WATER FOR TEXAS TODAY AND TOMORROW A CONSENSUS-BASED UPDATE TO THE STATE WATER PLAN

1.0 INTRODUCTION

Water, more than any other natural resource, will determine Texas' future in the decades to come. The era of plentiful water when an area's needs could be readily met with development of near-by supplies is past. Even with water conservation and sound water management, the State's rapidly growing population and economy will require additional water supplies. The amount and manner in which this basic resource is provided will define, to a large degree, our State's economic potential and its quality of life in the future.

Today, increasing relative scarcity and competition for available water, the high cost of new water supply development, and heightened environmental concerns make it difficult to marshall the public support needed to bring major new water development projects to fruition. Against this backdrop, Texas' population is projected to double over the next 50 years, and the water needs of its cities and industries are expected to correspondingly increase. Water is becoming evermore costly for Texans, and the lack of locally-available water supplies has prompted major urban areas to look to other regions in their search for water. At the same time, adequately providing for the water needs of the environment has come to be recognized as an essential element of sound water planning and management.

Exhibit 1-1 Key Water Management Tools

- Expected Water Conservation
- Advanced Water Conservation
- Water Reuse
- Expanded Use of Existing Supplies
- Reallocation of Reservoir Storage
- Water Marketing
- Subordination of Water Rights
- Yield Enhancement Measures
- Chloride Control Measures
- Interbasin Transfers
- New Supply Development
- Other Measures

The common element underlying the State of Texas' water planning efforts is the fact that meeting its future water needs will require the full range of management tools (see Exhibit 1-1). These tools range from less environmentallyimpacting water conservation and wastewater reuse measures to more controversial and costly interbasin transfers and large reservoir construction, with a variety of other options in between. Water availability, economics, environmental concerns, and even public acceptance will identify which particular tool is best suited to meet a specific water need. Texas is a vast and diverse state, and water management solutions that are appropriate for one region or locale may not be appropriate for another.

Water is our most precious natural resource and basic economic commodity. It is distinct from other natural resources and has no substitute. Man and the environment, on which human existence depends, must have water to survive and prosper. Water interrelates with and affects almost every aspect of human and natural existence and, thus, becomes an extremely complex subject of planning and management. The State faces a great task in bringing the varied, and often conflicting, water "interests" into better agreement on how to best provide for future human, economic, and environmental water needs. To avoid gridlock and its potential costs, Texans must work ever more cooperatively to meet this challenge.

How much water does Texas have? Is there enough for the people, the economy, and the environment? Will there be enough for future generations? Where are the supplies? Can they be made available for use at affordable costs? Will they be safe to drink and to use in other ways?

To address these fundamental questions, sufficient data must be gathered and evaluated and sound planning principles and assessment techniques must be applied. In turn, findings must be coordinated with the State Legislature; Federal, State, and local agencies; and the general public.

1.1 PLAN GOALS

In Section 16.051 of the Texas Water Code, the Executive Administrator of the Texas Water Development Board (TWDB) is charged with producing a State Water Plan that addresses the broad public interests of the State (see Exhibit 1-2). As currently specified in Section 16.055 and 16.056, the Plan is to be periodically reviewed and updated and serve as a flexible guide to state policy for the development of its water resources. The Commission (TNRCC) shall consider the State Water Plan in its water regulatory actions, although its actions are not bound by the Plan.

The Plan provides a statewide perspective that places local and regional needs in a broad-

Exhibit 1-2 Water Planning Statutory Authority

"The Executive Administrator shall prepare, develop, and formulate a comprehensive water plan...[he] shall be governed in the preparation of the plan by regard for the public interest of the entire state. The Executive Administrator shall direct his efforts toward the orderly development and management of water resources in order that sufficient water resources shall be available at a reasonable cost for the economic development of the entire state...the Executive Administrator shall also give consideration in the plan to the effect of upstream development of the bays, estuaries, and arms of the Gulf of Mexico..."

Section 16.051, Texas Water Code

er context. No other planning vehicle currently provides this overview. The State Water Plan, however, is not done in a vacuum nor without regard for local issues. Literally, hundreds of individual and county-level studies are built into the overall findings reflected in the statewide Plan. In formulating water supply solutions, the Plan focuses on economic viability while keeping an eye on environmental sensitivity. The ecological health of Texas' rivers, lakes, and estuaries is vitally dependent on the supply of clean water. Human activities, such as commercial and recreational fishing, boating, swimming, and other pursuits, and our quality of life depend on this vital resource. New legislation, passed in the 75th Legislature, specifies a five-year update period for the Plan, that it be based on regional planning studies, and provides that related financial assistance appli-

cations must be consistent with the regional and State plans for regulatory approval by State agencies.

The ultimate goal of the State Water Plan is to identify those policies and actions that may be needed to meet Texas' near- and long-term water needs, based on a reasonable projected use of water, affordable water supply availability, and a goal of conservation of the State's natural resources.

1.2 PLAN ORGANIZATION AND AVAILABILITY

Exhibit 1-3 Components of the 1997 State Water Plan

Volume I is a Legislative Summary that presents highlights of the State Water Plan's findings with an emphasis on recommended Legislative water policy initiatives,

Volume II is a Technical Planning Appendix that contains technical detail and the background, methodologies, findings, and recommendations concerning the forecast of the State's water resources future, and

Volume III is a Technical Data Appendix that contains the detailed planning data and forecasts for the State's counties and cities (available upon request in an electronic format and on the Internet). The 1997 State Water Plan is designed in a multi-volume format to provide an appropriate level of information to an array of different interest groups, ranging from political decision-makers to water professionals to the general public.

The 1997 update of the State Water Plan is comprised of a Legislative Summary (produced for the opening of the 75th Texas Legislature in January 1997), and a related detailed Plan produced a few months later (see Exhibit 1-3). Copies can be obtained by writing to the Board's mailing address referenced on this document's title sheet.