

# Panhandle Government Publications Water News



Depository

DAIRS PUDIT LIGITAL

October 1999

## WEATHER MODIFICATION PROGRAM REQUIRES RAISE IN TAXES

In an effort to determine public opinion on whether to enter into a precipitation enhancement program. the Panhandle Groundwater Conservation District's Board of Directors held open meetings in each of the six counties within the District, July 12, 13, and 14. At each meeting, Texas Natural Resource Conservation Commission's senior meteorologist, George Bomar, and Scott Holland, of the West Texas Weather Modification Association, provided valuable insight and support data, and answered countless questions about the effectiveness and benefits of cloud seeding programs.

Comments from citizens attending the meetings were very favorable, and as a result the Board made the decision to proceed with a weather modification program. The estimated cost of the program is \$312,000 per year. Of this amount, the state will pay fifty percent, and the District will pay the other fifty percent, or \$156,000 each. This will cause a tax increase of \$0.0078 per \$100 of value. The cost of the program to home owners (average home valued @ \$50,000) would be \$3.90. Average cost per section of irrigated land (valued @ \$525 per acre) would be \$26.20, or \$.0409 per acre. The estimated return on the investment (based on a projected 20% increase of rainfall during the growing season) would be approximately \$360 for each \$1.00 spent.

In addition to increased rainfall, the program has the added possibility of decreasing the size and amounts of hail. There are indications that seeded clouds have increased rainfall downwind and cloud tops decrease in size, thus decreasing the risk of damaging winds or tornadoes.

### **BOARD ADOPTS** 1999-2000 BUDGET AND TAX RATE

A public hearing on the proposed tax rate was held at the District office on August 26, 1999. Those in attendance expressed their support for the proposed weather modification program and the necessary raise in taxes to support

On September 1, the Board met again to adopt a tax rate of \$0.214 per \$100 valuation for the next fiscal year, which runs from October 1, 1999 through September 30, 2000.

A budget of \$663,675 was adopted. This also reflects the extra funds needed to facilitate the weather modification program.

### AGRICULTURAL WATER CONSERVATION **EQUIPMENT LOAN PROGRAM DISCONTINUED**

After considerable review and discussion, the Board of Directors has determined that the Ag Loan Program is no longer needed. Only one loan has been made in 1999 and the Board feels that the time has come to discontinue the program.

The District entered into the program with the Texas Water Development Board in March 1992. Since that time, fifty-five loans have been made to producers, totaling \$2,376,806. The funds remaining in the program will be returned to the T.W.D.B.



Colorado The River Foundation and the Texas Water Foundation will co-host the Clear Gold Summit, to be held in Austin on September 29-30. This event will launch a statewide debate on the current and future value of water as a commodity in Texas.

Senator J. E. "Buster" Brown, Chairman of the Texas Water Foundation, states, "With the everincreasing burden on the water supply in Texas, we must look ahead into the next century and define ways of protecting this precious natural resource."

Participants of the summit will be water experts in agriculture, university research, federal and state agencies, as well as riparian landowners, recreational, parks and wildlife, and environmental entities.

PGCD manager, C. E. Williams, has been invited to participate in the panel discussion entitled, "How Big is Your Pump, Anyway?"

Featured speakers will include top leaders from every region of Texas. The agenda is designed to facilitate discussion and drive towards solutions on very specific issues that will directly impact "Water as a Commodity".

## WATER WELL DRILLERS RULES

§ 238.61 Chemical Injection, Chemigation, and Foreign Substance Systems

The well driller or pump installer is to inform the land owner and well owner that the land owner and well owner are responsible for complying with the rules and regulations under the standards set forth in this section.

All irrigation distribution systems or water distribution systems into which any type of chemical (except disinfecting agents) or other foreign substances will be injected into the water pumped from water wells shall be equipped with an in-line, automatic quick-closing valve capable of preventing pollution of the ground water. The required equipment shall be installed on all systems whenever a pump is installed or repaired or at the time of a chemical injection, chemigation or foreign substance unit is added to a water delivery system or not later than January 1, 2000, if the well has a chemical injection, chemigation, or foreign substance unit in the delivery system. The type of check valve installed shall meet the following specifications:

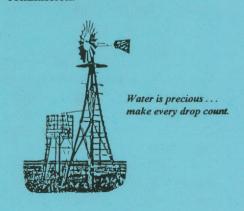
(1) The body of the check valve shall be constructed of cast iron, stainless steel, cast aluminum, cast steel, or of a material and design that provides a sturdy integrity to the unit and is resistant to the foreign substance being injected. All materials shall be corrosion resistant or coated to prevent corrosion. The valve working pressure

rating shall exceed the highest pressure to which the valve will be subjected.

- (2) The check valve shall contain a suitable automatic, quick-closing and tight-sealing mechanism designed to close at the moment water ceases to flow in the downstream or output direction. The device shall, by a mechanical force greater than the weight of the closing device, provide drip-tight closure against reverse flow. Hydraulic back pressure from the system does not satisfy this requirement.
- (3) The check valve construction should allow for easy access for internal and external inspection and maintenance. All internal parts shall be corrosion resistant. All moving parts shall be designed to operate without binding, distortion, or misalignment.
- (4) The check valve shall be installed in accordance with the manufacturer's specifications and maintained in a working condition during all times in which any fertilizer, pesticide, chemical, animal waste, or other foreign substance is injected into the water system. The check valve shall be installed between the pump discharge and the point of chemical injection or foreign substance injection.
- (5) A vacuum-relief device shall be installed between the pump discharge and the check valve in such a position and in such a manner that insects, animals, flood-water, or other pollutants cannot enter the well through the vacuum-relief device. The vacuum-relief device may be mounted on the inspection port as long as it does not interfere with the inspection of other anti-pollution devices.
- (6) An automatic low pressure drain shall also be installed between the pump discharge and the check valve in such a position and in such a manner that any fluid which may seep toward the well around the flapper will automatically flow out of the pump discharge pipe. The drain must discharge away from rather than flow into the water supply. The drain must not collect on the

ground surface or seep into the soil around the well casing.

- (A) The drain shall be at least threequarter inch in diameter and shall be located on the bottom of the horizontal pipe between the pump discharge and the check valve.
- (B) The drain must be flush with the inside surface of the bottom of the pipe unless special provisions, such as a dam made downstream of the drain, forces seepage to flow into the drain.
- (C) The outside opening of the drain shall be at least two inches above the grade.
- (7) An easily-accessible inspection port shall be located between the pump discharge and the check valve, and situated so the automatic low pressure drain can be observed through the port and the flapper can be physically manipulated.
- (A) The port shall allow for visual inspection to determine if leakage occurs past the flapper, seal, seat, and/or other components of the checking device.
- (B) The port shall have a minimum four-inch diameter orifice or viewing area. For irrigation distribution systems with pipe lines too small to install a four-inch diameter inspection port, the check valve and other anti-pollution devices shall be mounted with quick disconnects, flange fittings, dresser coupling, or other fittings that allow for easy removal of these devices.
- (8) Any check valve not fully meeting the specifications set forth in this section may on request be considered for a variance as given in § 339.6 of this title (relating to Variance of Rules) if demonstrated to the satisfaction of the commission.



## 1999 WATER QUALITY REPORT



by Bart Wyatt

With the last sample taken in September, the Panhandle Groundwater Conservation District has completed its first cycle with the newly implemented water quality sampling system. Since it was an odd-numbered year, (i.e. 1999), samples were taken from odd-numbered state wells along with state wells that have had a past history of high mineral concentration. This year, 190 out of a possible 204 samples (93%) were collected over a two and a half-month period. Of this two and a half-month period, 150 hours were spent in preparation and sample gathering, while a total of 100 hours were spent in the laboratory.

During the 1999 Water Quality season, some state wells did exceed in mineral content, according to the state's drinking water standards. Of the 190 samples collected, 36 were high in iron, 23 in sulfate, 6 in chloride, 3 in nitrate, and 1 in fluoride. (Note: One or more minerals may have been present in an individual sample.)

Here is a brief explanation of why iron was the most prevalent mineral found during the water quality season. Of the 36 samples gathered that were high in iron, 16 samples, or 44% of these state wells sampled, were windmills. Naturally, windmills will have a tendency to be higher in iron content due to rusting discharge pipes. The iron content is not directly tied to the water flowing up from the aquifer.

Not only does the PGCD gather water samples during the scheduled water quality season, but we also gather water quality samples throughout the District any time, upon request. Samples may be picked up by District employees or brought to our office for analysis. This year, the District has run tests on 67 requests. Of these 67 requests, 37 were brought into our office, while the other 30 were picked up on location. Results of these tests are then sent back to their respective owners. With three months still left in the year, the PGCD will end

up running approximately 85 to 90 requested samples for the year.

If you feel at anytime that your water is losing its quality, or if it would just make you feel better to have it checked, please don't hesitate to call us.

## GEOLOGICAL SOCIETY INVITES BRADY TO SPEAK

Raymond M. Brady, Panhandle Groundwater District's geologist/engineer has been invited to speak on his paper titled, "A Texas Panhandle Approach to Groundwater Sustainability," at the Geological Society of America's annual meeting, in Denver, Colorado, on Oct. 27-28.

Ray's paper will be part of the hydrology division's technical session titled, Sustainability of Water Resources in the High Plains.

## T.A.G.D. ELECTS NEW OFFICERS

The Texas Alliance of Groundwater Districts met in Sonora on August 30, 1999, for their quarterly meeting. New officers took office at this meeting. Those elected were: president, Mike Mahoney, manager of Evergreen U.W.C.D., Jourdanton; vicepresident, Harvey Everheart, manager of Mesa U.W.C.D., Lamesa; secretary, Kathy Jones, administrative assistant, Sandy Land U.W.C.D., Plains; treasurer, Cindy Cawley, manager of Plateau U.W.C.&S.D., Eldorado; parliamentarian, Stovy Bowlin, manager of Barton Springs-Edwards A.C.D., Austin.

# IT'S BEEN A BUSY YEAR!!

The District's fiscal year ended September 30, 1999. Looking back at the year just passed, we realized we've had a very busy year!

In October, we began working with representatives from the city of Amarillo on their request for a high impact production permit for the water rights they were planning to purchase in Roberts County. Although they aren't planning to develop the water rights for at least twenty-five years, they needed assurance that a permit would be available at that time. The

District held a hearing on the proposed permit, to allow adjoining landowners to voice concerns and be aware of the proceedings. Subsequently, the District issued four high impact production permits, with a twenty-five year non-use clause and other conservation provisions, to become effective when the sale is finalized.

Also in October, the District joined other Ogallala Districts to file an amicus brief in the Ozarka Suit.

In November, the Arkansas River Shiner was designated a "threatened," rather than an "endangered" species. The District had worked toward this designation for more than a year.

In December, the Internal Revenue Service approved the annual decline map. This map was constructed from data gathered during the static level measurements.

In January, the 76<sup>th</sup> Legislative Session convened. By the time it recessed in May, C. E. had spent a large amount of time in Austin, as he and other T.A.G.D. members, kept track of, and testified on, several house and senate bills.

In March, the well metering program, for the Panhandle Regional Planning Group, got underway. A total of 140 meters were installed in our district and the North Plains district.

In April, residents of Roberts County approached the District about becoming involved in a weather modification program.

In June and July, the Board held informational meetings on weather modification. The first meeting was at the District office. Subsequent meetings were held in Wheeler, Claude, Clarendon, Miami, Pampa, and Panhandle.

The Water Quality Program, flow tests and efficiency tests keeps everyone busy in July and August.

August and September are also busy as we work on the budget and tax rate for the coming year.

In addition to everything else, the Board approved twenty irrigation well permits (Wheeler Co. - 6; Donley Co. - 4; Armstrong Co. - 3, Gray Co. - 2; Carson Co. - 2; Roberts Co. - 3) and processed twenty-eight domestic well registrations and seven monitoring well registrations.

#### DISTRICT OFFICE

201 W. 3<sup>rd</sup> St., P.O. Box 637 White Deer, Texas 79097-0637 Phone: 806/883-2501 FAX: 806/883-2162

### DISTRICT STAFF

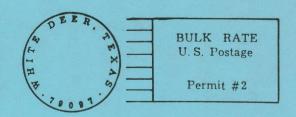
C. E. Williams, Manager Yvonne Thomas, Adm. Asst. Raymond Brady, Geologist/Engineer Bart Wyatt, Field/Lab Technician

### **BOARD OF DIRECTORS**

John Spearman, President
Frank Simms, Vice President
Charles Bowers, Secretary
Phillip Smith, Director
Jim Thompson, Director
Robert A. Clark, Director
Danny Hardcastle, Director
Jason Green, Director

Panhandle Water News is published quarterly by the Panhandle Groundwater Conservation District. Subscriptions are free upon request. PANHANDLE GROUNDWATER CONSERVATION DISTRICT P.O. BOX 637 WHITE DEER, TEXAS 79097

RETURN SERVICE REQUESTED



## DIRECTOR ELECTIONS TO BE HELD IN JANUARY

Elections will be held January 15, 2000, within and for Director's Precincts No. 1, No. 3, No. 5, and No. 7 of the Panhandle Groundwater Conservation District, to elect one director in each precinct for a four-year term. Directors presently serving in those precincts are: Phillip Smith, Precinct 1; John Spearman, Precinct 3, Jason Green, Precinct 5, and Robert A. Clark, Precinct 7.

To be qualified to serve as a director, a person must be a registered voter in that precinct. Applications must be signed by the applicant and filed in accordance with the Election Code. Applications must be filed in the District office between November 1 and December 1.

The Board is responsible for legal, financial, and business matters of the District.

Please refer to the adjoining map to determine your precinct boundaries.

