

# North Plains Water News



A Publication of the NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

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## North Plains Groundwater Conservation District: The Beginning

With the 60-Year Diamond Anniversary of the district fast approaching, it seemed like an appropriate time to take a look back to see how the North Plains Groundwater Conservation District came to be. Certainly it is worthwhile to reflect on what the district was created to do, and what sort of job it has done, but it is also valuable to remind stakeholders of the legacy of conservation that they are a part of. However, to start at the real beginning, it's necessary to go back more than 60 years. In fact, it was almost a hundred years ago that the foundation was laid that would lead to groundwater conservation districts in Texas, including North Plains GCD.

In 1917, Texas voters approved the Conservation Amendment (Article 16, Section 59) to the Texas Constitution following droughts in 1910

and 1917. The Amendment declared that conservation of the state's natural resources, including water, are public rights and duties.

To address its constitutional duty to protect water, the Texas Legislature created the framework for groundwater conservation districts in 1949 to locally manage the conservation, preservation, protection, recharge, and prevention of waste of groundwater. This framework has become known as the Groundwater Conservation District Act. Today, that management framework, as amended, is largely found in Chapter 36 of the Texas Water Code.

Originally the Groundwater

Conservation District Act required the State Board of Water Engineers to designate an aquifer or subdivision of an aquifer before a groundwater conservation district could be formed. On August 16, 1954, the board designated Subdivision No. Two North of the Canadian River in Texas, comprised of all or portions of Dallam, Hansford, Hartley, Hutchinson, Moore, Ochiltree, Sherman and Lipscomb Counties. The

board then appointed five directors to serve until confirmation elections could be held in the counties. The directors first met on December 23, 1954 to order a confirmation elec-

tion. On January 21, 1955, voters in Hartley, Moore, Sherman, Hansford, Hutchinson, and Ochiltree Counties confirmed the creation of the district dedicated to protect and conserve groundwater resources north of the Canadian River.

The district began managing groundwater on March 10, 1955, when the district adopted the name "The North Plains Water District" and issued Order No. 1 regarding the rules governing drilling permits. Less than a week later, the district issued Order No. 2 regarding the rules concerning the drilling and spacing of new wells and the reworking or replacement of old wells on March 14, 1955. Later that year, the Texas Legislature ratified the designation of the aquifer subdivision and the election results.

*(continued on page 3)*



## Early District History Notes by Dale Hallmark, PG

One board meeting, shortly after district area voters confirmed the creation of the district in a publically held election, the board of directors met (February 15, 1955) in Spearman, Texas and hired J. W. (Buck) Buchanan to be the general manager of the district. Buck started work for a staggering \$500 per month salary which in most months averages out to less than \$23 per day. That was a very respectable salary in those days, but isn't it amazing how much times have changed?

During their next meeting (March 10, 1955) the board changed their temporary meeting place in Spearman to Dumas, Texas.

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## New Partnership at North Plains Water Conservation Center

In December, the district board of directors voted to accept a proposal presented by Crop Production Services (CPS) of Loveland, CO., to lease and conduct farming operations at the North Plains Water Conservation Center (Center) located just south of Etter, TX. The board's action concludes a process that began in November, when the board issued a request for proposals for anyone interested in partnering with the district at the Center. The CPS proposal was selected from among several that were received and reviewed by the board's ag committee.

"The proposal presented by CPS had the right combination of commitment and cooperation," said District General Manager, Steve Walthour. The CPS proposal offers \$50,000 cash annually in exchange for the 200 acres of irrigated farmland and roughly 80 acres of dryland. In addition, CPS agrees to provide all inputs necessary for the operation. "This type of financial and resource commitment on the part of CPS is a good faith investment in the ideals of the Center and an investment in the future of irrigated agriculture in the district. It will make it possible for the district to participate, while eliminating additional cost to taxpayers," said Walthour.

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## Historical Timeline

- **January 21, 1955**, voters in Hartley, Moore, Sherman, Hansford, Hutchison, and Ochiltree Counties confirmed the creation of the district dedicated to protect and conserve groundwater resources north of the Canadian River.
- **February 15, 1955** the board hired J.W. "Buck" Buchanan as the first general manager of the district. Buchanan would serve for 25 years with breaks along the way to serve in the Texas House of Representatives.
- **March 10, 1955**, the district adopted the name "The North Plains Water District" and issued Order No. 1 regarding the rules governing drilling permits.
- **March 14, 1955**, the district issued Order No. 2 regarding the rules concerning the drilling and spacing of new wells and the reworking or replacement of old wells

# Annual Irrigation Conference Set for Amarillo

AMARILLO – The annual High Plains Irrigation Conference will be held January 15th in the North Exhibit Hall of the Amarillo Civic Center, 401 S. Buchanan St., Amarillo.

The program, hosted by the Texas A&M AgriLife Extension Service and the Texas Agricultural Irrigation Association, will address a wide variety of topics of interest to the general public, as well as to agricultural producers, landowners, crop consultants and irrigation professionals, said Dr. Dana Porter, program coordinator and AgriLife Extension agricultural engineering specialist-irrigation and water management, Lubbock.

A concurrent trade show also will provide opportunities for attendees to see new products and technologies, and to visit with experts from industry, non-profit organizations and agencies.

Registration will be on-site only, beginning at 8 a.m., with the program starting at 8:30 a.m. The fee is \$30.

Two Texas Department of Agriculture pesticide applicator continuing education units - one general and one integrated pest management - will be offered, as well as six Agricultural Irrigation Association certified irrigation designer units and 6.5 certified crop adviser continuing education units - 5.5 soil and water management and one integrated pest management.

*Topics and speakers for the program will be:*

- Agricultural Water Issues and How Local/Regional Applied Research Programs are Answering Critical Questions, Dr. Dave Brauer, U.S. Department of Agriculture-Agricultural Research Service soil and water management research unit leader, Bushland.

- Implementing the State Water Plan: Agricultural Water Conservation Strategies in the Panhandle Regional Water Plan, Dr. Nolan Clark, Panhandle Regional Water Planning Group Agricultural Water Demands and Projections Committee chair, Amarillo.

- Updates on SWIFT, Groundwater Rules, Legislative Actions and Other Hot Topics, C.E. Williams, Panhandle Groundwater Conservation District manager, White Deer.

- Update from the Texas Alliance for Water Conservation, Dr. Chuck West, Texas Tech University Thornton Distinguished Chair of plant and soil science department, Lubbock.

- Comments from Mark Stutler, Texas Agricultural Irrigation Association president, Stephenville.

- Practical Implications of Applied Irrigation Research, Dr. Gary Marek, USDA-ARS research agricultural engineer, Bushland.

- Water Management Considerations in Integrated Pest Management, Blayne Reed, AgriLife Extension integrated pest management agent, Hale and Swisher counties.

- Irrigation “Ex-Spurts”: Tips on Maintenance, Management and Troubleshooting to Get the Most from Your Irrigation System, industry representatives.

The meeting will conclude with a wrap-up, evaluation and CEU distribution.

For more conference information, go to the Texas Agricultural Irrigation Association website, [http://taia.org/HPIC\\_2015.html](http://taia.org/HPIC_2015.html). Questions about the program can be directed to Porter at [dporter@ag.tamu.edu](mailto:dporter@ag.tamu.edu). Trade show questions should be directed to Kern Stutler at 806-786-5644.

*This story provided by Kay Ledbetter, Texas A&M AgriLife Research and Extension.*



The district is offering support to the Eagle Scout Project of Kyle Graham of Dumas. Graham is restoring the garden beds at the south entrance to Dumas on Highway 287, including installation of a new drip irrigation system and native and xeriscape plants. Boys from Dumas Jr. High volunteered their time for the project.

## Farm Tech: Power Conditioners

The district is in the process of installing two new Reinke center pivot systems at the North Plains Water Conservation Center in preparation for the 2015 crop production year. The first wheat crop planted at the Center under its new name was planted in early November. While watering the wheat crop, staff experienced difficulties with the global position system (GPS) for the center pivots. The pivots were losing signal with the satellites causing the pivot to enter dead reckoning. If the pivot remained in dead reckoning for 20 minutes, the control system stopped the pivot and sent a notification.

After consulting with the Reinke dealer, the district discovered the GPS was being affected by the variable frequency drive (VFD) that is connected to the same transformer as the pivots. The VFD created noise in the electric system that traveled to the GPS causing the loss of signal. The issue began after the district changed the electric provider for the Center. The change was made based on the service areas of the electric providers.

To solve this problem, the district is installing power conditioners, also known as line conditioners, to prevent the noise from reaching the pivots. Power conditioners provide clean AC power for sensitive electrical equipment, like the GPS. Another way to solve this problem is to have the VFD and pivot connected to separate transformers. The transformers will not allow the noise to travel back to the main line.

For more information, please contact the district's Agricultural Engineer, Paul Sigle, at [psigle@northplainsgcd.org](mailto:psigle@northplainsgcd.org) or (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](http://www.northplainsgcd.org) and fill out the form on the right side of the page, or just email [kwelch@northplainsgcd.org](mailto:kwelch@northplainsgcd.org). You can also go online to download previous newsletters and find us on Facebook and Twitter.



- **May 6, 1957**, Board authorized the general manager to enter into a contract to lease one section of land from Phillips Petroleum Company to establish an experiment station.
- **January 20, 1958**, the district's directors approved buying meters and installing one in each county, to keep accurate records of the amounts of water pumped, hours the well was in operation, number of acres irrigated and amount of rainfall received during a crop period. This would give the district valuable information on the amounts of water used in producing different crops.
- **May 1, 1967**, the board instructed Buchanan to contact the USGS to cooperate on a study of transmissibility and storage capacity of the Ogallala formation north of the Canadian River.
- **June 10, 1967**, the district purchased lots 2 and 3 Block No. 2 Coronado Addition to the City of Dumas. Made a motion to hire an architect
- **Aug 23, 1971**, the district annexed Lipscomb County into the district. Declared final Jan. 17, 1972.
- **Aug. 5, 1974**, J.W. Buchanan (Manager) was awarded the Man of the Year in Texas Agriculture Award presented by Texas County Agriculture Agents Association.
- **Jan 18, 1975**, district in operation for 20 years
- **May 1, 1978**, the district was contracted to conduct a study and evaluation of ground water resources in the part of the Ogallala north of the Canadian River in Texas.

## Hydrology and Water Resources Report for 2013-14 is Available to the Public

The North Plains Groundwater Conservation District's annual Hydrology and Groundwater Resources Report is available at the District office at 603 East 1st Street in Dumas, or it may be downloaded from the district website at [www.northplainsgcd.org](http://www.northplainsgcd.org). Click on the link "Science and Technology" and then "Hydrology Maps" to download a PDF file of the report.

In early fall 2014, the district completed its annual Hydrologic Report and Atlas of the district. Current and historical data is used annually to map groundwater information throughout the district on a county-by-county basis.

The report contains maps depicting water-level monitor well locations, estimated depth to water, estimated aquifer thickness and estimated average annual declines by county. In addition to the maps section, the atlas also contains sections outlining the geographical extent of the district and general information on the geology and hydrology of the district. It features information on the current volume of water in storage in the aquifer, estimated annual water usage, recharge, and other inflows and outflows of the aquifer, as well as an article about water quality.

Each year district residents request this type of information for use in groundwater investigations of different areas of the district. The atlas is a resource that allows them to easily compare general geologic and hydrologic characteristics of properties.

The Hydrology and Groundwater Resources report is available free of charge.

## Early District History

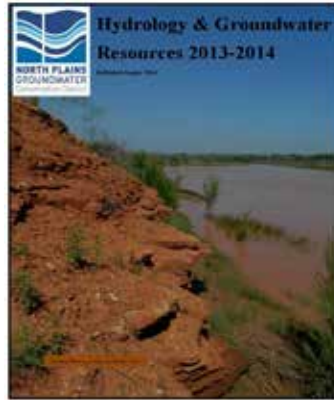
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During the meeting they examined bids for a district vehicle to be used by the manager for field work and conducting district business. The winning bid was from McClellan Chevrolet of Spearman, Texas for a sedan car. Yes, the district did field work out of a car and not the pick-up truck one might expect. The district continued to use cars in the field for many years. That sedan cost the district \$2,000 but it did have 4-doors, a radio, heater and an oil filter according to the board minutes. It was a three speed standard shift with an overdrive transmission. Just guessing, I'd say a showroom new 1955, 210, 4-Door Chevrolet would likely run you a "bit" more than that \$2,000 today.

In that March meeting the board approved a letterhead for the district's use and it read, "The North Plains Ground Water Conservation District No. 2 North of the Canadian River." That certainly took some typing effort, and today's name, "North Plains Groundwater Conservation District" doesn't seem so long by comparison.

During the April 15, 1955 meeting the board approved some necessary district expenditures. They approved spending \$82 for six months of auto insurance for that shiny new car. They also approved spending \$7.20 for a sign on the car door and \$6.16 for 125 two cent postcards and 100 stamped envelopes. They bought 11.5 gallons of gasoline for \$3.05, spent \$3.50 for some office supplies and \$1.50 to pay a county clerk filing fee. At that time the county clerks could file district well permits.

A lot has changed since 1955, and we may look back at those records in astonishment, but I for one think these days, not those, are the good ole days.



## New Partnership at North Plains Water Conservation Center

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Besides the guaranteed financial compensation, CPS management demonstrated a vision for the Center that matches the vision of the board. The CPS proposal spells-out a plan of demonstrating graduated irrigation regimens of 3, 4, and 5 gallons per minute pumping capacity to simulate the conditions faced by most producers in the district. Space will also be set-aside for demonstration of the district's award winning "200-12 Project". "CPS stands behind this study and recognizes its importance for the survival of farming with our limited water resources," said Shawn Carter, CPS Agronomist.

CPS also plans to demonstrate various plant populations and multiple crops and crop rotations in their demonstrations at the field including: corn, cotton, sorghum and wheat. These plans are already in line with the water conservation focus that the board wants for the Center, but the CPS proposal goes even further by also calling for ongoing coordination with the district in the design and implementation of demonstrations and district access to all the data.

CPS is the largest global agricultural retailer, providing growers across North America, South America and Australia with top quality crop input products and services. CPS is also a leading wholesale producer and distributor of crop nutrients, with operations strategically located to supply key global markets. Agrium, the parent company of CPS, has over nine million tons of nutrient production capacity across all three macro nutrients. They are the world's fourth largest nitrogen producer, as well as a major producer of potash and phosphate. Crop Production Services is Agrium's retail unit that supplies crop protection products, crop nutrients, seed, services and other products directly to customers through close to 1500 retail locations in the U.S., Argentina, Chile, Uruguay, Brazil, Australia and Canada.

"Our goal has always been to search for the most efficient and profitable methods of producing crops. This farm gives us the perfect opportunity to present our knowledge to the (district's) members and area producers," said Carter. CPS has contracted with local producer Stan Spain to conduct the day-to-day farming operations at the Center.

In addition to the agriculture conservation demonstrations to be conducted by CPS, the district will maintain the Center as a showcase for a variety of conservation practices and innovations. Possible demonstrations could include low water use landscaping, rainwater harvesting and gray water reuse.

Preparations are ongoing for CPS to begin operations during the 2015 growing season.

For more information about the Crop Production Services contact Shawn Carter at [shawn.carter@cpsagu.com](mailto:shawn.carter@cpsagu.com). For more information about the North Plains Water Conservation Center contact Kirk Welch at [kwelch@northplainsgcd.org](mailto:kwelch@northplainsgcd.org).

## The Beginning

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In 1973, voters in Lipscomb County approved joining the district. Dallam County was the last county to be incorporated into the district. Voters in portions of the county elected to join in 1993 and the Dallam County Underground Water Conservation District No. 1, created in 1958, agreed to join in 2004. The remaining properties in the county joined through a landowner petition process until the Texas Commission on Environmental Quality finally ordered the rest of the county into the district in 2012.

- **February 4, 1985**, rules governing toxic and hazardous waste disposal passed on an unanimous approval.
- **February 2, 1987**, the Research Field is to be purchased by the District for \$3,400.
- **May 1, 1993**, an election was held for the purpose of ratifying the annexation of the territory within a defined area of Dallam County and a defined area of Hartley County into the NPGCD.
- **May 25, 1993**, a portion of Dallam County and additional territory in Hartley County was annexed into the district on May 1, 1993.
- **August 28, 1995**, the board accepted new rules to go into effect October 1, 1995.
- **August 18, 1998**, the board adopted the 1998 North Plains Ground Water Conservation District No. 2 Management Plan.
- **November 23, 2004**, the board accepted the results of the election held on November 2, 2004 and canvassed on November 12, 2004 and therefore the Dallam County Underground Water Conservation District No. 1 is consolidated with NPGCD.
- **January 2005**, 50<sup>th</sup> Anniversary of the district is this month.
- **February 8, 2005**, the board repealed the October 14, 2003 moratorium and adopted the Proposed Rules of 2005. Rules required all wells drilled after October 14, 2003 to be metered.
- **May 19, 2005**, First Annual NPGCD Water Festival held.
- **January 24, 2006**, the board adopted a resolution supporting the use of NRCS EQIP funds for a pilot project in Ochiltree County to convert row watered irrigated lands to dryland, via incentive payments.

# Calendar of Events

## Pioneer Crop Production Clinics

January 12, 2015 – Dalhart  
 January 13, 2015 – Dumas  
 January 14, 2015 – Stratford  
 January 15, 2015 – Spearman

## North Plains Groundwater Conservation District Board Meeting

January 12, 2015 – Hampton Inn Meeting Room, 2010 S. Dumas Ave.

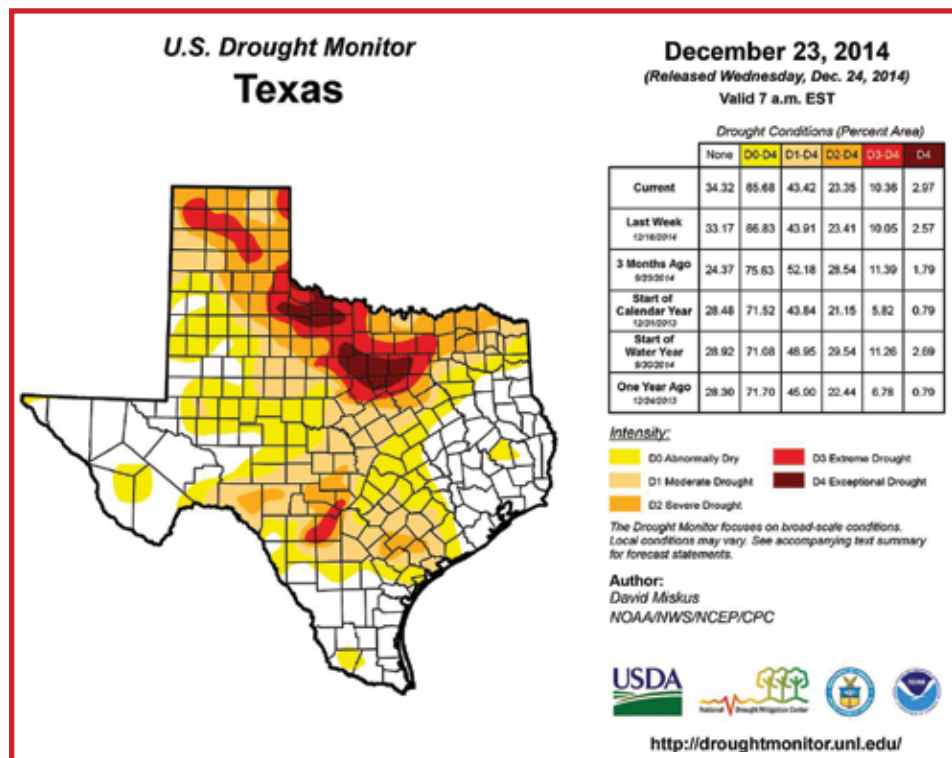
## 2015 High Plains Irrigation Conference

January 15, 2015 – Amarillo Civic Ctr. Amarillo, TX

## North Plains Groundwater Conservation District Production Reports Due

March 2, 2015 – District Office 603 E. 1<sup>st</sup> Street, Dumas, Reports can be mailed to PO Box 795, Dumas. TX 79020

**NORTH PLAINS GROUNDWATER  
 CONSERVATION DISTRICT**  
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- **June 3, 2010**, GMA-1 Joint Planning Committee completed the process of adopting Desired Future Conditions for aquifers in the district and the rest of the GMA.
- **May 20, 2010**, Leon New is to complete proposals for funding from multiple sources for the 200-12 Reduced Irrigation Project including the CIG (Conservations Innovation Grant) program and AWEP (Agricultural Water Enhancement Program).
- **August 30, 2010**, first field day for “200-12 Project” visited Danny Krienke’s demonstration field.
- **November 9, 2010**, the board approved the NPGCD Metering and Production Manual effective January 1, 2011.
- **March 17, 2011**, the Texas Water Development Board approved funding for an Agriculture Conservation Grant for three years not to exceed \$250,000. The grant funding will be used by the district in its “200-12 Project”.
- **July 19, 2011**, the district created a summer water conservation campaign to aid cities within the district. This campaign includes radio PSAs, press releases, water conservation kits, water saving tips, and distribution instructions.
- **August 22, 2011**, the district in cooperation with Texas Tech University and High Plains Groundwater District receives a \$499,848 Conservation Innovation Grant from the Natural Resources Conservation Service.
- **December 9, 2011**, the district receives the Blue Legacy Award for Agriculture from the Texas Water Conservation Advisory Council in recognition of the “200-12 Reduced Irrigation on Corn Demonstration Project” (200-12 Project).
- **February 14, 2012**, the district entered into a contract with the USGS to sample 32 wells for water quality over the next two years.
- **February 14, 2012**, the NPGCD funded Texas Agrilife Extension Service’s Efficient Profitable Irrigation in Corn (EPIC) in 2011.
- **May 2, 2012**, the district receives the Texas Environmental Excellence Award from the TCEQ and the Governor in recognition of the “200-12 Project”.
- **June 19, 2012**, the board annexed roughly 870 acres of Dallam County into the district.
- **July 2012** Texas Commission on Environmental Quality orders remaining properties in Dallam County into the district.
- **August 8, 2013**, the 2013-2023 Management Plan is approved.
- **July 14, 2014**, rules were passed to accomplish Desired Future Conditions.