

“If Texans cannot change the weather, they can at least, through sound, farsighted planning, conserve and develop water resources to supply their needs.”
—A Plan for Meeting the 1980 Water Requirements of Texas, 1961

Introduction

The Dallas-Fort Worth Metroplex of Texas is one the fastest growing areas in America. With population of nearly 7 million, the Metroplex has significant economical and environmental impacts within Texas. As a result managing and planning for its water resources is of the upmost importance. This is achieved through the research and legislative efforts of the Texas Water Development Board, its 16 planning regions, and Texas Legislature in which an integrated state water plan is gathered and approved in five year increments; the next approved water plan will be in 2017.



Existing Supplies

- Reservoirs projected to provide 58% of total water supply
- Surface water supplies located outside of Region C will account for 22%
- Groundwater from the Trinity Aquifer and other minor aquifers will provide 7%
- Reuse 10%
- 2% from local sources, such as run-of-river permits

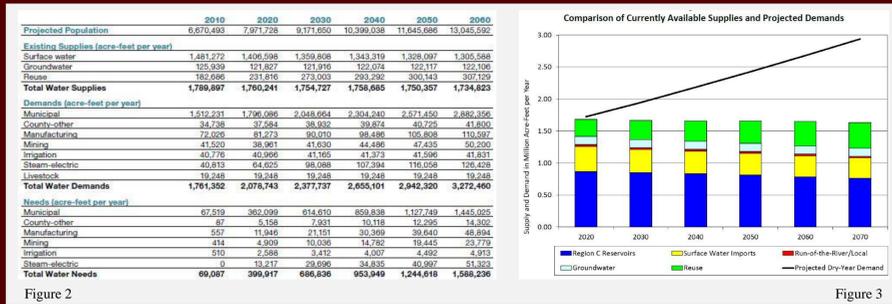
Recommendations

Four new major reservoirs

- Lower Bois d’ Arc
- Ralph Hall
- Marvin Nichols
- Fastrill Replacement Project

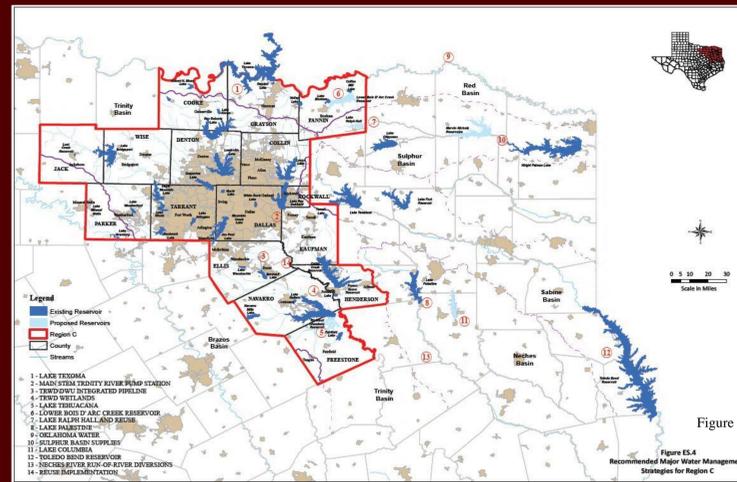
Conservations Strategies

- Education
- Pricing Structure
- Waste Water Prohibitions
- Water System Audits
- Plumbing Code Changes
- Aquifer storage and recovery



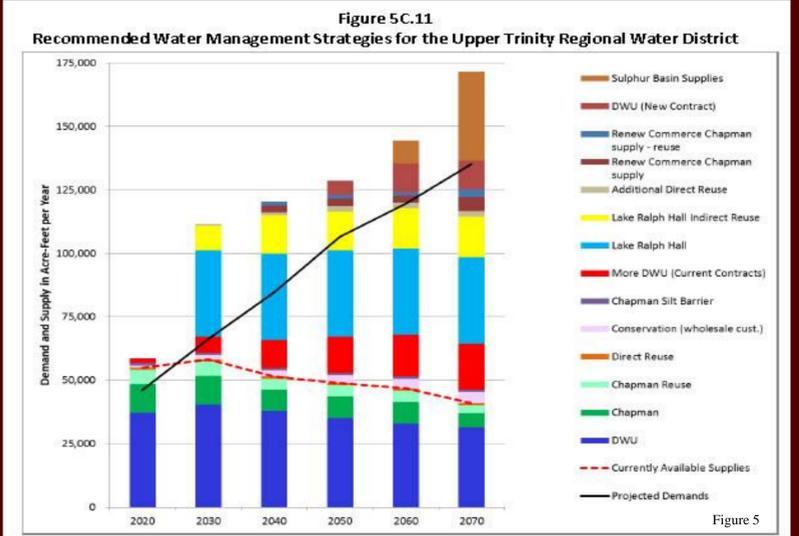
REGION C

The D-FW Metroplex is located within Region C (Figure 1). Region C’s population makes up 26 percent of Texas’ population and is projected to grow 96 percent to 13,045,592 by 2060 (Figure 2). As a result water demand is projected to increase as much as 86 percent driven by a municipal increase of 91 percent making up for 88% of the total projected demand increase.



What the Region Will Need

- Projected additional 1,588,236 acre-feet by 2060
- To achieve the goal of 2,360,302 acre-feet
- Increase reuse to 11%
- Increase conservation to 12%
- Construction of additional major reservoirs
- Total Capital Cost \$21.5 billion



Conclusion

The objective is simple: Provide clean and safe water for an area that forecasts to double their population in the next 50 years. City officials and water management professionals have over 550 strategies available and it will be complex array of variables to when deciding which projects meet the most critical demand(s) while also taking into account technological and economic feasibility.

REFERENCES

Texas Water Development Board (2012), 2012 Water for Texas, in , pp. 1-314, Texas Water Development Board.
Texas Water Development Board (2016), Draft: 2017 State Water Plan, in Water for Texas, pp. 1-161, Texas Water Development Board.

