About the Regional Water Planning Group

Region C is made up of all or part of 16 counties in North Texas: Collin, Cooke, Dallas, Denton, Ellis, Fannin, Freestone, Grayson, Henderson, Jack, Kaufman, Navarro, Parker, Rockwall, Tarrant, and Wise.

The Region C Water Planning Group (RCWPG) is one of 16 regional water planning groups selected by the Texas Water Development Board (TWDB) to help develop and revise a comprehensive state water plan for Texas through 2060. Each water planning group is responsible for preparing and adopting a regional water plan for its area. The RCWPG is made up of 19 members representing 11 different interest groups.

Name	Title	Representing
Jim Parks	Chair	Water Districts
Jody Puckett	Vice Chair	Municipalities
Russell Laughlin	Secretary	Industry
Steve Berry	Member	Environment
Bill Ceverha	Member	Public
Jerry Chapman	Member	Water Districts
S. Frank Crumb	Member	Municipalities
Bill Lewis	Member	Small Business
G. K. Maenius	Member	Counties
Howard Martin	Member	Municipalities
Jim McCarter	Member	Water Utilities
Paul Phillips	Member	Municipalities
Bob Scott	Member	Environment
Gary Spicer	Member	Electric Generating Utilities
Connie Standridge	Member	Water Utilities
Jack Stevens	Member	Water Districts
Danny Vance	Member	River Authority
Mary Vogelson	Member	Public
Dr. Tom Woodward	Member	Agriculture
Curtis Campbell	Non-Voting Member	Region B
Mike Harbordt	Non-Voting Member	Region I
Terry Kelly	Non-Voting Member	Brazos G RWPG
Angela Masloff	Non-Voting Member	Texas Water Development Board
David Weidman	Non-Voting Member	Region D
E.W. Wesley	Non-Voting Member	Texas Dept. of Agriculture
Adam Whisenant	Non-Voting Member	Texas Parks & Wildlife Dept.

REGION C
Water Planning
for North Texas
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Suite 530
Irving, TX 75038

Collin
Cooke
Dallas
Denton
Ellis
Fannin
Freestone
Grayson
Henderson
Jack
Kaufman
Navarro
Parker
Rockwall
Tarrant
Wise

REGION C

Water Planning for North Texas

Spring 2009 Newsletter

Region C Water Planning Group Invites Public to Attend Public Meetings

Public attendance is welcome at all Region C Water Planning Group meetings, and attending members of the public have an opportunity for comment on the Planning Group's activities during each meeting.

Next Meeting:

Monday, June 8, 2009, 1:00 p.m.

Meeting Location:

Trinity River Authority
Central Wastewater Treatment Plant
6500 W. Singleton Blvd.
Grand Prairie, TX 75212
(972) 263-2251

*Please Note: Persons with disabilities who plan to attend the Region C Water Planning Group meeting – and who may need auxiliary aids or services such as mobility assistance, interpreters for deaf or hearing-impaired persons, readers, large print, or Braille – are requested to contact Lee Shaffer in the TRA Central Wastewater Treatment Plant at (972) 263-2251 at least (5) work days prior to the meeting so that appropriate arrangements can be made.

For more information about the Region C Water Planning Group, contact:
James (Jim) M. Parks, RCWPG Chair
North Texas Municipal Water District
P.O. Box 2408
Wylie, TX 75098
Phone: (972) 442-5405
E-mail: jparks@ntmwd.com

To be added to the RCWPG newsletter mailing list, send your name and mailing address to Colby Walton via e-mail to colby@cookseypr.com, or via fax to (972) 580-0852.

Visit www.regioncwater.org for the latest updates on RCWPG activities, meetings and other water planning news, or contact Amy Kaarlela with Freese & Nichols at adk@freese.com.

Planning Group Concludes 2007-2008 Special Studies

As part of a statewide effort to examine emerging water supply issues, the Region C Water Planning Group (RCWPG) recently concluded two years of special studies that will be critical in helping the group develop an updated Regional Water Plan by 2011.

The studies looked at issues of particular importance to North Central Texas, including water conservation and reuse practices, the availability of water from the Toledo Bend Reservoir in East Texas, direct and indirect water reuse case studies and potential water management strategies to address rapid population growth and other changing conditions in localized areas of the region.

Short summaries of each RCWPG special study are provided below, and the full draft reports from the studies may be read in their entirety at www.regioncwater.org.

Water Conservation and Reuse Study

The Water Conservation and Reuse Study examined an issue of considerable consequence for Region C. Conservation and reuse are major recommended strategies in the existing 2006 Region C Water Plan, representing 1.3 million acre-feet per year of the water supply available to the region by 2060.

Encouragingly, the study found that the water user groups and water providers in Region C are on-target or ahead of schedule for implementing the 2006 plan's recommended conservation strategies, and that many conservation measures have been implemented in the region.

The conservation initiatives currently showing increasing adoption rates by water providers include public and school education programs, water waste prohibitions and residential audits. Region C water providers are also committing significant dollars to water conservation programs, and some entities are considering joining together to promote conservation programs and share implementation costs.

Implementation of rebate programs and programs targeting industrial, commercial and institutional water users has been slower, perhaps due to institutional challenges with administering these programs.

Water reuse also continues to be a significant component of the region's conservation efforts. Since adoption of the 2006 plan, one planned reuse project has been implemented, and seven new reuse projects have been identified for development. Taking into account all current and planned projects, Region C has by far the largest reuse program in Texas. Although water providers continue to express their commitment to reuse projects, the study found that implementation issues continue to be a concern.

Ultimately, the study's conservation and reuse-related recommendations for the 2011 Region C Water Plan are fivefold:

1. Consider other strategies currently being used in the region for possible inclusion in the expanded conservation package;
2. Encourage regional coordination of public education efforts;
3. Develop, in cooperation with the Texas Water Development Board (TWDB) and Texas Commission on Environmental Quality (TCEQ), a program to gather more data and information about water savings and costs associated with conservation strategies, and perform a quantitative assessment of water savings and costs per strategy;
4. Monitor water conservation technology developments and review new strategies for possible inclusion in plan updates; and
5. Monitor findings and recommendations of the statewide Water Conservation Advisory Council for possible inclusion in plan updates.

Region I's Toledo Bend Study

This study was led by the Region I Water Planning Group. The Region C consultant team reviewed the study, titled ***East Texas Region Special Study No. 1: Inter-Regional Coordination on the Toledo Bend Project,*** and provided input. Due to projected water demands in Region C, the 2007 State Water Plan recommended moving water from the Toledo Bend Reservoir in East Texas to water providers in North Texas via a pipeline project. Region I conducted this study to better understand the developments that have occurred since 2007.

The Toledo Bend Pipeline Project is considered viable, but it is not expected to be developed until 2060. Due to this extended timeframe, additional analysis will likely be needed, which may have significant implications on the project's preliminary design and cost. The study indicates that the major participants are currently pursuing other water supply projects and recommends that the East Texas region should continue to monitor the demand for water from sources in its region and coordinate with adjoining regions to best utilize its resources.

Direct and Indirect Reuse Study

This study examined direct and indirect reuse in Region C, in order to develop guidance documents for future reuse projects. The reuse of treated water effluent, also known as reclaimed or recycled water, is increasingly important statewide and in Region C. The 2006 Region C Water Plan projects that water reuse will address over 26 percent of regional water demand by the year 2060.

Direct reuse occurs when treated wastewater is delivered from a wastewater treatment plan to an end user, with no intervening discharge to waters of the state. Direct reuse requires a notification to the Texas Commission on Environmental Quality (TCEQ), which is routinely accepted so long as requirements to protect public health are met. Direct reuse is most commonly used to supply water for landscape irrigation (especially golf courses) and industrial uses (especially cooling for steam electric power plants).

The **Direct, Non-Potable Reuse Guidance Document** developed as part of the study is designed to provide guidance for implementation of future direct water reuse projects, including the identification of technical and regulatory issues that must be addressed in the planning and design of such projects.

As a case study for the guidance document, the RCWPG refined the implementation plans for two City of Fort Worth direct reuse projects: a Central System to serve potential customers between the Village Creek Wastewater Treatment Plant and the Central Business District, and a Southern System to serve potential customers in the industrial area near the intersection of I-20 and I-35W.

The Region C guidance document recommends that the City pursue further discussions with potential customers to finalize their commitment to reclaimed water use, and recommends phased construction of both projects over the next decade.

The RCWPG also developed an **Indirect Reuse Guidance Document,** which provides general guidance and a case study implementation plan for the Athens Municipal Water Authority and City of Athens to transport reclaimed water from the Athens wastewater treatment plants to Lake Athens to augment its raw water supply.

Indirect reuse occurs when treated wastewater is discharged to a stream or reservoir and is then diverted for reuse. The discharged water mixes with ambient water in the stream or reservoir as it travels to the point of diversion. Indirect reuse can provide water supplies for municipal use, as well as irrigation and industrial supplies.

The state does not have specific regulations for indirect use, since planned augmentation of raw water supplies with reclaimed water is relatively new in Texas. Rather, indirect reuse is regulated by other state permits and standards.

The document's recommendations for indirect reuse in Texas include a multi-barrier approach to manage the uncertainties associated with augmentation of raw water supplies with reclaimed water.

Studies Pertaining to Localized Areas

The remaining special studies conducted by the RCWPG during the 2007-2008 period looked at changing conditions in localized areas.

The first of these, the **Draft Water Supply Study for Ellis, Johnson, southern Dallas and southern Tarrant counties,** was commissioned to review recent population growth in the four-county area, make adjustments to projects as a result of the growth and update the current and future water plans of the water user groups and wholesale water providers in the study area based on revised projections.

This study was needed because the TWDB-approved population projections for Ellis and Johnson Counties that were used by the RCWPG in developing the 2006 Region C Water Plan did not take into account subsequent population projections developed by the North Central Texas Council of Governments (NCTCOG), which were significantly higher than those of the TWDB. More recent population estimates have shown that growth in the area falls between the two sets of projections.

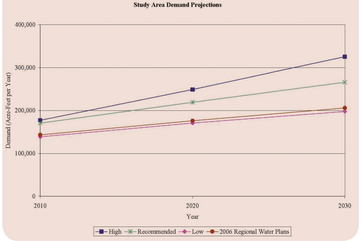
The study provided the opportunity to revise water management strategies to reflect new demand projections and current planning by area water suppliers.

The study concluded that significant changes in water supply should be expected in the coming decade, including:

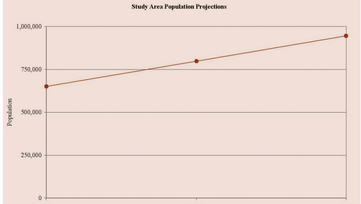
- Increased reliance on surface water supplies, instead of groundwater.
- Substantial additional supplies from the Sokoll water treatment plant currently under construction in Ellis County.
- Additional supplies from Midlothian's proposed water treatment plant.
- More treated water supplies from the Tarrant Regional Water District's (TRWD) primary customers.
- Cleburne's development of additional reuse supplies for manufacturing and mining use and development of a desalination plant for Lake Whitney water.
- Increased supply from Dallas with the growth of current customers and the completion of the Red Oak connection.

The study also recommended a variety of additional water management strategies to ensure an adequate future supply in the rapidly growing area.

Four-County Study — Total Study Area Demand

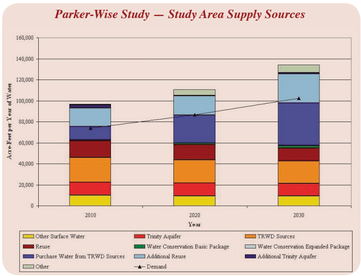


Four-County Study — Total Study Area Population

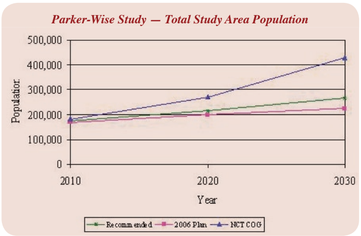


Another localized study, the **Water Supply Study for Parker and Wise counties,** focused on the years 2010 through 2030, detailing revisions and updates to the Region C Water Plan that will be needed to account for steadily increasing population growth projections. The resulting report concluded that, for most water user groups in the area, increasing the amount of supply from TRWD sources was the only change necessary to meet higher projected demands.

Parker-Wise Study — Study Area Supply Sources



Parker-Wise Study — Total Study Area Population



In addition to the localized studies, the RCWPG conducted meetings in six additional counties — Cooke, Fannin, Freestone, Grayson, Kaufman and Navarro — to identify changed conditions with the potential to impact the 2011 Region C Water Plan. The RCWPG will take all of the input provided at these meetings into consideration while developing the 2011 plan over the coming year.

Planning Group Monitors Drought, Legislative Proposals

The Region C Water Planning Group (RCWPG) is closely watching two issues with significant implications for the North Central Texas water supply, both for the near term and over the long term.

Texas is currently experiencing a drought, with regional conditions ranging from abnormally dry to exceptional (the most severe level), and unless rainfall conditions improve, many reservoirs and groundwater supplies will be well below optimal levels over the coming spring and summer months. Consequently, water suppliers and municipalities in the region may have to implement watering restrictions and other conservation measures.

The RCWPG strongly urges residents and businesses to be wise users of our scarce water resources, to help the region proactively address supply shortages.

The drought also illustrates the critical importance of long-term regional water planning, and North Central Texas' future growth projections further underscore the urgency of proactive planning to identify the best water management strategies for our region.

Additionally, the RCWPG is following a number of proposals currently under consideration by the Texas Legislature. Most critically, the Legislature needs to identify funding sources for water management strategies included in the State Water Plan, to ensure an ample long-term supply of water for North Central Texas and the entire state.

Many of the recommended strategies in the plan require significant time for planning, development and implementation — including effective conservation and reuse programs, as well as the construction of new reservoirs — so the time is now to dedicate the appropriate resources to these strategies. The RCWPG salutes Gov. Perry and Sen. Averitt for their leadership in identifying financing streams for the water plan.

The RCWPG will also closely monitor the Legislature's actions over the coming months with respect to groundwater conservation, eminent domain, environmental protection and other relevant issues affecting water supplies in our region.

Conservation Corner: Adopt Small Steps for Significant Savings

It's springtime once again, and the warmer weather has arrived. Since Texas is already experiencing a drought that is also affecting our region, it is imperative that North Texans take proactive measures to help conserve our most precious resource. If we join together in adopting a few, simple tips now, we can – and will – make a significant impact on our water supply.

Consider the following hints from the Texas Water Development Board when developing your conservation program:

- Plant drought tolerant grass and native plants
- Only water early in the morning or late in the evening
- Conserve soil moisture by using 1 to 3 inches of mulch
- Mulch or compost grass clippings
- Check automatic sprinkler heads and remove dirt and debris
- Sweep debris off of sidewalks and driveways instead of using water for removal
- Cover pools and spas to reduce evaporation

For additional conservation tips and more information, visit:

- http://www.twdb.state.tx.us/assistance/conservation/education.asp
- http://www.waterwisetexas.org/