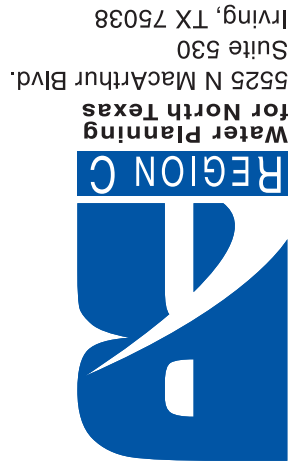


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Kaufman
Navarro
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Rockwall
Tarrant
Wise

REGION C

Water Planning for North Texas

2004 Fall Newsletter



Participate in Region C Water Planning

Public attendance is welcome at Region C Water Planning Meetings.

Next Meeting:

Monday, Dec. 6, 2004, 1:00 p.m.

Meeting Location:

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

For more information, contact:

James (Jim) M. Parks, RCWPG Chair
c/o:
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To be added to the mailing list to receive the quarterly RCWPG newsletter, send your name and mailing address to Amy Fuhrer at Cooksey Communications via e-mail at Amy@cookseypr.com or via fax at 972.580.0852.

Visit www.regioncwater.org for the most up-to-date news, water planning information, water conservation tips and RCWPG meeting information.

Region C Begins Evaluation of Water Management Strategies for Revised Regional Plan

The Region C Water Planning Group is now entering the heart of the second round of the water planning process for North Texas. Over the next year, the planning group will review, revise and refine the currently approved 2001 Regional Water Plan to respond to changed conditions that may impact projected water demands and available water supplies for the area. To ensure the region's future water needs are met, the group is studying various water management strategies, such as:

- Conservation
- Reuse
- Connection of existing supplies
- New supply development
 - Surface water resources
 - Groundwater resources
- Interbasin transfers
- Desalination
- Development of regional systems
- Miscellaneous strategies

Water Conservation

Water conservation continues to remain a necessary and important water management strategy in Region C. Water conservation strategies adopted by the planning group in the 2001 Region C Water Plan include taking active measures to achieve a 15 percent water conservation savings in municipal demand, expanding public education programs and encouraging state funding for research on the effectiveness of water conservation programs and funding for support of education programs. Since the completion of the 2001 plan, major water suppliers in Region C

have strengthened their water conservation programs and adopted new water conservation plans. Currently, the Region C Water Planning Group is reviewing potential water conservation strategies for the 2006 Regional Water Plan.

Reuse

Reuse is becoming an increasingly important source of water in Region C and across Texas. Water reuse is an effective water conservation measure and provides a reliable source that remains available even during droughts. The Region C Water Planning Group has determined that our available water supply could be significantly expanded with the development of water reuse projects such as commercial and residential landscape irrigation; agricultural irrigation; industrial and power generation reuse for cooling, boiler feed, process water and heavy construction; and recreational and environmental uses such as lakes, ponds, wetlands and stream flow augmentation. Region C suppliers (including Dallas Water Utilities, North Texas Municipal Water District, Tarrant Regional Water District, Trinity River Authority, Irving and Upper Trinity Regional Water District) are also pursuing indirect reuse projects, where treated return flows are used to supplement water from other sources and made part of the region's supplies.

Connection of Existing Supplies

Connection of existing water supplies is another major part of the 2001 Region C Water Plan and will continue to be critical for the 2006 revised plan. There are several sources of

Region C Water Planning Group Members

Chair

James (Jim) M. Parks

Agricultural

Brad Barnes

Counties

G.K. Maenius

Electric Generating Utilities

Paul Zweiacker

Environmental

Elaine J. Petrus
Robert O. Scott

Industries

Russell Laughlin

Municipalities

Robert Johnson
Howard Martin
Dale Fisseler
Paul Phillips

Public

Irvin M. Rice
Mary E. Vogelson

River Authorities

Danny Vance

Small Business

Roy J. Eaton

Water Districts

Jerry W. Chapman
James (Jim) M. Parks
George Shannon

Water Utilities

Jim McCarter
Connie Standridge



water supply that are committed for use in Region C and that will be connected and used between now and 2050. Specific projects include:

- Lake Chapman Supply to Lake Lewisville (completed in 2003)
- Pump station expansion for Tarrant Regional Water District (planned for 2005)
- Lake Fork Connection for Dallas Water Utilities (planned for 2007)
- West Fork Connection for Tarrant Regional Water District (planned for 2008)
- Lake Palestine Connection for Dallas Water Utilities
- Additional Lake Texoma Water for North Texas Municipal Water District

In the 2006 update, the connection of other existing supplies like Toledo Bend Lake and Lake Wright Patman in East Texas is also being considered.

New Supply Development

New supplies that might be developed for Region C include new reservoir sites and currently undeveloped groundwater supplies. Over the years, many new reservoir sites have been considered as sources of potential water supply for Region C. Even with conservation efforts, reuse projects and the connection of existing supplies, new supplies will still be necessary to meet growing demands in Region C. Marvin Nichols I Reservoir, Lower Bois d'Arc Creek Lake and Ralph Hall Reservoir are examples of the new water supplies in the 2001 Region C Water Plan and currently under consideration for the 2006 update.

Interbasin Transfers

Another strategy under consideration is interbasin transfers. An interbasin transfer occurs when surface water from one river basin is moved to another river basin to supplement water supplies. In the 2001 Region C Water Plan, water from Lake Texoma, Moss Lake, Lake Chapman, Lake Tawakoni, Lake Fork and Athens Lake would be diverted from one basin to another to supply part of the demand for Region C. Currently, Dallas

Water Utilities is also constructing facilities to deliver water from Lake Fork and planning to use Lake Palestine with plans to connect the two before 2020. Since most water supplies in the Upper Trinity Basin are already developed, the connection of existing supplies and the development of new supplies for Region C will generally require interbasin transfers.

Desalination

Desalination is the process of removing dissolved salts from water. The water must be desalinated or blended with high quality water in order to meet drinking water standards. Region C could potentially utilize additional supplies from Lake Texoma and the Red River, but absent extensive treatment, and/or blending, the salinity of these water sources is too high for municipal use.

Development of Regional Systems

Regional systems of pipelines and pump stations are designed to bring regional treated water to a number of entities needing additional water supplies. Regional system initiatives noted in the 2001 Region C Water Plan and under consideration for 2006 include Ellis County Water Supply Project, Cooke County Water Supply Project, Fannin County Water Supply Project, Grayson County Water Supply Project, Wise County Regional System, Parker County Regional System and the continued development of the North Texas MWD system and the Upper Trinity RWD system.

Miscellaneous Strategies

The 2001 Region C Water Plan also includes system operation of existing reservoirs. These and other proposed, new sources of water supply are being investigated for the 2006 Regional Water Plan.

For more information on the water management strategies included in the 2001 Plan or under consideration for 2006, please visit www.regioncwater.org.

Water Conservation Implementation Task Force Makes Final Edits to New Conservation Plan

It's quite possible that Texas could one day find itself unable to provide enough water to meet the demands of its residents. Many state and local officials and lawmakers have worked hard to keep this from happening. One of the most critical efforts revolves around water conservation.

The Texas Water Development Board, as mandated by Senate Bill 1094, created an important group – the Water Conservation Implementation Task Force. This 32-person Task Force was charged with reviewing, evaluating and recommending optimum levels of water use efficiency and conservation for the state. The group also looked at ways to boost those efforts.

The members of the Task Force included community officials who deal with water issues, such as engineers, environmentalists, as well as representatives of industries, municipalities and regional water planning groups.

For the past year, members have reviewed, evaluated and prepared recommendations for the state. During a three-week period in August, the Task Force took public comments on a draft conservation report and the BMP Guide. The BMP Guide is a best-management practices guide for use by planning groups and political subdivisions responsible for water-delivery service.

As of September 27, the Task Force finalized the edits to the plan and received the final approvals for presentation to the Texas Legislature.

Task Force members prepared a final report and will deliver it to Gov. Rick Perry and the Texas Legislature by Nov. 1. The draft report points out the damaging effect of predictions that the state could fall 7.5 million acre/feet short of supplying enough water in 2050 if ongoing drought conditions exist.

The report also includes recommendations to facilitate and encourage the implementation of appropriate water conservation measures by municipalities, industry and agricultural interests. One key suggestion is the creation of a statewide public awareness program for water conservation that would be comparable to the highly successful Don't Mess with Texas highway anti-litter campaign.

"The Task Force is made up of such a diverse group of interests that I'm proud to say we've been able to work together in a very positive way throughout the whole development process," said Jim Parks, member of the Water Conservation Implementation Task Force and chairman of the RCWPG. "By working together, we've been able to develop conservation guidance documents that can help protect our very valuable water resources in Texas for future generations."

RCWPG Neighborhood Water Conservation Study Reveals Effects of Water Conservation and Water Usage

As part of the 2006 Region C Water Plan, the Region C Water Planning Group must evaluate the effectiveness and potential water savings associated with different water conservation methods. There has been a general study done on the effects of water conservation and water usage, but prior to now, there has been little evaluation of how water conservation impacts Region C.

As part of the consultant team for the Region C Water Planning Group, Alan Plummer Associates, Inc. (APAI) recently conducted a neighborhood-scale study of residential water conservation and water usage within the Dallas/Fort Worth area. This study will help the Region C Water Planning Group determine how much water families actually use and how much they conserve.

In the neighborhood study, there were two water conservation methods that were researched: low-flow plumbing fixtures and customer water audits.

APAI selected eight neighborhoods in Arlington, Fort Worth, Dallas, and Plano for evaluation of water usage and the impact of low-flow plumbing fixtures. The neighborhoods for the study were selected based on the availability of seasonal water use data, existing water conservation measures in each area, the age of the neighborhood and socioeconomic conditions. These neighborhoods were also selected to reflect a broad range of family income and housing age.

The results of the water conservation and water usage neighborhood study indicate that indoor water usage increases with the growing rate of family income and lot size. The data also shows that indoor water usage is greater in older neighborhoods, which have older plumbing fixtures, than in newer neighborhoods. For a given home in the selected neighborhoods, a low-flow plumbing fixture is projected to save about 21 to 23 percent on indoor water use compared to older fixtures.

Home Conservation Tips

Water Use	Water Amounts (No Conservation)	Conservation Methods	Water Amounts (With Conservation)
Shower/bath	5 gallons/minute	Install low flow shower head; wet & soap, rinse off; reduce shower time	2.5 gallons/minute
Flushing toilet	5 gallons/flush	Use tank displacement; do not use toilet to flush household trash; replace with low flow toilet	1.6 gallons/flush
Brushing teeth	2 gallons (water running)	Use glass to wet, brush and rinse	1/8 gallon
Washing hands	1/2 gallon (water running)	Wet hands, turn off water, lather, rinse; replace with low flow faucet	1/4 gallon
Washing clothes	40 gallons/load (top water level)	Use minimum water level; use shortest necessary wash cycle; wash with full loads	25 gallons
Hand Washing dishes	7-14 gallons	Wash, rinse in tub	5 gallons
Dishwasher	7-14 gallons/load (full cycle)	Use short cycle	7 gallons

Key dates in the water planning process –

June 1, 2005 – Initially Prepared Plans due to TWDB

June & July 2005 – Planned public meeting/hearings

January 5, 2006 – Planning group-adopted Regional Water Plans due to TWDB

January 5, 2007 – TWDB-approved State Water Plan due to the Legislature