

E1550.6
W2915

95/1st

THE WATER SOURCE

A QUARTERLY PUBLICATION OF THE EDWARDS UNDERGROUND WATER DISTRICT

Government Publications
Texas State Documents

MAR 22 1995

Department of
State

January 1995

District Signs Historic Accord

*Rick Illgner, M.A. Geography
EUWD General Manager*

The Edwards Underground Water District recently joined with the underground water conservation districts in Medina and Uvalde counties in signing the Edwards Aquifer Interlocal Contract. After a five-year lapse, this Interlocal Contract restores regional management, subject to local control, over the Edwards Aquifer in a fair and equitable manner.

The original 1959 legislation creating the Edwards Underground Water District (EUWD) included the five major counties which rely on the Edwards Aquifer: the current EUWD counties of Bexar, Comal and Hays, and the two western counties of Medina and Uvalde. In 1989, the western counties withdrew from the Edwards District in a disagreement that focused on some of the regulatory concepts listed in the 1988 Regional Water Plan.

The new Interlocal Contract resolves historical conflicts about how to manage the Edwards Aquifer. The different needs and perspectives of western agricultural interests, central municipal interests, and eastern spring interests have, in the past, divided communities in the region. The Interlocal Contract will, over time, heal these divisions and unite all the interests in a regional perspective.

Recent divisions have included:

- A 1989 lawsuit which declared the aquifer an underground stream, and therefore subject to state control.
- A 1990 warning from the U.S. Fish & Wildlife Service (USFWS) that insufficient rainfall had caused spring flows to drop, jeopardizing endangered species, and that federal intervention was pending.
- The 1991 opening of the catfish farm, and its subsequent shut down the same year due to a lawsuit filed by the EUWD and San Antonio River Authority.
- The 1991 San Antonio citizens' initiative that halted construction of the Applewhite Reservoir.
- A 1992 action by the Texas Water Commission (now the Texas Natural Resource Conservation Commission) declaring the aquifer an underground stream. A court decision promptly reversed this attempt to regulate the aquifer.
- A 1992 decision by federal judge Lucius Bunton of Midland, finding the USFWS negligent, and directing it and the State of Texas to protect endangered species at Comal and San Marcos Springs. The lawsuit had been filed by the Sierra Club, Guadalupe-Blanco River Authority and others the previous year.
- The 1993 passage of Senate Bill 1477 by the Texas Legislature in response to Judge Bunton's directive. The bill would use government regulations to reduce aquifer pumping, create new underground water rights, and levy fees to buy water rights from well owners.
- A 1993 objection to S.B. 1477 by the U.S. Department of Justice on grounds that it violated the Voting Rights Act. This objection stopped the new law's implementation and preserved the current elected EUWD board as the aquifer's primary regional manager.
- A 1994 referendum that defeated the San Antonio Water System's long-range plan, and with it, a revised version of the Applewhite Reservoir.

To resolve these conflicts, the EUWD board of directors decided in early 1994 to develop a strategic plan –

(continued)

Don't Forget About Conservation

Charles Abrens, B.A. Urban & Regional Planning
EUWD Water Resource Planner III

Simplicity. In today's complicated world, we are bombarded with choices and alternatives, often times overlooking the obvious. Residents of the Edwards Aquifer region have experienced this over the last three years, hearing about alternatives such as augmentation, recharge, reservoirs, inter-basin transfers, and more being advocated by activists and policy-makers alike. Yet there always seems to be constraints in the acquisition of these additional supplies. Political, legal, environmental and institutional issues face any effort to obtain water supplies from various sources other than the Edwards Aquifer.

But there is one alternative which has few of the constraints mentioned above ... increasing water-use efficiency, or more commonly, water conservation. To most of us, water-use efficiency is a noble and desirable goal. But to decision makers, the formation of such policy presents an inexpensive alternative. What is water-use efficiency, and how much water can be made available as a result of this type of program?

Water-use efficiency is defined as changes in lifestyle or equipment which results in a smaller volume of water used to accomplish any given task. These changes are usually components of water conservation plans or drought management plans. Water-use efficiency can be as simple as shutting off the water while brushing your teeth, or as complex as determining an appropriate water rate structure which penalizes excessive use while maintaining the financial strength of a utility.

Regardless of the type of plan or program implemented, a common thread determines its effectiveness – the



These Chinese figures represent simplicity. The Chinese believe that simplicity is an important concept, reminding us that "getting back to basics" is a noble goal.

level of acceptance by the public. Experience tells us that most individuals will respond favorably to a call-to-action once they understand the reasons for undertaking the effort. Water-use efficiency should be the most accepted and effective means of providing this region an additional supply in a relatively short period of time. Yet very few methods are effectively legislated, as most are tied to some action, or lack of action, by the end user. This presents a challenge to the water planners of the region.

So why haven't we heard more about water conservation as a component of water management in the past, and why should we look to it in the future? Historical reasons for not practicing water conservation include:

- water has been inexpensive,
- few incentives have been offered,
- people didn't believe they could make a difference,

- there was no threat of outside intervention by other levels of government.

I propose that users of the Edwards Aquifer have the power in their own hands to affect the amount of water available today and in the future. Water conservation has not been practiced to the degree it should, and all of us should step up efforts to increase the efficiency of our water use. If we all saved five gallons a day (the equivalent of one flush or knocking one minute off our shower time), we could provide the region with an additional **2.7 billion gallons** of water per year!

The risk of federal intervention has galvanized the region into searching for additional supplies, and strides are being made. The price of water has recently gone up, with additional increases to those who use more than their fair share. More agencies are providing cash incentives in the form of rebates for plumbing fixture replacement, or proper landscape design and installation. On-going education efforts have helped convince the public that individual actions can make a difference.

Many times we look too hard for an answer to a situation when in fact the answer, or part of it, is right before us. Efforts which increase the level of water-use efficiency are not the sole solution to any water management dilemma. But they are the most easily accomplished if the users of the resource understand the need for such actions and believe that they can make a difference, regardless of the success or failure of other efforts to manage our most precious resource. ■

Historic Accord *(continued)*

a ten year blueprint and written public policy direction for the District and region's future. Throughout the five-month effort, board members came together and developed a mission statement, goals and objectives that would ensure a sustainable supply of high quality water, with a spirit of regional cooperation. Demonstrating this cooperative spirit, the board was united in its endorsement of the plan.

A critical element of the plan is, "To create a regional cooperative agreement ... among the underground water authorities in Bexar, Comal, Hays, Medina and Uvalde Counties, leading to a regionally-supported water management plan." This agreement would be a cornerstone for 1995 legislative proposals. The three districts reached a preliminary agreement in May. In July, EUWD negotiators began weekly open meetings with Medina and Uvalde representatives in Castroville. A team of professional facilitators helped with the sensitive negotiations. After three months, the negotiators reached consensus on managing the Edwards Aquifer.

On October 10, 1994, representatives of the Edwards, Medina and Uvalde Districts signed the Edwards Aquifer Interlocal Contract (EAIC), a binding document based on four principles:

- local control with regional cooperation,
- whoever benefits, pays,
- preservation of property rights, and
- equitable funding.

The main points are as follows:

Governance

The three districts will work in unison with an obligation to manage each section of the aquifer with appropriate techniques. An Edwards

Aquifer Liaison Committee will provide a forum for communicating and coordinating actions among the three districts.

Financing

All districts will continue to levy ad valorem taxes. The Edwards District will also seek authority to levy production fees, while the Medina and Uvalde Districts may seek authority for special production surcharge fees in times of drought or other appropriate conditions.

Aquifer Management Guidelines

Districts will be required to provide money for alternative sources of water at times whenever they need to pump more than their historical high. The amounts for each district are:

Edwards:	375,000 acre-feet per year
Bexar:	325,000 acre-feet
Comal:	30,000 acre-feet
Hays:	15,000 acre-feet
Medina:	120,000 acre-feet per year
Uvalde:	160,000 acre-feet per year

These management guidelines are less than the average recharge to the aquifer each year. The guidelines are *not* allocations that are expected to be issued to individual well owners on a "use it or lose it" basis. Rather, they are production thresholds that require development of new supplies. The advantages of this system are its basis on actual numbers, its responsiveness to property rights, and its emphasis on developing new water supplies. Moreover, it does not encourage wasteful use to maintain an artificial water right.

Water Supplies

The Edwards District has already begun looking for 75,000 acre-feet of new water supplies for the region. A comprehensive, but not exhaustive, list

of supply alternatives is contained in the EAIC.

Springflow Protection

Protecting Comal and San Marcos Springs has long been a commitment of the Edwards Underground Water District. The yardstick for measuring the effectiveness of any water management strategy is its responsiveness to protecting spring flows that are now mandated for these two natural resources that provide habitat for four endangered species.

Special Tools

The EAIC requires all three districts to develop and enforce drought response plans or demand management plans, conservation plans, reuse policies and water quality protection plans. These plans were adopted in November.

The EAIC is the framework for legislation in the 1995 session. Because of the EAIC, the Edwards District will be able to work cooperatively with its regional partners from Medina and Uvalde counties in ways that have not been possible since 1989. The EAIC is easily the most comprehensive and forward-thinking commitment put forth to manage the Edwards Aquifer. Most of the work can begin immediately, while other elements will require legislative action. The good news is that the EAIC can be implemented with an existing governmental framework that has already received the blessings of the Department of Justice. There is much to be done, but the Edwards Underground Water District is ready for the challenge.

If you would like a copy of the Edwards Aquifer Interlocal Contract, contact the Public Information Office during regular business hours at 222-2204 or (800) 292-1047. ■

News Briefs

□ The Texas Water Development Board (TWDB) has awarded a \$12,000 grant to the Edwards Underground Water District to purchase water quality testing equipment. The new equipment will be used in sampling and analyzing water in Edwards Aquifer wells as part of the District's annual sampling program. The program involves the collection and laboratory analysis of water samples from Edwards and Glen Rose Aquifer observation wells, as well as surface water samples from streams, rivers and springs in the recharge zone of the Edwards Aquifer. The TWDB's Agricultural Conservation Grants Program provided 75% funding of the new equipment.

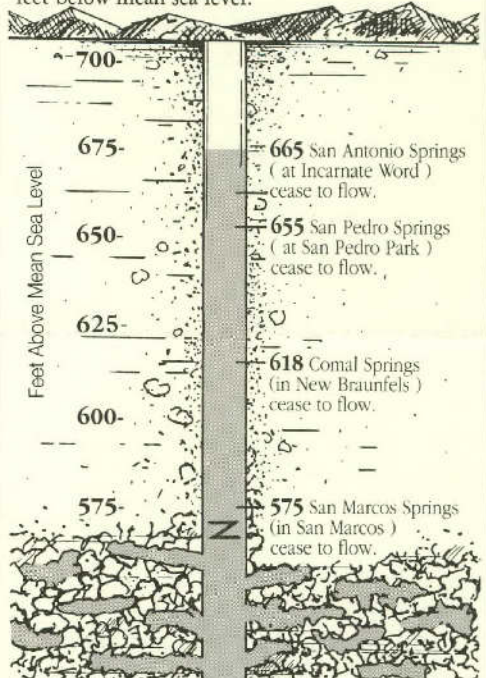
□ The Edwards Underground Water District is developing a "DRASTIC" style mapping process which will assist in the agency's work in assessing the cumulative impact of development over the Edwards

Aquifer Recharge Zone. "DRASTIC" is an acronym for seven hydrologic, geologic and pedologic (soil) parameters that, when evaluated collectively, describe the vulnerability of an aquifer to contamination. Data sets will be digitized and entered into the District's G.I.S. system, providing a more comprehensive view of land sensitivity.

The goal of "DRASTIC" mapping is two-fold: 1) to provide more exacting data with which to guide the EUWD's land preservation efforts, and 2) to provide more exacting data with which to establish pollution prevention criteria for development projects. Since "DRASTIC" addresses the physical environment including the built environment, changes in building density can be measured by "DRASTIC" parameters, in effect, measuring cumulative impact. Two subwatersheds will be selected for a pilot study, which is expected to be completed by September, 1995. ■

The Water Level

This reading reflects the daily high artesian water elevation at the Bexar County Edwards Aquifer Index Well. The bottom of the graph represents the depth of the well which is 143 feet below mean sea level.



Current Status: On December 20th, 1994 the water elevation was recorded at 674.3. Average for December is 669.2.

THE WATER SOURCE

The Water Source is published quarterly by the Public Information Office of the Edwards Underground Water District, 1615 N. St. Mary's, San Antonio, Texas, 78212. 210/222-2204 or 800/292-1047
Editor: *Carolyn Eagle*
Feature Articles: *Rick Illgner, Charles Ahrens.*



EDWARDS UNDERGROUND
WATER DISTRICT

1615 N. ST. MARY'S - P.O. BOX 15830
SAN ANTONIO TEXAS 78212

FORWARD & ADDRESS CORRECTION

BULK RATE
U.S. POSTAGE
PAID
PERMIT # 771
SAN ANTONIO
TX 78212