 1.3 million acre-feet per year.

Of the total groundwater production, the eastern and western counties’ groundwater pumping averaged 23.5% and 76.5%, respectively. Total groundwater withdrawals in the district during 2016 totaled 1.56 million acre-feet.

The eastern counties pumped 362 thousand acre-feet (21.3%) while the western counties pumped 1.2 million acre-feet (70.8%). 2016 district-wide production is 8% below the average of the past five years. The east counties are 9.33% below the average, and the west counties are 7.47% below the average.

Table 2: Groundwater Production Reported to The District, 2012-2016 (Volumes in Acre-feet)						
County	2012	2013	2014	2015	2016	Average
Dallam	372,000	399,300	393,700	297,000	339,200	360,240
Hartley	458,700	459,000	442,100	332,700	391,600	416,820
Moore	234,700	228,300	210,000	156,700	185,700	203,080
Sherman	348,100	346,700	361,400	251,700	285,300	318,640
Hansford	218,800	202,000	211,700	148,800	170,400	190,340
Hutchinson	72,300	69,800	74,000	57,700	67,600	68,280
Lipscomb	55,600	42,600	48,800	39,400	42,300	45,740
Ochiltree	109,300	98,300	106,300	77,400	81,400	94,540
West	1,413,500	1,433,300	1,407,200	1,038,100	1,201,800	1,298,780
East	456,000	412,700	440,800	323,300	361,700	398,900
Total	1,869,500	1,846,000	1,848,000	1,361,400	1,563,500	1,697,680

[A] 2016 Production data are provisional and subject to change.

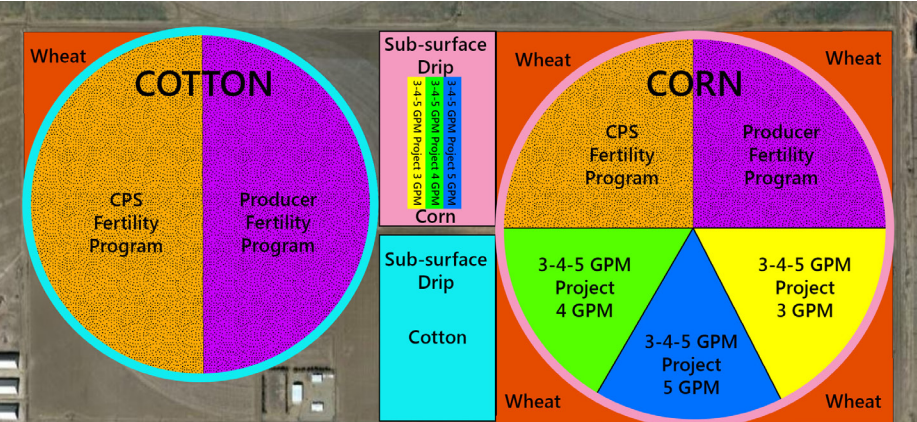
[B] Average is an average of the last five years.

The average annual groundwater production is below the MAG provided by the TWDB which means the district is well on its way to achieving its adopted DFCs.

Though the board has adopted DFCs for the next 50 years, the joint planning process continues. The district will begin the next cycle shortly with its joint planning partners: Hemphill County Underground Water Conservation District, High Plains Underground Water Conservation District, and Panhandle Groundwater Conservation District. 💧

WCC Planting Plans in 2017

(continued from page 1)



85th Legislative Wrap Up

The Texas Legislature ended its 85th Regular Session on Monday, May 29, 2017. The district followed over one hundred bills through the legislative session. As with any legislative session, most bills are not passed by both chambers of the congress, and therefore, are not sent to the governor to sign or veto. Even fewer bills make it past the governor’s veto pen. Six new laws that survived the governor’s June 18th deadline to sign or veto bills passed during the regular session that generally affected groundwater management in the state. The new laws positively affect state water development planning, the district and our stakeholders. A summary of those laws is listed below.

HB 2215, authored by Representative Four Price, amends the Texas Water Code to better coordinate groundwater management planning by groundwater conservation districts (GCDs) and joint management planning to develop the state’s water resources. The bill revises the timeframe for GCDs to jointly plan and compile a summary regarding proposed desired future conditions and the procession of the proposal through final adoption.

HB 2803, authored by Representative Lyle Larson, compiles local laws into one place in the government code concerning certain special districts that may have their laws spread out over a hundred years of Texas Legislation. NPGCD was one of the special districts that went through the codification process, and its enabling legislation is Chapter 8887 in the government code.

SB 864, authored by Senator Charles Perry, requires that notice be provided to a GCD with jurisdiction over the groundwater whenever a surface water permit at Texas Commission on Environmental Quality (TCEQ) proposes to use groundwater as an alternative resource. TCEQ already has a procedure for providing notice during the permitting process, so this bill would simply expand the notice requirements to include GCDs as well.

SB 865, authored by Senator Charles Perry, specifically authorizes GCDs to use payroll disbursements by electronic direct deposit and pay bills using electronic means. The district believes that it already had the power to take this action based on another law already in place.

SB 1009, authored by Senator Charles Perry, prevents GCDs from changing administrative completeness requirements for permits and permit amendment applications without first changing its rules.

SB 1511, authored by Senator Charles Perry, amends the state and regional water planning process and the funding of projects included in the state water plan. The legislation creates an expedited planning process for those areas of the state that groundwater development has not changed substantially from one planning process to the next, and it clarifies the parameters to determine if a project seeking state funding is feasible.

Governor Greg Abbott called a special session of the 85th Legislature that began July 18, 2017. Groundwater management is not specifically on his special session agenda; however, the district is monitoring legislation that can potentially affect the local government and its stakeholders. For additional information, please contact Steve Walthour at swalthour@northplainsgcd.org, or call the office at (806) 935-6401. 💧

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 aholguin@northplainsgcd.org. You can also go online to download previous newsletters, and find us on Facebook, Twitter and Instagram.



Operation: Summer Showers for your water conservation needs

North Plains Groundwater Conservation District (district) challenged its residents to take advantage of Operation: Summer Showers during the month of July. 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, the district has supplied water conservation tools to the North Plains for the last five years.

The district continues to host Operation: Summer Showers because of the opportunity to partner with the communities. “This is a great way to extend our reach with these conservation messages. We are all water users, so we need to all be water savers.” said Kirk Welch, Assistant General Manager – Outreach at North Plains Groundwater Conservation District.

Check out these tips for conserving water outside the house.

1. Use a broom, not a hose, to clean driveways and sidewalks
2. Water your lawn when it is cooler – early in the morning or late in the evening- to reduce water loss from evaporation.
3. Water when there is as little wind as possible to keep the water on your lawn.
4. Allow grass to dry between watering to promote deeper root growth.
5. Keep your lawn around 2 ½” - 3” tall. Taller grass shades the soil, reducing evaporation.

Wanting to know how you can conserve water inside your home daily? Here are a few helpful hints.

1. When washing your hands, turn the water off while you lather.
2. Toilet leaks can be silent! Be sure to test your toilet for leaks at least once a year.
3. Shorten your shower by a minute or two, and you’ll save up to 150 gallons per month.
4. Plug the sink instead of running the water to rinse your razor and save up to 300 gallons a month.
5. Store drinking water in the refrigerator rather than letting the tap run every time you want a cool glass of water.

More water-saving tips can be found at <http://wateruseitwisely.com/100-ways-to-conserve/>. Finally, make sure you are in compliance with any water restrictions in your city.

For more information about water conservation practices or Operation: Summer Showers, you may call the district at 806-935-6401 or email kwelch@northplainsgcd.org. “Like” the North Plains Groundwater Conservation District on Facebook, and “Follow” @NorthPlainsGCD on Twitter and Instagram to learn more water conservation tips. 💧



Operation: Summer Showers kits include a water bottle, low-flow showerhead, rain/sprinkler gauge, faucet drip gauge, and a leak detector tablet.

2017 Water Conservation Artwork Contest Winners

Dante Delgado of Dalhart was the grand prize winner in the 2017 Water Conservation Artwork Contest sponsored by the North Plains Groundwater Conservation District (NPGCD). The annual contest is open to all fourth, fifth, and sixth grade students who reside within the district.

Dante’s artwork titled “Water Cycle” is a colorful depiction of the water cycle with a smiling sun shining down on the landscape.

Dante received a certificate of recognition, a \$50 cash prize, and his artwork is featured on the cover of the 2017 NPGCD Water Conservation Calendar. Dante was in Mrs. Dona Smith’s class at Dalhart Intermediate School in 2016 when the entries were submitted. The calendars are free to the public.

Other winners in this year’s contest were:

Kamryn Long – artwork titled “Turn Off the Faucet!”. Kamryn was in Mrs. Linda Henley’s class at Hillcrest Elementary in Dumas.

Jolee Jones – artwork titled “Don’t Waste Water”. Jolee was in Mrs. Gloria Mason’s class at Hillcrest Elementary in Dumas.

Arely Acuna – artwork titled “Save Our Water!”. Arely was in Mrs. Krisa Smith’s class at Dalhart Intermediate.

Daya Vasquez – artwork titled “Drops Count”. Daya was in Mrs. Barbara Kaul’s class at St. Anthony of Padua Catholic School in Dalhart.

Mitchell Bailey – artwork titled “H2O is Life”. Mitchell was in Mrs. Krisa Smith’s class at Dalhart Intermediate.

Ashely Rodriguez – artwork titled “Be Water Smart”. Ashley was in Mrs. Kara McDowell’s class at Sunset Elementary in Dumas.

Valerie Najera – artwork titled “Save Every Drop”. Valerie was in Mrs. Kara McDowell’s class at Sunset Elementary in Dumas.

Janette Avila – artwork untitled. Janette was in Mrs. Kara McDowell’s class at Sunset Elementary in Dumas.

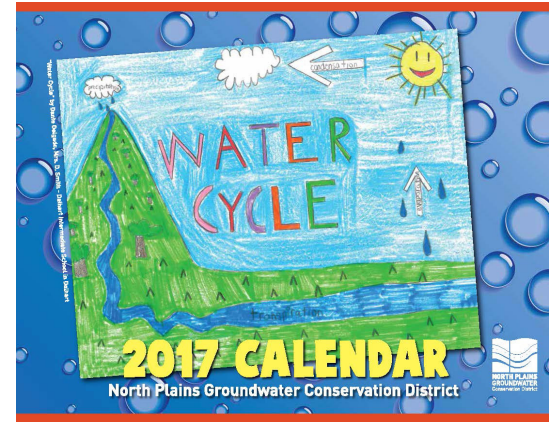
Sherlynn Herrera – artwork titled “Save Water!”. Sherlynn was in Mrs. Courtney Thelander’s class at Dalhart Intermediate.

Kevin Ivan Favela Martinez – artwork titled “Save Water”. Kevin was in Mrs. Dona Smith’s class at Dalhart Intermediate.

Jolie Bowers – artwork titled “In a Drought Don’t be Without”. Jolie was in Mrs. Jantje Olson’s class at Dalhart Intermediate.

Payton Ralston – artwork titled “Don’t Dump Water Down the Drain”. Payton was in Mrs. Courtney Thelander’s class at Dalhart Intermediate.

These students received certificates of appreciation, a \$25 cash award, and their artwork is featured inside the 2017 Water Conservation Calendar. Additionally, each student received copies of the calendars to share with friends and family. 💧



Gardening with Less Water in Mind

North Plains Groundwater Conservation District held a water wise Gardening Class on March 11, 2017 where Neal Hinders, owner of Canyon’s Edge Plants, taught the community how to have a beautiful landscape while being responsible stewards of the area’s precious water resources. Hinders discussed xeriscaping concepts and low-water use plant varieties and their characteristics. Canyon’s Edge Plants is located on the square in Canyon, TX and specializes in low-water use and native plants.

The word “xeriscape” was coined by the Denver Water Department in 1981 to help make water conserving landscaping an easily recognized concept. The word is a combination of “landscape” and the Greek word “xeros,” which means “dry.”

According to Hinders, there are seven water conserving principles that are used to achieve a yard dedicated to xeriscaping. To read about the seven principles, head to our website at <http://northplainsgcd.org/news/>.

The class was free to the public, and attendees received free resources on water wise gardening and xeriscaping. One \$30 gift card to Canyon’s Edge Plants was won by class attendee Cindy Rhoades, and all attendees received 25% off up to \$100 at Canyon’s Edge Plants. Garden wisely!

For more information on xeriscape, water wise gardening, please contact Kirk Welch at (806) 935-6401 or email kwelch@northplainsgcd.org. 💧



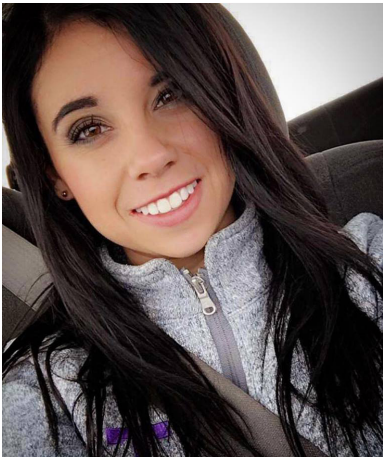
North Plains community listen to Neil Hinders’ presentation on achieving a yard dedicated to xeriscaping.

Summer Interns Join NPGCD

In late May, two summer interns joined the North Plains Groundwater Conservation District (NPGCD) communications department, Jessica Fischbacher and Paige Glazner.

Jessica Fischbacher is a Junior Animal Science – Animal Industries major at Tarleton State University and is scheduled to graduate May of 2019 when she plans to become a pharmaceutical sales representative. She graduated in 2015 from Dumas High School. Jessica chose Tarleton State University because it felt like home to her, and the animal science program proved strong and successful.

Jessica is assisting with social media outreach, in addition to website maintenance and coordinating NPGCD’s *Operation: Summer Showers* campaign. “I like working at NPGCD because I am learning that I am good at the things I feared, like public relations. I wanted to work at NPGCD because I was always curious about how NPGCD worked with farmers. I volunteered at the Water Festivals when I was in



High School, and I was curious about what went on behind the scenes to put it on.” Fischbacher said.

Paige Glazner is a sophomore in graphic design attending Amarillo College. She graduated in 2016 from Dumas High School and ranked in the top ten of her class. She chose Amarillo College as a way to acclimate herself to college life before jumping into a four-year university. The college offered many other opportunities, such as the Presidential Scholarship, which allowed her to join a tight knit study community, and she traveled to Japan in January 2017. Paige has been involved in graphic design since childhood, often drawing and creating digital layouts for online simulation games. Additionally, she participates in online art communities, which allows her to sell commissioned art internationally.

Paige is at the district to gain valuable work experience and to work with the district to create unique artwork for practical applications. “The District provides a great opportunity for personal growth and learning, which has made the experience very fulfilling.” Glazner said.

Both internships will end mid-August, when the students will return to their classes at Tarleton and Amarillo College. 💧



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NPGCD taught future water savers (PreK-6 graders) the importance of conservation at Killgore Memorial Library’s “Build a Better World” on June 21, 2017 in Sunray, Cactus, & Dumas.

