



Region C Water Planning Group
Key Messages for 2007-2009 Biennium
Monday, February 25, 2008

I. General Messages about Region C Water Planning

- a. We *value the public's input* on the Regional Water Plan and want their continued feedback as we revise/refine the plan
- b. Region C WPG is a *planning* group but ultimately has no implementation or regulatory authority (no power to enforce conservation or to develop projects, for example); ultimately, water providers and local governmental entities must implement plan, ensure sound use of water; individual users must also bear some responsibility
- c. During the first two years of the current five-year planning cycle (through end of 2008), we are *conducting special studies* to examine particular water strategies and identify changing conditions; we are building on, and improving, the existing plan
- d. We are particularly focused on *coordination within the region*, as that's required to address shared challenges
- e. Ultimately, our objective is to develop and refine a balanced, long-range plan that will meet the region's water needs over the next 50 years, as we experience tremendous population growth and related increases in regional water demands, *so we don't end up in a water crisis*

II. Major accomplishments since Regional Water Planning began

- a. Two rounds of planning completed; now in third five-year cycle
- b. All projects seeking permits/state funding must be in regional water plan
- c. We have contributed towards implementation of the following (totaling nearly 2 million acre/feet/year of new supply added since 1997)
- d. **Reuse projects**
 - 1. *Total reuse more than 730,000 acre-feet/year*
 - 2. *Completed* supplies include Garland/Forney reuse for power plant, NTMWD Wilson Creek reuse expansion, Grapevine/Dallas County Park Cities MUD, UTRWD reuse of Lake Chapman water

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3. *Under construction* supplies include NTMWD East Fork Raw Water Supply Project, TRWD wetlands (phased)
 4. *In progress* supplies include Dallas' contract for return flows
 5. *Other supplies now permitted* (Athens MWA, Trinity River Authority, Dallas' Ray Hubbard & Lewisville, Irving)
- e. Connection to existing supplies**
1. Several entities (incl. TRWD and UTRWD) currently seeking Oklahoma water
 2. Many completed projects and under construction projects (see Tom Gooch's recent presentation to RCWPG)
 3. *Total from connection to existing supplies is more than 1,070,000 acre-feet/year*
- f. New reservoirs/supply sources**
1. Only Muenster Lake completed, at 500 acre-feet/year
 2. Pursuing permit applications for Lower Bois d' Arc Creek Reservoir, Lake Ralph Hall (*totaling 168,000 acre-feet/year*)
- g. Large-scale conservation initiatives**
1. Dallas
 2. NTMWD
 3. Arlington
 4. Fort Worth
 5. TRWD
 6. Many other cities and suppliers
- h. Significant amount of regional cooperation**
- i. Significant amount of public participation**

III. Key messages on the existing Regional Water Plan

- a. Overall plan messaging**
1. The current plan was adopted by the Planning Group in 2006 and includes a variety of strategies – increased conservation; reuse; connection of existing supplies; development of new surface water supplies
 2. No one strategy alone can meet our region's needs over the next 50 years, so a variety of strategies is paramount
 3. Over the next 50 years, Region C's population is projected to more than double (from 5.2 million in 2000 census, to projected 13.1 million in 2060), so developing new supplies is critical
 4. Population projections have continued to adjust upwards over time, with each new census
 5. If we fail to develop new supplies, we will fall short of meeting projected 2060 water needs (3.3 million acre feet) by 1.9 million acre-feet per year

6. We must also develop a reasonable surplus supply, from a variety of sources, to guard against worse-than-expected droughts, unanticipated population growth and unforeseen problems with implementation of planned strategies
7. The impact of failing to meet future demands would be devastating to North Texas
 - a. 7% reduction in population (over 1 million people)
 - b. 17% reduction in employment (700,000 jobs)
 - c. 21% reduction in regional income (\$58.8 billion)
 - d. \$160 billion loss of income and taxes

b. Importance of conservation and reuse in the plan, relative importance of other strategies

1. Conservation alone is not enough
2. Region C is adopting more conservation and reuse than any other region in the state (and also a national leader)
3. Implementing the conservation and reuse strategies in the plan will reduce our average per capita municipal water demand by nearly 30% over the next 20 years
 - a. NTMWD's East Fork Water Supply Project (generating 102,000 acre-feet/year) and TRWD's wetlands project (generating 188,000 acre-feet/year) are prominent reuse examples
 - b. Reuse projects have some limits, however, as we must preserve normal flow of the Trinity River
4. The planned conservation/reuse strategies will achieve the goal set by the Texas Water Conservation Implementation Task Force by 2020
5. By 2060, our region will get its water from the following sources in the following amounts:
 - a. 31% from current supplies
 - b. 26% from conservation and reuse
 - c. 23% from connection to existing sources
 - d. 18% from new reservoirs
 - e. Remainder from regional water systems, system operation of reservoirs and use of groundwater

c. Marvin Nichols Reservoir

1. The Region C Water Plan includes much more than just MNR, and new reservoirs represent only 18% of our total regional water supply anticipated for 2060
2. MNR is a low-cost source of a large amount of water (489,000 acre-feet/year) for Region C, at a site relatively close to the Metroplex and ideal for damming
3. Conservation alone won't replace the need for some large-scale sources of supply such as MNR

4. Other available supplies are relatively more expensive, or not as ample a solution, as the MNR
5. At this point, the MNR is still a long ways from construction. It will still have to go through the appropriate permitting process before anything happens, but it needs to be part of our long-range plan.

d. Lake Fastrill

1. Lake Fastrill is a critical part of DWU's long-term strategy for supplies
2. We will, of course, follow the pending litigation involving the City of Dallas/TWDB and the U.S. Fish & Wildlife Service very closely

e. Lake Ralph Hall

1. Permit currently being pursued by UTRWD
2. Would provide 50,740 acre-feet/year to rapidly expanding population served by UTRWD
3. UTRWD's current water supply only adequate for next 25 years; reservoirs take a long time to permit and build, so approval is needed now
4. Is the lowest cost and most feasible water supply option for the families and cities who rely on UTRWD

f. Lower Bois d'Arc Creek Reservoir

1. Permit currently being pursued by NTMWD
2. Would provide 123,000 acre-feet/year to rapidly expanding population served by NTMWD
3. NTMWD's customers need this water supply by 2020, so development of reservoir must begin now
4. Conservation, reuse and connecting to existing supplies alone will not supply enough water for this rapidly growing area

g. Existing supplies not currently recommended as plan strategies

1. Lake Livingston
 - a. Existing reservoir could supply 200,000 acre-feet/year to Region C
 - b. The 180-mile distance for transport and high cost of long-distance transport of water make this a relatively expensive option compared to other strategies
 - c. Currently an *alternative strategy* in the plan for TRWD and NTMWD
2. Sam Rayburn Reservoir/Lake B.A. Steinhagen
 - a. These two reservoirs in East Texas could supply 200,000 acre-feet/year to Region C

- b. The 200-mile distance for transport and high cost of long-distance transport of water make this a relatively expensive option compared to other strategies
- c. Currently an *alternative strategy* in the plan for DWU and TRWD
- d. Note that commitments from this source to other regions have increased in recent years, so this water may no longer be available

h. Other potential supplies not currently recommended in the plan

1. **Ogallala groundwater (Roberts County)**
 - a. Mesa Water Inc. has proposed selling up to 200,000 acre-feet/year of water from the Ogallala Aquifer in the Panhandle to Region C
 - b. At 250 miles from the Metroplex, this is a relatively expensive source of supply
 - c. Currently an *alternative strategy* in the plan for DWU and the NTMWD
2. **Desalination of Gulf of Mexico water**
 - a. The Gulf of Mexico offers a potentially limitless supply of water
 - b. The cost of desalinating this water and transporting it all the way to North Texas makes this a *very expensive* option compared to every other strategy under consideration
 - c. We will continue to monitor technological developments that make this strategy potentially feasible over time
3. **Oklahoma water**
 - a. Currently not an option due to legislative moratorium
 - b. TRWD is currently engaged in litigation with Oklahoma to declare moratorium unconstitutional
 - c. We will, of course, monitor legal and political developments very closely
4. **Reuse**
 - a. Reuse is a critical water supply for Region C – with conservation, represents 26% of future supply
 - b. *Indirect reuse*, where the treated effluent is discharged into a natural channel, reservoir, constructed wetlands or other form of water, is being applied in Region C today and is planned to be a large part of our future supply
 - c. Region C also supports the application of *direct reuse* where appropriate – for example, to irrigate

golf courses, and to provide cooling water for steam electric power

IV. Emerging public issues, likely media queries

a. General queries on potential alternative strategies

1. We have evaluated, and continue to reassess, all potentially feasible water management strategies
2. Feasibility and costs change over time, as do the needs of entities within Region C, so our plan must constantly evolve
3. That is why we have 5-year planning cycles to revise and refine the Region C Water Plan, as do all regions statewide

b. GPCD comparisons with other regions/cities

1. Apple-to-apple comparisons are difficult, because we have a relatively higher percentage of industry and other high-volume uses compared to other regions, which skew our GPCD figures
2. What's important to note is that, under our plan, we *will* meet the state Water Conservation Implementation Task Force's goal by 2020
3. We will get there through a combination of conservation and reuse, as well as through implementation of conservation best management practices

c. Drought (likelihood of one here, U.S. Southeast comparison, etc.)

1. We were fortunate to emerge from our recent drought relatively unscathed, thanks to last year's rainfall and the implementation of drought contingency plans in local areas
2. Atlanta's current experience underscores the wisdom of a statewide, regional water planning process that develops a long-term plan for ample water
3. If we are to avoid a similar experience, we must continue moving forward with our Regional Water Plan and implementation of the recommended strategies

d. Global warming/climate

1. We're planning for the possibility of permanent climate change and the resulting effect on water supplies
2. This is one reason why planning to have a reasonable surplus is so important, and why water planning generally is critical

e. Study Commission on Region C Water Supply

1. We haven't pre-judged the issue, and we anticipate a good faith negotiation between the two regions
2. The only reason Region C nominated politicians was because Region D had already designated some non-Planning Group members as its commission appointees
3. Our designees are leaders in the water planning effort, and the legislators we've appointed are appropriate since the Commission will be reporting back to the Legislature

f. Coordination with other regions

1. We are working closely with other regions to coordinate on water planning needs and water management strategies, as this regional cooperation is critical
2. We regularly send RCWPG members to neighboring regions' meetings, including Regions D, Brazos G, H, etc.
3. We are also currently coordinating with Region I on the Toledo Bend study

g. Instream flows, bays and estuaries

1. The Legislature has recognized the importance of maintaining a healthy ecosystem while meeting human needs for water, and we are supportive of that objective
2. Since 1985, the Texas Water Code has required the TCEQ to assess the affect of new water use permits on existing instream uses, water quality, fish/wildlife habitats and freshwater inflow needs for bays and estuaries
3. SB 2 (2001) provided a basic framework for the Texas Instream Flow Program and studies in select river basins
 - a. Priority studies include the Middle Trinity, flowing into Lake Livingston
 - b. 2nd Tier studies include Red River /Lower Bois d'Arc Creek Reservoir, and the Upper Sabine River/Toledo Bend Reservoir
 - c. Special studies include the Upper Sulphur River and Marvin Nichols Reservoir/Wright Patman Lake
4. SB 3 (2007) provided a framework for setting environmental flow standards
 - a. TCEQ directed to promulgate flow standards by basin starting in 2010
 - b. A scientist and stakeholder-driven process

h. Groundwater monitoring and regulation (incl. Barnett Shale issues)

1. We are confident that the new Groundwater Conservation Districts will address relevant, localized groundwater issues in the appropriate, bottom-up manner
2. While groundwater is an important supply in localized areas of Region C, it is not a major source of future supplies from a region-wide perspective
3. A balance will need to be struck between the need to continue exploring for gas/oil (as a vital part of the region's economic engine), and the need for local residents and businesses to have reasonable access to water
4. Note: Barnett Shale production was not yet taken into account in 2006 plan, because it was just getting underway during 5-year planning cycle; it will be considered in 2011 plan

i. Water leaks/aging infrastructure

1. More of a distribution issue than a raw water supply issue
2. Raw water supply does have these issues, to the extent that water intakes, pipelines, etc. need to be maintained and replaced
3. We are supportive of adequate funding for municipalities and suppliers so they can maintain existing systems and minimize water loss due to leakage