

Lisa Birkman
WILLIAMSON COUNTY COMMISSIONER
PRECINCT 1



400 WEST MAIN, SUITE 216
ROUND ROCK, TX 78664

(512) 248-3238
FAX (512) 248-3243
lbirkman@wilco.org

October 29, 2004

City Manager Frank Salvato
400 Porter Street
Taylor, TX 76574

Dear City Manager Salvato:

On behalf of the Williamson County Commissioner's Court, Commissioner Frankie Limmer and I would like to invite you to attend a meeting in regards to the Priority Groundwater Management Assessment currently under way by the Texas Commission on Environmental Quality (TCEQ) on the possibility of the creation of a groundwater conservation district in our county. Enclosed is a copy of information on this matter presented to the county by Mr. Steve Musick, P.E., of the TCEQ.

The county has been asked to provide comments to the TCEQ and we are holding the meeting to solicit your input and opinions as a member of the Williamson County Water Visionary Committee on the matter prior to doing so.

The meeting will be held on Monday, November 15, 2004 at 9:30 a.m. at the meeting room located in the Williamson County Inner Loop Annex, 3151 Southeast Inner Loop, Georgetown, TX 78626. Please respond by phone or email to my assistant, Mary Clark, mclark@wilco.org or 512.248.3238 as to if a representative will attend and the name of the representative by no later than Nov. 12th.

If you are unable to attend and would like to submit written comments, please submit them to my office by electronic or regular mail by no later than two days prior to the meeting.

We look forward to hearing your thoughts on this important issue.

Truly,

Lisa Birkman
Williamson County Commissioner, Pct. 1

Cc: The Honorable Frankie Limmer, Commissioner, Pct. 4

H A N D O U T
Priority Groundwater Management Area Evaluation for
Williamson, Burnet, and Northern Travis Counties

Williamson County Commissioners Court
September 14, 2004 Hearing
9:30 a.m.
Williamson County Courthouse
710 Main Street

Steve Musick, Leader
Groundwater Planning and Assessment Team
Technical Analysis Division
Texas Commission on Environmental Quality
Phone: 512.239.4514
Email: smusick@tceq.state.tx.us

BACKGROUND

To enable effective management of the state's groundwater resources in areas where critical groundwater problems exist or may exist in the future, the Legislature has authorized the Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board (TWDB), and the Texas Parks and Wildlife Department (TPWD) to study, identify and delineate priority groundwater management areas (PGMAs), and initiate the creation of groundwater conservation districts within those areas, if necessary. "Critical groundwater problems" are defined as shortages of surface water or groundwater, land subsidence resulting from withdrawal of groundwater, or contamination of groundwater.

The PGMA process provided in Chapter 35 of the Water Code is implemented by TCEQ rules that outline procedures for the designation of PGMAs and address issues related to the creation of groundwater conservation districts in areas which have been designated as PGMAs. These TCEQ rules are contained in Title 30, Texas Administrative Code (30 TAC), §293.19 and §§294.41 - 293.44.

Between 1987 and 1991, 16 critical area (now PGMA) studies were initiated and 14 were completed. Three additional PGMA studies were completed between 1998 and 2001. Of these 17 studies:

- ✓ X 6 study areas were determined not to be PGMAs;
- ✓ X 5 study areas were determined not to be PGMAs, but were identified as requiring monitoring and future assessment of the severity of groundwater problems; and,
- ✓ X 6 study areas were designated as PGMAs.

Attach:

- X *PGMA Study Area Map*
- X *Designated PGMA Map*
- X *PGMA Update Study Map*

ORIGINAL STUDY FOR WILLIAMSON & ADJACENT COUNTIES

In the late 1980s, the Texas Water Commission [predecessor agency of the present TCEQ] and TWDB completed a joint critical area study in Bell, Burnet, Travis, Williamson and parts of adjacent counties. The Texas Water Commission determined in 1990 that the study area did not meet the criteria to be designated as a "critical area" at that time due to local efforts to develop surface water. The Commission requested the area to be reinvestigated at a later date to assess effectiveness of local actions.

The primary conclusions from the 1989 report were:

- ✓ X Conjunctive use of both surface and groundwater and reduction of water demands through conservation would be necessary to preserve the groundwater supply and provide water to the area to meet future needs.
- ✓ X Ongoing efforts and additional new voluntary efforts would be needed to restrict further groundwater development and to limit groundwater pumpage when surface water supplies are developed or become available through cooperative efforts.

STATE AGENCY ACTIONS SINCE THE ORIGINAL STUDY

- X In 1998 and 1999, TCEQ requested data on water supply, use, demand, availability and planning information from Texas Water Development Board, and natural resources information from Texas Parks and Wildlife Department for the five update PGMA study areas. In 2003, TCEQ requested updated water planning data from the TWDB.
- X The Texas Water Code, §35.007 requires TCEQ to complete PGMA evaluations by September 1, 2005. This deadline was added to state law in 2001 within Senate Bill 2 (Chapter 966, Acts of the 77th Legislature, Regular Session, 2001).
- X On December 17, 2002, the Executive Director of TCEQ and Executive Administrator of TWDB again identified the Williamson, Burnet, and Northern Travis Counties area as one of six PGMA studies that were needed based on presently available information and established criteria.
- X On July 26, 2004, TCEQ sent out the stakeholder notice to solicit comments and to request data on water supply, groundwater availability, groundwater level trends, and groundwater quality.

Attach:

- X *Study Area Map*
- X *Study Area Aquifer Map*

PENDING TCEQ EXECUTIVE DIRECTOR REPORT ON THE AREA

The Executive Director's draft report for the updated Williamson, Burnet, and northern Travis counties PGMA study must:

- ✓ X examine the reasons and supporting information for or against designating the study area as a PGMA;
- ✓ X recommend the delineation of boundaries if PGMA designation is proposed;
- X provide recommendations regarding groundwater conservation district creation in the study area;
- X recommend actions necessary to conserve natural resources within the study area; and
- X evaluate information or studies submitted by the study area stakeholders.

The Texas Water Code requires the report to identify present critical groundwater problems, or those expected to occur within a 25-year planning horizon. Critical groundwater problems which warrant PGMA designation include shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies. The report will evaluate the authorities and management practices of existing groundwater management entities within the study area and make recommendations on appropriate strategies necessary to conserve and protect groundwater resources in the area.

TCEQ staff will considered data and information provided by the TWDB, TPWD, stakeholders in the study area, the *2002 State Water Plan*, and from independent research to support the report conclusions and recommendations.

IDENTIFIED WATER SUPPLY CONCERNS IN WILLIAMSON COUNTY
(from 2002 State Water Plan and other TWDB publications and information)

Georgetown

The City of Georgetown purchases water from the Brazos River Authority (BRA) at Lake Georgetown and at Lake Stillhouse Hollow. Water purchase contracts total 22,168 acre feet per year (af/yr). This water supply is sufficient to meet Georgetown's needs beyond 2040. However, Georgetown's estimated diversion capacity at Lake Georgetown is about 8,344 af/yr and the city will need to construct additional intake and conveyance facilities to fully use the remaining 13,824 af/yr under contract.

- X The year 2030 shortage reported for Georgetown of 8,151 af/yr is a result of infrastructure constraints of the city's intake and conveyance facilities.
- X The long term strategies recommended to meet Georgetown's water needs beyond 2030 are:
 - X participate in the Little River Reservoir project,
 - X develop a groundwater supply from the Carrizo-Wilcox Aquifer, and/or
 - X purchase water from BRA/LCRA Alliance (water availability up to 25,000 acft)

Round Rock

The City of Round Rock purchases water from the BRA at Lake Georgetown and at Lake Stillhouse Hollow. Water purchase contracts total 24,854 af/yr. This water supply is sufficient to meet Round Rock's needs until about 2015. Round Rock's estimated diversion capacity at Lake Georgetown is limited to about 17,800 af/yr and the city will need to construct additional intake and conveyance facilities to fully use the remaining 7,000 af/yr under contract. Round Rock also pumps groundwater from the Edwards aquifer and the estimated reliable supply is about 921 af/yr. In addition, Round Rock implements wastewater reuse projects.

- X The year 2030 shortage reported for Round Rock is 12,157 af/yr and the year 2050 shortage is reported at 21,543 af/yr. About 7,000 af/yr of this shortage results from intake and conveyance constraints at Lake Georgetown.
- X Recommended strategies to meet the projected 2030 shortage for the City of Round Rock (12,157 af/yr) include:
 - X expand the raw water intake and conveyance facilities at Lake Georgetown (7,000af/yr; year to be implemented is 2010),
 - X participate in a regional Carrizo-Wilcox Aquifer supply project (6,000 af/yr; year to be implemented is 2010),
 - X purchase Lake Travis water from the BRA/LCRA Alliance (6,000 af/yr; year to be implemented is 2020; water availability up to 25,000 af), and
 - X continue to implement wastewater reuse (5,000 af/yr; year to be implemented is 2030).
- X Participation in the Little River Reservoir project is a long-term strategy (beyond 2030) to meet Round Rock water needs.

IDENTIFIED WATER SUPPLY CONCERNS IN WILLIAMSON COUNTY.....Continued

Brushy Creek Municipal Utility District

The Brushy Creek Municipal Utility District (BCMUD) currently has a contract for water supply from the City of Round Rock which expires in 2006. In 1994, the BCMUD entered into an agreement with the BRA to purchase 4,000 af/yr of water from Stillhouse Hollow Reservoir, and became part of the Williamson County Regional Project. The BCMUD is working toward construction of its own water treatment plan and transmission line.

- X The year 2030 shortage reported for BCMUD is 4,020 af/yr and year 2050 shortage is reported at 3,887 af/yr.
- X Recommended strategies to meet the projected 2030 shortage for the BCMUD (4,020 af/yr) are
- X diversion and treatment facilities to use Lake Stillhouse Hollow water delivered to Lake Georgetown (year to be implemented 2006)

County other - Williamson County (Rural)

Entities in the County-other category in Williamson County obtain their water supply from groundwater (Trinity and Edwards aquifers), the BRA at Lake Georgetown and Lake Stillhouse Hollow, and by purchasing from adjacent cities. The County-other category is shown to have a current shortage, based primarily on the conservatively low groundwater supply values in the projections. The projected shortages increase to 11,750 af/yr in 2030 and then stay relatively the same through 2050.

- X Because the County-other demands are closely linked to what is occurring in the cities, and because the shortages are similar, the options and plans presented are also similar.
- X The following water supply plan is recorded to meet the projected 2030 shortage of County-other needs:
- X participate in a regional Carrizo-Wilcox Aquifer supply project (6,000 af/yr; year to be implemented 2010),
- X purchase Lake Travis water from the BRA/LCRA Alliance (6,000 aff/yr; year to be implemented 2020), and
- X continue to implement wastewater reuse (5,000 af/yr; year to be implemented 2030).

IDENTIFIED WATER SUPPLY CONCERNS IN WILLIAMSON COUNTYContinued

Groundwater Level Trends

TWDB Report #350, 1999 (*Updated Evaluation of Water Resources in Bell, Burnet, Travis, Williamson and Parts of Bastrop, Lee, and Milam Counties, Texas*)

§ This report notes water-level declines in the Edwards and Trinity aquifers in eastern Williamson County during the 1989 - 1999 decade because pumpage from the aquifers in this area exceeded estimated available supply (groundwater is being mined from storage).

TWDB Report #358, 2003 (*Groundwater Availability Modeling: Northern Segment of the Edwards Aquifer, Texas*)

§ Under conditions of average recharge, the model predicts that future water levels in the northern segment of the Edwards aquifer will not change dramatically (less than 25 feet). Under drought-of-record conditions, the model predicts water-level declines of greater than 25 feet to occur only along the western margin in the outcrop area of the aquifer.