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# THE CROSS SECTION

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THERE IS NO SUBSTITUTE FOR WATER!

FEBRUARY 2013

A MONTHLY PUBLICATION OF THE HIGH PLAINS UNDERGROUND WATER CONSERVATION DISTRICT NO. 1, LUBBOCK TX

## Reporting deadline may be extended

Groundwater production reporting for 2012 is to be submitted to the High Plains Underground Water Conservation District by March 1, 2013. However, a technical problem with the district's meter data entry web site may cause the deadline to be extended.

"It is anticipated that the High Plains Water District Board of Directors will review the reporting deadline in the current HPWD rules and possibly extend it," said Board President Lynn Tate of Amarillo.

The meter data entry web site was closed for two weeks for maintenance to correct slow performance and a database error.

No penalties will be assessed due to the web site being off line. There is a two-year moratorium on enforcement and civil penalties for reporting groundwater production due in 2013 and 2014. This was approved by the HPWD board on Feb. 21, 2012.

Persons with questions about the groundwater production reporting process are encouraged to contact the HPWD office for assistance.

## Updated 2011 hydrologic atlases available on-line

The High Plains Underground Water Conservation District (HPWD) announces availability of new "digital" hydrologic atlases which provide updated information about the Ogallala Aquifer within the district's 16-county service area.

The new atlases are available for on-line viewing at [www.hpwd.com](http://www.hpwd.com) or directly at [atlas.hpwd.us](http://atlas.hpwd.us).

"For decades, the High Plains Water District has provided a series of county-based hydrologic atlases to our constituents. Updates to these atlases have historically been made every 5-10 years," said William F. Mullican III, P. G.

He serves as the district's professional geoscientist/hydrologist and supervisor for the hydrologic atlas mapping program.

"Use of digital technology allows the District to update the different maps each year as soon as the annual Winter Water Level Measurements have been completed and processed. In addition, the district is now able to provide timely updates to the hydrologic atlases as soon as new information becomes available from scientific investigations," Mullican said.

An outline map of the

boundaries of the High Plains Water District appears when the new atlas application is loaded.

Persons can use the arrow tool at the left side of the map to pan left or pan right. The slider tool is for zooming in or zooming out of the map image.

Persons need to click on the first icon ("layer switcher") to access individual map layers. This includes the water table, saturated thickness, and base of the Ogallala Aquifer shown in color--as well as contour overlays for depth to water, water

See **NEW DIGITAL** Page Three

## Board seeks appointees for Precinct 5 District Director; February public meetings to outline selection process

The High Plains Underground Water Conservation District (HPWD) Board of Directors outlined the procedure they will follow in appointing an individual to fill the unexpired term of the office of Precinct Five District Director as per Chapter 36.051(c) of the Texas Water Code.

Citing health reasons, Bruce Rigler of Plainview recently resigned as Precinct Five District Director after 18 years of service.

He was elected in 2010 to serve a four-year term (2010-2014) representing the residents of the portion of Floyd County within the district, all of Hale County, and all of Swisher County.

The appointment process, approved Jan. 22 by the Board of Directors, is as follows:

- A public meeting will be convened in each county to outline the appointment process and solicit input of local residents.

- The **Floyd County** public

meeting is set for **10 a.m., Feb. 12**, in the Happy State Bank Room at the Floyd County Friends Unity Center at Muncy. The center is located on Highway 70 between Floydada and Lockney.

- The **Swisher County** public meeting is set for **10 a.m., Feb. 14**, at the Swisher County Memorial Building (basement), 127 SW 2<sup>nd</sup> Street, in Tulia.

- The **Hale County** public meeting is set for **3 p.m., Feb. 14**, at the Museum of the Llano Estacado, Wayland Baptist University, 1900 W 8<sup>th</sup> Street, in Plainview.

Application forms and qualifications to serve as a member of the HPWD Board of Directors are available by contacting Kathryn CdeBaca at the district office in Lubbock at (806) 762-0181 or may be viewed/downloaded at <http://hpwd.com/about-hpwd/precinct-5-director-vacancy>.

Completed application forms for all potential appointees must

be received no later than **5 p.m., Feb. 21, 2013** at the district office in Lubbock.

They may be submitted by mail to Kathryn CdeBaca, High Plains Water District, 2930 Avenue Q, Lubbock TX 79411-2499; by fax at 806-762-1834; or by e-mail at [kathryn.cdebaca@hpwd.com](mailto:kathryn.cdebaca@hpwd.com).

Application forms received after 5 p.m., Feb. 21 will not be considered.

Interviews with the candidates will be conducted soon thereafter.

It is hoped that the Board of Directors will be able to appoint the new Precinct Five director at a special meeting in early March. The new member would then be in place for the March 19 regular monthly meeting.

It is important to remember that a candidate for appointment to this office must reside either in the portion of Floyd County within the district, Hale County, or Swisher County.

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VISIT THE HIGH PLAINS WATER DISTRICT'S WEB SITE AT [WWW.HPWD.COM](http://WWW.HPWD.COM)



## Dewhurst announces members of Senate Natural Resource Committee

Lt. Governor David Dewhurst has announced committee assignments for the 83<sup>rd</sup> Texas Legislature, which convened Jan. 8.

“During legislative sessions, the High Plains Water District primarily deals with the House and Senate Committees on Natural Resources. District staff monitor water-related legislation introduced during the session and provides written comments and/or testimony on legislation as needed,” said Manager Jim Conkwright.

The Senate Committee on Natural Resources includes: Chairman Troy Fraser of Horseshoe Bay; Vice-Chairman Craig Estes of Wichita Falls; and members Robert (Bob) Deuell of Greenville; Robert Duncan of Lubbock; Rodney Ellis of Houston; Kevin Eltife of Tyler; Glenn Hegar Jr. of Katy; Juan (Chuy) Hinojosa of McAllen; Robert Nichols of Jacksonville; Kel Seliger of Amarillo; and Carlos Uresti of



San Antonio.

Sen. Ellis is the newest member of the committee. He replaces Sen. Mike Jackson of LaPorte, who did not seek re-election.

Speaker Joe Straus III has not yet announced committee assignments for the House of Representatives.

Additional information about the 83<sup>rd</sup> Texas Legislature is available online at the Texas Legislature Online web site ([www.capitol.state.tx.us](http://www.capitol.state.tx.us))

## Work session now precedes regular monthly Board of Directors meeting

The High Plains Water District Board of Directors now conduct work sessions prior to each regularly scheduled monthly meeting.

The time of the work session and regularly scheduled board meeting are posted on the calendar on the front page of the HPWD web site.

Agendas may also be found at <http://www.hpwd.com/about-hpwd/agendas-and-official-notice>.

These work sessions are primarily for the benefit of the directors, although they are open to the public. No public comment will be heard during these work sessions—but can be made during the regularly-scheduled board meeting.

No action is taken at the work sessions. Items requiring Board actions are revisited at a regularly-scheduled meeting.

Those attending the work sessions and/or monthly board meetings are reminded that the parking lot immediately west of the district office is now dedicated to visitor parking.

In the past, persons have parked

on both sides of 30<sup>th</sup> Street—which left room for only one vehicle to pass at a time. Using the visitor lot will relieve this parking congestion and help prevent a potentially dangerous situation to drivers turning from Avenue Q to 30<sup>th</sup> Street.



### McGregor Resigns

Mike McGregor resigned from the HPWD staff on Jan. 31. Since July 2010, he served as project coordinator--which included administrative tasks for the Llano Estacado Regional Water Planning Group (Region O). We wish Mike all the best in his future endeavors.

## Directors receive Oath of Office



Precinct Three District Director Mike Beauchamp of Friona (top left) and Precinct Four District Director Lynn Tate of Amarillo (above left) receive the Oath of Office from Randall County Judge Ernie Houdashell during Jan. 14 ceremonies at the HPWD's Amarillo office.

Officers elected to serve during the 2013 calendar year are Lynn Tate, President; James Powell, Vice-President; and Mike Beauchamp, Secretary-Treasurer.

## THE CROSS SECTION

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### BOARD OF DIRECTORS

James Powell, Vice-President .....Lubbock  
 Jim Copeland, Member .....Anton  
 Mike Beauchamp, Secretary-Treasurer.....Friona  
 Lynn Tate, President .....Amarillo  
 Precinct 5 ..... Office vacant due to resignation

### DISTRICT STAFF

Jim Conkwright ..... Manager  
 Patty Bryant..... Permit Group Supervisor  
 Gerald Crenwelge.....Field Data Coordinator

Billy Barron ..... Field Technician  
 Terry Bridges .....Field Technician  
 C. J. Campbell .....Field Technician  
 Liz Casias .....Receptionist/Administrative Assistant  
 Kathryn CdeBaca ..... Executive Secretary  
 Irma Clark .....Administrative Assistant (Amarillo)  
 Lee Cranmer ..... Field Technician  
 Jim Crownover ..... GPS Specialist  
 Ray Eads ..... Field Technician (Amarillo)  
 Lance Epperson ..... Field Technician  
 Mark Hamilton ..... Field Technician  
 Greg Holder ..... Field Technician  
 Pat Kunkel.....Bookkeeper  
 Jed Leibbrandt ..... GIS Specialist  
 Juan Peña .....Field Technician  
 Gray Sanders .....Field Technician  
 Sherry Stephens.....Executive Assistant  
 Keith Whitworth.....Draftsman



# New digital technology allows for annual updates of hydrologic atlases

Continued From Page One

table, saturated thickness, and base of the Ogallala Aquifer.

The Google hybrid option at the bottom of the layer menu switches the base map from regular view to a Google Map aerial image.

Persons can then select the respective contour map layer they want displayed on the Google base map.

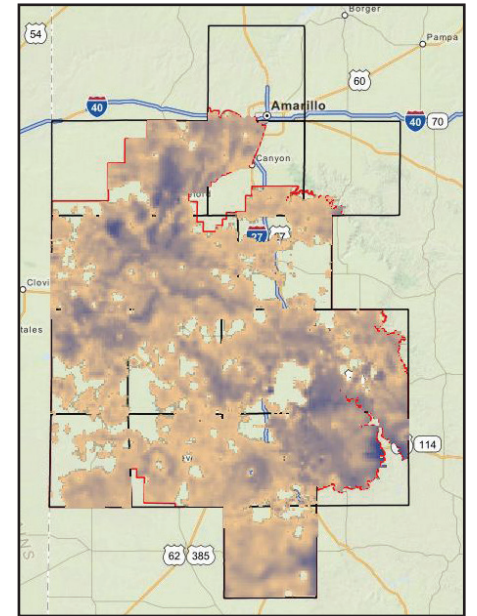
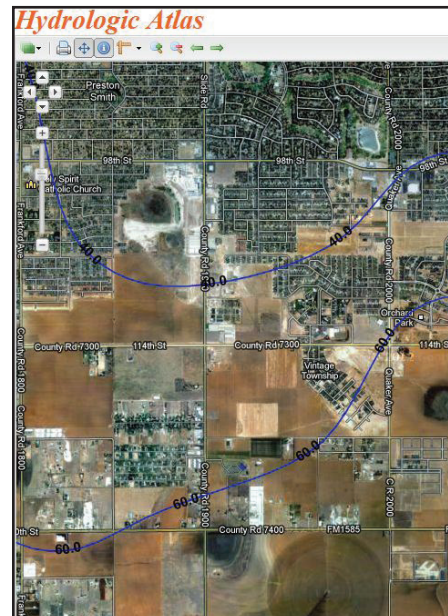
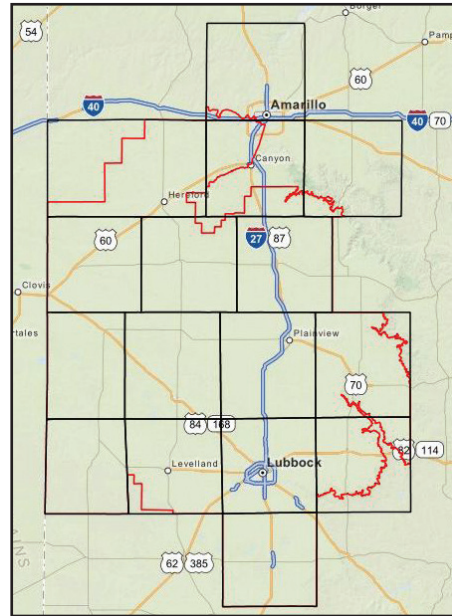
The print icon allows persons to view/adjust the area for printing. They can then create a PDF of the image for printing or e-mailing.

Other icons include a length and area measurement tool, image pan and zoom, and an identification (*get feature info*) tool.

Selecting the identification tool and clicking once will select an area. Each double click will bring that area in for a closer view. This can be repeated as many times as desired.

“We hope this new web-based tool will be a valuable addition to the many data sets maintained and made available by the High Plains Water District. This is the first version of this application and we welcome comments and suggestions,” Mullican said.

In addition, updated 2011 hydrologic atlases are now available for downloading from the HPWD web site at <http://www.hpwd.com/aquifers/hydrologic-atlases>.



## Updated Digital Hydrologic Atlases Available Online

Screen capture images from the new High Plains Water District hydrologic atlas web site show (LEFT) boundaries of the water district as the site first loads; (CENTER) the Google hybrid feature with the saturated thickness contour turned on for viewing; and (RIGHT) the saturated thickness layer depicting the different thicknesses in varying colors.

The new on-line atlas series contains the same four maps as the previous print version.

They include the approximate altitude of the land surface, approximate altitude of the base of the Ogallala Formation, the approximate saturated thickness of the Ogallala Formation, the approximate altitude of the water table in the Ogallala Formation for each county or portion of a county within

the district.

The recently updated atlas series includes areas annexed into the district in Nov. 2010.

It is important to remember that annual Winter Water Level Measurements used to construct the various maps are made during two calendar years.

For example, measurements were made in late 2011/early 2012 which reflect results of groundwater

pumping during 2011.

Mullican said that printed copies of the updated county-based hydrologic atlases are available upon request for those who do not have computer access.

“District mapping personnel will be glad to help those who need a printed copy of the hydrologic atlases. Persons just need to call the HPWD office at (806) 762-0181 for assistance,” he said.

# Drought-restricted watering schedules don't have to equate to dead lawns

**COLLEGE STATION** – Lush, green lawns may not be possible during drought-restricted watering schedules, but sustaining and maintaining their grass is something homeowners can do with proper management, according to a Texas A&M AgriLife Research expert.

The Texas Commission on Environmental Quality estimated approximately 1,000 Texas public water systems imposed water restrictions during the 2011 drought. Such water restrictions frequently limit homeowners to a two-day-per-week watering schedule.

Jim Thomas, AgriLife Research senior research associate, and Leslie Keen, with Naiad Water in Conroe, worked with a study last summer to determine what such a schedule might do to a lawn's condition.

“When you are under drought restrictions, you have a limited time to water,” Keen said. “We wanted to visually see how the grass looked with water restrictions, because this can sometimes be a concern



with homeowners and homeowner associations.”

The study at the Texas A&M Turfgrass Field Lab in College Station compared irrigation timing and sprinkler-head types in an effort to provide guidelines for meeting the two-day-per-week watering schedule and maintaining a healthy turf.

The turf plots utilized in this study were established in the fall of 2010, Thomas said. Previously, these six turf plots planted to St. Augustine and Bermuda grasses

were watered half on a four-day-per-week watering schedule and half on a two-day-per-week watering schedule, applying a full inch of water per week.

In the 2012 research project, all six turf plots were set to a two-day watering schedule with a reduced total of water applied, and the researchers compared four different sprinkler heads: spray, MP rotator, rotors and sub-surface drip.

“Coming out of the 2011 drought, what we wanted to do was to simulate a drought and only run two days a week,” Keen said.

“Instead of putting a half inch of water on each of the two days, we also decided to only apply one-quarter inch and one-third inch on the watering days.”

The study determined that if the grass started out healthy, “you can irrigate twice a week using less water than normal and the grass will survive,” she said.

“You will have less green, but it will respond when water is applied.

But we need to stress, you have to start with a healthy lawn first.”

The comparison of sprinkler heads/systems showed the best outcome occurred under drip irrigation, followed by the turf watered with spray heads, the MP rotator heads. The poorest performers were the rotor heads, the two said.

“No matter which system you have, you need to adjust it correctly so you don't have overspray on the street or other concrete,” Thomas said. “Focusing on the efficiency of how you irrigate is key.”

In the typical residential situation, he said, irrigation systems are often not properly adjusted to just hit landscape.

In those situations, as much as 35 percent to 50 percent of the water can be lost to runoff.

Another key, Thomas said, is timing of the water application.

“Large cities don't restrict how

See **CYCLE-SOAK** Page Four



## Cycle-soak water application method can reduce water runoff from lawns

Continued From Page Three

much water you can put out, they just restrict how many days a week you can irrigate," he said. "If you try to apply half an inch of water in a half hour, it can create quite a bit of runoff."

He suggested using a cycle-soak system, where a small amount of water is applied and allowed to soak in and then a second amount is applied and allowed to soak in, thus minimizing runoff of the valuable water and nutrients that might be applied to the grass.

"Even a poorly installed system that is properly scheduled is going to do a much better job," Keen said.

"All this takes homeowner input," Thomas said. "You can't just set the system and six months later come back and check on it. You have to watch what is happening when the water is being distributed."

Most residential controllers can have multiple start times, the two said. They can be programmed to apply water at multiple times in one day, allowing a person to lower the application at each watering.

Another finding of the study: Brown grass does not always equal dead grass.

"It may be going dormant due to lack of water, but dead and dormant are not the same thing," he said.

## Two years of drought force adoption of new crop irrigation technologies

AMARILLO – Two years of drought have forced adoption of new technology and management practices in crop irrigation, according to a Texas A&M AgriLife Extension Service specialist in Amarillo.

Nich Kenny, AgriLife Extension

irrigation specialist, said the key factor moving into the 2013 season will be for producers to concentrate on their irrigation management.

"It seems like over the last couple of years, we've made big improvements in technologies," Kenny said. "The guys have taken some proper steps to make sure their pivots are outfitted properly. They are using proper residue management, good plant populations and planting dates.

"Now we're really getting right down to where it will require some active irrigation management – holding some water early, managing soil water so we are not over-applying or over-irrigating early, and then keeping up with capacity during the middle of the season," he said.

Kenny said some producers already know, but others must improve their understanding of how much water they really need to keep up with all their crops, from corn to cotton and sorghum.

Producers need a good feel of what their capacity is and what is needed to maintain moisture during the season, he said. When the crop is at the tail-end of the season, they might need to back off the water again to match crop water needs as it matures and finishes out towards harvest.

"Something that has been to our advantage is that during that drought, a lot of producers have learned to be very efficient," Kenny said. "They've looked at applying bubble-mode sprinklers so that they are minimizing their evaporation. We've also had a renewed and improved interest in subsurface drip irrigation."

## Conservation Conversation

News briefs and other conservation-related information

**DEATHS:** **Ona Maye Golden Belt**, 96, died Dec. 26 in Lockney. She was the wife of J.R. Belt, who served as HPWD Precinct Five District Director from 1958 to 1963. He passed away March 16, 2012 at age 94. Survivors include two daughters, a son, six grandchildren, and 10 great-grandchildren.

**Ann Zinser Meyer**, 77, died Jan. 12 in Amarillo. She was the mother of former HPWD Board President Robert Meyer of Canyon. Survivors include her husband, two sons, two daughters, four brothers, a sister, and 10 grandchildren.

**HONORS:** Several Texas A&M AgriLife Extension Service faculty and staff in the Panhandle region were recognized Jan. 8 for their dedication and service. Our congratulations to the following award recipients:

**Dr. John Sweeten**, resident director of the Texas A&M AgriLife Research and Extension Centers in Amarillo and Vernon, has been honored with the Texas A&M AgriLife Vice Chancellor's Award in Excellence for administration.

**Kay Ledbetter**, Texas A&M AgriLife Extension Service media relations specialist, was honored with the Vice Chancellor's Award in Excellence in the staff category.

**Dr. Galen Chandler**, Texas A&M AgriLife Extension Service regional program coordinator for agricultural and natural resources in Amarillo, has been awarded a Superior Service Award for distinguished service. Chandler retired Jan. 31 after 32 years with Texas A&M AgriLife Extension.

**Dr. Monte Dozier**, Texas A&M AgriLife Extension Service regional program coordinator for agricultural and natural resources, has been awarded a Superior Service Award in the agency leadership category.

**David Graf**, Texas A&M AgriLife Extension Service agent for agriculture and natural resources in Swisher County, has been awarded a Superior Service Award in the county agent category.

**Texas A&M AgriLife Communications-Media Relations**, was recognized with the Superior Service Award for a unit. Members include Kathleen Phillips, College Station; Blair Fannin, College Station; Robert Burns, Overton; Steve Byrns, San Angelo; Kay Ledbetter, Amarillo; Rod Santa Ana, Weslaco; and Paul Schattenberg, San Antonio.

**SURFACE WATER DATA ON-LINE:** Water Data For Texas is a new on-line data source which allows the public, engineers, and scientists access to extensive information regarding state surface water reservoirs. The site ([www.waterdatafortexas.org](http://www.waterdatafortexas.org)) provides easy access to data, such as surface water reservoir levels, storage, surface area, and elevation-area capacity curves. The site, launched late last year, replaces several Texas Water Development Board web sites that are being decommissioned.

**XERISCAPE CONFERENCE:** The Xeriscape Council of New Mexico announces its 18<sup>th</sup> annual water conservation conference set for Feb. 28-March 1 in Albuquerque. This year's conference theme is "Our Water, Our Future Communication and Cooperation Across Disciplines." The conference program, list of speakers, and on-line registration information is available at [www.xeriscapenm.com](http://www.xeriscapenm.com). Information about the accompanying Water Conservation Expo at the NM State Fairgrounds on March 2-3 is also available on the web site.

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