


Notice to Irrigated Landowners

An IRS engineer will visit the District in December and review information for the cost-in-water depletion program. This program allows irrigated landowners to receive a tax benefit due to declining groundwater levels. This program is specific to the High Plains landowners using groundwater from the Ogallala formation.

Each year, the IRS must review and approve land sales data that establishes the cost of water. Also, the District's water table decline map must meet IRS guidelines.

Since 1999, approximately 539 landowner requests have been fulfilled. Eligible properties are those which have been acquired since 1979. Those who have previously requested this information will soon receive a reorder form.

If you would like additional information or have any questions, call or come by the District office. 

SOUTH PLAINS GROUNDWATER NEWS is published by the SOUTH PLAINS UNDERGROUND WATER CONSERVATION DISTRICT, PO Box 986, 802 Tahoka Road, Brownfield, TX 79316. Directors: Dan Day, Doyle Moss, Scott Hamm, Matt Hogue, Larry Yowell; General Manager: Jason Coleman; Administrative Assistant: Lindy Harris. Subscriptions are free upon request.

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Calendar of Events

- Nov. 23-24 Thanksgiving Holiday
Office Closed
- Dec. 5 Board Meeting
8:30 am
District office
- Dec. 25-26 Christmas Holiday
Office Closed
- Looking Ahead to 2007**
- Jan. 1 New Year's Holiday
Office Closed
- Jan. 9 Board Meeting
8:30 am
District office
- Feb. 6 Board Meeting
8:30 am
District office
- Feb. 7 South Plains Ag Conference and Trade Show

GROUNDWATER NEWS

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STATE OF THE AQUIFER

Since 1993, the South Plains UWCD has conducted research and implemented programs which are necessary for understanding our underground water resources. The focus of this effort has always been supplying the Board of Directors the best possible data for implementing management practices. Although there is much work yet to be done, the District does have extensive

data available for summarizing the state of the aquifer (the Ogallala) as it is understood at this time. Analyzing the current state of groundwater resources is especially helpful as the Board considers developing a desired future condition for the aquifer, along with the six other districts in Groundwater Management Area #2.

For simplicity, the data evaluated for this article includes water level changes and irrigation usage. The usage numbers shown are for

the primary crops grown here: cotton, peanuts, wheat and sorghum. This data begins for the year 1985, and extends through 2006 (Fig. 1). Although the District began collecting data in 1993, the Texas Water Development Board has data which was collected during the prior years. When the District began operations in 1993, the existing TWDB data set was expanded, and additional information was obtained.

Reviewing the chart in Figure



SOUTH PLAINS UNDERGROUND WATER CONSERVATION DISTRICT
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ADDRESS SERVICE REQUESTED



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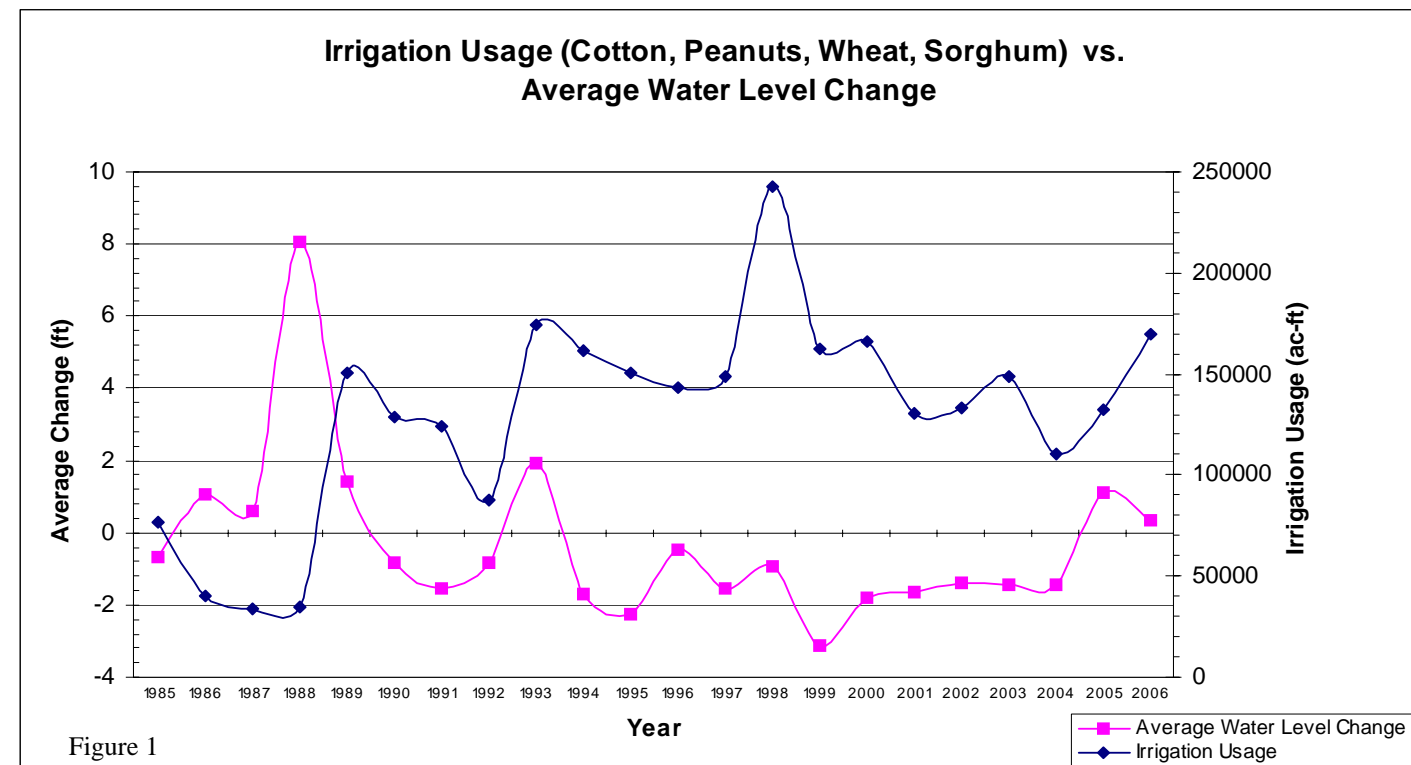


Figure 1

1, notice that trends for water level changes and usage appear cyclical. That is, there are alternating periods of highs and lows for both series. Also, to no surprise, the greatest average water level decline (1999) follows the year of highest usage (1998). Conversely, the greatest average water level rise (1988) follows the year of lowest usage (1987). Other years of interest may be analyzed in similar fashion.


It appears that any usage greater than about 100,000 ac-ft results in water level declines, except the years 2005 and 2006. This occurrence, though odd, may be explained in part by record-setting rainfall during 2004. There are a total of 15 years in this study where average water level changes resulted in a decline. The seven years where average water level changes resulted in rises include those years where usage was at or below 100,000 ac-ft, and the two years following record-high precipitation. Currently, the District's estimate of recharge is about 70,000 ac-ft/year. Based on these data trends, depleting aquifer levels are expected to continue, absent of large amounts of precipitation or significantly lower than average usage. Average

use for the time period 1985-2006 is about 129,000 ac-ft/year.

Since the District's confirmation in 1992, this area has experienced a number of very dry years. Consequently, there have been 11 years where average water level changes have resulted in declines since 1994. Several years during this period, average declines have been quite severe. During the period 1995-2000, the average change observed in 100 wells was -7.79 ft. From 2000-2005, the average change observed in 120 wells was -5.25 ft. For the period 1995-2005, the average change observed in 91 wells was -13.01 ft. What does this mean? The results of this analysis reveal that the slight rise in water levels from 2005 and 2006 did little to offset the relatively large drops in water levels which occurred during the previous 10 years.

Finally, the question still remains concerning the future condition of the aquifer. The specific task of adopting a desired future condition of the aquifer must be completed by 2010, barring any legislative changes. Even so, the data presented here leads to several conclusions. First, the current pattern of usage exceeds recharge, result-

ing in water level declines. The aquifer will not sustain the current average usage as water levels continually decline. As aquifer levels drop, irrigated landowners will face critical decisions. Some choices that may result include a conversion to dry land, or significant reductions in acreage and/or usage. Lastly, an enormous amount of recharge is needed to offset the declines inflicted since 1995. After all, the District's volume calculations indicate a decline in storage of more than 1 million ac-ft during the period 1995-2006.


Concluding, it is obvious that drought has negatively affected water levels. Since 1985, there have been more years where declines were observed than water level rises were observed. Additional declines of some magnitude are expected, based on current trends. However, lower usage and higher rainfall may result in water level rises. Using water wisely remains a top concern for District residents. 

We Need Your Help

The Postal Service is now in the process of converting the rural addresses in Terry County to physical addresses which will be used in connection with 9-1-1 emergency services. Notices have been sent to rural residences to notify them of their change of address.



We have many rural addresses on our newsletter mailing list, and we need your help in updating our records.

Please call the office (637-7467) or fill out the attached Change of Address card, which requires \$.24 postage, to notify us of your new address. 



Happy Holidays
The Board of Directors
and Staff of the
South Plains UWCD
wish you a happy and safe holiday
season.


*May the Lord bring you
adequate rain,
abundant crops,
and
peace in the coming year.*

District Board Approves Inter-Local Agreement

During its regular meeting in October, the District Board approved an inter-local agreement with three other groundwater conservation districts. The districts included are the Sandy Land UWCD, Llano Estacado UWCD, and the Permian Basin UWCD. This agreement specifies the arrangements for a shared public relations/education director. Under the terms of this agreement, the Sandy Land UWCD is the employer, while the other districts contract with Sandy Land for shared services from the employee.

The purpose of this program is to collectively provide a higher level of educational programs than is currently feasible by each individual district. Also, it is anticipated that the shared input from the four districts will allow the implementation of better programs at a lower cost than would be possible otherwise.

A coordinated educational program of this scope can be very effective, reaching a large number of people. Similar programs from other groundwater conservation districts have proven successful and have increased awareness concerning groundwater conservation. It is expected that this arrangement will provide education and programs specific to the residents of the Southern Ogallala region.

At the time of this writing, the Sandy Land UWCD is accepting applications for this position. Any interested parties should contact the Sandy Land office at 1012 Ave. F, Plains, TX. 

EQIP FINANCIAL ASSISTANCE AVAILABLE

Applications for the 2007 EQIP program in Texas are currently being accepted. The Local Work Groups (LWGs) made the following recommendations for the Terry County EQIP Program:

The top concern to be addressed with "**Ogallala Ground and Surface Water Conservation Funds**" is water quantity. The practices considered for funding include:

- **High priority**—center pivot upgrades.
- **Medium priority**—drip (20 acres or less).
- **High low priority**—converting irrigated acres to dryland.
- **Low low priority**—all other irrigation practices.

The top concerns to be addressed with "**County Base Funds**" include plant health, water quality and quantity, and soil erosion. The practices eligible for funding are:

- **High priority**—brush management (1000 acres or less of chemical treatment or 160 acres or less of mechanical treatment), chemigation valves and/or flowmeters, and fencing.
- **Medium priority**—livestock pipelines, livestock wells, livestock troughs, and drip (21-80 acres).
- **High low priority**—terraces, waterways, pasture/hayland planting, irrigation water management, drip (20 acres or less), and converting center pivot irrigation to drip.
- **Low low priority**—all other conservation practices.

All conservation practices will be cost shared at a 50% cost share rate under both funds. Producers qualifying as "Beginning Farmers and Ranchers" are eligible to have their conservation practices cost shared at 75%. Producers qualifying as "Limited Resource Producers" are eligible to have their conservation practices cost shared at 90%.

The EQIP sign up for the current funding period will remain open until December 15, 2006. To make an appointment or for more information, contact the Terry Soil and Water Conservation District or NRCS at 637-8092. 