TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AN ORDER Designating the North-Central Texas - Trinity and Woodbine Aquifers - Priority Groundwater Management Area and Approving the Executive Director's Recommendation Regarding a Groundwater Conservation District in the Proposed Area; TCEQ Docket No. 2007-1012-MIS; SOAH Docket No. 582-07-3917.

On February 11, 2009, the Texas Commission on Environmental Quality (Commission or TCEQ) considered the petition of the Executive Director (ED) for designation of the North-Central Texas – Trinity and Woodbine Aquifers – Priority Groundwater Management Area (PGMA) and the ED's recommendations for creation of a groundwater conservation district (GCD) in the PGMA. The petition was presented to the Commission with a proposal for decision by Carol Wood, an Administrative Law Judge (ALJ) with the State Office of Administrative Hearings (SOAH).

After considering the ALJ's proposal for decision and the evidence and arguments presented, the Commission makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

- 1. In 1990, the Executive Director (ED) wrote a report concerning critical area designation and management strategies for groundwater protection in Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson, Hood, Hunt, Jack, Johnson, Kaufman, Montague, Navarro, Parker, Rockwall, Tarrant, and Wise Counties.
- 2. As a result of the 1990 report, the area was not recommended for PGMA designation; rather, TCEQ was to monitor the area.

- 3. In 1998, the ED reinitiated the study and requested reports from the Texas Water Development Board (TWDB) and Texas Parks & Wildlife Department (TPWD). TWDB and TPWD prepared reports and sent them to the ED in 1999.
- 4. The ED postponed the updated study effort until the 2001-2002 regional and state water planning cycles were completed.
- 5. On July 26, 2005, the ED sent notice of the initiation of the study to approximately 1,200 stakeholders in the study area. Those stakeholders included area legislators, planning entities, county officials, municipalities, river authorities, groundwater conservation districts, water districts, entities supplying public drinking water, agricultural interest groups, selected federal and state agencies, and environmental interest groups.
- 6. The ED mailed notice of its draft report, "Updated Evaluation for the North Central Texas Trinity and Woodbine Aquifers Priority Groundwater Management Study Area" (the Report), to the same stakeholder group in December 2006.
- 7. Notice of the ED's final report was sent to the same stakeholders and placed in the *Texas Register*. Copies of the report were placed in libraries and public places in the 20-county study area and, in the proposed PGMA 13-county area, copies were placed in the county clerks' offices.
- 8. Notice of the hearing was mailed on September 11, 2007, to all stakeholders, governing bodies of each county, adjacent GCDs, river authorities, municipalities, water authorities or other entities that supply public drinking water, each holder of a certificate of convenience and necessity, and irrigation districts in the proposed PGMA.
- 9. On October 23, 2007, a preliminary hearing was conducted in Fort Worth, Texas, by Carol Wood, a SOAH ALJ.

- 10. The following were designated as parties to the proceeding: the ED, the Commission's Public Interest Counsel (PIC), the Greater Texoma Utility Authority (GTUA) and a coalition of 27 retail public utilities located in Grayson, Cooke, and Fannin Counties (Water Providers), Bois D'Arc Municipal Utility District (MUD), Marilee Special Utility District (SUD), Mustang SUD, City of Grand Prairie, the aligned parties of Cooke County, Woodbine Water Supply Corporation (WSC), Kenneth Klement, Era WSC, City of The Colony, JEMcCombs Real Estate Ltd., Aqua Texas, Hillwood Properties, City of Bridgeport, North Hunt WSC, Sardis-Lone Elm WSC, Mountain Peak SUD, and Malone Water Service. JEMcCombs Real Estate Ltd., Aqua Texas, Hillwood Properties, City of Bridgeport, and Malone Water Service were later withdrawn as parties upon their request.
- 11. The ALJ granted a unanimous request made by the interested parties to waive the statutory requirement to complete the hearing process within 75 days of the notice of the hearing and to waive the statutory requirement to hold the hearing in a county within the study area.
- 12. On May 13, 2008, the hearing on the merits was held in Austin, Texas.
- 13. From 2000 to 2030, the population of the 20-county study area is projected to increase from over 5.5 million people to almost 9.5 million people.
- 14. Demand for water in the study area is projected to increase from 1.35 million acre-feet used in 2000, to 1.85 million acre-feet in 2010, to 2.46 million acre-feet of water by 2030.
- 15. Declines in water level, including the associated reduction in artesian pressure caused by the removal of water from aquifer storage, is a regional groundwater problem that was reported in the ED's 1990 critical area study and remains a significant groundwater problem today.

- 16. Over 200 water-user groups in the study area anticipate the continued use of the Trinity and Woodbine Aquifer supplies at present levels, and most are planning to drill supplemental or replacement wells to maintain their supply. Increased reliance on the Trinity and Woodbine Aquifers has also been recommended as a strategy for many water-user groups in the study area. Forty-one water-user groups plan to overdraft the Trinity Aquifer through at least 2010 and plan to add new wells or increase well production as a regional water planning strategy. Similarly, 23 water-user groups plan to overdraft the Woodbine Aquifer, increase well production, and add new wells in the area.
- 17. Thirty-three water-user groups in the study area have plans to reduce reliance on the Trinity and Woodbine Aquifers. Overall, however, their strategies, collectively, will result in a higher collective groundwater demand through 2010 for both aquifers and, through 2030, a higher groundwater demand for the Woodbine Aquifer. By 2020, the reduced Trinity Aquifer use strategies are projected to offset the new, increased aquifer use strategies.
- 18. More groundwater is currently being withdrawn than is effectively being recharged to the aquifers in the North-Central Texas PGMA study area.
- 19. Historically, pumpage in the study area has exceeded effective recharge, resulting in declining water levels, removal of water from aquifer storage, and possible deterioration of chemical quality.
- 20. The "Assessment of Groundwater Use in the Northern Trinity Aquifer Due to Urban Growth and Barnett Shale Development" (Barnett Shale Report) was prepared because TWDB was concerned about the effects of growth and gas exploration on groundwater resources in the area. These effects were not considered in the regional water plans.
- 21. Barnett Shale water use and demand projections may exacerbate overdraft conditions in the study area and push other areas into overdraft situations.

- 22. "Safe supply" is an estimate of groundwater availability determined by the regional water planning groups.
- 23. In the Region C Water Plan, the estimated safe supply of groundwater is generally defined as the amount of groundwater available for use with acceptable long-term impacts to water levels.
- 24. In the Region B Water Plan, the safe supply for municipal and manufacturing user groups is defined as 120 percent of the projected demand.
- 25. Water-user groups in Ellis, Johnson, and Tarrant Counties, collectively, are using the Trinity Aquifer at quantities over regional water planning group estimates for the safe supply for each county.
- Water-user groups in Collin, Cooke, Dallas, Denton, Fannin, Grayson, Hood, Parker, and Wise Counties are using the Trinity Aquifer at quantities near each county's estimated safe supply.
- 27. Water user groups in Fannin and Johnson Counties, collectively, are using the Woodbine Aquifer at quantities over regional water planning group estimates for the safe supply for each county.
- 28. Groundwater use can decrease groundwater reserves, which impacts the springs, which in turn impacts species that rely on surface water. Long-term decreases in groundwater can exacerbate water quality and impact these species.
- 29. Designation of the area as a PGMA could lead to more efficient use of existing water resources of the area.

- 30. Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson, Hood, Johnson, Montague, Parker, Tarrant, and Wise Counties are experiencing, or are expected to experience, critical groundwater problems in the next 25 years.
- 31. Delta, Hunt, Kaufman, Lamar, Navarro, Red River, and Rockwall Counties are not experiencing critical groundwater problems, nor are they expected to experience critical groundwater problems within the next 25 years.
- 32. The single county Northern Trinity GCD was created by the 80th Texas Legislature to cover Tarrant County and became effective June 15, 2007.
- 33. The Upper Trinity GCD comprised of Hood, Montague, Parker, and Wise Counties was created effective September 1, 2007, and confirmed by the voters on November 6, 2007.
- 34. No GCDs cover the eight counties of Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson and Johnson recommended for inclusion in the PGMA.
- 35. No federal or state agencies have the authority to regulate groundwater in this area, and local governments cannot provide the type of groundwater regulation required to protect these resources.
- 36. GCDs are statutorily charged and authorized to manage groundwater resources within their jurisdiction. GCDs have many permissive powers, such as enacting rules requiring well permits, regulating spacing of wells, and transferring groundwater out of the districts.
- 37. GCDs are required to adopt management plans and to cooperate in joint planning with other GCDs in a Groundwater Management Area (GMA), including determining "desired future conditions" for the aquifers in the GMA.
- 38. Management through GCDs is the best management option for the 13 counties in the PGMA.

- 39. GCDs are the preferred method of groundwater management in the State.
- 40. A GCD must generate revenue, usually though a property tax or from well production fees.
- 41. The feasibility of a GCD is dependent upon many factors, including the size and total tax base of the GCD, the quantity of water that is subject to production fees, and the scale and scope of the programs undertaken by the GCD.
- 42. Creation of GCDs in the PGMA is feasible and practicable.
- 43. A minimum of \$250,000 in revenue must be generated annually to operate a GCD and to fund meaningful groundwater management programs.
- 44. Under Chapter 36 of the Texas Water Code, a GCD may not levy a tax at a rate exceeding 50 cents per \$100 assessed valuation to pay for maintenance and operating expenses.
- 45. Neither Cooke County nor Fannin County can generate tax revenue to support a single-county GCD if the rate is less than \$0.01 per \$100 valuation.
- 46. Cooke County would need to have a tax rate of .01526 per \$100 and Fannin County would need a tax rate of .02637 of assessed property valuation to generate \$250,000.
- 47. Cooke County would be able to generate only \$50,670 annual revenue from well production fees under the GCD creation rules authorized for use by the Commission.
- 48. None of the eight counties in the PGMA study area without a GCD would be able to generate sufficient revenue through well production fees to adequately finance single-county GCD resource management activities.

- 49. Although many of the counties in the PGMA could finance GCD groundwater management activities through ad valorem taxes, the majority of the eight counties in the PGMA study area without a GCD are heavily reliant on surface water, making it difficult for ad valorem taxes supporting GCDs to be approved by voters.
- 50. If a GCD is created with the funding mechanism of ad valorem taxes and that funding mechanism is voted down, the GCD would be left with either no funding mechanism or inadequate funding through well production fees.
- 51. A single, regional GCD in the eight remaining PGMA counties of Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson and Johnson is the most feasible, economic, and practicable option for protection and management of the groundwater resources.
 - a. A single, regional GCD would avoid costs for duplicative management and administrative groundwater management programs and would allow for economies of scale, thus reducing fiscal waste.
 - b. A single, regional GCD would cover the largest area of the aquifers.
 - c. A single, regional GCD would be able to apply the regulatory rules for management of the groundwater resources over the entire area.
 - d. A single, regional GCD would be able to adequately finance the GCD's resource management activities.
 - e. Local committees could be established for localized input.
- 52. Dallas County, one of the 13 counties comprising the PGMA study area and a county heavily reliant on surface water, must be included in a GCD.

53. A single, regional multi-county GCD that includes Dallas County is the most practicable and feasible GCD for the eight counties in the PGMA without a GCD.

CONCLUSIONS OF LAW

- 1. Pursuant to TEX. WATER CODE (Water Code) § 35.008(a), the Commission has authority to designate a PGMA in the North-Central Texas—Trinity and Woodbine Aquifers area.
- 2. SOAH has jurisdiction over matters related to the hearing in this matter, including the authority to issue a proposal for decision with findings of fact and conclusions of law, pursuant to TEX. GOV'T CODE (Gov't Code) Chapter 2003 and Water Code § 35.008.
- 3. Based on the Findings of Fact, the hearing on the ED's petition to designate the North-Central Texas Trinity and Woodbine Aquifers PGMA was conducted in accordance with Chapter 35 of the Water Code and the Commission's and SOAH's applicable procedural rules.
- 4. According to Water Code § 35.007(a), a PGMA is an area of the state that is experiencing or expected to experience, within the immediately following 25-year period, critical groundwater problems, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies.
- 5. Pursuant to Section 35.007(a) of the Water Code, exceeding or approaching the groundwater "safe supply" estimates provided by the regional and state water planning groups denotes a shortage of groundwater and indicates that critical groundwater problems are occurring.
- 6. Based on the Findings of Fact, Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson, Hood, Johnson, Montague, Parker, Tarrant, and Wise Counties are experiencing or are expected to experience, within the immediately following 25-year period, critical

groundwater problems, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies and should be designated a PGMA.

- 7. Based on the Findings of Fact, Delta, Hunt, Kaufman, Lamar, Navarro, Red River, and Rockwall Counties are not experiencing and are not expected to experience, within the immediately following 25-year period, critical groundwater problems, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies and should not be designated a PGMA.
- 8. Water Code § 35.008(b) requires the Commission to recommend a GCD that is both feasible and practicable.
- 9. Based on the Findings of Fact, creation of a single, regional GCD covering Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson and Johnson Counties is feasible and practicable.
- 10. Texas Water Code § 35.012(a) provides that GCDs within the PGMA can be created through the Legislative process.
- 11. Texas Water Code § 35.012(b) provides that the Commission has up to two years to create GCD(s) within a designated PGMA.

ORDER

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY THAT:

1. The North-Central Texas – Trinity and Woodbine Aquifers PGMA be created to cover Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson, Hood, Johnson, Montague, Parker, Tarrant, and Wise Counties.

2. Upon this Order becoming final, the ED shall commence proceedings, to be completed within two years, for the creation of a single, multi-county GCD over Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson and Johnson Counties, unless a GCD is created by

landowners in the area, by counties in the area, or by the Texas Legislature.

All other motions, requests for entry of specific findings of fact or conclusions of law, 3. and any other requests for general or specific relief not expressly granted herein are

hereby DENIED for want of merit.

4. The effective date of this Order is the date the Order is final in accordance with Gov't

Code § 2001.144.

5. If any provision, sentence, clause, or phrase of this Order is for any reason held to be

invalid, the invalidity of any portion shall not affect the validity of the remaining portions

of the Order.

Issue Date: **FEB 1 8 2009**

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

11