



Panhandle Water News

APRIL 2012

Success for Texas Panhandle Water Symposium

The first Inaugural Texas Panhandle Water Conservation Symposium was an unmitigated success, with over 300 attendees and 19 speakers from across the United States. This symposium was the vision of C.E. Williams, general manager of Panhandle Groundwater Conservation District (PGCD). He wanted to focus on water conservation for all users including municipal, agricultural producers and the general public by inviting speakers from across the State of Texas, as well as throughout the United States. There were presentations on conservation principles, programs that had been implemented and their effects. With the guidance of Carole Baker from the Texas Water Foundation and Alliance for Water Efficiency, and many sponsors from across the Texas Panhandle the symposium was made possible, and Williams stated, "It may very well be the highlight of my career."



Farmer Matt Moore from Wheeler County listens during the Texas Panhandle Water Symposium. Picture taken by High Plains Water Conservation District.

The morning session focused on the current drought and statewide issues including conservation myths, drought forecasts and how the drought affected the state. After lunch, the attendees split up into three breakout sessions that focused on municipal, agricultural and private water use. Municipal users heard presentations regarding municipal conservation

as it relates to water rates, and how to track water use. Attendees in the agricultural breakout session learned about irrigation timing, crop rotation, drought tolerant corn hybrids and irrigation demonstrations showing how to grow 200 bushels of corn on 12 inches of applied irrigation. Private users

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Rules and Management Plan Changes Made

Panhandle Groundwater Conservation District (District) amended the district rules and management plan after a hearing on April 4, 2012. Many of the rule changes were required by statute because of legislation enacted in 2011. Among those required changes is the addition of Groundwater Management Area (GMA) hearings to the hearing proce-

dures in Rule 10, clarification of the District's role in the GMA planning in Rule 12, clarification in Rule 15 that the District's existing 50/50 Management Standard is adopted as the Desired Future Condition (DFC) of the Ogallala in this area and the addition of DFC's for the minor aquifers in the area including a 50/50 DFC for the Blaine Aquifer, and a de-

cline of no more than 30 feet in 50 years for the Dockum Aquifer.

The other major changes are regarding wells that are classified as exempt use because of their oil and gas exploration status. Those wells will now be required to meet spacing rules because many of them, once abandoned by the oil and gas

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Points of Interest

Success for Texas Panhandle Water Symposium

Rules and Management Plan Changes Made

Precipitation Enhancement Kicks Off 13th Year at PGCD

Public Education in Full Swing Across District

PGCD Participates in Regeneration 2012

Ag Loans Funds Still Available



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were treated to presentations detailing rainwater harvesting, xeriscape gardening and conservation education.

One highlight of the symposium was the presentation of the first Robert Duncan Crown of Texas Water Conservation Award to Senator Robert Duncan for his tireless dedication to water conservation on behalf of future generations of Texans. PGCD anticipates that the symposium will be held every other year and this award can continue to be granted to other distinguished advocates of water conservation.

PGCD would again like to thank all of the sponsors for making this symposium a success, and participating in bringing water conservation awareness to all aspects of the Texas Panhandle.

Precipitation Enhancement Kicks Off 13th Year at PGCD

Panhandle Groundwater Conservation District (PGCD) will kick off its' thirteenth year of precipitation enhancement this month as we move into the spring across the Texas Panhandle. This year has started off slightly better than the spring of 2011, with the La Niña in place not as strong as last year. La Niña was the primary reason for the severe drought that the Texas Panhandle experienced last year. According to the Climate Prediction Center, La Niña is expected to transition to more neutral conditions by the end of April and continue through the Northern Hemisphere summer of 2012.

Models that predict La Niña, which are when temperatures are cooler than normal across the eastern Pacific Ocean, and El Niño, which are when temperatures are warmer than normal across the eastern Pacific Ocean, are trending towards a neutral condition for the Summer. Neutral conditions would benefit the Panhandle by bringing more average rainfall chances for the summer. Where as when El Niño is in place we see increased rainfall chances in the Panhandle, and when La Niña is in place we see less rainfall chances which is what occurred during 2011.

However, because we often see a slow demise of a La Niña events, impacts are expected to persist into the upcoming season. One of those impacts includes increased chances of above-average temperatures across the south-central United States. Here in the Texas Panhandle we are already seeing this with records highs during March. Amarillo broke three record high temperatures in March which occurred on March 15, 16 and 25.

The 2011 Precipitation Enhancement season concluded on September 3. The season began on April 25; however, last year was a hard year in the Texas Panhandle since rainfall was very limited due to the extreme drought most of Texas experienced along with other states in the United States. Table 1 shows the number of days flown, seeding flights, reconnaissance flights and hours flown per month through the 2011 season. There were not a lot of favorable conditions for seeding until the neutral conditions allowed for some dynamics across the Texas Panhandle to provide some seeding opportunities in July and August.

The rainfall amounts in 2011 were in most cases below

anything the Texas Panhandle has ever seen. During 2009 and 2010, most counties were above the district normal of 16.43 inches, and there were significant increases in rainfall from 2009 to 2010. However, when comparing the 2011 rainfall to those years it is evident that this year's rainfall was severely hindered by La Niña with most counties seeing less than five inches of rainfall from April through September. Table 2 shows the rainfall values for the District counties for 2009-2011 and their differences.

| | Days | Seed Flights | Recon Flights | Flight Hours |
|-----------|------|--------------|---------------|--------------|
| April | 2 | 1 | 1 | 3 |
| May | 0 | 0 | 0 | 0 |
| June | 2 | 0 | 2 | 3 |
| July | 10 | 14 | 3 | 39 |
| August | 14 | 12 | 6 | 42 |
| September | 1 | 2 | 0 | 6 |
| Totals | 29 | 29 | 12 | 93 |

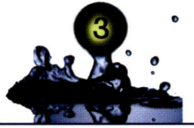
Table 1 shows the number of days flown, seeding flights, reconnaissance flights, and hours flown per month through the 2011 season.

Last year's seeding season was still considered very successful, providing on average a 20 percent rainfall increase per county according to Active Influence and Scientific Management. This increase was calculated using real-time rain gauge measurement collected throughout the District, and by comparing the radar data of the seeded clouds to the non-seeded clouds. This increase calculated out to an average of 0.89 inches of additional rainfall per county within the PGCD target area. Active Influence and Scientific Management analyzed a total of 38 clouds in 24 operational days. The results were evaluated as excellent with timing of seeding at 93 percent and no seeding opportunities missed. The cost of the program per acre was calculated at \$0.037.

April-September Rainfall Averages Comparing 2009-2011 in Inches

| | 2009 | 2010 | Diff | 2011 | Diff |
|-----------|-------|-------|-------|------|--------|
| Armstrong | 17.75 | 22.83 | 5.08 | 4.75 | -18.08 |
| Carson | 23.22 | 24.04 | 0.82 | 5.69 | -18.35 |
| Donley | 16.97 | 27.09 | 10.12 | 3.38 | -23.71 |
| Gray | 19.43 | 23.13 | 3.7 | 4.83 | -18.30 |
| Potter | 14.09 | 17.76 | 3.67 | 2.98 | -14.78 |
| Roberts | 16.99 | 18.42 | 1.43 | 4.97 | -13.45 |
| Wheeler | 19.05 | 25.54 | 6.49 | 4.79 | -20.75 |

Table 2 shows the comparison of rainfall from 2009-2011 during April-September in PGCD.

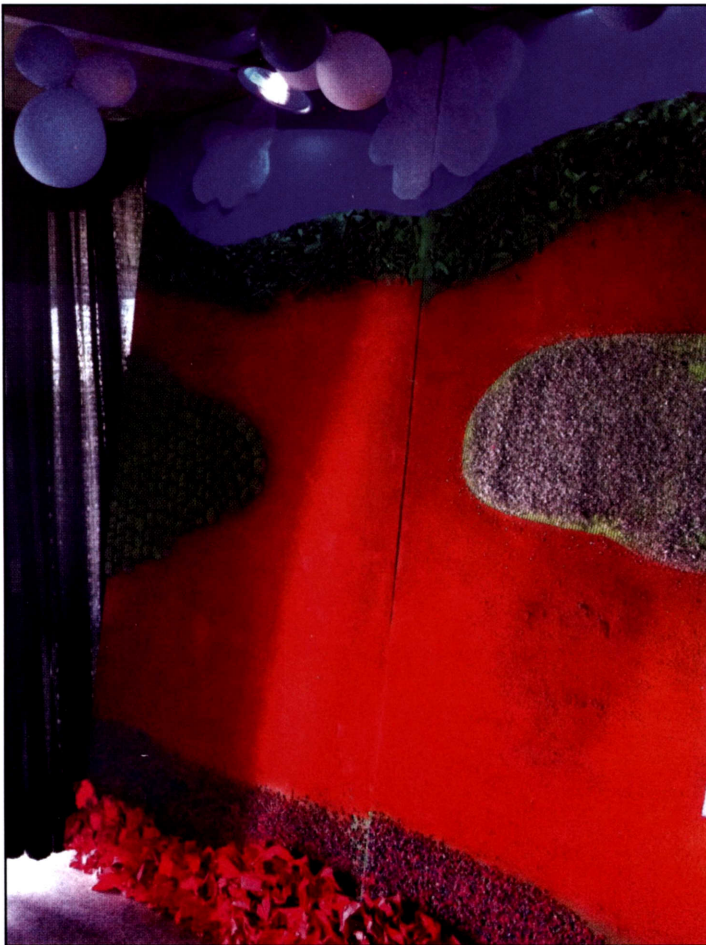


Public Education in Full Swing Across the District

The staff at Panhandle Groundwater Conservation District (PGCD) jumped into 2012 with more enthusiasm for public education and outreach than ever before! With last year's extreme drought still fresh on everyone's mind, we're working hard to drive home the dire importance of water conservation. Not only did our elementary education program kick into full-swing, but a lot of other opportunities have come along as well.

Each year, PGCD does countless programs for civic organizations throughout the year and this year has been no exception. We visited the Retired Teachers Association of Panhandle to discuss xeriscape gardening and rainwater harvesting. There was a great turnout and a lot of enthusiasm over the attractive new rain barrels that are available. The Groom Girls Scouts learned all about xeriscaping and drought tolerant plants and presentations were also delivered at meetings for the Texas Farm Bureau, Ogallala Common's Playa Education Day, High Plains Driller's, City of Amarillo Utilities, and Shamrock Downtown Booster Club.

On February 8, PGCD hosted the Inaugural Panhandle Water Conservation Symposium: the Dollars and Sense of Conservation. It was an immense success and we are thrilled with



A portion of the walk through aquifer made to have on display and for kids to walk through to understand the aquifer better. *Picture taken by Joy Shadid.*

the turnout. (For the full story, see page: one.) The City of Amarillo and PGCD partnered on booths at the Amarillo Home and Garden Show, Amarillo Utility School, and Regeneration 2012's tree planting at Thompson Park. The aquifer exhibit was on display at the Amarillo Botanical Gardens throughout the month of March with tours led by Alice in Waterland. Staff also attended the Donley County Health Fair, Carson County Ag Fair and West Texas A&M University Earth Day.

We are looking forward to many exciting upcoming events and are eager to continue educating the public about the importance of water conservation. If you would like a presentation for your civic group, please contact Joy Shadid at 806-883-2501.



Pauline Robertson with Alice (Joy Shadid) from Alice and Waterland at the Botanical Gardens. *Picture taken by Robyn Turner.*

Hearing Continued from Page 1

companies, are returned to the landowners for other uses. Also, those wells will now be required to install a meter and report water use annually. Since the GMA and Regional Planning processes require the District to have good estimates of water use, this new reporting of oil and gas water use is critical to make these estimates more accurate within the District.

As the oil and gas exploration continues to expand and use more water in the District, and the GMA and Regional Planning processes require the District to have better estimates of water use, this reporting is more critical for the District.

The management plan was updated in order to capture the DFC's and update the water use and supplies information required by the Texas Water Development Board. This plan outlines 13 goals that guide the District's actions over the next five years. The guiding principle of the Panhandle Groundwater Conservation District is still the 50/50 Management Standard, and the amendments to the rules and management plan serve only to strengthen that goal.

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PGCD Participated at Regeneration 2012 in Amarillo



Assistant City of Amarillo Manager for Finance helped Mayor Paul Harpole take the Water Warrior Pledge at the Panhandle Groundwater Conservation District booth at the Regeneration 2012 in Amarillo. Photo taken by Sonja Gross.

Panhandle Groundwater Conservation District (PGCD) participated in Regeneration 2012 at Thompson Park in Amarillo on Saturday, April 21, 2012. The event was sponsored by Xcel Energy and Amarillo National Bank, and was one event among many held throughout the city to celebrate Earth Day.

PGCD helped people take the Water Warrior Pledge which is to commit to five tasks of water conservation such as adjusting your sprinklers so they do not water the sidewalks and streets which can save up to 500 gallons of water per month or repairing leaky faucets which can save up to 150 gallons of water per month. PGCD Public Relations Coordinator Joy Shadid was also there in her Alice and Waterland costume showing kids the life size model of the aquifer.

Volunteers singed up to help plant 250 new trees at Thompson Park, and the city had a tent to promote its water conservation program Every Drop Counts.

Ag Loan Funds Still Available

Panhandle Groundwater Conservation District (PGCD) began its agricultural loan program to help qualifying farmers finance their irrigation sprinklers in 1992. Since then, loans totaling \$7,533,380 have been disbursed. PGCD has already approved funding for 3 loans in 2012 and has another \$650,000 available. With an exceptionally low interest rate of 1.08% and a payback term of eight years, interested applicants are encouraged to download an application on our website at www.pgcd.us or contact our office at (806) 883-2501.