

To The People of the State of Texas:

August, 1997

Transmitted herewith is the amended Texas Water Plan, Water for Texas, which was unanimously adopted by the Texas Water Development Board on August 20, 1997 as the official water plan for Texas. The State Water Plan has been in preparation since 1992. It is the result of a consensus planning process which included considerable effort among the staff of the Board, the Texas Natural Resource Conservation Commission, and the Texas Parks and Wildlife Department with additional support and input from technical advisory committees, focus group workshops, interviews with community and professional leaders, more than 20 public meetings, and a draft Legislative Summary of key findings prepared earlier this year and circulated for public comment. Recent legislation, Senate Bill 1 (SB 1), incorporated many of the findings from the Legislative Summary into law effective September 1, 1997. Provisions of SB 1 also include changes in how the Water Plan is prepared at the regional level instead of at the State level. Since this plan was developed over the past five years and adopted prior to September 1, 1997, it is not subject to the new SB 1 requirements. However, key elements of the SB 1 provisions are identified in the text where possible. The 1997 Texas Water Plan will serve as a guide and resource for the preparation of regional plans under SB 1, and will be the State Water Plan until replaced by an approved plan in 2001.

The amended 50-year State Water Plan describes current and prospective water uses, identifies water supplies, matches these supplies to water uses, and identifies needed water-related management measures, facility needs and costs, addresses environmental concerns, and offers program and policy recommendations to better manage the State's water resources.

Texas is at a historical cross roads. The era of plentiful water when an area's needs could be readily met with new water supply development is mostly past. Today, the increasing relative scarcity and competition for water, the high cost of new supplies, local concerns about transferring water from one basin to another, and heightened environmental concerns make it difficult to marshal the public support needed to bring major new water projects to fruition.

Rapid growth will exert even greater pressures on the capabilities of many local governments to implement and finance new water-related facilities necessary to keep pace with this growth and related environmental, health, and public safety concerns. Actions are needed now to ensure that state government is responsive to the water needs of all of its citizens as Texas enters the 21st century.

Sincerely,



Craig D. Pedersen
Executive Administrator

WATER FOR TEXAS

A CONSENSUS-BASED UPDATE TO THE STATE WATER PLAN

Volume II Technical Planning Appendix

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Sections 16.051 and 16.055 of the Texas Water Code direct the Executive Administrator of the Texas Water Development Board to prepare and maintain a comprehensive State water plan as a flexible guide for the orderly development and management of the State's water resources in order that sufficient water will be available at a reasonable cost to further the economic development of the entire State. Section 16.056 of the Code directs the Board, after a public hearing, to amend and modify the plan in response to experience and changed conditions.

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Executive Summary

Texas is facing many challenges in its water resources future... rapid growth, competition over limited water resources, environmental impacts, and significant costs of infrastructure development. Challenges also create opportunities and can engender the public will to address these issues. Recent drought experiences have once again reminded Texans of just how fundamental water resources are to the future quality of life and prosperity of the State. Vigilance in managing and protecting our State's water supply and related environmental resources is a very significant, ongoing effort, not just a periodic exercise to pursue when it doesn't rain.

This renewed public interest in water resources was embodied in the passage of Senate Bill 1(SB 1) by the 75th Texas Legislature. SB 1 is a comprehensive omnibus water bill that addressed improving many different areas of water management, ranging from water planning and regulation to data collection and dissemination. Water finance was also addressed to some extent in SB1, but even more significant financial support for the State's current and future water infrastructure has been targeted for interim study and possible consideration in the next Legislative session.

Further good news for Texas is that a reasonable plan for water development has been identified in this State Water Plan that can assure an adequate supply of water to meet all anticipated economic needs of the State for the next 50 years. However, it will require diligent application of a wide array of various water management tools, encompassing water conservation, expanded use of existing local supplies, wastewater reuse, water marketing, reallocation of reservoir storage, protection of water quality, interbasin transfers, new water supply development, and various other measures to bring it about.

Texas is projected to roughly double in population in the foreseeable future, increasing from its current level of about 19 million persons to more than 36 million people by the year 2050. Statewide water use is only anticipated to moderately increase about 11 percent over that same period. However, this moderate overall increase in statewide water use is due to a projected decline in water used for irrigated agriculture somewhat offsetting a significant increase in the water needs of Texas' cities and industries. Urban water use in Texas is anticipated to grow by about 52 percent in the next 50 years, even after noticeable savings from anticipated water conservation measures are considered.

Even after various less-impacting water management measures have been applied to meet these future needs, new major water supply development will be required. The State Water Plan has identified the need for eight new water supply reservoirs and 28 major water conveyance projects over the next 50 years to access both existing and newly-developed water supplies. While these larger projects typically gain the most public attention, it is the "everyday" water and wastewater infrastructure for treatment, storage, pumping, and piping that will make up the vast majority of water-related infrastructure spending. Only about \$4 billion of the estimated \$65 billion in future 50-year water-related infrastructure needs can be attributed to major water supply and conveyance projects.

In identifying future water development needs, the consensus-based planning process also considered environmental issues, proposing less physically-impacting options first. An attempt was then made to ensure to the best extent possible in a long-range planning process that environmental water needs were adequately addressed in the development of new water resources.

Implementing the State Water Plan will not be easy. The State still requires considerable efforts to improve water planning and management, and to provide additional financial assistance. Improved public participation and education, as well as intra- and inter-regional cooperation, are absolutely essential to the future well-being of Texas. The magnitude of these efforts is significant and will require an ongoing commitment of its citizens and governments to assure its implementation.

