# North Plains Water News

#### A Publication of the NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT

VOLUME 55, NO. 3 "Maintaining our way of life through conservation, protection, and preservation of our groundwater resources."

FALL 2009

## New Agreement with Texas AgriLife for Research into Area Water Conservation

North Plains Groundwater Conservation District recently signed a new lease agreement giving Texas AgriLife Research use of the 320 acre North Plains Research Field for five more years. Texas AgriLife is a member of the Texas A&M University System and has been leasing the North Plains Field at Etter from the District for the past 10 years. The new lease contains specific language designed to benefit northern Panhandle water producers. "We attempted to find a way to create more benefit for northern Panhandle taxpayers, while continuing to support the research goals of Texas AgriLife, and I think the new agreement does that," said Steve Walthour, General Manager of North Plains Groundwater Conservation District. The latest contract calls for the two parties to design research projects that take direct aim at the water conservation issues of the counties in the District. Each year, the District will work with Texas AgriLife to develop studies of more water efficient crops and varieties, and water conserving techniques and technologies, according to the new lease.

This will give the producers in the District the opportunity to have input into the research projects, through their representatives on the Board of Directors. Texas AgriLife has been conducting important research at the Etter Field for many years, but the new lease will insure an emphasis on water issues in the northern Texas Panhandle for the next 5 years.

"We are proud to have had the opportunity to participate with Texas AgriLife Research in the work at the Etter Research Field for many years," said Walthour. "We look forward to the progress we can make in water conservation and management in the northern Texas Panhandle as we work even more closely in the future."

#### Local Research Aimed at Local Problems

Recent Field Days sponsored by Texas AgriLife Extension Service and Texas AgriLife Research are looking into solutions for the challenges facing local ag-business. North Plains Groundwater Conservation District works closely with Texas AgriLife Research on projects at the North Plains Research Field in Etter. The Field Days presented each year offer a unique opportunity for agricultural producers and others involved in agriculturally related fields to see firsthand the research that is being conducted across the state.

Most recently, the August Field Day at the North Plains Research Field in Etter compared six different grass varieties based on their yield, nutritional value to livestock and water efficiency. The perennial grasses are being evaluated as alternative crops, because of their relatively low water requirements, compared to some of the other irrigated row crops grown in the area.

Dr. Brent Bean, Texas AgriLife Extension Service agronomist, gave an overview of the three year study that is observing the grass varieties under three irrigation programs: dry land, limited and full. Attendees walked through plots of the grasses including: buffalograss, sideoats grama, bluestem, switchgrass, blue grama and bermudagrass.

While the project is only in its second year, preliminary data shows Haskell Sideoats Grama to be slightly ahead of Old World Bluestem in the race for the highest total yield among the six grasses. The one exception is the Blackwell Switchgrass, which so far has edged-out the bluestem yields under dry land conditions.

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Dr. Brent Bean, Texas AgriLife Extension Service agronomist in Amarillo, center, leads a team of speakers discussing the profitability of warm-season grass production in the High Plains. He was joined by Dr. Larry Redmon, AgriLife Extension forage specialist from College Station, right, Emalee Buttrey, AgriLife Extension assistant in Amarillo, and Rex Brandon on the far left.

(Texas AgriLife Extension Service photo by Kay Ledbetter)

When comparing crude protein after just one year of the study, the relatively low yielding Bermuda dry land has the highest concentration at 20-percent. The rest of the grasses come in fairly close on crude protein, with dry land conditions producing the highest concentrations in all varieties. Finally, when measuring in vitro true digestibility, switchgrass beat all varieties under all irrigation conditions. Bermuda and sideoats grama were not far behind, especially in dry land conditions. Researchers emphasized that these numbers are based on the first year of a 3-year study, and that the information will be more conclusive after the study is complete.

In addition to the grasses Field Day in August, more research was presented at the Bushland Research Center in May. "Wheat Issues and Challenges" was the theme of the Field Day sponsored by Texas AgriLife Research, Texas AgriLife Extension Service, the USDA Agricultural Research Service, and *(continued on page 4)* 

## **Texas Water Development Board Considering Petitions**

A re the desired future conditions (DFCs) established by GMA 1 reasonable? That is the question now before the Texas Water Development Board. TWDB representatives listened to petitions filed by two water rights owners in the GMA 1 area who argue that the DFC's are unreasonable. The DFC's are the projected goals for the desired amount of remaining groundwater available after 50 years. They will be used in the ongoing state water planning process.

The four groundwater conservation districts that makeup GMA 1 spent more than 3 years investigating the matter and gathering public comment, before deciding on the DFC's. "Because of its planning process and cooperation with the other conservation districts, North Plains Groundwater Conservation District believes that the desired future conditions for the Ogallala aquifer are reasonable and provide for the best management of the region's groundwater resources," said Steve Walthour, General Manager of North Plains Groundwater Conservation District.

The petitioners, Mesa Water, Inc. and G&J Ranch are both represented by Mesa attorney, Marvin Jones. They claim the approved DFC's represent the taking of property owned by the petitioners, because the DFC's would limit their ability to produce water. The District believes that the DFC's are only goals, not rules for limiting water production, and that the DFC's allow for more production than the state's projections for demand.

## **Board Approves** New Tax Rate

he North Plains Groundwater Conservation District Board of Directors approved its new tax rate for maintenance and operations for 2009. After two public hearings with no opposition, the Board approved the new rate of .019783, an increase of 7.99 percent from last year's rate of .019209. The increase amounts to about 57-cents on a \$100,000 home. The annual budget for the District supports the ongoing conservation, protection and preservation of the groundwater in the Northern Texas Panhandle. This includes registering, permitting and metering wells, compiling data, conducting educational programs, and performing free water analysis for residents of the District. All of this attention to this critical resource is carried out by your locally elected Board of Directors and the dedicated staff put in place by that board. North Plains Groundwater Conservation District exists for the purpose of maintaining our way of life, now and for future generations.

> One inch of rainfall drops 7,000 gallons or nearly 30 tons of water on a 60' by 180' piece of land.

# Geographical Information System Makes District More Efficient

A state-of-the-art geographical information system is helping North Plains Groundwater Conservation District staff record, store, analyze and display data, which is improving workflows, eliminating errors, and solving other challenging issues regarding water conservation management. The system, called ArcGIS, gives management the tools and data needed to make sound decisions and perform long-term planning, while making the staff more efficient.

The District recently upgraded the software for mapping and data collection. The biggest benefit of the upgrade is the capability of the maps to update in real time, even with many users working on a common map, simultaneously. Real time updates mean the maps always reflect the most current data.

The software is loaded on rugged tablet computers that field technicians use for data collection and verification. Also, new electronic forms and databases are being developed that will do a better job of integrating the data into the maps. More and better information available on the maps will help with well permitting,



Natural Resource Specialist, Odell Ward, demonstrates Geographical Information System and rugged, on-board computers used by the District to manage ground water in the northern Texas Panhandle

compliance investigations, and other programs.

The maps have multiple layer capability, which means that different information can be displayed depending on the layer that is activated. This feature allows the display to be customized to show the staff what they want, when they want it. Map layers are being developed that show location and ownership of water producing properties, what type of reporting method is used, and how much water was pumped each year.

The staff is working closely with Agronomist, Leon New and the Texas Water Development Board (TWDB) to insure the estimated crop water usage amounts used in state planning are consistent with the production amounts reported by local users.

The consulting firm Interra is helping staff update the TWDB's groundwater model. The accuracy of the model will affect mapping of the base of the Ogallala aquifer. Interra is also helping to update the pumping distribution reflected in the model for the area of the District. This model is used extensively at the state, regional and the local level for planning purposes and to predict future water availability in the District.

Over the next year staff will train extensively to maximize the potential of the ArcGIS software. The District is also exploring possibilities for on-line customer/public access to the data and maps.

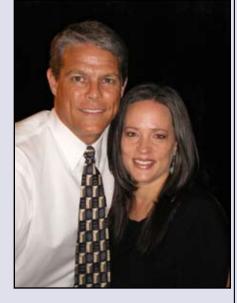
## North Plains Groundwater Conservation District Hires New Public Information and Education Manager

The newest member of the North Plains Groundwater Conservation District team is anything but new to the area. A 1983 graduate of Dumas High School, Kirk Welch has spent most of his professional life in the Panhandle-Plains region as a news reporter and Public Relations professional.

After graduation from West Texas State University in 1988, Welch began his career with KFDA News Channel 10 in Amarillo, followed by 15 years in Public Relations and Marketing—5 with Texas Tech University Health Sciences Center in Amarillo and almost 10 with Panhandle Telephone Cooperative, Inc. in Guymon, OK.

Welch returns home to Dumas after two years in the Los Angeles, California area where he worked in media sales, most recently as new accounts manager for an advertising design firm. "It is great to have the opportunity to come home and have the chance to do what I do best for an organization that is working to maintain our way of life through conservation, protection and preservation of our groundwater resources," Welch said.

"Kirk brings a background and skill set to the District that will help us as we educate our various stakeholders about our conservation mission," said Steve Walthour, General Manager of North Plains Groundwater Conservation District. "As we go about the work of protecting our groundwater resources, we need everyone to understand, support, and provide input regarding our conservation efforts. It will be Kirk's job to help make that happen."



Welch's wife, Jill (formerly Jill Riley of Gruver, Texas) is also a product of Dumas High School. Jill is a singer-songwriter and former youth minister and worship leader. Both Kirk and Jill say they are excited about their future as their lives bring them back, full circle, to their former hometown.

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#### North Plains Groundwater Conservation District Gets Help from the "Far" East

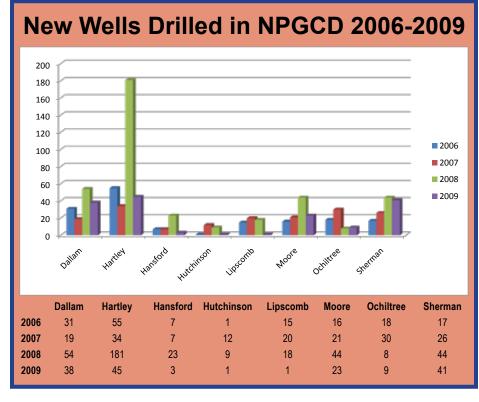
resident of the District's farthest Acounty to the East, RJ (Robert Joe) Vandygriff, will be working with the District on upcoming projects in Lipscomb County and throughout the service area. RJ has experience in education and will be lending a hand with educational outreach programs with area schools. His background is interesting and varied, including competitive rodeo, a career in country/western music, entertainment management, and writing and performing his own one-man-show. RJ's show "The Cowboy Ain't Dead Yet" is entering its 20th year, including three seasons in Branson, Missouri. "RJ's creativity and his unique ability to communicate and connect with people will, no doubt, help us be more effective in delivering the critical message of conservation of groundwater in the North Texas Panhandle," said Steve Walthour, General Manager of North Plains Groundwater Conservation District.

#### Notice to All District Well Owners

North Plains Groundwater Conservation District staff members have noted numerous wells in operation that were classified by owners as unused. A reminder to all water producers:

To put a well back into production the owner must contact the District before operation can begin. The District will inspect the well for the proper check valve and metering method before the well can produce groundwater.

Significant fines can be incurred for violation of this rule.



#### **Irrigation Efficiency Trailer Donated to Boy Scouts**



North Plains Groundwater Conservation District recently donated a trailer to the Spearman Boy Scouts. The troop will use the trailer for various activities, including hauling equipment and supplies for camping trips. Bob Zimmer, North Plains Groundwater Conservation District Director for Hansford and Hutchinson Counties, presented the trailer to the boys and their troop leader, Brit Jarvis.

The District at one time owned five trailers, which were bought in an agreement with local Natural Resource Conservation Service (NRCS) offices throughout the District. The trailers originally contained tools and equipment to test irrigation efficiency on both pivot and flood type irrigation systems. Testing of the irrigation systems throughout the District was conducted by NRCS for many years

The NRCS eventually started carrying the necessary equipment in pickup beds rather than the trailers, and the trailers sat unused. Finally, the District was asked to take possession of the trailers, and the Board of Directors decided that each Director would donate a trailer to an agency or individual in their county.

## **Changes to Permit Application Fees**

New test hole and well application fees took effect on October 1, 2009. The permit application fee for drilling a test hole is \$100 per permit and the permit application fee for drilling a water well is \$500. There is no permit application fee for drilling a domestic or livestock well that is not capable of producing more than 17.5 gallons per minute, or an oil rig supply well exempted from the District's

permitting rules. The District will no longer collect or keep a deposit on a permit application fee. The full fee is non-refundable. The District will honor current deposits on applications filed before October 1, 2009, and will return those deposits, provided the required paperwork has been submitted according to the deadlines on the permit.

The purpose of this change

# Water Event Raises Public Awarness



**F**t. Worth was the location of a meeting designed to educate and motivate about the current state of water in the State of Texas.  $H_2O4TEXAS$ : The Water Event was presented by two of the key leaders in the process, Texas Senator Kip Averitt, Chairman of the Committee on Natural Resources, and Representative Allan Ritter, Chairman of the House Natural Resources Committee.  $H_2O4TEXAS$  was presented in cooperation with the Texas Water Foundation and featured Dr. Robert Glennon, author of Unquenchable: America's Water Crisis and What To Do About It.

The Texas Water Foundation website explains the urgent need for action and involvement, "Without a sufficient supply of clean, affordable water, our economy and public health will be irrevocably harmed.  $H_2O4TEXAS$ : The Water Event will increase public awareness of the critical water shortfalls facing our state and begin mobilizing support for full implementation of the State Water Plan - a goal that the ongoing  $H_2O4TEXAS$  campaign will continue to pursue before and after The Water Event."

North Plains Groundwater Conservation District plays a key role in the state water planning process by representing the people of the areas we serve. It is important that all Texans be educated and involved in this process through their local water conservation districts and their legislators. The meeting was held Nov. 16-17 at the Omni Hotel in Ft. Worth. For more information about  $H_2O4TEXAS$ , go to www.texaswater.org.

is to partially recover the actual processing cost of permitting and place the responsibility for the costs of permitting a well or test hole on the property owner that pumps groundwater. For questions regarding the District's new test hole and well permit fee schedule, please contact the District offices at 806-935-6401. Р Я Е SORTED STANDARD U.S. POSTAGE PAID LUBBOCK, TX PERMIT NO. 324 RETURN SERVICE REQUESTED

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# Water Conservation Artwork Contest Winners Announced



#### Ian Dickerson,

son of Gail and Luke Dickerson of Dumas, was this year's grand prize winner in the Water Conservation Artwork Contest sponsored by North Plains Groundwater Conservation District. The annual contest is open to all fourth, fifth, and sixth grade students who reside within the District.

Ian's artwork, titled "Bright Ideas Help Save Water" featured water drops executed in watercolor, with a rainbow of water-conserving ideas radiating from the central water drop. Hints for saving water included "Take Shorter Showers", "Repair Dripping Faucets", "Don't Hose Down Pavements", and "Collect Rainwater". Ian received a certificate of recognition, a \$50 cash prize, and his artwork will be featured on the cover of the 2010 North Plains Groundwater Conservation District Water Conservation Calendar. Ian is homeschooled by his mother Gail. The calendar will be free to the public in November of 2009.

Other winners in this year's contest were:

<u>Warren Boggs</u> – artwork titled "You Don't Have to Think to Shut Off the Sink". Warren is the son of Warren and Jennifer Boggs, and was in Mrs. Coyle's class at Hillcrest Elementary in Dumas.

Hannah Dickerson (sister of Ian) artwork titled "Indoors and Outdoors– Think Conservation". Hannah is the daughter of Gail and Luke Dickerson of Dumas and is homeschooled by her mother Gail.

**Oscar Franco** – artwork titled "Fish Paste". Oscar is the son of Yadira Franco and Eugenio Franco, and was in Mrs. Milbern's class at Sunset Elementary in Dumas.

**Emma Freeman** – artwork titled "Saving Water Saves Animals". Emma is the daughter of Yvonne and Robert Freeman and is homeschooled by her mother Yvonne.

**<u>Reghan Gerber</u>**-artwork titled "Don't Take an Hour in the Shower". Reghan is the daughter of Chris and Kelly Gerber and was in Mrs. Coyle's class at Hillcrest Elementary in Dumas.

**Jacqueline Hernandez** – artwork titled "Saving a Drop of Water". Jacqueline is the daughter of Lorena Hernandez and Manuel Hernandez, and was in Mrs. Coyle's class at Hillcrest Elementary in Dumas.

**Brianna Mendoza** – artwork titled "Water is Life – Help Save It! Brianna is the daughter of David and Rosa Mendoza, and was in Mrs. Thatcher's class at Hillcrest Elementary in Dumas. **Braden O'Daniel** – artwork titled "Why Waste Water?" Braden is the son of Rebecca Morgan and Trent O'Daniel, and was in Mrs. Coyle's class at Hillcrest Elementary in Dumas.

Manuel Reyna Jr. – artwork titled "Water Doesn't Last Forever, So Don't Waste It!" Manuel is the son of Manuel Reyna and Teresa Reyna, and was in Mrs. Quirk's class at Sunset Elementary in Dumas.

<u>Ali Romo</u> – artwork titled "Save It, Don't Waste It". Ali is the daughter of Edith Gonzalez and Ruben Loya, and was in Mrs. Coyle's class at Hillcrest Elementary in Dumas.

<u>Alexis Vinson</u> – artwork titled "Ways to Conserve Water". Alexis is the daughter of Julie and Jerry Vinson, and was in Mrs. Ford's class at Hillcrest Elementary.

<u>Citlaly Zamarripa</u> – artwork titled "Wasting Water". Citlaly is the daughter of Carmen and Juan Zamarripa and was in Mrs. White's class at Sunset Elementary in Dumas.

All of these students received certificates of appreciation, a \$25 cash award, and will have their artwork featured inside the annual Water Conservation Calendar. In addition, each student will receive copies of the calendars to share with friends and family.

The free water conservation calendars serve as a colorful reminder throughout the year of ways that each of us can be more responsible for our water resources in the little every day actions that we can take. The calendars will be available in November of 2009 at the North Plains Groundwater Conservation District offices at 603 East 1<sup>st</sup> Street in Dumas, and also at all water utility offices in each town within the District. You can also request copies of the calendar by calling the District office at 806-935-6401.

#### Local Research Aimed at Local Problems

(Continued from page 1)

West Texas A&M. Researchers shared information on studies ranging from the development of new wheat varieties to seed treatments and research on wheat diseases.

Conservation related projects included studies of irrigation application technologies, comparing spray, subsurface drip, and LEPA applications on sorghum, soy bean and cotton. Comparisons are also made between low water application and full ET irrigation. In addition, studies are being conducted to compare using wide twin beds for drip irrigation compared to 60" standard rows.

The progress being made in agriculture because of such research will enable agricultural producers in the future to farm more effectively, more cost efficiently, and with the use of less water. Any interested person is invited to attend the Research Field Days, which are held throughout the year at both the research field at Bushland and the North Plains Research field in Etter.