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# I Key Functions, Powers, and Duties

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## A. Provide an overview of the agency's mission, key functions, powers, and duties. Specify which duties are statutory.

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The Texas Water Development Board (TWDB) is the state's water planning and financing agency. The TWDB's main responsibilities are threefold: collecting and disseminating water-related data, planning for the development of the state's water resources, and administering low-cost financing programs. Since 1957, the agency has been charged with managing the state's water needs. Recently however, with the passage of Senate Bill 1 during the 75th Texas Legislature, federal and state organizations, political subdivisions, and Regional Water Planning Groups have assumed increased responsibility for ensuring sufficient water supplies for the state. The TWDB has stepped into a leadership and support role, guiding, enabling and supporting the state's water resources development.

**TWDB's Mission:** Provide leadership, technical services and financial assistance to support planning, conservation and the responsible development of water for Texas.

**Agency Philosophy:** The Texas Water Development Board strives to achieve excellence in meeting and exceeding the expectations of its customers. The organizational culture of the TWDB is based on the following values:

- **Customer Satisfaction** - consistently satisfy all the requirements of our customers;
- **Leadership** - provide clear and visible direction, expectations, and value for all employees and for our relationships with customers;
- **Process Focus** - concentrate on efficient performance of our tasks and refinement of our business processes to achieve goals;

- **Fact-Based Decision Making** - generate prompt, objective decisions based on the best available information and sound professional judgement;
- **Empowered Employees** - delegate authority and responsibility to effectively serve our customers; and
- **Continuous Improvement** - seek opportunities to improve the products and services provided to our customers.

**TWDB Vision: Water for Texas** - Dependable, clean, and affordable water for our people, our economy, and our environment.

In support of the agency's mission and vision, the TWDB focuses on two goals:

- 1. Water Resources Planning**  
Plan and guide the conservation, orderly and cost-effective development, and best management of the state's water resources for the benefit of all Texans; and
- 2. Water Project Financing**  
Provide cost-effective financing for the development of water supply, for water quality protection, and for other water-related projects.

The TWDB attains these goals by operating as a one-stop shop, efficiently and effectively implementing its data collection and dissemination, water resources planning, and low-cost project financing functions. The highly integrated relationship between these functions and the agency's goals allows the TWDB to successfully serve the water resources needs of Texas.

The TWDB's operations can be further broken-down into the strategies listed below, which are detailed in the **1999-2003 Texas Water Development Board Strategic Plan** (refer to Attachment #20).

Strategy	Statutory References
Conduct statewide data collection and water resources evaluations <b>(Strategy 01-01-01)</b>	Water Code §11.1491, Chapter 15 ( Subchapter M), Chapter 16 ( Subchapter B), §16.058
Coordinate regional water planning and prepare the State Water Plan <b>(Strategy 01-01-02)</b>	Water Code §§6.011, 6.012, 15.4061, Chapter 15 (Subchapter K), Chapter 16 ( Subchapters B, C and D), §§35.007, 36.1071-.1073
Provide grants for practical research and feasibility studies to encourage cost-effective regional solutions to local community water, wastewater, and flood control infrastructure problems <b>(Strategy 01-02-01)</b>	Water Code §§15.002, 15.401-.406, National Flood Insurance Act of 1968 (§§1366 and 1367) 42 United States Code, §§4104c and 4104d
Promote water conservation and increased water-use efficiency <b>(Strategy 01-02-02)</b>	Water Code §§15.106, 15.208, 15.431-.435, 15.471-15.473, 15.607, 16.012, 16.015, 16.051, 16.053, 16.055, 17.125, 17.277
Facilitate public access to natural resources and census data <b>(Strategy 01-01-03)</b>	Water Code §16.021
Integrate, process, and disseminate water resources information and infrastructure facility needs information (facilities to be developed to meet future water infrastructure needs) <b>(Strategy 01-01-04)</b>	Water Code §16.012; Federal Water Pollution Control Act §516-b; Safe Drinking Water Act Amendments of 1996 §1452-h
Enable communities to build needed water infrastructure and save them money in doing so <b>(Strategy 02-01-01)</b>	Texas Constitution Article III, §§49-c, 49-d, 49-d-1, 49-d-2, 49-d-3, 49-d-4, 49-d-5, 49-d-6, 49-d-7, 49-d-8, 50-d; Water Code Chapter 15, (Subchapters A-F, J); Chapter 16 (Subchapters E and F); Chapter 17 (except for Subchapter K); §§36.159, 36.371-374; 33 United States Code 33 §§1251 et seq. (Federal Water Pollution Control Act); Public Law 104-182, August 6, 1996, 110 Stat. 1613 (Safe Drinking Water Act Amendments of 1996) and Title 42 United States Code §§ 300f-300j-26
Provide financial assistance to develop adequate water and sewer services in economically distressed areas <b>(Strategy 02-01-02)</b>	Texas Constitution Article III, §49-d-7, 49-d-8; Water Code §§15.102, 15.401, 15.407, Chapter 15 (Subchapter L); Chapter 16 ( Subchapter J); Chapter 17 (Subchapter K) Public Law 102-389 (Federal Appropriations Act of 1993); Public Law 103-327 (Federal Appropriations Act of 1995); Public Law 104-99 (Federal Appropriations Act of 1996, Continuing Resolutions Nos. 3 and 4); Public Law 104-204 (Federal Appropriations Act of 1997); Public Law 105-65 (Federal Appropriations Act of 1998)

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**B. Does the agency's enabling law correctly reflect the agency's mission, key functions, powers, and duties?**

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The agency's enabling law correctly reflects the agency's mission, key functions, powers, and duties.

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**C. Please explain why these strategies are needed.**

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Each of the strategies listed in the previous chart are essential to the TWDB's operations. The need for each strategy is further described below. (Also refer to Section VI, Guide to Agency Programs, for a complete description of each strategy.)

**Strategy 01-01-01**

- **Conduct statewide data collection and water resources evaluations**

Making sound water management and planning decisions requires accurate and current water data. The Texas Water Development Board collects vital quality and quantity information on surface water and groundwater and participates in the joint agency determination of environmental flow needs of bays, estuaries, and instream segments.

**Strategy 01-01-02**

- **Coordinate regional water planning and prepare the State Water Plan**

In 1997, the State of Texas recognized the need to institute statewide water planning in order to secure the future of the state's water resources. With the passage of Senate Bill 1 in 1997, the TWDB became the lead agency in coordinating the state's grassroots water planning effort.

### **Strategy 01 -02-01**

- **Provide grants for practical research and feasibility studies to encourage cost-effective regional solutions to local community water, wastewater, and flood control infrastructure problems**

The TWDB provides grants for applied research to support local efforts to address water infrastructure needs, including the development of cost-effective regional solutions to multi-party problems. These grants provide political subdivisions and others the opportunity to make informed decisions regarding their options for best managing their water resources.

For example, when considering how to meet its wastewater collection and treatment needs, a city can use grant funding to evaluate the advantages of a regional wastewater system versus a local system, including attributes such as cost and environmental impact.

### **Strategy 01 -02-02**

- **Promote water conservation and increased water-use efficiency**

Texas' growing population, increasing water needs, and limited supply of new water resources make water conservation a necessary tool for maintaining the quality of life for all citizens. The TWDB's expertise in water conservation practices has contributed to the general acceptance and use of innovative conservation technologies throughout the state. The agency provides comprehensive water conservation solutions to a wide variety of customers from agricultural interest groups to local governments and private industry.

### **Strategy 01 -01-03**

- **Facilitate public access to natural resources and census data**

The TWDB stores vast amounts of critical information, including data provided by other agencies regarding the state's water resources. The agency saves its customers time and money by centralizing all of this information and providing it in an easily accessible way.

The TWDB's Texas Natural Resources Information System (TNRIS) is the state's central repository for natural resources and census data. TNRIS makes this data available to state agencies, private entities, and the public at large through walk-in, mail-order, and Internet services. The TNRIS assists these customers by making data available to users quickly

and reliably and by referring users as necessary to appropriate data sources outside of the TNRRIS collection.

#### **Strategy 01 -01 -04**

- **Integrate, process, and disseminate water resources information and infrastructure facility needs information (facilities to be developed to meet future water infrastructure needs)**

The TWDB maintains and distributes surface water and groundwater data via a statewide network that focuses solely on water resources information. Additionally, as a member of the Drought Preparedness Council, the TWDB reports drought monitoring and water supply conditions via this network to the Regional Water Planning Groups, the Governor of Texas, and the general public.

The TWDB leads the state's participation in federally-mandated facility needs surveys administered by the Environmental Protection Agency to estimate the capital costs for water and wastewater infrastructure projects needed in the next 20 years. Hundreds of millions of dollars of federal funds are impacted by the results of this work. The information collected during the facility needs process is also of great strategic value to administrators and planners at the TWDB, the State Legislature, utilities, and Regional Water Planning Groups.

#### **Strategy 02-01 -01**

- **Enable communities to build needed water infrastructure and save them money in doing so**

The TWDB provides cost-effective financing solutions to Texas' communities so that they can meet the challenges of constructing and maintaining existing water infrastructure and comply with increasingly stringent water quality standards.

#### **Strategy 02-01 -02**

- **Provide financial assistance to develop adequate water and sewer services in economically distressed areas**

The 71st Texas Legislature in 1989 found that the lack of adequate water supply and wastewater services in economically distressed areas creates serious and unacceptable health hazards for residents. Additionally, the resources of these areas are totally inadequate to meet minimal water and sewer needs without federal, state, or private assistance.

Furthermore, if left unaddressed, solutions to these problems become more expensive and the dangers to public health and safety increase. The TWDB financial assistance programs provide cost-effective solutions for such problems in economically distressed areas.

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### **Are any of these functions required by federal law?**

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None of these eight key strategies are directly required by federal law. However, in choosing to utilize federally-funded programs, the agency must comply with federal requirements.

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### **D. In general, how do other states carry out similar functions?**

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#### **Strategy 01 -01 -01**

- **Conduct statewide data collection and water resources evaluations**

In general, other states collect similar water-related data through cooperative programs among federal, state, and local agencies. While some state agencies rely entirely on the United States Geological Survey (USGS) to collect water data, the TWDB has found it more cost-effective to use the USGS primarily for surface water gaging.

#### **Strategy 01 -01 -02**

- **Coordinate regional water planning and prepare the State Water Plan**

Not every state prepares a State Water Plan. Selected states in which plans are prepared include Texas, California, Wyoming, Utah, Kansas, Nevada, New Mexico, and Illinois. The process used to develop a plan can vary a great deal from state to state. Some states' processes are state-directed while others include varying degrees of local and regional input. The TWDB's current planning process is regionally-driven in accordance with Senate Bill 1 provisions and is unprecedented in its detail and local development.

### **Strategy 01-02-01**

- **Provide grants for practical research and feasibility studies to encourage cost-effective regional solutions to local community water, wastewater, and flood control infrastructure problems**

Florida manages and plans for its water supplies through water management districts funded by property taxes. In California, water planning is funded by the state's Department of Water Resources and agencies such as the Metropolitan Water District of Southern California. Additionally, many other states use university and foundation programs to fund such studies.

### **Strategy 01-02-02**

- **Promote water conservation and increased water-use efficiency**

States such as California, Florida, and Arizona, with scarce water resources and rapidly expanding demands for additional water supply, pursue aggressive conservation programs similar to the TWDB's programs.

### **Strategy 01-01-03**

- **Facilitate public access to natural resources and census data**

Many states have clearinghouses for natural resources information and work in cooperation with other states and federal agencies such as the United States Geological Survey. Few states' programs have the reputation or success of the TWDB's Texas Natural Resources Information System (TNRIS).

### **Strategy 01-01-04**

- **Integrate, process, and disseminate water resources information and infrastructure facility needs information (facilities to be developed to meet future water infrastructure needs)**

Other states also provide water resources information via web-based technologies.

Facility needs surveys are handled in basically the same manner in other states as in Texas.

### **Strategy 02-01-01**

- **Enable communities to build needed water infrastructure and save them money in doing so**

All 50 states provide either federal or state subsidized financial assistance for the development of water resources.

### **Strategy 02-01-02**

- **Provide financial assistance to develop adequate water and sewer services in economically distressed areas**

No other state has an economically distressed areas program that is comparable to that of the State of Texas. The colonia problem, which is unique in size and complexity to Texas, is a central focus of the TWDB's program. Other states are just beginning to address the challenges of economically distressed areas.

## **E. Describe any major agency functions that are outsourced.**

An outsourced function is defined here as a major programmatic function that the TWDB staff have legal authority to perform but instead have contracted with an outside entity to promote the most efficient use of state funds.

### **TWDB MAJOR AGENCY FUNCTIONS THAT ARE OUTSOURCED**

<b>Vendor/Firm</b>	<b>Function</b>	<b>Date of Contract</b>
Bank of New York	Provides custodial services to the TWDB for the book-entry municipal bond portfolio held at the Depository Trust Company	August 31, 1998 - August 31, 2000
Vinson and Elkins; McCall, Parkhurst, and Horton; Wickliff and Hall	These bond counsel firms are used to provide legal advice on the issuance of TWDB bonds and on miscellaneous interpretive matters related to TWDB programs	October 15, 1998 - August 31, 1999 * (Note: same contract dates for each firm)
Bear, Stearns and Co.; Chase Securities; Coastal Securities; Estrada Hinojosa; Goldman Sachs; Jackson Securities; John Nuveen and Co.; JP Morgan; Loop Capital; Merrill Lynch; Morgan Stanley/Dean Witter; Ramirez and Co.; Siebert Brandford Shank and Co.; Southwest Securities	These 14 firms were selected as a team to sell the TWDB's bonds on an as-needed basis; any combination of firms can be on the team  Firms were selected in December 1998 for an assumed two year timeframe; may be extended at the will of the TWDB Board members	A "bond purchase agreement" is entered into as necessary; it has a 30 day life
Texas Safekeeping Trust	Provides depository and custodial services necessary to the TWDB's financial operations	August 1999 next date for renewal
First Southwest Asset Management	Provides arbitrage consultant and reporting services necessary to fulfill the TWDB's obligations under federal arbitrage regulations	August 1999 next date for renewal

\* Extended by the TWDB to August 31, 2000 at its August 1999 Board meeting.

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**F. Discuss anticipated changes in federal law and outstanding court cases as they impact the agency's key functions.**

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In the 106th Session of the United States Congress, three bills are pending in committee that may have an impact on the agency's key functions. The first is Senate Bill 188, which will allow individual members of eligible entities to apply for State Revolving Fund Loans for construction projects that improve water conservation. Currently, such loans can only be made to eligible entities, not to individuals. This change will be made through an amendment to 33 United States Code §1383.

The other two bills, Senate Bill 968 and House Bill 1106, will allow the Environmental Protection Agency to grant money to state agencies, including the TWDB, to maximize available water supply and protect the environment through the development of alternative water sources. Both bills would require states to match the federal funds by at least 50 percent and, most importantly, would allow private utility companies to be eligible for participation in these projects.

The TWDB is not aware of any outstanding court cases that would influence the agency's business.

**G. Please fill in the following chart, listing citations for all state and federal statutes that grant authority to or otherwise significantly impact the agency.**

<b>Texas Water Development Board Statutes/Attorney General Opinions</b>	
<b>Citation/Title</b>	<b>Authority/Impact on Agency</b>
Texas Constitution , Article III, §§49-c, 49-d, 49-d-1, 49-d-2, 49-d-3, 49-d-4, 49-d-5, 49-d-6, 49-d-7, 49-d-8, 50-d	Provides for creation of TWDB; authorizes issuance of state general obligation bonds for water, water quality enhancement, flood control, economically distressed areas, and agricultural water conservation; and provides the authority to operate a program for bond insurance
Water Code Chapter 6	Provides for general powers, duties and responsibilities of TWDB; composition, appointment and eligibility of TWDB Board; administrative provisions for TWDB; and appointment and general powers of executive administrator
Water Code Chapter 15 (Subchapter A)	Provides general provisions relating to Chapter 15 funding
Water Code Chapter 15 (Subchapter B, C, E, F)	Provides authority for financial assistance from Water Assistance Fund and accounts thereunder as follows: establishment and management of Water Assistance Fund (Subchapter B); loans and grants from Water Loan Assistance Fund (Subchapter C); state purchase of facilities under Storage Acquisition Program (Subchapter E); Research and Planning Program including research grants, regional facility planning grants, EDAP facility planning grants and Senate Bill 1 regional planning grants (Subchapter F)
Water Code Chapter 15 (Subchapter D)	Authorizes TWDB to implement constitutional authority for Water Bond Insurance Program
Water Code Chapter 15 (Subchapter G, H, I)	Provides for establishment and management of Agricultural Trust Fund; transfers of money to Agricultural Water Conservation Fund, and use of funds for agricultural water conservation purposes including grants for equipment purchases
Water Code Chapter 15 (Subchapter J); 33 United States Code §§ 1251 et seq. (Federal Water Pollution Control Act); Public Law 104-182, August 6, 1996, 110 Stat. 1613 (Safe Drinking Water Act Amendments of 1996) Title 42 United States Code §§ 300f - 300j-26	Provides for creation of and funding from State Water Pollution Control Revolving Fund (known as Clean Water State Revolving Fund) and the Safe Drinking Water State Revolving Fund (known as Drinking Water State Revolving Fund)

<b>Texas Water Development Board Statutes/Attorney General Opinions - continued</b>	
<b>Citation/Title</b>	<b>Authority/Impact on Agency</b>
Water Code Chapter 15 ( Subchapter K)	Provides for creation and administration of Texas Water Bank to facilitate water transactions
Water Code Chapter 15 ( Subchapter L)	Provides for creation of Plumbing Loan Fund to provide loans through political subdivisions to individuals for connections to water or sewer systems, or to provide indoor plumbing facilities and fixtures
Water Code Chapter 16 ( Subchapter C)	Provides for TWDB adoption of State Water Plan and coordination and approval of regional and local water planning; provides for drought response planning and implementation
Water Code §§16.058, 11.1491	Provides for TWDB and Texas Parks and Wildlife Department to jointly establish and maintain a bay and estuary data collection and analytical studies program for determination of freshwater inflow needs, use of money for bay and estuary studies
Water Code §§16.091, 16.092	Designates the TWDB as the agency to cooperate with the United States Army Corps of Engineers and Bureau of Reclamation for planning water resources projects; allows the TWDB to be named local sponsor of federal projects
Water Code §16.093	Provides for TWDB implementation of the Construction Grants Program, including collecting application fees
Water Code §11.153	Provides for TWDB participation in pilot aquifer storage studies, and use of TWDB funding for studies
Water Code Chapter 16 ( Subchapters E and F)	Provides implementing legislation for TWDB constitutional authority to purchase and sell interests in regional water and wastewater projects, including flood retention structures (State Participation Program)
Water Code §16.233	Provides executive administrator with authority to confer with federal and state agencies and political subdivisions, and execute cooperative agreements
Water Code Chapter 16 ( Subchapter H)	Provides that the TWDB may make navigation improvements within Cypress Creek drainage basin
Water Code Chapter 16 ( Subchapter J); Chapter 17 ( Subchapter K); §15.407	Provides implementing legislation for constitutionally authorized Economically Distressed Areas Program (EDAP)

<b>Texas Water Development Board Statutes/Attorney General Opinions - continued</b>	
<b>Citation/Title</b>	<b>Authority/Impact on Agency</b>
Public Law 102-389 (Federal Appropriations Act of 1993); Public Law 103-327 (Federal Appropriations Act of 1995); Public Law 104-99 (Federal Appropriations Act of 1996, Continuing Resolutions Nos. 3 and 4); Public Law 104-204 (Federal Appropriations Act of 1997); Public Law 105-65 (Federal Appropriations Act of 1998)	Provides federal funds through the Colonia Wastewater Treatment Assistance Program (CWTAP) with condition that the agency comply with certain federal statutes, i.e., 42 U.S.C.A. §§4321, et seq., National Environmental Policy Act; Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, 40 C.F.R. Part 31
Water Code Chapter 17 (Subchapters A-G, L)	Provides implementing legislation for constitutionally authorized financing of water, water quality enhancement and flood control projects; provides for sale of bonds and disposition of proceeds for such programs and for the EDAP program
Water Code Chapter 17 (Subchapter I)	Provides authority for the TWDB to issue and use revenue bonds
Water Code Chapter 17 (Subchapter J)	Provides implementing legislation for constitutionally authorized Agricultural Water Conservation Bond Program
Water Code §§17.0871, 20.012, 20.045, 20.071, 17.072, 20.075, 15.1071	Provides for TWDB Board members to serve on the Board of Texas Water Resources Finance Authority ( TWRFA), and for various interactions with the TWDB, including TWRFA's purchase of the TWDB's political subdivision bonds
Water Code §26.035	Provides for the TWDB to execute agreements with the United States Environmental Protection Agency or other federal agencies that administer programs providing cooperation and financial assistance in the form of loans and grants for water quality control activities and to accept federal funds for such purposes
Water Code §26.043 (State of Texas Water Pollution Control Compact)	Authorizes the TWDB to purchase bonds issued by entities that have entered "The State of Texas Water Pollution Control Compact" to provide funds for water quality enhancement pursuant to the Federal Water Pollution Control Act
Water Code §26.403	Provides for the TWDB Executive Administrator to be a member of Texas Groundwater Protection Committee
Water Code §§35.007, 35.012, 35.018	Provides for TWDB responsibility for identifying and studying priority groundwater management areas, and for education in such areas and filing reports

<b>Texas Water Development Board Statutes/Attorney General Opinions - continued</b>	
<b>Citation/Title</b>	<b>Authority/Impact on Agency</b>
Water Code §§36.1071-.1073	Provides for the TWDB certification of groundwater management plans and technical assistance
Water Code §36.120	Provides for sharing of information between groundwater conservation districts and TWDB
Water Code Chapter 36 (Subchapter L)	Provides for the TWDB to use Water Assistance Fund for loans to newly confirmed groundwater conservation districts for creation and initial operations
Water Code §36.159-.161	The TWDB may provide funds to groundwater conservation districts for data collection, management plans and regional water plans from Water Assistance Fund
Water Code §36.302	The TWDB provides technical assistance to state auditor for review of groundwater conservation districts
Water Code §54.037	Provides that the TWDB rules may specify mode and manner for condemnation of any type of property to be acquired by regional plan implementation agencies if not otherwise prescribed by law
Water Code §58.186	Requires the TWDB to furnish irrigation districts with topographic maps and data concerning district projects
Water Code §64.011	Requires the TWDB Executive Administrator to prepare cost-benefit analysis for importation of water into an area of the Ogallala Water Import Authority and also to estimate the quantities of water available and required for import, and impacts in counties within the authority if water is imported
Water Code §151.076	Harris Galveston Coastal Subsidence District may request TWDB staff to make a complete study of groundwater situation in the district relating to subsidence
Texas Civil Statute Article 8280-13	Provides that the TWDB cooperate with federal government in National Flood Insurance Program and aid political subdivisions endeavoring to qualify for participation in such program, publish information and prepare maps on flood plain areas
Texas Civil Statute Article 717u	Names the TWDB Executive Administrator to College Opportunity Act committee; authorizes TWDB to designate all or part of general obligation bonds as college savings bonds

<b>Texas Water Development Board Statutes/Attorney General Opinions - continued</b>	
<b>Citation/Title</b>	<b>Authority/Impact on Agency</b>
Water Code §59.005	Prohibits regional districts from providing matching funds for TWDB financial assistance through a guarantee of anyone who has a financial interest in the district or will receive direct financial benefit from a project
Texas Civil Statute Article 8280-121	Authorizes the TWDB to appoint members of the San Jacinto River Authority (power has been transferred through various legislation from Board of Water Engineers to Texas Water Commission, to Texas Water Rights Commission, to Texas Department of Water Resources, to TWDB)

<b>Attorney General Opinions</b>	
<b>Attorney General Opinion No.</b>	<b>Impact on Agency</b>
There are no Attorney General opinions specifically directed towards the agency at this time.	

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## H. Please fill in the following chart:

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<b>Texas Water Development Board Agency Contacts</b>			
	<b>Name</b>	<b>Address</b>	<b>Telephone Number Fax Number E-mail Address</b>
<b>Agency Head</b>	Craig D. Pedersen Executive Administrator	1700 N. Congress Avenue P.O. Box 13231 Austin, TX 78711-3231	<b>Telephone:</b> 512-463-7847 <b>Fax:</b> 512-475-2053 <b>E-mail:</b> pedersen@twdb.state.tx.us
<b>Agency's Sunset Liaisons</b>	<b>Policy Contact:</b> Leonard A. Olson, Jr. Special Assistant to the Executive Administrator  <b>Administration Contact:</b> Paris Peden Deputy Executive Administrator for Administration and Support Services	same as above     same as above	<b>Telephone:</b> 512-463-7956 <b>Fax:</b> 512-475-2053 <b>E-mail:</b> lolson@twdb.state.tx.us  <b>Telephone:</b> 512-475-2073 <b>Fax:</b> 512-475-2053 <b>E-mail:</b> ppeden@twdb.state.tx.us

# **II History and Major Events**

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**Provide a timeline discussion of the agency's history, briefly describing the key events in the development of the agency.**

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## **TWDB History**

- 1904 A constitutional amendment was adopted authorizing the first public development of water resources.
- 1913 The 33rd Texas Legislature created the Board of Water Engineers to regulate appropriations of water.
- 1915 The Board of Water Engineers began a cooperative surface-water data collection program with the United States Geological Survey.
- 1953 The Thomas Committee recommended state financial assistance to local water projects, reorganization of the Board of Water Engineers, and preparation of a long-range water policy for the state.
- 1954 - 1956 Texas suffered the most severe drought in the state's history.
- 1957 The drought of the 1950's was broken by damaging floods.

The Texas Water Development Board (TWDB) was created by legislative act and constitutional amendment. The constitutional amendment, approved by Texas voters, authorized the TWDB to issue \$200 million in State of Texas General Obligation Water Development Bonds for the conservation and development of Texas' water resources through loans to political subdivisions.

- 1962 The Board of Water Engineers was reorganized, renamed the Texas Water Commission, and given specific responsibilities for water planning (57th Texas Legislature).

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**1957  
The Texas Water  
Development Board  
(TWDB) was created by  
legislative act and  
constitutional  
amendment.**

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- 1962 Texas voters approved use of \$200 million in previously authorized State of Texas General Obligation Water Development bonds to allow the state to acquire and develop storage facilities in reservoirs.
- 1965 The Texas Legislature restructured the state water agencies, transferred water resource planning functions to the TWDB, and renamed the Texas Water Commission to the Texas Water Resource Commission (TWRC).
- 1967 The TWDB initiated a cooperative program with the United States Geological Survey (USGS) to collect data on the estuaries of Texas.

The Texas Legislature mandated that the TWDB create and maintain the Texas Water-Oriented Data Bank (predecessor to Texas Natural Resources Information System).

- 1968 The first State Water Plan was adopted, and included a recommendation for moving water from the Mississippi River into Texas.
- 1969 The Texas Water Quality Act was amended by the 61st Texas Legislature to create the Texas Water Quality Board and to develop a system of statewide water quality control.
- 1971 Constitutional amendment authorized the TWDB to issue \$100 million in bonds for water quality enhancement.
- 1972 The Texas Natural Resources Information System (TNRIS) was created, succeeding the Texas Water-Oriented Data Bank, and incorporating a centralized repository and clearinghouse of maps, census information, and water-related information.
- 1972 - 1975 The TWDB initiated a number of regional studies of water and related land resources in areas of Texas faced with severe water problems.
- 1975 The TWDB was directed by the Texas Legislature to carry out comprehensive studies of the relationships between freshwater inflows and the biological productivity of Texas bays and estuaries.
- 1977 The three water agencies existing at the time, the Texas Water Development Board, the Texas Water Rights Commission, and the Water Quality Board, were

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**1977**  
**The three water agencies existing at the time, the Texas Water Development Board, the Texas Water Rights Commission, and the Water Quality Board, were combined by the Texas Legislature, creating the Texas Department of Water Resources (TDWR).**

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combined by the Texas Legislature, creating the Texas Department of Water Resources (TDWR). This new single agency was responsible for developing Texas' water resources, maintaining the quality of water, and assuring equitable distribution of water rights.

- 1978 The Environmental Protection Agency delegated the EPA Construction Grant Program project administration duties to the Texas Department of Water Resources. This program ultimately awarded approximately \$1.7 billion in grants to Texas communities.
- 1979 A new executive order designated the TDWR as the state agency responsible for coordinating all water quality management planning in the state.
- 1981 Amendments to the federal Clean Water Act placed responsibility in the hands of the TDWR for coordination and administration of area-wide management planning through federal grants.
- 1985 Sunset Legislation reorganized the Texas Department of Water Resources, splitting the agency into two separate agencies, the Texas Water Commission and the Texas Water Development Board (current agency). The TWDB was made responsible for long-range planning and water project financing.

The Texas Legislature established the Agricultural Trust Fund as an investment account to generate interest earnings for funding agricultural programs.

Constitutional amendments expanded state ownership authority to include regional water and wastewater treatments; provided the TWDB with additional bonding authority; extended the TWDB financial programs to water supply corporations, flood control projects, and agricultural water conservation.

- 1986 The Legislature authorized the TWDB to set up the Agricultural Water Conservation Fund, previously authorized by constitutional amendment, using bond proceeds to make loans to borrower and lender districts such as soil and water conservation districts, irrigation districts, and underground water conservation districts.
- 1987 The federal Clean Water Act amendments and associated state legislation brought about the phase-out of the EPA Construction Grant Program and created the Clean Water

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**1985  
Sunset Legislation  
reorganized the Texas  
Department of Water  
Resources, splitting  
the agency into two  
separate agencies, the  
Texas Water  
Commission and the  
Texas Water  
Development Board  
(current agency). The  
TWDB was made  
responsible for long-  
range planning and  
water project  
financing.**

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State Revolving Fund (CWSRF) program, which the TWDB then added to its portfolio of financial assistance programs.

1987 The TWDB and the Texas Parks and Wildlife Department were directed by Senate Bill 683 to jointly conduct studies of the effects of freshwater inflows on coastal bays and estuaries.

1989 The TWDB was the first agency in the nation to make a CWSRF loan commitment.

The Texas Legislature and voters of the state passed comprehensive legislation and constitutional amendments establishing the Economically Distressed Areas Program (EDAP) to be administered by the TWDB.

The TWDB began administering the Environmental Protection Agency (EPA)-funded Colonia Plumbing Loan Program (CPLP), providing for residential construction of adequate water supply and sewer service.

The TWDB sold its loan portfolio to the Texas Water Resources Finance Authority (TWRFA). Bond proceeds and investment earnings have been used to supplement TWDB funding sources.

1991- 1997 The TWDB provided financial and technical assistance for long-term water supply planning through the Trans-Texas Program.

1992 The TWDB provided financial assistance for the construction of a wastewater treatment plant in Nuevo Laredo, Mexico.

The TWDB's Hydrographic Reservoir Surveying Program began operations to measure reservoir storage capacity throughout the state.

The TWDB was allocated \$200 million of EPA-funded Colonia Wastewater Treatment Assistance Program (CWTAP) funds for providing wastewater service to counties within 100 kilometers of the international border.

The Texas Legislature directed the TWDB to establish the Texas Water Bank to facilitate the transfer, sale or lease of water and water rights throughout the state.

- 1996 Amendments to the federal Safe Drinking Water Act created a Drinking Water State Revolving Fund (DWSRF) program to be used to finance public water supply projects.

Severe drought revealed the limitations in accessing current water resources information across the state.

- 1997 The 1997 State Water Plan was adopted as a consensus effort by the TWDB, the Texas Parks and Wildlife Department and the Texas Natural Resource Conservation Commission.

The 75th Texas Legislature passed Senate Bill 1, changing the water planning process in Texas, charging local entities with preparing regional water plans every five years, and charging the TWDB with incorporating these plans into a comprehensive state water plan.

- Senate Bill 1 designated the TWDB as the lead agency to provide financial and technical assistance to regions to facilitate the development of regional water supply plans.
- The TWDB was authorized to use principal from the Agricultural Trust Fund as a revolving loan fund for agricultural water conservation projects.
- A “water trust” was established as part of the TWDB’s Texas Water Bank.
- Senate Bill 1 also established the Texas Strategic Mapping Program, to be managed by the TWDB.

Constitutional amendment authorized the TWDB to consolidate previously unissued, voter-approved General Obligation bond authorizations to create the Texas Water Development Fund II.

- As of July 1999, \$945.8 million in unissued Texas Water Development Fund II General Obligation bond authorizations remain for financing future construction of water and wastewater related projects.

The Governor named the TWDB to administer the Flood Mitigation Assistance (FMA) grant program in Texas and to serve as the point of contact for the State of Texas on behalf of the Federal Emergency Management Administration.

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1997 - 1998 The TWDB adopted rules, designated regional water planning areas and appointed initial coordinating bodies for Senate Bill 1 regional water planning efforts.

1998 The TWDB assisted in monitoring and responding to severe drought conditions in most of the state.

In response to high CWSRF loan demand, the TWDB established a priority rating system for allocating CWSRF funds.

The TWDB made its first DWSRF loan commitment.

The TWDB began providing financial and technical assistance to the Regional Water Planning Groups to facilitate development of their regional water plans.

1998 - 1999 The TWDB awarded \$20 million as grant assistance for regional water plan preparation.

1999 The TWDB provided emergency financial assistance for the interconnection of systems in the Lower Rio Grande Valley to ensure adequate provision of municipal water supplies during times of drought.

# III Policymaking Structure

## A. Please complete the following chart.

Pursuant to §§6.053 and 6.057, Texas Water Code, all TWDB Board members must be members of the general public and have no conflict of interest prohibited by law. They are all appointed by the Governor and serve staggered six year terms.

## B. How is the chair of the policymaking body appointed?

The chair is appointed by and serves at the will of the Governor. The vice-chair is elected by the members of the Board every two years.

<b>Member Name Term/Appointment Date</b>	<b>Address</b>	<b>Telephone &amp; Fax Number E-mail Address</b>
<b>Elaine M. Barron</b> Public Member Appointed 1/31/94 Expires 12/31/99	900 Cherry Hill Lane El Paso, Texas 79912	(915) 592-0088 (915) 592-7705 fax
<b>Charles L. Geren</b> Public Member Appointed 10/19/94 Expires 12/31/99	The Railhead Restaurant 2900 Montgomery Fort Worth, Texas 76107	(817) 738-9808 (817) 732-4059 fax cgeren@twddb.state.tx.us
<b>William B. Madden</b> Public Member, Chairman Appointed 6/28/90 Appointed Chairman 2/8/95 Reappointed 3/8/96 Expires 12/31/2001	Madden Securities Corp. 1901 N. Akard Dallas, Texas 75201	(214) 855-5335 (214) 855-5024 fax wmadden@twddb.state.tx.us
<b>Noe Fernandez</b> Public Member, Vice-Chairman Appointed 3/19/90 Reappointed 3/8/96 Expires 12/31/2001	Dos Rios Textiles Corp. 1510 Beaumont McAllen, Texas 78501	(956) 686-0291 (956) 686-7960 fax nfernand@twddb.state.tx.us
<b>Jack Hunt</b> Public Member Appointed 1/20/98 Expires 12/31/2003	King Ranch, Inc. 1415 Louisiana, Suite 2300 Houston, Texas 77002	(713) 752-5763 (713) 752-0101 fax
<b>Wales H. Madden, Jr.</b> Public Member Appointed 1/20/98 Expires 12/31/2003	724 South Polk, Suite 510 Amarillo, Texas 79101  P.O. Box 15288 Amarillo, Texas 79105-5288	(806) 374-2422 (806) 379-7049 fax

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## **C. Describe the primary role and responsibilities of the policymaking body.**

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The TWDB is the state agency with primary responsibility for conducting water planning and administering water financing (Water Code, Section 6.011). The six member Board advises and authorizes TWDB proceedings.

### **Chief Board Responsibilities:**

1. Provide policy direction for the agency;
2. Adopt agency rules;
3. Adopt and amend the State Water Plan;
4. Approve the regional water plans, including resolving disputes between regional plans;
5. Approve all applications for financial assistance, including corollary approvals such as amendments and time extensions;
6. Authorize the issuance of all TWDB bonds;
7. Approve the agency's Strategic Plan;
8. Approve appropriations request transmitted to the Texas Legislature;
9. Appoint and evaluate the TWDB Executive Administrator;
10. Approve any intra-agency agreements or contracts; and
11. Approve all other contracts.

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## **D. List any special circumstances or unique features about the policymaking body or its responsibilities.**

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The Texas Water Development Board is created by Article III, Section 49-c of the Texas Constitution. Most state agencies are created by statute. The Constitutional acknowledgment of the agency's existence provides assurances to bondholders regarding the continued administration of the agency's bonds.

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**E. In general, how often does the policymaking body meet? How many times did it meet in FY 1998? In FY 1999?**

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The Board meets monthly, usually in Austin, Texas.

In fiscal year 1998, there were 12 Board meetings and in fiscal year 1999 there were 13 Board meetings.

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**F. What type of training do the agency's policymaking body members receive?**

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The Governor's Office sponsors a one-day seminar for all new appointees, which covers legal and ethics issues, budgeting, and media relations. All current appointees have attended this training.

The TWDB staff provide new members with written information and briefings on the TWDB's legal ethics and budget issues; agency organization, operating guidelines, procedures, rules, strategic planning, and performance measures; information on water resources planning and financial assistance project status; and current legislative appropriations and relevant bills.

Additionally, Board members are required by the Public Funds Investment Act (Government Code, Chapter 2256) to complete an investment training session within six months of their appointment to office. This may be accomplished through an investment training video approved by the Texas Higher Education Coordinating Board.

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**Board members are required by the Public Funds Investment Act (Government Code, Chapter 2256) to complete an investment training session within six months of their appointment to office.**

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**G. Does the agency have policies that describe the respective roles of the policymaking body and agency staff in running the agency? If so, please describe these policies.**

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The designation of duties for the Executive Administrator and the Board are found throughout the TWDB's rules and in the statutes creating the TWDB's programs.

The Board has adopted rules at 31 TAC Chapter 353 that address meetings, public participation, the TWDB seal, minutes, delegation of hearing responsibility, public records, rulemaking procedures, and relationships between the TWDB and donors, including acceptance of gifts and grants.

Texas Water Code Chapter 6 also provides for delineation of these duties by stating specific duties of the Executive Administrator and of the Board. For instance, the Executive Administrator is authorized to propose rules to the Board (§6.101), and the Board is responsible for adopting rules; the Executive Administrator is responsible for managing the administrative affairs of the Board under the general supervision and direction of the Board (§§6.181, 16.011); the Board approves appropriations requests to the Legislature (§6.1011) which are prepared by the Executive Administrator; the Executive Administrator employs personnel, and, with approval of the Board, organizes and reorganizes the administrative sections and divisions of the agency (§§6.184, 16.011); and the Executive Administrator negotiates contracts, and, with the consent of the Board, enters into contracts (§6.190).

Chapters 15, 16 and 17 of the Texas Water Code also define various roles and responsibilities for the Executive Administrator and the Board. For instance, the Executive Administrator should gather technical data and provide technical assistance to political subdivisions and to Regional Water Planning Groups in the development of regional water plans. The Board has final approval over the regional and State Water Plans. The Executive Administrator must provide a technical review of any applications for financial assistance; the Board retains the right to authorize such assistance.

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**H. If the policymaking body uses subcommittees or advisory committees to carry out its duties, please fill in the following chart.**

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<b>Texas Water Development Board Subcommittees and Advisory Committees</b>			
<b>Name of Subcommittee or Advisory Committee</b>	<b>Size/Composition/How Members are Appointed</b>	<b>Purpose/Duties</b>	<b>Legal Basis for Committee</b>
Finance Committee	Three members of the Board appointed by the Board Chairman	Guides/advises on policy issues relevant to TWDB financial programs, and reviews loan and grant application	N/A
Audit Committee	Three members of the Board appointed by the Board Chairman	Provides oversight in matters relating to financial reporting, auditing and internal control	N/A

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## **I. How does the policymaking body obtain input from the public regarding issues under the jurisdiction of the agency? How is this input incorporated into the operations of the agency?**

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The six member Board invites the public to present information regarding specific items on the Board agenda. Public participation is governed by 31 TAC §353.4 which is comprised of the administration of oaths, the order of presentation, the ability of the Board to limit or exclude cumulative or repetitious presentations, and any filings of briefs or other written statements.

If members of the public, including representatives of political subdivisions, choose to provide written comments on items before the Board, the comments are submitted to the Board before the items are considered. Because the agency does not conduct contested case hearings, the public is not prohibited from communicating directly with Board members regarding general matters or specific items within the Board's jurisdiction.

The Executive Administrator may hold meetings with various members of the public to discuss items on the Board agenda before making recommendations to the Board itself. Public comments on rules are summarized for Board members before the Board is asked to adopt such rules, and specific language is adopted by the Board members addressing these public comments. Rule hearings also may be held at the discretion of the TWDB, or upon specific public request, to allow for public input on proposed rules for adoption.

Additionally, the TWDB notifies any person who has previously informed the Executive Administrator of an interest in any agenda item (31 TAC §353.12); notice is also provided to political subdivisions relating to various planning grant applications (31 TAC Chapter 355) and public hearings are conducted to review the Intended Use Plans and priority ranking systems for the State Revolving Funds.

Public hearings or meetings, with appropriate notice, are required in the regional water planning process by Water Code §16.054 and 31 TAC §357.12. All public comments are summarized by a Regional Water Planning Group before the group's plan is submitted to the Board for approval (31 TAC §357.10). The Board, although not statutorily required to do so, has also adopted rules to provide public notice and conduct public hearings before adoption of the State Water Plan (31 TAC §358.3).

The Board typically holds at least one of its monthly meetings each year in a town other than Austin to facilitate attendance at Board meetings by persons outside the Austin area.

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**The TWDB staff interact directly with the public on a daily basis and provide public feedback to the Board on relevant issues. Both the Board and the Executive Administrator encourage staff to obtain input from customers and stakeholders regarding decisions pending before the agency.**

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# IV Funding

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## **A. Describe the agency's process for determining budgetary needs and priorities.**

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The TWDB's budgeting cycle follows several steps. The first step is the completion of the Agency Strategic Plan, which is completed around April of even numbered years. Once the strategic plan is approved by the Legislative Budget Board (LBB), the agency begins the process of completing the Legislative Appropriations Request (LAR).

The LAR process starts with each of the agency's four offices reviewing their funding needs as they relate to the agency strategic plan and offering their additional needs for funding above agency baseline amounts. The TWDB does not directly solicit the public in determining funding needs, rather it assesses what future funding is needed based on the offices' interaction with the public and public entities throughout the biennium.

After the offices review their funding needs, executive management and the agency's Board members participate in a legislative workshop in June or early July to prioritize legislative initiatives and exceptional funding items that will be placed in the LAR. The LAR is then approved by the Board members at the July meeting.

The agency's internal operating budget cycle begins in May. Each office receives an amount as appropriated in the most recent Appropriations Bill pattern. If an office needs more funding than was appropriated in the bill, the office justifies the additional funding request and brings the request before the TWDB's executive management, who makes the final decision. The operating budget is approved by August 15 of each year. After a legislative session, the internal operating budget process begins in June of that year.

**B. Show the agency's sources of revenue. Please include all local, state, and federal sources.**

<b>Texas Water Development Board Sources of Revenue - Fiscal Year 1998 (Actual) Operating Budget Revenue</b>	
<b>Source</b>	<b>Amount</b>
General Revenue - Texas Legislative Appropriations	\$10,326,350
Earned Federal Funds	1,037,200
Appropriated Receipts	3,126,247
Water Assistance Fund (480)	1,821,072
Agricultural Trust Fund (562)	165,613
General Revenue - Soil and Water Conservation Fund (563)	80,421
Interagency Contracts	126,578
Federal Revenue	3,566,565
<b>Total</b>	<b>\$20,250,046</b>

<b>Texas Water Development Board Sources of Revenue - Fiscal Year 1998 (Actual) Program Revenue</b>	
<b>Source</b>	<b>Amount</b>
Federal Funds	\$73,611,474
Principle and Interest on Bonds/Loans to Political Subdivisions	121,559,781
Interest on Deposits	21,163,224
Interest on Investments	22,156,926
Interest on Pilot Loan Programs	6,683
Interest on Storage Facility Sales	737,667
Interest on Long Term Advances	7,921,754
Net Increase in Fair Value of Investments	165,048
Sale of Goods and Services	299,421
Gain on Sale of Investments	1,787
Other Miscellaneous Revenue	124,543
<b>Total</b>	<b>\$247,748,308</b>

**C. If you receive funds from multiple federal programs, show the types of federal funding sources.**

<b>Texas Water Development Board Federal Funds — Fiscal Year 1998 (Actual)</b>				
<b>Type of Fund</b>	<b>State/Federal Match Ratio</b>	<b>State Share</b>	<b>Federal Share</b>	<b>Total Funding</b>
Environmental Protection Agency (EPA) Capitalization Grants-State Revolving Fund (SRF)	16.67/83.33	\$11,076,583	\$55,603,111	\$66,679,694
EPA Colonia Plumbing Loan Program	0/100	0	361,377	361,377
EPA Construction Management Assistance	0/100	0	460,564	460,564
EPA Capitalization Grant for Drinking Water SRF	16.67/83.33	211,996	1,059,724	1,271,720
EPA Colonia Wastewater Treatment Assistance Program I	50/50	19,275,970	19,275,970	38,551,940
EPA Colonia Assistance Management Program	5/95	6,578	124,994	131,572
EPA Transboundary Aquifer	65.73/34.27	185,056	96,484	281,540
EPA Texas/Mexico Borderlands	11.48/88.52	9,095	70,134	79,229
Environmental Education Grant Program	20.21/79.79	3,102	12,180	15,282
United States Department of Interior Bureau of Reclamation Wetlands Restorations and Enhancement	0/100	0	113,501	113,501
<b>TOTAL</b>		<b>\$30,768,380</b>	<b>\$77,178,039</b>	<b>\$107,946,419</b>

## **D. Show the Agency's Expenditures by Strategy.**

### **Notes regarding Expenditures by Strategy - Fiscal Year 1998:**

Strategies were redefined in Fiscal Year 1999, so goals and strategies listed in this chart do not directly correspond to current goals and strategies outlined in this document.

Most water and wastewater infrastructure financial assistance, including all bond proceeds, is not appropriated to the agency through strategies. Thus, these funds are not reflected in this chart outlining Expenditures by Strategy. Additionally, these appropriations represent the vast majority of the funds the agency manages in a given fiscal year.

<b>Texas Water Development Board Expenditures by Strategy — Fiscal Year 1998 (Actual)</b>	
<b>Goal/Strategy</b>	<b>Amount</b>
<b>Goal A: Water Resource Planning</b>	<b>Total Goal A: \$11,367,735</b>
Data Collection	3,779,518
Long-Range Planning	2,683,403
Texas Natural Resources Information System	2,972,910
Regional Planning	1,234,945
Multi-Year and Regional Planning	90,063
Conservation Assistance	606,896
<b>Goal B: Financing Water-Related Projects</b>	<b>Total Goal B: \$6,195,622</b>
Financial Assistance	4,476,283
Economically Distressed Areas Program	1,719,339
<b>Goal C: Indirect Administration</b>	<b>Total Goal C: \$2,686,689</b>
Central Administration	1,579,053
Information Resources	479,443
Other Support Services	628,193
<b>GRAND TOTAL:</b>	<b>\$20,250,046</b>

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**E. Show the agency's expenditures and Full Time Employees (FTEs) by program.**

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<b>Texas Water Development Board Expenditures and Full Time Employees (FTEs) by Office — Fiscal Year 1998 (Actual)</b>					
<b>Program</b>	<b>Budgeted FTEs FY 1998</b>	<b>Actual FTEs as of August 31, 1998</b>	<b>Federal Funds Expended</b>	<b>State Funds Expended</b>	<b>Total Actual Expenditures</b>
Water Planning	100	96	\$ 174,285	\$ 7,068,469	\$7,242,754
Financial and Construction Assistance	122	119	3,214,499	2,981,123	6,195,622
Resource Information	38.5	37	177,781	3,947,200	4,124,981
Indirect Administration	53	51	0	2,686,689	2,686,689
<b>TOTAL</b>	<b>313.5</b>	<b>303.0</b>	<b>\$3,566,565</b>	<b>\$16,683,481</b>	<b>\$20,250,046</b>

**F. If applicable, please provide information on fees collected by the agency.**

<b>Texas Water Development Board                      Fee Revenue and Statutory Fee Levels — Fiscal Year 1998</b>				
<b>Description/                      Program/                      Statutory Citation</b>	<b>Current Fee/                      Statutory                      Maximum</b>	<b>Number                      of                      Persons                      or                      Entities                      Paying                      Fee</b>	<b>Fee Revenue</b>	<b>Where Fee Revenue                      is Deposited</b>
Statutory Fee to Recover Administrative Costs for the State Revolving Fund (SRF) Programs - Section 15.609 Water Code	1.85% of loan for Clean Water SRF and 2.25% of loan for Drinking Water SRF	52	\$8,191,794	SRF Recovery Fund - Treasury Safekeeping Trust
Open Record Request Fees	Various fees set by General Services Commission	31	\$120,658	Various accounts according to the Division which filled records request.
Hydrographic Survey Fees	Fees adequate to pay program costs *based on Lake Area Fixed Rate Structure (see Attachment 10-A)	8	\$70,545	Water Assistance Fund
Water Bank Fee	Not to exceed \$500 per transfer from bank (\$1 per acre-foot up to \$500, \$10 minimum) *amount of fee to be amended in 1999	1	\$396	Water Bank Account of Water Assistance Fund

Note: The 76th Texas Legislature authorized the Texas Water Development Board to impose a cost recovery fee on State Participation projects. Proposed rules were authorized for publication at the July 1999 Board meeting, but the fees will not be effective until Fiscal Year 2000.

## G. Purchases from Historically Underutilized Businesses (HUBs)

Texas Water Development Board Purchases from Historically Underutilized Businesses (HUBs)				
FISCAL YEAR 1996				
Category	Total \$ Spent	Total HUB \$ Spent	Percent	Statewide Goal
Heavy Construction	\$0	\$0	N/A	11.9%
Building Construction	\$0	\$0	N/A	26.1%
Special Trade	\$40	\$0	0%	57.2%
Professional Services	\$2,398,384	\$341,821	14.2%	20.0%
Other Services	\$970,622	\$59,585	6.2%	33.0%
Commodities	\$818,609	\$260,351	31.7%	12.6%
<b>TOTAL</b>	<b>\$4,187,655</b>	<b>\$661,757</b>	<b>15.8%</b>	

FISCAL YEAR 1997				
Category	Total \$ Spent	Total HUB \$ Spent	Percent	Statewide Goal
Heavy Construction	\$0	\$0	N/A	11.9%
Building Construction	\$29,000	\$29,000	100%	26.1%
Special Trade	\$0	\$0	N/A	57.2%
Professional Services	\$2,664,866	\$343,125	12.8%	20.0%
Other Services	\$898,437	\$64,390	7.2%	33.0%
Commodities	\$978,021	\$381,004	39%	12.6%
<b>TOTAL</b>	<b>\$4,570,324</b>	<b>\$817,519</b>	<b>17.9%</b>	

FISCAL YEAR 1998				
Category	Total \$ Spent	Total HUB \$ Spent	Percent	Statewide Goal
Heavy Construction	\$0	\$0	N/A	11.9%
Building Construction	\$0	\$0	N/A	26.1%
Special Trade	\$954	\$954	100%	57.2%
Professional Services	*\$733,893	*\$101	.13%	20.0%
Other Services	\$606,417	\$85,195	14%	33.0%
Commodities	\$946,708	\$569,145	60.2%	12.6%
<b>TOTAL</b>	<b>\$2,287,972</b>	<b>\$655,395</b>	<b>28.6%</b>	

\*Amounts do not include the fiscal year 1998 underwriter management fees and sales commissions' fees that were distributed to HUB firms. The TWDB paid \$3,344,288 in these fees; \$214,000 was distributed to HUBs.

## H. Does the agency have a Historically Underutilized Businesses (HUB) policy? How does the agency address performance shortfalls related to the policy?

The TWDB has created many opportunities over the years to include HUB vendors in routine purchases and throughout the bond distribution and Bond Counsel processes. The TWDB HUB Program is committed to promoting HUB participation and utilization.

HUB vendors are given the opportunity to participate in all procurement opportunities (except for emergency and sole-source purchases) regardless of the dollar amount. All agency purchase orders and/or contracts are awarded to the firm or vendor that offers the best quality, lowest cost for the agency.

HUB participation opportunities are tracked and reviewed on a weekly basis. In instances in which HUB participation is low, initiatives are implemented to assist in increasing HUB participation and utilization.

For example, the TWDB ensures that the General Services Commission's Centralized Master Bidders List (CMBL) is utilized for all procurement opportunities. This list is used to identify Certified HUB Vendors. Whenever possible, the TWDB also ensures that larger procurement opportunities are divided or split into several smaller expenditures in order to provide more opportunities for HUB vendor participation. In addition, the TWDB assures that subcontracting opportunities are available for all service contracts. This practice is currently being used in the Bond Sale and Bond Counsel processes. These practices have proven effective for the TWDB, and have increased HUB participation.

External factors also affect the TWDB's HUB participation performance. The majority of shortfalls in certain procurement categories are simply due to a lack of available HUB vendors to provide the requested goods or services. Due to the TWDB's unique business, the availability of HUB vendors for procurement opportunities is limited. Several of the TWDB's activities require extremely specific equipment and services that are not offered by HUB Vendors. The TWDB has highlighted this issue to both the General Services Commission and the Texas Legislature in its current reports and presentations to committees.

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# V Organization

**A. Please fill in the chart below. If applicable, list field or regional offices.**

<b>Texas Water Development Board Full Time Employees (FTEs) by Location — Fiscal Year 1998</b>			
<b>Headquarters (HQ), Region, or Field Office</b>	<b>Location</b>	<b>Number of Budgeted FTEs, FY 1998</b>	<b>Number of Actual FTEs as of August 31, 1998</b>
Stephen F. Austin Building, HQ	Austin	290.5	280
Region 1, (Field Office)	Mesquite	5	5
Region 2, (Field Office)	Houston	7	7
Region 3, (Field Office)	Harlingen	4	4
Region 4, (Field Office)	El Paso	1	1
Region 5, (Field Office)	San Antonio	1	1
Materials Lab	Austin	5	5
<b>TOTAL</b>		<b>313.5</b>	<b>303</b>

**B. What was the agency's Full Time Employee (FTE) cap for FY 1998?**

The Texas Water Development Board's FTE cap was 313.5 for FY 1998.

**C. How many temporary or contract employees did the agency have as of August 31, 1998?**

The Texas Water Development Board had nine temporary/contract employees as of August 31, 1998.

**D. Please fill in the chart below.**

Texas Water Development Board Equal Employment Opportunity Statistics							
FISCAL YEAR 1996							
Job Category	Total Positions	Minority Workforce Percentages					
		Black		Hispanic		Female	
		Agency	Civilian Labor Force %	Agency	Civilian Labor Force %	Agency	Civilian Labor Force %
<b>Officials/Administration</b>	19	5%	5%	16%	8%	26%	26%
<b>Professional</b>	182	2%	7%	14%	7%	30%	44%
<b>Technical</b>	39	5%	13%	15%	14%	21%	41%
<b>Protective Services</b>	N/A	N/A	13%	N/A	18%	N/A	15%
<b>Para-Professionals</b>	9	11%	25%	0%	30%	100%	55%
<b>Administrative Support</b>	26	11%	16%	27%	17%	88%	84%
<b>Skilled Craft</b>	N/A	N/A	11%	N/A	20%	N/A	8%
<b>Service/Maintenance</b>	N/A	N/A	19%	N/A	32%	N/A	27%

FISCAL YEAR 1997							
Job Category	Total Positions	Minority Workforce Percentages					
		Black		Hispanic		Female	
		Agency	Civilian Labor Force %	Agency	Civilian Labor Force %	Agency	Civilian Labor Force %
<b>Officials/Administration</b>	27	0%	5%	11%	8%	19%	26%
<b>Professional</b>	183	4.5%	7%	14%	7%	32%	44%
<b>Technical</b>	36	6%	13%	22%	14%	25%	41%
<b>Protective Services</b>	N/A	N/A	13%	N/A	18%	N/A	15%
<b>Para-Professionals</b>	11	9%	25%	36%	30%	73%	55%
<b>Administrative Support</b>	16	19%	16%	19%	17%	88%	84%
<b>Skilled Craft</b>	N/A	N/A	11%	N/A	20%	N/A	8%
<b>Service/Maintenance</b>	N/A	N/A	19%	N/A	32%	N/A	27%

<b>Texas Water Development Board Equal Employment Opportunity Statistics (continued)</b>							
<b>FISCAL YEAR 1998 *</b>							
<b>Job Category</b>	<b>Total Positions</b>	<b>Minority Workforce Percentages</b>					
		<b>Black</b>		<b>Hispanic</b>		<b>Female</b>	
		<b>Agency</b>	<b>Civilian Labor Force %</b>	<b>Agency</b>	<b>Civilian Labor Force %</b>	<b>Agency</b>	<b>Civilian Labor Force %</b>
<b>Officials/Administration</b>	28	4%	5%	18%	8%	21%	26%
<b>Professional</b>	171	4%	7%	11%	7%	32%	44%
<b>Technical</b>	47	9%	13%	28%	14%	30%	41%
<b>Protective Services</b>	N/A	N/A	13%	N/A	18%	N/A	15%
<b>Para-Professionals</b>	22	9%	25%	32%	30%	59%	55%
<b>Administrative Support</b>	32	6%	16%	25%	17%	72%	84%
<b>Skilled Craft</b>	3	0%	11%	0%	20%	0%	8%
<b>Service/Maintenance</b>	N/A	N/A	19%	N/A	32%	N/A	27%

\* The 1998 data reported in the chart above are not an accurate reflection of the agency's Equal Employment Opportunity statistics for this time period due to the fact that some of the data had not been coded correctly onto the Uniform State Personnel System. Consequently, the TWDB recently audited and updated this information. The June 1999 chart reflects these changes.

<b>FISCAL YEAR 1999 THROUGH JUNE</b>							
<b>Job Category</b>	<b>Total Positions</b>	<b>Minority Workforce Percentages</b>					
		<b>Black</b>		<b>Hispanic</b>		<b>Female</b>	
		<b>Agency</b>	<b>Civilian Labor Force %</b>	<b>Agency</b>	<b>Civilian Labor Force %</b>	<b>Agency</b>	<b>Civilian Labor Force %</b>
<b>Officials/Administration</b>	31	3%	5%	16%	8%	23%	26%
<b>Professional</b>	209	5%	7%	17%	7%	30%	44%
<b>Technical</b>	24	17%	13%	33%	14%	33%	41%
<b>Protective Services</b>	N/A	N/A	13%	N/A	18%	N/A	15%
<b>Para-Professionals</b>	31	6%	25%	26%	30%	97%	55%
<b>Administrative Support</b>	6	17%	16%	17%	17%	67%	84%
<b>Skilled Craft</b>	N/A	N/A	11%	N/A	20%	N/A	8%
<b>Service/Maintenance</b>	N/A	N/A	19%	N/A	32%	N/A	27%

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**E. Does the agency have an Equal Employment Opportunity Policy? How does the agency address performance shortfalls related to the policy?**

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The Texas Water Development Board does have an Equal Employment Opportunity Policy which was revised and approved in August 1998. The policy details the agency's commitment to providing a workplace that encourages diversity. Major components of this policy address Recruitment and Selection Procedures; Upward Mobility; Disciplinary Procedures; and Appeal Procedures (to resolve complaints of employment discrimination). The Human Resources Director is responsible for administering this policy and providing regular reports to the Executive Administrator and Deputy Executive Administrators. The Human Resources Division is in the process of preparing a 1999 Annual Equal Employment Opportunity Progress Report, required by the Texas Department of Human Rights, that will include recommendations on how to address shortfalls in the levels of staffing that do not correspond to the current civilian labor force.

# VI Guide to Agency Programs

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## OVERVIEW

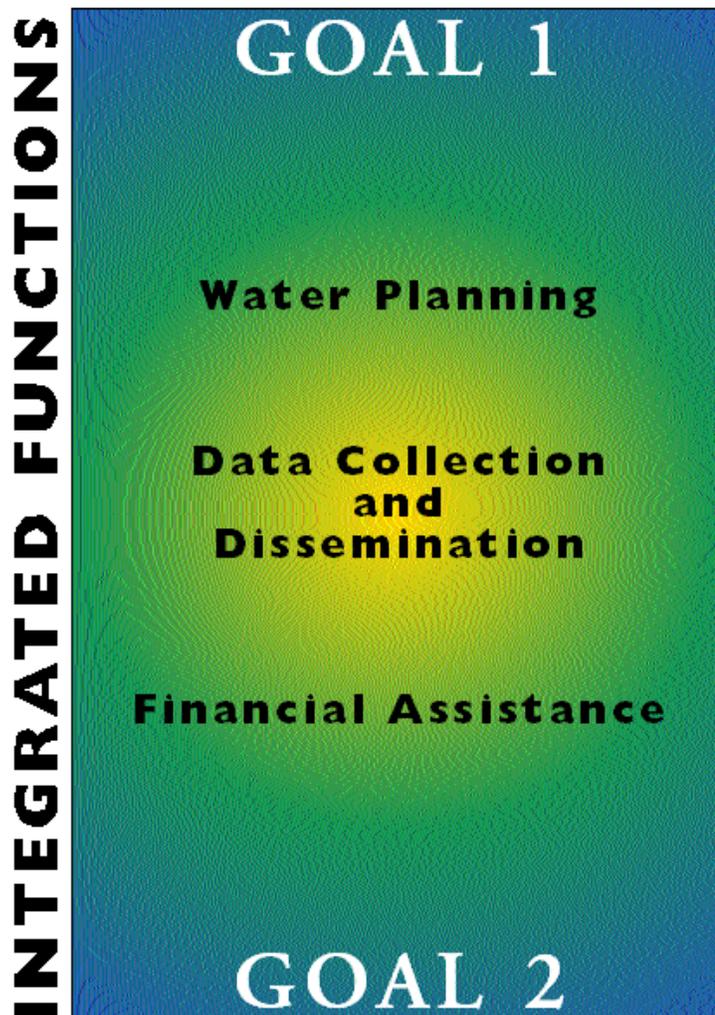
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This section describes how all of the Texas Water Development Board's programs and services fit together to achieve the two agency goals. We have taken the liberty of grouping the programs by goal and strategy, with graphics included to indicate the relationships.

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## TWDB OVERVIEW

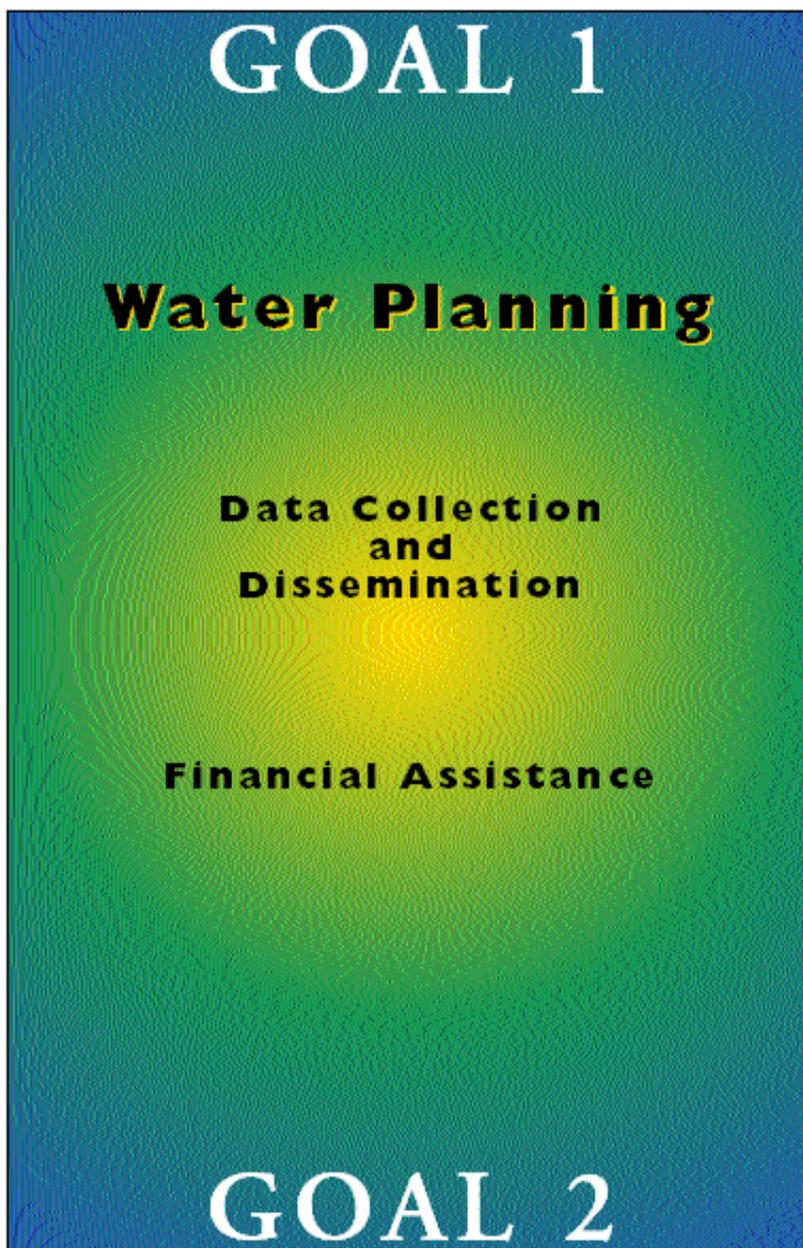
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## GOAL 1: Water Resources Planning

Plan and guide the conservation, orderly and cost-effective development, and best management of the state's water resources for the benefit of all Texans.

**INTEGRATED FUNCTIONS**



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### Strategies

**Water Planning Data  
(01-01-01)**

**Water Plan  
Development  
(01-01-02)**

**Water Conservation  
Assistance  
(01-02-02)**

**Research and Local  
Assistance  
(01-02-01)**

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## **WATER PLANNING DATA STRATEGY DESCRIPTION**

### **Purpose: Conduct statewide data collection and water resources evaluations**

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Water Planning Data is important to a variety of customers including state and federal agencies, Regional Water Planning Groups and political subdivisions. Data are collected for use in the planning and financing of the state's water resources. The TWDB's Water Planning Data strategy is supported by ongoing basic data collection programs designed to determine location, quantity and quality of groundwater and quantity of surface water resources across the state.

One continual challenge the state faces is accurately assessing the available groundwater and surface water supplies. In many areas, major water supply problems exist or are expected to occur because of declining groundwater levels. Unknown reservoir sedimentation rates and poor original capacity information are two factors affecting the validity of available surface water supply projections. The TWDB conducts local and regional groundwater studies, prepares reports on these studies, and maintains a cooperative program with the United States Geological Survey (USGS) to collect surface water data in the state.

The drought of 1996 highlighted limitations to accessing current water resources information across the state. As a result, the Texas Legislature provided funds for the TWDB to expand or initiate a number of statewide data collection and drought monitoring services to address these issues. TWDB staff from the Office of Planning and the Resource Information Office coordinate, integrate, and disseminate water planning data to all customers via a data network.

*Contact: Gary Powell*

*Location: Office of Planning*

*FTEs (Budgeted/Actual): 36.25/35.25*

<b>Water Planning Data</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Groundwater Data Collection</li> <li>• Surface Water Data Collection</li> <li>• Environmental Flow Needs</li> <li>• Lake Hydrographic Survey Program</li> <li>• Groundwater Test Hole Drilling and Logging</li> </ul>
<b>Creation Date</b>	Various types of data have been collected since 1915
<b>Purpose</b>	Collect data from groundwater and surface water supplies throughout the state to track any changes that may occur over time and determine the amount of water needed for environmental purposes
<b>Statutory Requirements</b>	Texas Water Code §11.1491, Chapter 15 (Subchapter M); Chapter 16 (Subchapter B), §16.058
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Measure groundwater quantity and quality</li> <li>• Determine water supply capacity in lakes and reservoirs</li> <li>• Collect data on stream flows, tide levels, lake levels, water-well levels, lake evaporation, and coastal hydrology</li> <li>• Determine bay and estuary conditions and instream flows necessary to support a sound ecological environment</li> <li>• Monitor drought conditions of the state's water resources</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• 16 Regional Water Planning Groups</li> <li>• Groundwater conservation districts</li> <li>• Political subdivisions</li> <li>• Local, state and federal government entities</li> <li>• Water providers and users</li> </ul>
<b>Eligibility Requirements</b>	None
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• General revenue and appropriated receipts</li> <li>• Research and Planning Fund (sub-account of the Water Assistance Fund)</li> <li>• USGS provides partial federal match for certain monitoring activities</li> <li>• Federal funds</li> <li>• Interagency contracts</li> </ul>
<b>Funding Adequacy</b>	<p><b>Current level of funding is below what is considered necessary for stream and tide gaging, water well levels, and lake levels</b></p> <ul style="list-style-type: none"> <li>• Funding is not sufficient to replace outdated equipment and instruments</li> <li>• Funding is not adequate for water quality information</li> <li>• Funding levels adequate to achieve other program objectives</li> </ul>
<b>Program Evaluation</b>	<p>As conditions, demands, and availability of water supplies continue to change, and with the planning requirement of Senate Bill 1, the need for accurate water planning data will remain high</p> <ul style="list-style-type: none"> <li>• The TWDB is unable to provide the level of data required</li> </ul>

## **The TWDB's Interagency Coordination on Water Planning Data**

The TWDB coordinates chiefly with the Texas Natural Resource Conservation Commission (TNRCC) and with the Texas Parks and Wildlife Department (TPWD) regarding specific water resources functions. The TWDB, the TNRCC, and the TPWD each have specific and unique roles for various Water Planning Data activities, as identified and assigned in the Texas Water Code. Coordination of these differing roles is effected through the September 1997 Memorandum of Agreement (MOA) between the three agencies, relating to Senate Bill 1, 75th Texas Legislative Session, and by other less formal arrangements.

The TWDB is the primary statewide groundwater and surface water flow data supplier and is in constant communication with other data collection agencies as well as the general public. The TWDB collaborates with the TNRCC and the TPWD on the following activities:

- Bay and estuary studies, used to determine freshwater inflow needs; and,
- The Gulf of Mexico Program, to improve the health of the Gulf of Mexico bays, estuaries, and coastal waters.

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and the TPWD, refer to the Water Planning Data Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies** page 64.

Additionally, the TWDB works on a smaller scale with numerous other agencies to perform various duties:

- The TWDB cooperates with the General Land Office in tracking oil spills;
- The United States Geological Survey collects water resources information, and the TWDB makes this data available to customers;
- The Groundwater Protection Committee, dedicated to protecting the groundwater resources of the state; and,
- The Texas Border Infrastructure Group, which develops a data collection and dissemination network.

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## **WATER PLAN DEVELOPMENT STRATEGY DESCRIPTION**

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### **Purpose: Coordinate regional water planning and prepare the State Water Plan**

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Until the passage of Senate Bill 1, the State Water Plan was developed by TWDB staff with input from local entities, state agencies and technical advisory committees. In 1992 the TWDB initiated a more formal and inclusive “consensus approach” and worked with hundreds of entities, including the TNRCC and the TPWD through formal agreement, to develop the 1997 State Water Plan.

The 75th Texas Legislature in 1997 mandated a regional water planning process, creating Regional Water Planning Groups (RWPGs) to assume increased responsibility for and participation in water planning. (See RWPG boundaries in graphic located in Section X, page 157)

The TWDB assists the RWPGs in their plan development by providing information regarding population projections, annual water use and water use demand projections, groundwater and surface water availability data, and analyses of socioeconomic impacts of water needs. The TWDB provides technical assistance to RWPGs to assist in water planning decisionmaking and policymaking. Additionally, grant funds are awarded to RWPGs to cover planning process costs. Regional water plans will be submitted to the TWDB for approval by January 5, 2001, and the TWDB will resolve any conflicts between plans and incorporate all the approved regional water plans into a State Water Plan by January 5, 2002.

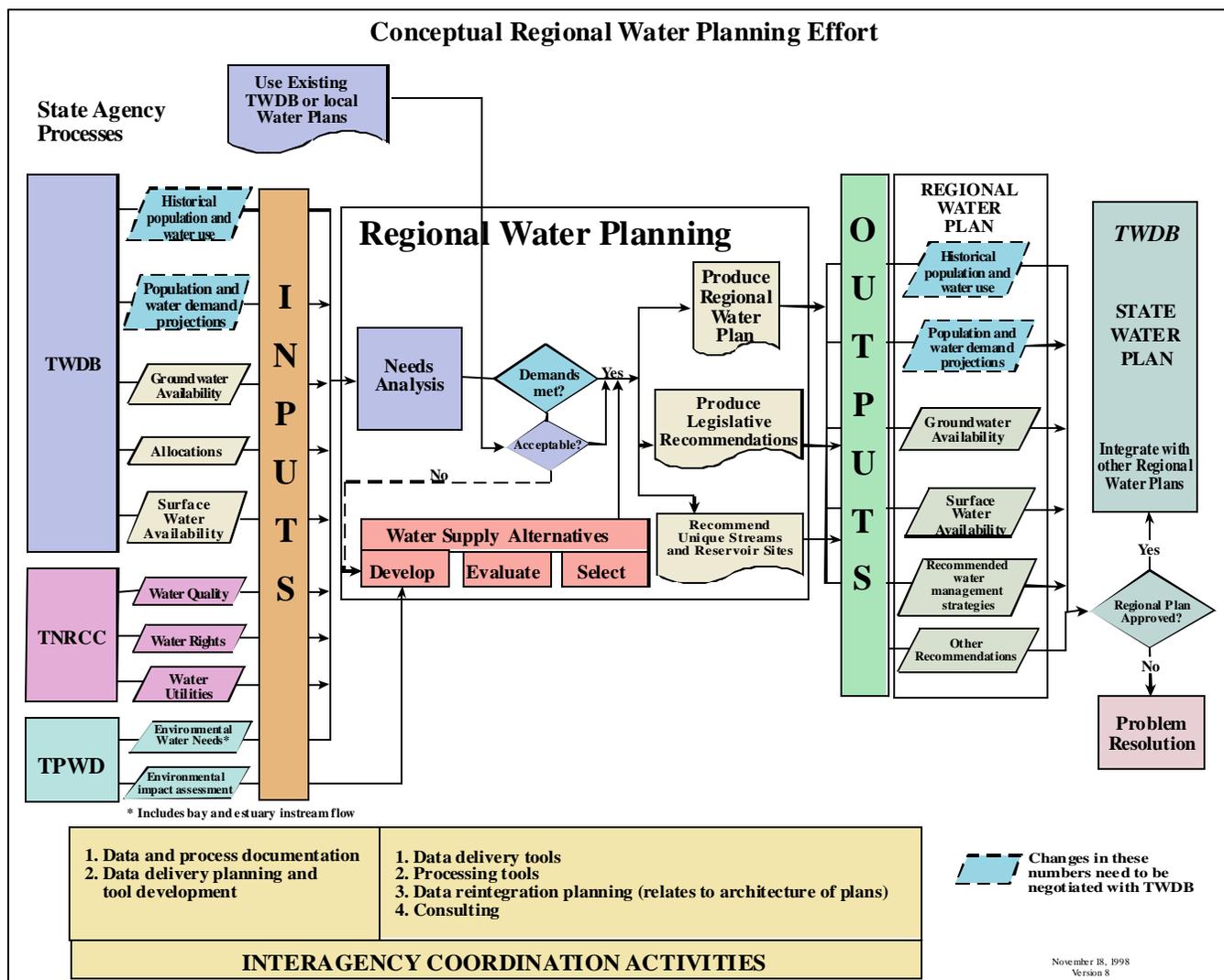
*Contact: Tommy Knowles*

*Location: Office of Planning*

*FTEs (Budgeted/Actual): 44.20/43.20*

<b>Water Plan Development</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Regional Planning / State Water Plan</li> <li>• Certification of Groundwater Districts</li> <li>• Socioeconomic Impacts of Water Needs</li> <li>• Water Use Data Collection</li> <li>• Statewide Population and Water Use</li> <li>• Groundwater Availability</li> <li>• Surface Water Availability</li> <li>• Water Availability Technical Assistance</li> <li>• Water Bank</li> <li>• Priority Groundwater Management Area Assessments</li> </ul>
<b>Creation Date</b>	1957
<b>Purpose</b>	Coordinate the regional planning process and prepare the State Water Plan by approving and incorporating regional water plans; and other duties to support water supply planning
<b>Statutory Requirements</b>	Texas Water Code §§6.011, 6.012, 15.4061, Chapter 15 (Subchapter K), Chapter 16 (Subchapters B, C, and D), §§ 35.007, 36.1071-.1073
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Develop the State Water Plan</li> <li>• Provide technical and financial assistance in the preparation of regional water supply plans and studies</li> <li>• Study the source, occurrence, and physical characteristics of the groundwater sources of the state and assess priority groundwater management areas</li> <li>• Investigate feasible methods to conserve, preserve, improve and supplement water supply</li> <li>• Evaluate the social and economic impacts of not meeting forecasted water needs</li> <li>• Compile annual municipal and industrial water use data, information regarding water sales and purchases among users and suppliers, and population and water demand projections</li> <li>• Operate the Texas Water Bank</li> <li>• Operate the Texas Water Trust to hold water rights dedicated to environmental needs</li> <li>• Determine groundwater and surface water availability and dependability for the state</li> <li>• Make population and water demand projections</li> <li>• Certify completeness of groundwater management plans</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• 16 Regional Water Planning Groups</li> <li>• Political subdivisions</li> <li>• Water user groups</li> <li>• Federal, state, regional, and local water resource agencies and service providers</li> </ul>
<b>Eligibility Requirements</b>	For regional water planning grant assistance, a political subdivision must be designated by an RWPG
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• General revenue</li> <li>• Appropriated receipts</li> <li>• Water Assistance Fund</li> </ul>
<b>Funding Adequacy</b>	<p><b>Current level of funding is below what is considered necessary for stream and tide gaging, water well levels, and lake levels</b></p> <ul style="list-style-type: none"> <li>• Funding is not sufficient to replace outdated equipment and instruments</li> <li>• Funding is not adequate for water quality information</li> <li>• Funding levels adequate to achieve other program objectives</li> </ul>
<b>Program Evaluation</b>	<p>As conditions, demands, and availability of water supplies continue to change, and with the planning requirement of Senate Bill 1, the need for accurate water planning data will remain high</p> <ul style="list-style-type: none"> <li>• The TWDB is unable to provide the level of data required</li> </ul>

## The TWDB's Interagency Coordination on Water Plan Development



Regional water planning was introduced with Senate Bill 1 to foster statewide collaboration among regions in creating the next revision of the State Water Plan. The TWDB has specific responsibilities for providing water planning data and technical assistance to the Regional Water Planning Groups (RWPGs). A Memorandum of Agreement (MOA) developed between the TWDB, the TNRCC, and the TPWD addresses how the agencies work together on the following issues:

- Senate Bill 1 state and regional planning;
- The Texas Water Bank and Trust, which offer an opportunity to acquire water rights by donation, lease, or purchase;
- Data management and integration, to improve interagency access to water resources data;

- Collection and information-sharing of water use data;
- Water Availability Models, used to analyze water supply management strategies and calculate unappropriated available water;
- Groundwater Availability Models, which provide all relevant data regarding groundwater availability in aquifers across Texas; and
- Technical assistance for the development of Groundwater Conservation District Management Plans.

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and the TPWD, refer to the Water Plan Development Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 65.

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## **WATER CONSERVATION ASSISTANCE STRATEGY DESCRIPTION**

### **Purpose: Promote water conservation and increased water-use efficiency**

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Projected total water use in Texas is expected to increase 17 percent from 1990 to 2050. This moderate growth in overall statewide water use masks the critical reality of rapidly increasing municipal and industrial water use by many of the state's urban areas. Municipal and industrial water use is anticipated to increase by more than 86 percent during the 1990-2050 planning horizon. The statewide population is projected to increase 116 percent over this time period. Consequently, the adoption of water conservation practices is essential in order to limit the growth in municipal and industrial water use.

According to the 1997 State Water Plan, over 80 percent of new water sources needed to meet demand in the year 2050 will come from water conservation and reuse. The TWDB offers water conservation assistance in the form of workshops and training programs on efficiency measures, and the establishment of water conservation education programs for political subdivisions, schools, water users, and the general public. Agricultural water conservation grants may be awarded to local water conservation and irrigation districts for purchasing equipment to evaluate or demonstrate efficient agricultural water uses; to measure, test and evaluate water quality and suitability of water supplies for agricultural uses; and to demonstrate and evaluate systems that prevent contamination of water from chemicals or other substances used in agriculture.

*Contact: Bill Hoffman*

*Location: Office of Planning*

*FTEs (Budgeted/Actual): 9/9*

<b>Water Conservation Assistance</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Agricultural Conservation Grants to Districts</li> <li>• Water Conservation Technical Assistance</li> <li>• Water Conservation Education and Public Information</li> <li>• Drought Response</li> </ul>
<b>Creation Date</b>	1985
<b>Purpose</b>	Encourage the implementation of water conservation and drought response practices by water providers and water users
<b>Statutory Requirements</b>	Texas Water Code §§15.106, 15.208, 15.431-.435, 15.471-.473, 15.607, 16.012, 16.015, 16.051, 16.053, 16.055, 17.125, 17.277
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Provide grant money for conservation equipment to assess water use efficiency and water quality</li> <li>• Offer technical assistance including on-farm irrigation system efficiency evaluations; water utility on-site surveys; staff training and loan of water audit and leak detection equipment; training workshops that assist entities in developing or improving conservation programs; and assistance to municipalities in developing a conservation plan as required to receive TWDB financing</li> <li>• Educate municipal, institutional, commercial, industrial, and agricultural water providers and users about water use efficiency, and alternative water resources such as desalting, reuse, rainwater harvesting, and other emerging technologies</li> <li>• Create water conservation literature for use in public information campaigns (ex. Water Smart Campaign)</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Political subdivisions</li> <li>• Local water resource agencies</li> <li>• Water providers and water users</li> </ul>
<b>Eligibility Requirements</b>	Grants may be made to eligible districts
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• General revenue</li> <li>• Agricultural Trust Fund</li> <li>• Appropriated receipts</li> <li>• Interagency contracts</li> </ul>
<b>Funding Adequacy</b>	<b>Proposals for funding have exceeded appropriations</b>
<b>Program Evaluation</b>	Necessity for program will continue to exist as the pursuit of water conservation is an ongoing need

### **The TWDB's Interagency Coordination on Water Conservation Assistance**

The TWDB provides technical assistance for the implementation of agricultural, commercial, industrial, institutional, and municipal water conservation practices by water providers and water users, including the public. Additionally, the TWDB works jointly with other state agencies to provide financial assistance in the form of loans and grants to private entities and political subdivisions.

For a more in-depth description of the interagency coordination efforts between the TWDB and other agencies, refer to the Water Conservation Assistance Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 68.

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## **RESEARCH AND LOCAL ASSISTANCE STRATEGY DESCRIPTION**

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**Purpose: Provide grants for practical research and feasibility studies to encourage cost-effective regional solutions to local community water, wastewater, and flood control infrastructure problems**

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Research and Local Assistance is an interrelated strategy that allows the TWDB to finance water-related research projects and engineering feasibility studies on regional water, wastewater, and flood control projects. Regional planning grants can be used to address future water needs and to develop information and recommendations regarding various alternatives, to enable local policymakers to evaluate the feasibility of regional projects and make informed and coordinated decisions relating to water supply, wastewater, and flood control problems. Grants are available to help communities pay a portion of the cost of developing regional facility plans for alternative water supply, wastewater treatment, and flood control projects.

To date, the TWDB has provided about \$13 million for regional water supply and wastewater facilities planning, \$20 million for research grants to enhance the proper management, development, and protection of Texas' water resources, and \$9 million for flood protection planning to encourage long-term, comprehensive mitigation planning.

Activities within this strategy require agency-wide collaboration to implement successfully. The TWDB's Office of Planning recommends research projects that will aid water service providers in improving their operations, and recommends water and wastewater infrastructure projects that encourage regional participation. Most of the applicants for Research and Local Assistance programs are also customers of other loan or planning programs, and therefore receive assistance from many divisions of the agency.

*Contact: Phyllis Thomas*

*Location: Office of Planning*

*FTEs (Budgeted/Actual): 8/8*

<b>Research and Local Assistance</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Water Research</li> <li>• Regional Water Supply and Wastewater Infrastructure Planning Financial Assistance</li> <li>• Federal Emergency Management Administration Grant Program</li> <li>• Flood Protection Planning Assistance</li> </ul>
<b>Creation Date</b>	Water research and planning grants were allocated beginning in 1981
<b>Purpose</b>	Provide funding for research and implementation of cost-effective measures to promote conservation and development of the state's water resources, and to reduce or eliminate the long-term risk of flooding
<b>Statutory Requirements</b>	Texas Water Code §§15.002, 15.401-.406; National Flood Insurance Act of 1968 §§1366 and 1367; 42 USC §§ 4104c and 4104d
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Recommend and manage water research, planning, and project grants</li> <li>• Aid in local and regional management of water resources</li> <li>• Provide input to water policy decisions by state and local decision-makers</li> <li>• Assist communities in developing flood protection plans for the entire watershed area</li> <li>• Assist in developing flood mitigation plans and carrying out project options</li> <li>• Provide federal grants to eligible political subdivisions to plan for and mitigate the impacts of flooding</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Political subdivisions</li> <li>• Federal, state, regional and local water resource agencies</li> <li>• Local and regional flood plain managers</li> <li>• State and local water policy decisionmakers</li> </ul>
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• Up to 100 percent grant funding may be awarded for water research based on the following evaluation criteria: description of project, responsiveness to Request For Proposal, approach to organizing and managing project, estimate of cost, estimated time to complete project, and ability to perform research</li> <li>• Up to 50 percent grant funding may be awarded to communities for regional water and wastewater facility planning (75 percent in cases of economically distressed areas and up to 100% in cases of demonstrated need) - see EDAP strategy under Goal 2</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• General revenue</li> <li>• General revenue appropriations riders for specific projects</li> <li>• Water Assistance Fund</li> <li>• Grant funds provided by the Federal Emergency Management Administration</li> </ul>
<b>Funding Adequacy</b>	<b>Current level of funding is acceptable to continue water-related grant programs;</b> will require additional appropriations of general revenue and federal funds to continue in next biennium
<b>Program Evaluation</b>	The need for this program will continue to exist as the planning and prevention of long-term risk of flood damage, and the pursuit of information and knowledge relating to water resources remains in demand

### **The TWDB's Interagency Coordination on Research and Local Assistance**

The TWDB is the Point-of-Contact (POC) for the Federal Emergency Management Administration's Flood Mitigation Assistance Grant Program, which awards funds for flood projects and planning grants and for TWDB technical assistance.

The TWDB also works with the TNRCC and the TPWD on water research and flood protection planning.

## GOAL 1: Water Resources Planning

Plan and guide the conservation, orderly and cost-effective development, and best management of the state's water resources for the benefit of all Texans

**INTEGRATED FUNCTIONS**

**GOAL 1**

**Water Planning**

**Data Collection  
and  
Dissemination**

**Financial Assistance**

**GOAL 2**

- 
- Strategies**
- 
- Texas Natural  
Resources Information  
System  
(01-01-03)**
- Water Resources  
Information  
(01-01-04)**
-

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## **TEXAS NATURAL RESOURCES INFORMATION SYSTEM (TNRIS) STRATEGY DESCRIPTION**

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### **Purpose: Facilitate public access to natural resources and census data**

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The TWDB's Texas Natural Resources Information System is a truly integrated function, supporting all of the TWDB's goals and strategies, as well as the activities of other agencies. This system facilitates the process of delivering information to TWDB staff, other state agencies, and external customers. The TNRIS, under the auspices of the TWDB, makes available to customers one of the state's most extensive collections of natural resources and socioeconomic data. The TNRIS is an invaluable clearinghouse and referral center that works collaboratively with the United States Geological Survey and with over 40 other federal, state, and local agencies. The TNRIS, through the Borderland Information Center, also coordinates with the Instituto Nacional de Estadística Geográfica e Informática (INEGA) to gather and distribute data for both sides of the United States-Mexico border.

Senate Bill 1 designated the TWDB as the lead agency for the Strategic Mapping Initiative (StratMap), which is housed within the TNRIS. StratMap is a multi-year, cost-sharing project designed to produce large-scale (1:24,000 scale) computerized base map information, documenting land features such as soils, elevation and hydrography (water features), and man-made attributes like political boundaries and roadways. Through StratMap, TNRIS staff will create a common frame of reference for mapping conducted throughout the state. Other agencies will be able to use StratMap's accepted base map to collectively input their data, making it easy to cross-reference different sets of information such as water supplies, highways, school districts, and pipelines. StratMap will be designed to provide the most comprehensive set of public domain digital geographic information in the United States.

*Contact: Roddy Seekins*

*Location: Resource Information Office*

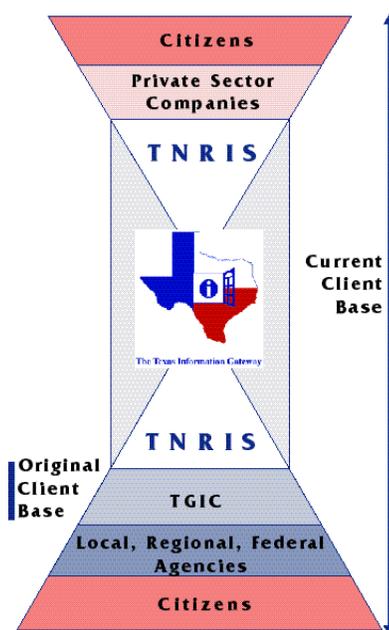
*FTEs (Budgeted/Actual): 13/13*

<b>Texas Natural Resources Information System (TNRIS)</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Strategic Mapping Initiative ( StratMap)</li> <li>• Research and Distribution Center</li> <li>• Borderland Information Center</li> <li>• Information Services</li> </ul>
<b>Creation Date</b>	1972
<b>Purpose</b>	Acquire and make available an extensive collection of natural resources and socioeconomic data, including a complete set of quadrangle map and aerial photos of the state; and facilitate access to this data via the Internet
<b>Statutory Requirements</b>	Texas Water Code §16.021
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Distribute information on groundwater and surface water reports, Texas Department of Transportation highway digital data, USGS maps, county grid maps, flood insurance rate maps, National Wetland Inventory maps, census data, and historic and current aerial photography</li> <li>• Digitize StratMap data layers for orthoimagery (aerial photos), elevation, soils, water features, transportation, and political boundaries</li> <li>• Provide public access to data through effective acquisition and dissemination of digital files</li> <li>• Facilitate access to natural resources and census information and promote data-sharing across both sides of the Texas-Mexico border</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Federal, state, and local government entities</li> <li>• Public and private industry</li> <li>• General public</li> </ul>
<b>Eligibility Requirements</b>	None
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• Federal government appropriations</li> <li>• General revenue</li> <li>• Cost recovery receipts</li> </ul>
<b>Funding Adequacy</b>	<p><b>Current level of funding is below what is considered necessary for effective data dissemination over the Internet</b></p> <ul style="list-style-type: none"> <li>• Funding is not adequate to maintain current web technology</li> <li>• Funding is not sufficient to support required employees or database consultants for digital data development and maintenance</li> </ul>
<b>Program Evaluation</b>	<p>This program is in high demand; it supports all areas of the agency with water-related information and receives high usage from external customers</p> <ul style="list-style-type: none"> <li>• Tens of thousands of data files are electronically downloaded each week through the TNRIS' Internet website</li> </ul>

## The TWDB's Interagency Coordination on the Texas Natural Resources Information System (TNRIS)

The TNRIS is exceptional in that it operates as an administrative unit of the TWDB, but also works on a daily basis with the 46 members of the Texas Geographic Information Council (TGIC) and is guided by their recommendations.

- The TNRIS, along with the Department of Information Resources, works under guidance from the TGIC to coordinate the use of geographic information and related technologies among federal, state, and other public sector entities.
- The TNRIS collaborates extensively with TGIC member agencies and actively participates and supports these other affiliated geographic information groups:
  - The Managers Committee of the TGIC, bringing together mid-level staffers who have a hands-on approach to geographic information;
  - The Texas Mapping Advisory Committee, which provides a forum for agencies and businesses to advise the TGIC on geographic information issues; and
  - The Texas Federal Geographic Information Workgroup, focused on the coordination of disaster response efforts, the reduction of redundant geographic information system data creation, and methods of sharing the production cost of base mapping data layers.



Additionally, the TNRIS collaborates with the TNRCC and the TPWD on the Texas Border Infrastructure Group (TBIG), to develop and implement a Border Activity Tracking system to facilitate project information-sharing.

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and the TPWD, refer to the TNRIS Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 69.

## Interstate Coordination

- The TNRIS, under the auspices of the TWDB, also assists in the development of geographic information and related technologies within and among the western states;
- The TWDB works with the Gulf of Mexico Program Data and Information Transfer Committee; and

- The TWDB collaborates on the Trans-Boundary Resource Inventory Program, providing access to information describing the natural resources of the United States/Mexico border region.

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## **WATER RESOURCES INFORMATION STRATEGY DESCRIPTION**

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**Purpose: Integrate, process and disseminate water resources information and infrastructure facility needs information (facilities to be developed to meet future water infrastructure needs)**

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This last strategy under Goal 1 is an essential, interrelated function. Water Resources Information is composed of two distinct programs with similar objectives. These programs collect and maintain information that supports both agency goals and all agency strategies.

The Water Information Network (WIN) Section serves both internal and external customers through the integration and distribution of water-related information. Data collected from the TWDB's Hydrologic and Environmental Monitoring Division are integrated into the groundwater database managed by the WIN, and made available to all customers. The WIN, working in coordination with federal, state and local governments, institutions of higher education and other interested parties, guides the development of a statewide network of cooperators that collect water-related information and make it available over the Internet.

The Facility Needs (FN) Section is responsible for the collection, management, and distribution of information describing the water and wastewater processing facilities in Texas. To efficiently manage this information, the TWDB has constructed and maintains a relational database management system which includes TWDB-funded projects, publicly owned water and wastewater facilities, other public drinking water systems, and economically distressed areas (all potential or current TWDB customers).

Periodically, reports are generated from this database to meet the requirements of the Environmental Protection Agency (EPA). The EPA requires that needs surveys be conducted to guide the distribution of federal funds to the state-operated revolving fund loan programs (see Statewide Financial Assistance strategy under Program Goal 2). Regional water facility capacities and needs are recorded through facility needs surveys to assist the state in obtaining sufficient funding to meet the demands of all Texans. The results of these surveys are used to determine Texas' share of federal appropriated funding. Since 1972, approximately \$2.5 billion has been allocated to Texas based on this process.

*Contact: Roddy Seekins*

*Location: Resource Information Office*

*FTEs (Budgeted/Actual): 13.5/13.5*

<b>Water Resources Information</b>	
<b>Programs</b>	<ul style="list-style-type: none"> <li>• Water Information Network</li> <li>• Facility Needs Survey Program</li> </ul>
<b>Creation Date</b>	Began to conduct facility needs surveys with the creation of the Clean Water Act in 1987; Water Information Network program created in response to Senate Bill 1, 1997
<b>Purpose</b>	Support the integration, processing, and distribution of water resources information and water-related infrastructure financing needs
<b>Statutory Requirements</b>	Texas Water Code §16.012; Federal Water Pollution Control Act (Section 516(b)); Safe Drinking Water Act Amendments of 1996 (Section 1452(h))
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Answer inquiries related to groundwater, surface water, evaporation, drought conditions, and water conservation</li> <li>• Provide maintenance and programming for water resource databases</li> <li>• Guide the development of a statewide water resource data integration and dissemination network</li> <li>• Facilitate access to basic data and summary information concerning water resources of the state, and provide guidance regarding data formats and descriptions required to access and understand Texas water resources data</li> <li>• Manage the state's participation and interests in national water infrastructure needs surveys</li> <li>• Forecast demand for the TWDB's federal financing programs</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Federal, state, and local government entities</li> <li>• Regional Water Planning Groups</li> <li>• Industry, consultants</li> <li>• Conservation districts</li> <li>• Financing program loan recipients</li> <li>• Investor-owned utilities</li> <li>• TWDB staff</li> <li>• The general public</li> </ul>
<b>Eligibility Requirements</b>	None
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• Federal government appropriations</li> <li>• General Revenue</li> </ul>
<b>Funding Adequacy</b>	<b>Current level of funding is appropriate</b>
<b>Program Evaluation</b>	<ul style="list-style-type: none"> <li>• The Water Information Network is in high demand; it supports all areas of the agency with water-related information and receives high usage from external customers</li> <li>• Strong demand for the TWDB's financing programs creates the need to continue participation in federal facility needs surveys; additionally, both internal and external customers frequently request facility needs information</li> </ul>

### **The TWDB's Interagency Coordination on Water Resources Information**

The TWDB coordinates with the TNRCC, the TPWD, and other agencies to deliver regional water planning data to the regions for their use in developing regional water plans.

The TWDB also acquires facility needs information from the TNRCC regarding the Drinking Water Needs Survey and the Clean Water Needs Survey.

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and the TPWD, refer to the Water Resources Information Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 71.

# SHARED JURISDICTION OF THE TEXAS WATER DEVELOPMENT BOARD AND OTHER AGENCIES

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## Goal 1 - Water Resources Planning

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The Texas Water Development Board (TWDB), the Texas Natural Resource Conservation Commission (TNRCC), and the Texas Parks and Wildlife Department (TPWD) each have specific and unique roles for various Water Resources Planning activities, as identified and assigned in the Texas Water Code, and coordinated through a September 1997 Memorandum of Agreement (MOA) between the three agencies, relating to Senate Bill 1, 75th Legislature.

### Coordination on the TWDB's Water Planning Data Strategy

#### Bays and Estuaries

- September 1986 Master Operating Agreement between the TWDB, the TNRCC, and the TPWD.
- The TWDB and the TPWD are charged to jointly establish a bay and estuary data collection and analytical studies program to be used by the TNRCC and the TPWD for determining the freshwater inflow needs of these valuable coastal environments. (Texas Water Code §16.058)
- The TWDB, the TNRCC, and the TPWD also retain joint responsibility for developing water management options to meet the freshwater inflow needs of bays and estuaries. (Texas Water Code §11.1491)
- The TWDB has a cooperative relationship with the TPWD that offers skills in hydrology, measurement of physical parameters, hydrodynamic modeling, nutrient budgeting, and freshwater inflows optimization, with verification of the solution being performed by the TPWD.

#### Matagorda Bay and the Lavaca-Colorado Estuary Study

- The TWDB, the TPWD, and the TNRCC worked collaboratively with the Lower Colorado River Authority (LCRA) to complete the study. (There is an MOA dated October 1993 among the LCRA,

the TWDB, the TNRCC, and the TPWD for studies to determine freshwater inflow needs of these estuaries.)

### **The Gulf of Mexico Program**

- TWDB staff serve on the Monitoring, Modeling, and Research Committee to develop projects that will improve understanding of coastal processes, restore and maintain ecological health, and benefit decisionmakers in all five gulf states.
- The TWDB, the TPWD, and the TNRCC coordinate with other state and federal agencies to develop plans and projects to improve the health of the Gulf of Mexico bays, estuaries, and coastal waters.

### **Groundwater Protection Committee**

- The TWDB is the vice-chair of the committee. Other committee members include state and local entities and organizations interested in protecting the groundwater resources of the state. The Committee's activities coordinate the collection of groundwater quality data and provide reports to the Texas Legislature on its actions.

### **Texas Border Infrastructure Group**

- The TWDB and numerous state and federal agencies participate in the Texas Border Infrastructure Group (TBIG) to develop a data collection and dissemination network.

## **Coordination on the TWDB's Water Plan Development Strategy (refer to the Regional Water Planning Graphic, page 48)**

### **State Water Plan Development**

- The 1997 State Water Plan was adopted as a consensus effort among the TWDB, the TPWD, and the TNRCC. An MOA existed between these three agencies for developing the consensus, and coordination has continued since the plan was approved in August 1997.

### **Regional Water Planning (Senate Bill 1, 75th Legislature)**

- The TWDB, the TNRCC, and the TPWD worked jointly to develop regional planning rules, to delineate 16 planning regions and to designate members of the initial coordinating bodies. (An MOA

developed between the TWDB, the TNRCC, and the TPWD addresses these issues.)

- Population and water demand projections used in the development of the regional water plans are reviewed by staff from all three agencies.

### **Texas Water Bank and Trust**

- The TWDB administers the Texas Water Trust, a program within the Texas Water Bank that offers an opportunity to acquire by donation, lease, or purchase water rights for environmental needs, including instream flows, water quality, fish and wildlife habitat, and bay and estuary inflows.
- The TWDB, in consultation with the TPWD and the TNRCC, adopted rules governing the process for holding and transferring water rights in the Water Trust. No water right shall be placed in the Texas Water Trust without the review and approval of the TNRCC, after appropriate consultation with the TPWD and the TWDB.
- The TWDB, the TPWD and the TNRCC also participated in a workshop to discuss the implementation of the Texas Water Trust. A workgroup, which includes staff from the TWDB, the TPWD and the TNRCC, has been established to further develop a strategy to promote the Texas Water Trust.

### **Data Management and Integration**

- The TWDB, the TNRCC and the TPWD formed a senior level Senate Bill 1 Coordination Committee.
- An interagency Data Steering Team and a Water Information and Integration Committee (WIIC) were created to cooperatively develop data sets for supporting regional water planning efforts, to identify strategies for improving interagency access to water resource data, and to create Internet web pages (and other delivery mechanisms) for distributing information to the RWPGs.
- The TNRCC is improving its water rights and water utilities databases so that the TWDB may easily access this data to facilitate water planning.

### **Collection of Water Use Data**

- The TWDB gathers information for RWPGs regarding annual water use through a survey sent to cities, water districts, and river authorities.

- The TWDB collects groundwater and surface water use data at the point of use.
- The TNRCC collects surface water use data based on the point of diversion from the source of supply.
- All three agencies coordinate requests for information and have developed methods of sharing information via Internet links between their databases.

### **Water Availability Models**

- The TNRCC will make water availability models (WAMs) available to the TWDB, the TPWD, and the RWPGs for analyzing water supply management strategies, and for calculating unappropriated available water.
- The TNRCC identifies how much water is available to each existing water right holder, and calculates unappropriated available water using the newly-developed hydrological water availability models, which improve the assessment of water rights applications and provide flexibility to the TWDB in performing analyses of water supply options.
- The TWDB and the TPWD are assisting in the development of the WAMs through participation on the WAM Management Team.
- For regional and state water planning, the TNRCC will make the WAMs available to the TWDB and the RWPGs for analyzing water supply options to ensure that the parameters of the hydrological models used for planning purposes are consistent with the models used for regulatory purposes.

### **Groundwater Availability Modeling**

- The TWDB collaborates with the TNRCC and the TPWD to develop Geographic Information System-based models which provide all relevant data regarding groundwater availability in aquifers across Texas.
- Both the TNRCC and the TPWD will participate in a technical steering committee that will develop technical guidelines for implementation of the models and provide technical assistance to the RWPGs, groundwater conservation districts, and other interested parties.

### **Groundwater Conservation District Management Plans**

- Groundwater conservation districts are required to develop and submit management plans to the TWDB for certification of administrative completeness. If a district does not submit a management plan to the TWDB as required, the TNRCC is responsible for enforcement. (Texas Water Code §36.1071 et seq. and Subchapter I)
- The TNRCC and the TWDB provide technical assistance to a district in the development of the management plan.

### **Priority Groundwater Management Areas**

- The TWDB and the TNRCC coordinate on the identification of priority groundwater management areas (PGMAs) and groundwater conservation district issues; PGMAs are reported to the TNRCC. (This coordination is established by a September 1997 MOA between the TWDB, the TNRCC, and the TPWD.)
- The TWDB and the TNRCC gather information on those areas of the state experiencing or expected to experience critical groundwater problems including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies. (Texas Water Code §35.007)
- No later than January 31 of each odd-numbered year, the TNRCC, in conjunction with the TWDB, prepares and delivers a comprehensive report to the Governor, the Lieutenant Governor, and the Speaker of the House of Representatives, detailing all activities during the preceding two years. (Texas Water Code §35.018)

## **Coordination on the TWDB's Water Conservation Assistance Strategy**

### **Financial Assistance**

- The TWDB provides loans to entities for precipitation enhancement projects, brush control projects, and other water supply initiatives.
- The TNRCC may also provide grants to political subdivisions for precipitation enhancement projects, provided that the local political subdivisions provide a 50 percent match.

## **Coordination on the TWDB's Research and Local Assistance Strategy**

### **Water Research and Flood Protection Planning**

- The TWDB, the TNRCC, and the TPWD informally coordinate as necessary on water research topic selections and recommendations, and flood planning project reviews and evaluations.

## **Coordination on the TWDB's Texas Natural Resources Information System (TNRIS) Strategy**

The TNRIS collaborates extensively with member agencies of the Texas Geographic Information Council (TGIC), and actively participates in and supports these other geographic information groups.

- The Managers Committee of the TGIC brings together mid-level staffers who have a hands-on approach to geographic information issues. The Managers Committee meets at least six times a year and provides a forum in which many of the TGIC programs are generated. The Managers Committee is the primary author of the Geographic Information Framework for Texas and the follow-up action plans that supplement that document.
- The Texas Mapping Advisory Committee provides a forum for both public and private sector agencies and businesses to advise the TGIC on geographic information issues. This committee meets four times a year and is comprised of geographic information professionals in surveying, engineering, software, geographic information systems, and other related fields.
  - One major initiative for this committee is the improvement of the state's Field Data Collection efforts, to promote a unified approach to traditional surveying, and the use of global positioning software as an important tool in the state's geographic information efforts.
- The Texas Geographic Information Workgroup is comprised of federal agencies involved in geographic information initiatives within Texas. Current efforts focus on the coordination of disaster response efforts, the reduction of redundant geographic information system data creation by different agencies working in the same region, and ways to share the production cost of base mapping data layers.

### **The Texas Border Infrastructure Group (TBIG)**

- In 1997, the TWDB brought together state and federal agencies to address coordination issues relating to the funding initiatives for colonias and the Texas/Mexico border.
- Coordination efforts include the following agencies: the Texas Department of Housing and Community Affairs, the TNRCC, the Texas Department of Health, the Office of the Attorney General, the Environmental Protection Agency, the Border Environment Cooperation Commission (BECC), the North American Development Bank (NADBank), the United States Department of Agriculture - Rural Division, and the Economic Development Administration.
- The TBIG is developing an Action Plan to coordinate and prioritize the provision of water and wastewater services to border colonia areas. Additionally, the TNRIS is assisting the TBIG in the development and implementation of a Border Activity Tracking system to facilitate project information-sharing, to assist in coordinating programs, and to improve service delivery to economically distressed areas.

### **Drought Monitoring**

- The Division of Emergency Management Drought Preparedness Council is responsible for assessing drought monitoring, advising the Governor of Texas on significant drought conditions, recommending provisions for state response to drought disasters, advising the RWPGs on drought-related issues in regional water plans, and ensuring effective coordination among state, local, and federal agencies in drought-response planning.
- The TWDB reports drought monitoring and water supply conditions to the RWPGs, the Governor of Texas, and the general public.

### **Interstate Coordination**

- The TNRIS, under the auspices of the TWDB, assists the Western States Governors' Association Geographic Information Council in the development of geographic information and related technologies within and among the western states.
- The TWDB works with the Gulf of Mexico Program Data and Information Transfer Committee to promote the development of information standards for the exchange of natural resources information describing the Gulf of Mexico.

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**The TNRIS is assisting the TBIG in the development and implementation of a Border Activity Tracking system to facilitate project information-sharing, to assist in coordinating programs, and to improve service delivery to economically distressed areas.**

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- The TWDB coordinates the development and access to information describing the natural resources of the United States/Mexico border region with the Trans-Boundary Resource Inventory Program.

## **Coordination on the TWDB's Water Resources Information Strategy**

The TWDB coordinates with the TNRCC, the TPWD, and other agencies to deliver regional water planning data to the regions for use in developing regional water plans.

- An interagency Data Steering Team and a Water Information and Integration Committee (WIIC) were created to cooperatively develop data sets for supporting regional water planning efforts, to identify strategies for improving interagency access to water resource data, and to create Internet web pages (and other delivery mechanisms) for distributing information to RWPGs.

Additionally, the TWDB's Facility Needs Section interacts with a variety of federal, state, and local agencies to acquire and process information.

- TWDB staff coordinate with the Environmental Protection Agency program staff, and actively participate in national policy formulation meetings. These meetings establish survey ground rules, define the content of congressional reporting, and are an excellent forum with which to exchange ideas and information with other states.
- The TWDB partners with the TNRCC for the Drinking Water Needs Survey (and the TNRCC in turn contracts with the Texas Rural Water Association); staff members from both agencies act as primary points-of-contact for surveyed water systems.
- The TWDB also coordinates with local water officials in the collection and interpretation of information.

## San Antonio Water System (SAWS)

The TWDB has provided a wide range of data, water resources planning, and financial assistance services to the SAWS since the 1960s. This case study highlights the TWDB's participation in several significant milestones over the last decade that contributed to the SAWS' development of its water resources.

### INTEGRATED FUNCTIONS

#### Water Resources Planning

- SAWS used the *1997 State Water Plan* recommendations to make decisions regarding water resources needs and solutions
- Population and water demand projections presented to Mayor's Water Committee and approved by Regional Water Planning Area L for use in their Senate Bill I regional water plan development in 1999
- Numerous simulations conducted using the TWDB's water availability model of the Edwards Aquifer to estimate the supply available from the aquifer

#### Data Collection and Dissemination

- Hydrographic survey of Lake Medina to determine the amount of water storage available in the reservoir which could be used for municipal water supply
- Population and water demand projections provided to be used in the City's Water Plans
- Maps, aerial photographs, census data, as well as state and federal digital data accessed via the Texas Natural Resources Information System to facilitate SAWS' water resources planning
- Instream flow information collected on the Guadalupe River with state (TPWD) and local (GBRA) cooperators to determine monthly flow requirements to maintain the stream's fish and wildlife populations and ecological health
- Drilling rig contracted to dig 16 monitoring wells in the Edwards aquifer, needed to pinpoint the "bad water line" for water supply estimates
- Stream flow and water well level data exchanged with the Edwards Aquifer Authority and the USGS to monitor water supply conditions and provide input into water availability planning

#### Financial Assistance

- \$71,410,000 loan provided for wastewater recycling and major sewer interceptor replacements in the Leon Creek and Salado Creek watersheds
- \$47,500,000 loan provided for major sewer interceptor replacements in the Leon Creek and Salado Creek watersheds and improvements to existing wastewater treatment plants
- \$3,950,000 grant or loan to San Antonio, Bexar County Metropolitan Water District, and Atascosa County Rural Water Supply Corporation for 88 water supply projects
- \$46,000 grant or loan and oversight of groundwater study supplied to determine the impacts of the sale of Carrizo Wilcox groundwater in Bastrop and Milam Counties
- Flood protection planning grant in the amount of \$248,750 provided for Leon, Upper Olmos and Salado Creeks

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## **Integration of Goals 1 and 2**

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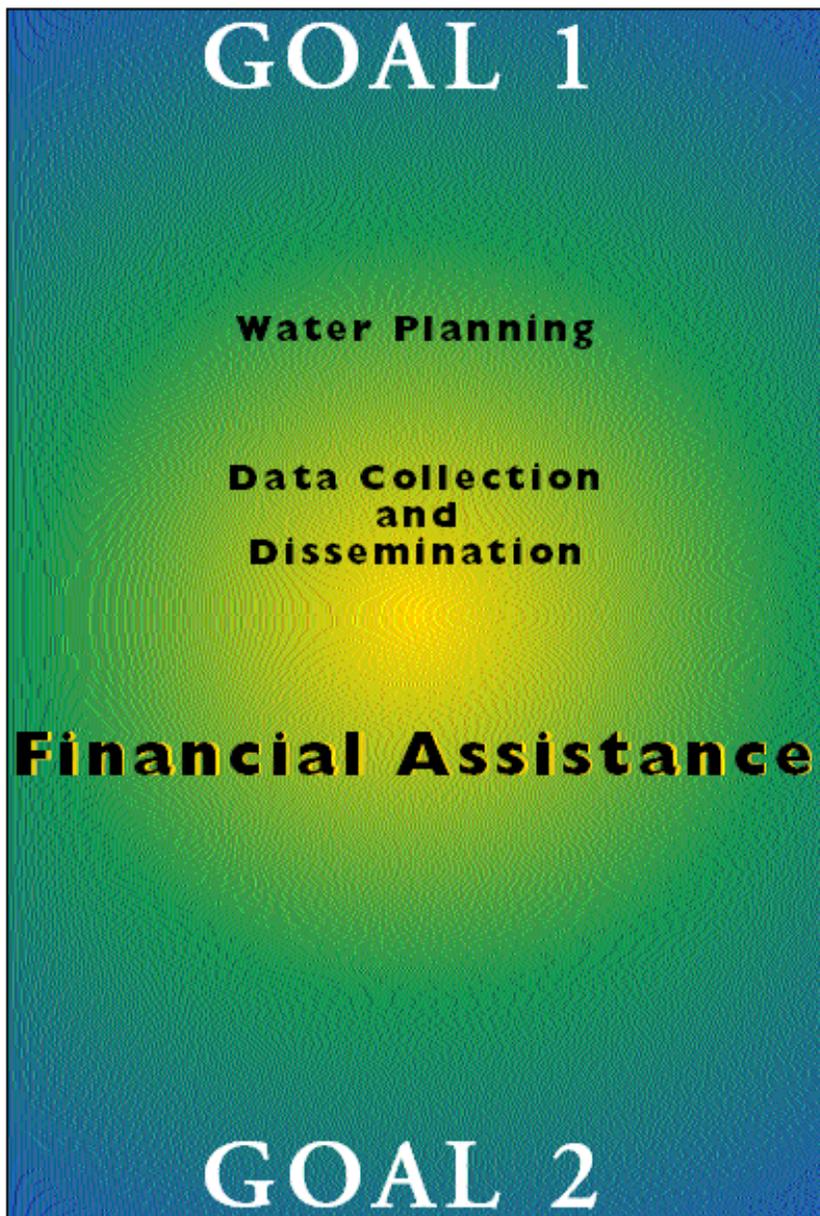
The TWDB's Water Resources Planning Goal (Goal 1) and Water Project Financing Goal (Goal 2) are integrated in that both goals are needed to effectively serve the agency's customers. One compelling example highlighting this essential relationship, is that after January 2002, with the adoption of the State Water Plan, TWDB financial assistance may only be provided to water supply projects that meet needs in a manner consistent with the approved regional water plans submitted by the Regional Water Planning Groups.

Additionally, without the results of the Facility Needs Survey, falling under Goal 1, the TWDB's federally-funded financial programs in Goal 2 would only receive the minimum allocation of available funds (or one percent) for the State Revolving Fund financial programs (Drinking Water State Revolving Fund and Clean Water State Revolving Fund, explained in further detail later). Being able to effectively advocate for these federal funds is a significant revenue benefit for Texas, amounting to many millions of dollars.

## GOAL 2: Water Project Financing

Provide cost-effective financing for the development of water supply, for water quality protection, and for other water-related projects.

**INTEGRATED FUNCTIONS**



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### Strategies

**Statewide Financial  
Assistance  
(02-01-01)**

**Economically  
Distressed Areas  
Program (EDAP)  
Financial Assistance  
(02-01-02)**

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## **Overview of the Bond Financing Process**

The TWDB's financial assistance programs are funded through any one of a combination of state-backed general obligation bonds; state special program revenue bonds; federal grant funds; and/or limited appropriated funds. When the TWDB sells State of Texas General Obligation or Revenue Bonds, the proceeds are then loaned to local governments by buying the local governments' bonds or, in limited cases, by executing contracts for repayment. Local governments use the proceeds to construct or improve water-related projects. As local governments repay principal and interest on their bonds to the TWDB, the agency uses the principal and interest collected to pay the debt service on the state's bonds. The TWDB uses its strong credit rating and other available capital to offer interest rates that are generally lower than what a borrower could otherwise obtain from the market or other lending institutions. A limited amount of funds are made available as grants to disadvantaged or hardship communities.

The TWDB offers a variety of financial programs and services that directly or indirectly benefit the customer through cost savings.

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## STATEWIDE FINANCIAL ASSISTANCE STRATEGY DESCRIPTION

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**Purpose: Enable communities to build needed water infrastructure and save them money in doing so**

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Statewide Financial Assistance offers potential TWDB customers a range of cost-saving options for addressing their water and wastewater infrastructure needs. A water project can be funded in part by any number of financing programs, including other state and federal agency programs, as well as through banks and debt issued by the customer. The TWDB's programs are unique in terms of volume and subsidy levels. The agency utilizes the proceeds from state bonds sold in the public bond market and federal capitalization grants from the Environmental Protection Agency as the primary sources of funding for Statewide Financial Assistance programs. Regardless of the funding option chosen, TWDB staff work closely with customers to ensure that all projects receiving some financial assistance from the TWDB are consistent with agency policy, as well as with applicable state and federal regulations.

The TWDB's Statewide Financial Assistance offerings have resulted in an average of \$70 million in cost savings to customers over the last two years.

**Statewide Financial Assistance Strategy  
Cost Savings, Fiscal Year 1998**

**Targeted cost savings = \$47,188,476 (100%)**

**Actual cost savings = \$62,765,795 (133%)**

**The TWDB exceeded the targeted 1998 cost-savings for this strategy by 33 percent**

**Statewide Financial Assistance Strategy  
Cost Savings, Fiscal Year 1999 up to 3rd Quarter**

**Targeted cost savings = \$51,939,000 (100%)**

**Actual cost savings = \$77,860,946 (150%)**

**The TWDB exceeded the targeted 1999 cost savings for this strategy by 50 percent**

The TWDB works collaboratively with the Texas Natural Resource Conservation Commission (TNRCC) to rank drinking water projects eligible for federal funds according to environmental benefit and public health and safety needs. The TNRCC is also responsible for reviewing plans and specifications for water infrastructure projects, but has formally agreed (through a Memorandum Of Agreement) to allow the TWDB to perform these activities for projects funded by the TWDB to better facilitate project management. State-funded water projects are considered by the TWDB on a first-come, first-served basis, and are not required to be prioritized in order to be eligible for financial assistance.

The TWDB's Statewide Financial Assistance programs are administered by multi-disciplined teams from the Office of Project Finance and Construction Assistance (OPFCA). The TWDB's Board considers potential water projects during regularly scheduled monthly Board meetings to ensure that projects reflect sound engineering and do not result in adverse environmental impact as defined by federal guidelines. Once a project receives a funding commitment and the recipient satisfies certain prerequisites, funds are released to the recipient, and TWDB field office staff monitor the progress of the project and report back to the project teams.

*Contact: Kevin Ward*

*Location: Office of Project Finance and Construction Assistance*

*FTEs (Budgeted/Actual): 89.5/89.5*

## Key Federal-State Partnership Funding Programs: CWSRF and DWSRF

The TWDB offers two financial assistance programs funded in part by federal grant money, with the state providing matching funds. The TWDB's Clean Water State Revolving Fund (CWSRF) is the second largest SRF in the nation with over \$2.5 billion in cumulative loan commitments. The TWDB's Drinking Water State Revolving Fund (DWSRF), established in 1996, has already provided \$72.3 million in cumulative loan commitments.

<b>Clean Water State Revolving Fund (CWSRF)</b>	
<b>Creation Date</b>	1987
<b>Purpose</b>	Provide a combination of federal and state funds for financial assistance to political subdivisions for the construction and improvement of wastewater treatment works, including projects to control storm water and nonpoint source water pollution
<b>Statutory Requirements</b>	Federal Water Pollution Control Act, as amended (33 U.S.C. §1251 et seq.); Texas Water Code (Chapter 15, Subchapter J) and Chapter 17, §17.0821)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Offer below-market interest rate loans to political subdivisions for the planning, design and construction of wastewater treatment works</li> <li>• Supply below-market interest rate loans for the implementation of federal Nonpoint Source Pollution and National Estuary Pollution Control Programs</li> </ul>
<b>Customers</b>	2,140 eligible entities: political subdivisions of the state
<b>Eligibility Requirements</b>	Funds must be expended on publicly-owned wastewater treatment works or nonpoint source projects which are necessary to achieve clean water standards or alleviate public health problems
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• Yearly Capitalization Grant from EPA</li> <li>• State match of at least 20 percent from general obligation bonds</li> <li>• Program leveraging from revenue bonds</li> <li>• Loan repayments</li> <li>• Cash management interest earnings</li> <li>• Fees for administration</li> </ul>
<b>Funding Guidelines</b>	State-developed priority system for funds is based on the goals of the Clean Water Act
<b>Funding Adequacy</b>	<p><b>Current and expected future funding resources will not be adequate</b></p> <ul style="list-style-type: none"> <li>• Actual annual capacity = \$334 million per year*</li> <li>• Annual funding needs = \$617 million per year</li> </ul>
<b>Program Evaluation</b>	This program continues to be in high demand as more projects become available for funding

\*Projections are limited by uncertainty regarding the levels (if any) of federal appropriations that will be available in the future.

## On-site Technical Assistance

To support the TWDB's CWSRF financing program (previous page), the EPA has also allocated grant money for an On-site Technical Assistance Program, affording valuable technical services to wastewater managers in small communities. The TWDB's On-site Technical Assistance Program provides free consultations, evaluations by a certified operator, and the loan of agency smoke-testing equipment to identify leaks in wastewater collection systems. This unique service is a voluntary, no-cost courtesy to customers, available to cities with a population of less than 25,000 and limited resources, and is provided on a first-come, first-served basis.

<b>Drinking Water State Revolving Fund (DWSRF)</b>	
<b>Creation Date</b>	1996
<b>Purpose</b>	Provide a combination of federal and state funds to communities in order to bring their water systems into compliance with national drinking water standards
<b>Statutory Requirements</b>	Public Health Service Act (42 U.S.C. §§300f to 300j-26); Safe Drinking Water Act Amendments of 1996, (Public Law 104-182, Aug. 6, 1996 110 Stat. 1613); Texas Water Code (Chapter 15, Subchapter J and §17.0821)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Offer below-market interest rate loans to public water systems for the planning, design and construction of drinking water supply projects</li> <li>• Provide additional subsidies, including forgiveness of loan principal, to systems qualifying as disadvantaged communities</li> </ul>
<b>Customers</b>	4957 eligible entities: political subdivisions of the state, water supply corporations, investor-owned utilities, and nonprofit non-community water systems
<b>Eligibility Requirements</b>	Funds must be applied to projects which bring public water systems into compliance with national drinking water standards, or otherwise further the health objectives of the Safe Drinking Water Act
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• Yearly Capitalization Grant from EPA</li> <li>• State match of at least 20 percent from general obligation bonds</li> <li>• State appropriations</li> <li>• Authorization for revenue bonds (unused to date)</li> <li>• Loan repayments</li> <li>• Cash management interest earnings</li> <li>• Fees for administration</li> </ul>
<b>Funding Guidelines</b>	<ul style="list-style-type: none"> <li>• Federally-mandated priority system administered by the TNRCC</li> <li>• No less than 15 percent of DWSRF funds may be awarded to public water systems serving fewer than 10,000 people (to the extent that eligible projects exist)</li> <li>• Up to 30 percent of the EPA Capitalization Grant may be used for loan subsidies (including forgiveness of principal) for disadvantaged communities</li> <li>• Funds may be designated for source water protection loans and for capacity development projects</li> </ul>
<b>Funding Adequacy</b>	<p><b>Current and expected future funding resources will not be adequate</b></p> <ul style="list-style-type: none"> <li>• Appropriated funding 1996-2003 = \$500 million + \$100m (state match)</li> <li>• Safe drinking water-related needs for Texas = \$12.4 billion as identified in Drinking Water Needs Survey</li> </ul>
<b>Program Evaluation</b>	The need for this program will remain high as safe drinking water-related needs continue to increase

### Key State-Funded Programs: General Obligation (G.O.) Bond Programs, Water Assistance Fund, Agricultural Water Conservation Programs

Since 1957, the Texas Legislature and voters have approved constitutional amendments authorizing the TWDB to issue up to \$2.68 billion in Texas Water Development Bonds, i.e. general obligation bonds, to be used to finance water and wastewater-related projects in Texas. As of July 31, 1999, \$945.8 million in unissued general obligation bond authorization remains for financing future construction of water- and wastewater-related projects, including State Participation projects. In addition, the TWDB has \$181 million in unissued Agricultural Water Conservation Project bond authorization.

<b>Water Financial Assistance (G.O. Bond Program)</b>	
<b>Creation Date</b>	1957
<b>Purpose</b>	Provide cost-effective loans to assist communities in funding water, wastewater, and flood control projects
<b>Constitutional and Statutory Requirements</b>	Article III of the Texas Constitution (§§49-c through 49-d-8); Texas Water Code (Chapter 17), (except Subchapters I, J, and K)
<b>Functions</b>	Offer low-interest loans to political subdivisions for the planning, design and construction of wastewater treatment works, water supply projects (including public water supply, rainwater enhancement and brush control), municipal solid waste projects and structural and nonstructural flood control programs
<b>Customers</b>	2,993 eligible entities: political subdivisions of the state and nonprofit water supply corporations
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• Funds must be used for water, wastewater, municipal solid waste or flood control projects</li> <li>• Applicants are considered on a first-come, first-served basis</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• Development Fund I: General Obligation Water Development Bonds</li> <li>• Development Fund II: General Obligation Water Financial Assistance Bonds</li> </ul>
<b>Funding Guidelines</b>	Limited by amount of bonding authority constitutionally authorized
<b>Funding Adequacy</b>	<b>Remaining bonding authority is sufficient to sustain programs through 2003</b>
<b>Program Evaluation</b>	Financing will always be needed for water infrastructure projects and water supply projects; therefore, this program will continue to be in demand

## State Participation

The TWDB's State Participation financing program allows local governments to build larger regional projects in order to take advantage of economies of scale with fewer overall direct environmental impacts. To keep projects from being a burden to local rate payers, the state bears the cost of reserved capacity until local residents are able to pay back the loan with revenues generated from an expanded customer base. As growth occurs and more of the capacity is needed, the TWDB sells its share of the capacity to the project's owner. The TWDB uses money from the sale to retire the state's debt or finance other projects.

<b>State Participation (G.O. Bond Program)</b>	
<b>Creation Date</b>	1962
<b>Purpose</b>	Allow political subdivisions to construct optimal-sized regional projects designed to meet future growth through partial state acquisition of projects for water supply, flood protection, groundwater recharge and wastewater treatment works
<b>Statutory Requirements</b>	Article III of the Texas Constitution (§§49-d, 49-d-2, 49-d-5 and 49-d-8); Texas Water Code (Chapter 16, Subchapters E and F)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Encourage optimum regional development of authorized facilities through TWDB ownership of projects up to 50 percent</li> <li>• Purchase an interest in regional water supply and wastewater facility projects, reservoirs and flood retention basins</li> </ul>
<b>Customers</b>	2,993 eligible entities: political subdivisions of the state and nonprofit water supply corporations
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• Funds must be expended on optimum regional projects that could not be financed without state participation</li> <li>• Applicants are considered on a first-come, first-served basis</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• General obligation bonds</li> <li>• Direct state appropriations</li> <li>• Fees may be collected after September 1, 1999 per appropriations rider</li> </ul>
<b>Funding Guidelines</b>	As the regional population increases and begins to utilize the TWDB's ownership portion of the project, the TWDB's share of the project should be sold and the agency's investment recovered
<b>Funding Adequacy</b>	<p><b>Current funding resources are sufficient to continue program through 2001</b></p> <ul style="list-style-type: none"> <li>• Future legislative intent will be necessary to make additional assistance available through the program beyond that time</li> </ul>
<b>Program Evaluation</b>	<p>Demand for this program is increasing:</p> <ul style="list-style-type: none"> <li>• So far in 1999, the TWDB has approved \$37 million to finance projects</li> <li>• The 76<sup>th</sup> Texas Legislature authorized the issuance of another \$50 million in State Participation bonds during the next biennium (ending August 31, 2001)</li> </ul>

## Water Assistance Fund

One statewide financial assistance program serves as an umbrella for the various water resources planning funding needs. Separate accounts are set up in the Water Assistance Fund to finance specific research and planning activities for State Participation, for hydrographic surveying, to manage the Water Bank, for regional and state water planning conducted by the RWPGs, for flood protection planning, and for construction loans or grants.

<b>Water Assistance Fund*</b>	
<b>Creation Date</b>	1981
<b>Purpose</b>	Provide financing for the construction of water or wastewater projects, water research, flood protection planning, and regional planning for water supply and wastewater treatment and collection
<b>Constitutional and Statutory Requirements</b>	Texas Constitution, Article 3, 49-d-3; Texas Water Code (Chapter 15, Subchapters A-C, E, F)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Designate loans/grants for water supply, water quality enhancement, flood control and other specifically-legislated water-related purposes, including brush control</li> <li>• State acquisition of facilities</li> <li>• Offer grants to individuals and political subdivisions to do research into the practical solutions of water-related problems</li> <li>• Supply grants for flood control planning, regional facility plans, EDAP facility plans, and Senate Bill 1 regional water plan development</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Political subdivisions</li> <li>• Nonprofit water supply corporations</li> <li>• Individuals (for research grants)</li> </ul>
<b>Eligibility Requirements</b>	<p>Political subdivisions receiving funds for flood protection planning</p> <ul style="list-style-type: none"> <li>• Must have the authority to plan for and abate flooding</li> <li>• Should consider structural and nonstructural flood protection measures</li> <li>• Must plan for an entire watershed</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• State appropriated funds / interest earnings from the funds</li> <li>• Loan repayments</li> <li>• Other gifts and grants</li> <li>• Technical assistance fees</li> </ul>
<b>Funding Guidelines</b>	<ul style="list-style-type: none"> <li>• Grants for regional facility plans and flood protection planning should be limited to 50 percent of the total cost of the project</li> <li>• Senate Bill 1 regional water planning mandates that the TWDB should provide grants for 100 percent of the regional planning costs and the region should provide 100 percent of the administrative expenses</li> <li>• The TWDB may provide up to 75 percent of the total cost to disadvantaged communities</li> <li>• The TWDB may award grants up to 100 percent of the cost of a research project</li> </ul>
<b>Funding Adequacy</b>	<p>The TWDB has successfully run the program within the constraints of the funds appropriated, but <b>funding is not sufficient for future projected needs</b></p> <ul style="list-style-type: none"> <li>• Projected needs over next 50 years = \$65 billion</li> </ul>
<b>Program Evaluation</b>	The need for this program will continue to exist as funds are increasingly requested for research and regional planning activities, and for flood protection planning

\*Refer to the Research and Local Assistance Strategy and the Water Plan Development Strategy under Goal 1.

**Agricultural Water Conservation Loan and Grant Program (refer to chart on next page)**

This program funds agricultural water conservation equipment and irrigation water conservation projects. The Texas Legislature established the Agricultural Water Trust Fund in 1985 as a separate investment account to generate interest earnings for funding agricultural programs. This account was funded with appropriations. A bond program for Agricultural Water Conservation was approved by constitutional amendment in 1985 (Agricultural Water Conservation Fund). Senate Bill 1, 75th Texas Legislature, allows the TWDB to use the principal from the Agricultural Water Trust Fund as a revolving loan fund for agricultural water conservation projects. Additionally, a portion of the interest earnings from the Agricultural Water Trust Fund may be used to provide grants to local water conservation and irrigation districts for purchasing equipment to evaluate or demonstrate efficient agricultural water uses.

Support staff from all areas of the TWDB collaborate to bring together these agricultural financing programs. A program administrator coordinates with staff in the Conservation, Accounting, Audit and Funds Management, Portfolio Management and Legal divisions. This dynamic, interrelated activity has resulted in more than \$19 million loaned to eligible districts, with reductions in water usage from 22-50 percent for acreage affected.

<b>Agricultural Water Conservation Loan and Grant Program *</b>	
<b>Creation Date</b>	1985
<b>Purpose</b>	Provide water conservation loan and grant funds to eligible districts for conservation purposes including: irrigation systems efficiency, land preparation, precipitation enhancement, and brush control activities
<b>Constitutional and Statutory Requirements</b>	Texas Constitution, Article 3, §50-d; Texas Water Code §15.431; Texas Water Code (Chapter 17, Subchapter J)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Provide low-interest loans to districts which allow the districts, in turn, to make loans to farmers for the purchase and installation of water-conserving irrigation equipment</li> <li>• Furnish loans to districts to be used for conservation improvements to district facilities</li> <li>• Allow local conservation districts and irrigation districts to purchase equipment to evaluate or demonstrate efficient agricultural water uses (grant funds available up to \$100,000 per year)</li> <li>• Provide funding to other agencies for agricultural water conservation technical assistance, agricultural water conservation education and demonstration programs, research and other water conservation development</li> </ul>
<b>Customers</b>	302 eligible entities: groundwater districts, irrigation districts, soil and water conservation districts; and districts eligible to borrow funds for conservation
<b>Eligibility Requirements</b>	Funds must be spent on delivery or application systems of irrigation water, on land preparation, brush control and precipitation enhancement
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• State general obligation bonds</li> <li>• Direct state appropriations</li> <li>• State Energy Conservation Office - Oil Overcharge Funds</li> <li>• Repayments of principal and interest on loans</li> <li>• Cash management interest earnings of Agricultural Water Trust Fund</li> </ul>
<b>Funding Guidelines</b>	Applicants are considered on a first-come, first-served basis
<b>Funding Adequacy</b>	<b>Level of funding appears sufficient for the foreseeable future</b>
<b>Program Evaluation</b>	Popularity and efficiency gains made through this program have caused it to be expanded to allow more funds to be available

\*Refer to the Water Conservation Assistance Strategy under Goal 1

## **Critical Support Activities for Water Project Financing**

### **Debt Management**

Currently, bonds are issued and accounted for separately to appropriately differentiate between legally distinct programs. Separate cash flow projections and financial statements are also maintained. TWDB policy allows for issuing bonds and incurring debt only on an as-needed basis, based on funding commitments for approximately six to nine months at a time. To reduce issuance costs and capitalize on economies of scale, several series of general obligation bonds are often issued at one time. TWDB staff monitor the need for money to fund the many loan programs, and when additional monies are needed, a new bond transaction is negotiated, with the approval of the agency's Board. A new bond issuance is a major undertaking and involves careful coordination between TWDB staff, consultants (financial advisor, bond counsel and underwriters), and other state agencies.

### **Texas Water Resources Finance Authority (TWRFA)**

In 1989, pursuant to legislation passed that year, the TWDB's financial portfolio was sold to the Texas Water Resources Finance Authority (TWRFA), producing an initial payment from TWRFA to the TWDB of about \$41 million. These additional proceeds were applied to the TWDB's financial assistance programs in order to fund grants, loans, and state participation in regional water supply and wastewater treatment projects. In addition to the initial payment, the TWDB benefits from annual payments of the available excess coverage from the loan portfolio. These excess coverage payments have in the past been primarily appropriated by the legislature to pay debt service on EDAP General Obligation bonds. TWDB staff administer the program, paying and collecting debt and servicing loans, ensuring the continued integrity of financial assistance projects.

### **Portfolio, Reporting, and Systems Management**

The TWDB's Portfolio, Reporting, and Systems Management team plays a crucial role in supporting the agency's financial assistance programs. This group prepares priority lists for federally-funded financial projects and develops an Intended Use Plan for each State Revolving Fund program (CWSRF and DWSRF), reported annually to the Environmental Protection Agency (EPA) to acquire necessary project funding. Additionally, the team performs the record-keeping associated with each of the TWDB program portfolios, prepares reports for the Legislative Budget Board and other entities, prepares cash flow data for bond sales, processes

claims for payments for federal programs, and maintains financial systems and any complex financial analyses in support of the programs.

### **Audit and Funds Management**

Chief responsibilities for this team consist of the TWDB's external audit and funds management activities including loan closings, grant releases, investments, debt service payments and collections, loan portfolio monitoring, and special audits and investigations.

### **The TWDB's Interagency Coordination on Statewide Financial Assistance**

The TWDB, the Texas Natural Resource Conservation Commission (TNRCC), and the Texas Parks and Wildlife Department (TPWD) have defined roles and responsibilities for various Water Project Financing programs and collaborate on the following:

- Drinking Water State Revolving Fund projects;
- Clean Water State Revolving Fund projects;
- Other drinking water projects; and,
- Other wastewater projects.

The TWDB also coordinates on a smaller scale with several other agencies to implement financing programs:

- The Texas Historical Commission (THC), responsible for assessing and protecting the archeological, architectural and historical state landmark resources; and
- The Economic Development Administration (EDA), to provide matching grants to organizations to construct water and wastewater facilities in economically distressed areas.

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and other agencies, refer to the Statewide Financial Assistance Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 93.

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## **ECONOMICALLY DISTRESSED AREAS PROGRAM (EDAP) STRATEGY DESCRIPTION**

### **Purpose: Provide financial assistance to develop adequate water and sewer services in economically distressed areas**

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In 1989, the 71st Texas Legislature passed comprehensive legislation that established the Economically Distressed Areas Program (EDAP) to be administered by the TWDB. The EDAP offers grants and loans for planning, designing, and constructing water and wastewater services to assist economically distressed areas in which the present services are inadequate to meet the minimal needs of residents. EDAP funds are available to political subdivisions located within counties adjacent to the Texas-Mexico border, or within counties with qualifying income and unemployment levels. Funds can be used for construction, acquisition or improvements to water supply and wastewater collection and treatment works, including all necessary engineering work.

The TWDB provides research and planning grants to political subdivisions in economically distressed areas (also referred to as “colonias”), to prepare water and wastewater service facility plans. Colonias are defined as areas within a county containing inadequate water or wastewater services that are health risks for the residents; in which the financial resources of the area are inadequate to provide the services, and which meet residential occupancy requirements as determined by the TWDB. EDAP financial assistance may be awarded in the form of loans, grants or a combination of the two. Eligible EDAP applicants may receive EDAP grants and loans, in conjunction with other financial assistance programs, to design and construct adequate water or wastewater facilities. Current projections of projects completed, projects under design or construction, and projects in the facilities planning process indicate that an estimated 280,000 colonia residents will receive adequate water or wastewater services, or both when the program is complete.

The TWDB's EDAP financial assistance offerings have resulted in an average of \$77 million in cost savings to customers over the last two years.

<p style="text-align: center;"><b>EDAP Strategy Cost Savings Fiscal Year 1998</b></p> <p style="text-align: center;"><b>Actual cost savings = \$42,684,863</b></p>
<p style="text-align: center;"><b>EDAP Strategy Cost Savings Fiscal Year 1999 up to 3rd Quarter</b></p> <p style="text-align: center;"><b>Actual cost savings = \$110,205,523</b></p>

**Percent increase over two-year period = 158 percent**

As of July 31, 1999, \$250 million in voter-authorized state general obligation bonds and \$29 million of other state funds are being combined with a total of \$300 million of federal Colonia Wastewater Treatment Assistance Program (CWTAP) funds to finance eligible water and/or wastewater construction projects in economically distressed areas, including residential hookups.

The OPFCA's Border Project Management Division administers the EDAP financial assistance programs, working closely with customers throughout the application process and facility construction until the end of life of the loan. A facility planning process determines the need for the project, and evaluates the scope and cost of a project to determine if it meets EDAP eligibility criteria for financial assistance. Once the TWDB's Board considers and approves funding for EDAP projects, the Border Project Management team then reviews and approves engineering plans and specifications for the project, and monitors the progress of the project. The Inspection and Field Support Services Division staff inspect the facility construction. This highly-involved approach allows the TWDB to maintain efficient and effective service delivery to economically distressed areas.

*Contact: Ignacio Madera, Jr.*

*Location: Office of Project Finance and Construction Assistance*

*FTEs (Budgeted/Actual): 32.7/30.7*

## Key State-Funded Programs: Economically Distressed Areas Program

The EDAP is the only TWDB financial assistance program funded from state general obligation bonds that is currently authorized by the Texas Legislature to provide financial assistance in the form of grants. Currently, up to 90 percent of the total general obligation bond authorization for the EDAP may be used for grants, and individual projects can be awarded up to 100 percent grants.

<b>Economically Distressed Areas Program</b>	
<b>Creation Date</b>	1989
<b>Purpose</b>	Provide cost-effective financial assistance for construction, acquisition, or improvements to water supply and wastewater collection and treatment works in economically distressed areas
<b>Constitutional and Statutory Requirements</b>	Texas Constitution Article III, §§49-d-7, 49-d-8; Texas Water Code §15.407; Chapter 16 (Subchapter J); Chapter 17 (Subchapter K)
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Provide financial assistance to address the lack of adequate water and wastewater services in economically distressed areas, particularly along the Texas-Mexico Border</li> <li>• Create a mechanism for the control of further proliferation of economically distressed areas by ensuring the adoption and enforcement of Model Subdivision Rules by local political subdivisions (enforcement of Model Subdivision Rules is the responsibility of the Office of the Attorney General and local district attorneys)</li> </ul>
<b>Customers</b>	36 currently eligible counties: 1495 economically distressed areas, with 392,000 estimated residents, as identified by 1992 and 1996 surveys
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• Eligible political subdivisions must be in counties with unemployment rates 25 percent above the state average, and per capita income 25 percent below the state average, or next to the Texas/Mexico border</li> <li>• Counties must adopt and enforce Model Subdivision Rules to stop colonia growth</li> <li>• Area to be served must lack adequate water or wastewater service, lack the financial resources necessary to obtain adequate service, and must have been established as a residential development as of 1989</li> <li>• A limit of 90 percent of financial assistance in the form of grants applies to state-issued bond proceeds</li> <li>• To receive greater than 50 percent of the projected costs in the form of a grant, the Texas Department of Health must find conditions in the area dangerous to public health</li> <li>• Project must be located in an area where a local political subdivision is participating in the TNRCC program to regulate on-site waste disposal facilities</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• State general obligation bonds</li> <li>• Texas Water Resources Finance Authority portfolio sales proceeds</li> </ul>
<b>Funding Guidelines</b>	Up to \$250 million of general obligation bond authorization for water and wastewater projects may be set aside for EDAP funds
<b>Funding Adequacy</b>	<p><b>Unable to determine</b></p> <ul style="list-style-type: none"> <li>• Other federal and bi-national agencies may be providing increased funding to contribute to the \$776.6 million estimated need</li> <li>• The TWDB expects to provide \$579 million</li> </ul>
<b>Program Evaluation</b>	Ninety EDAP projects are currently completed, in design, under construction or in the TWDB's EDAP planning stage; this program continues to be in demand

## Key Federal-State Partnership Funding Programs: Colonia Wastewater Treatment Assistance Program (CWTAP) and Colonia Plumbing Loan Program (CPLP)

### Colonia Wastewater Treatment Assistance Program (CWTAP)

The TWDB is the agency designated by the Environmental Protection Agency to administer the \$300 million of federal Colonia Wastewater Treatment Assistance Program (CWTAP) funds to finance eligible water and/or wastewater construction projects in economically distressed areas. Additionally, the TWDB is required to contribute a state match.

<b>Colonia Wastewater Treatment Assistance Program (CWTAP)</b>	
<b>Creation Date</b>	1992 (grant applications were accepted beginning in 1993)
<b>Purpose</b>	Improve wastewater treatment and water supply in colonias in the state, including funding for planning and design
<b>Statutory Requirements</b>	Public Laws 102-389, 103-327, 103-715, 104-99, 104-204, 105-65; Continuing Resolutions Numbers 3 and 4; 40 C.F.R. Part 31; Federal appropriations of 1993, 1995, 1996, 1997 and 1998
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Provide grants for planning, designing and constructing adequate wastewater treatment systems to serve unincorporated colonias in existence as of November 9, 1989 as expeditiously as possible</li> <li>• Improve public health for colonia residents</li> <li>• Dispense funds for regional and rural colonia planning</li> <li>• Provide for \$100 million to be used for water and/or wastewater service connections and projects</li> </ul>
<b>Customers</b>	Political subdivisions and nonprofit water supply corporations in eligible counties
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• Counties on the Texas/Mexico border or within 100 kilometers of the border</li> <li>• County must adopt model rules for the regulation of subdivisions prior to application for financial assistance</li> <li>• Projects must be located in economically distressed areas within affected counties (affected counties are those with a per capita income 25 percent below the state average and an unemployment rate 25 percent above the state average, or are next to the international border)</li> <li>• Project must be located in an area where a local political subdivision is participating in the TNRCC program to regulate on-site waste disposal facilities</li> <li>• Areas to be served must lack adequate water and wastewater service, lack adequate financial resources to obtain adequate services, and must have been established as residential subdivisions as of 1989</li> </ul>
<b>Funding Sources</b>	<ul style="list-style-type: none"> <li>• \$300 million federal allocation, applicable to five CWTAP grants</li> <li>• State matching funds from EDAP-authorized general obligation bonds</li> </ul>
<b>Funding Guidelines</b>	<ul style="list-style-type: none"> <li>• Match to federal appropriations varies between 20-50 percent match</li> <li>• For the last \$100 million, water projects are eligible</li> <li>• Two of the CWTAP grants (CWTAP IV and CWTAP V) allow applicants to apply for both water and wastewater funding</li> <li>• Applicants are considered on a first-come, first-served basis</li> </ul>
<b>Funding Adequacy</b>	<p><b>Funding is not sufficient to meet projected needs</b></p> <ul style="list-style-type: none"> <li>• Some EPA funding for colonia-related projects is being channeled to the North American Development Bank (NADBank) instead of to the states for distribution</li> </ul>
<b>Program Evaluation</b>	Program is necessary to assist in meeting \$776.6 million estimated need

### Colonia Plumbing Loan Program (CPLP)

The TWDB also administers an EPA-funded loan program for plumbing improvements and connections called the Colonia Plumbing Loan Program (CPLP). Through the CPLP, the TWDB makes loans to local entities that lend to residents in need of plumbing improvements and/or connections. As of July 31, 1999, almost \$9.8 million is available for assistance through this program.

<b>Colonia Plumbing Loan Program (CPLP)</b>	
<b>Creation Date</b>	1989
<b>Purpose</b>	Provide funds to local entities which in turn provide low or zero-interest loans to individual borrowers for plumbing improvements or connections costs
<b>Statutory Requirements</b>	Public Law 101-144; Texas Constitution Article III §49-d-3; Texas Water Code (Chapter 15, Subchapter L)
<b>Function</b>	Offer low-interest loans that assist low-to-moderate income colonia residents with financing connections to water and wastewater systems, and with the installation of necessary plumbing improvements within their homes
<b>Customers</b>	12 eligible counties: political subdivisions and nonprofit water supply corporations
<b>Eligibility Requirements</b>	<ul style="list-style-type: none"> <li>• City or county where customer resides must have adopted Model Subdivision Rules and a water conservation and drought contingency plan</li> <li>• Maximum loan amount per household is \$4000, unless applicant can document that costs are greater</li> </ul>
<b>Funding Sources</b>	\$15 million federal grant from 1989 Clean Water State Revolving Fund grant (balance can be returned to SRF if not needed)
<b>Funding Guidelines</b>	Political subdivisions applying for and receiving funds under the CPLP can then make low-interest plumbing loans to qualifying colonia residents
<b>Funding Adequacy</b>	<b>Level of funding appears sufficient for current needs</b>
<b>Program Evaluation</b>	Colonia residents have not typically sought these funds since they are loans (requiring repayment) and not grants

### The TWDB's Interagency Coordination on EDAP Financial Assistance

The TWDB coordinates with the Texas Natural Resource Conservation Commission on EDAP financing projects. The TNRCC investigates the severity of nuisance conditions in a colonia, and determines whether an innovative technology is appropriate for use on colonia projects. (On September 1, 1999, this responsibility will transfer to the Texas Department of Health.)

Additionally, the TWDB collaborates with the following agencies:

- The Texas Border Infrastructure Group (TBIG);
- The Department of Housing and Urban Development through the Texas Department of Housing and Community Affairs;
- The United States Department of Agriculture through the Rural Development Division;
- The North American Development Bank (NADBank); and,
- The Border Environment Cooperation Commission (BECC).

For a more in-depth description of the interagency coordination efforts between the TWDB, the TNRCC, and other agencies, refer to the EDAP Strategy in the Part VI Section titled, **Shared Jurisdiction of the Texas Water Development Board and Other Agencies**, page 96.

# SHARED JURISDICTION OF THE TEXAS WATER DEVELOPMENT BOARD AND OTHER AGENCIES

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## Goal 2 - Water Project Financing

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The Texas Water Development Board (TWDB), the Texas Natural Resource Conservation Commission (TNRCC), and the Texas Parks and Wildlife Department (TPWD) have defined roles and responsibilities for various Water Project Financing programs.

The TNRCC regulates services for water and wastewater treatment works operations, sets the design and construction standards for water, wastewater and flood control projects, oversees area-wide wastewater management planning and nonpoint source planning, and regulates the creation and operation of most water districts, which may apply for funding through the TWDB.

The TPWD manages and conserves the natural and cultural resources of Texas, participates in and makes recommendations for administrative and judicial proceedings concerning pollution incidents, development projects and other actions that may affect fish and wildlife. The TPWD reviews planning documents associated with TWDB funding applications so that endangered species will not be adversely affected by projects. The TWDB utilizes the TPWD's information on endangered species lists in developing mitigation for specific projects.

### Coordination on the TWDB's Statewide Financial Assistance Strategy

#### **Drinking Water State Revolving Fund (MOU between the TWDB and the TNRCC, 31 TAC 371.5)**

- The TWDB obtains the TNRCC's database of Public Water System Operators to create mailing lists to send information to potential customers about the Drinking Water State Revolving Fund (DWSRF) program and funding cycles.
- The TWDB creates an Intended Use Plan, identifying public water systems that qualify for financing. The TNRCC ranks projects seeking DWSRF funding, based on health and compliance factors.
- The TNRCC evaluates existing public water systems and their operations in order to regulate and enforce standards for water systems. The TWDB obtains the TNRCC's assistance in performing

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**The TWDB obtains the TNRCC's assistance in performing financial, managerial and technical capability assessments of applicants who are expected to apply for DWSRF funding . . .**

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financial, managerial and technical capability assessments of applicants who are expected to apply for DWSRF funding; applicants must have an affirmative finding before the TWDB can provide financing, or they must be on an approved corrective action plan.

- The TWDB administers the funding and management of DWSRF projects and ensures that they comply with the requirements of the Clean Air Act regulated by the TNRCC.
- The TWDB and the TNRCC participate on a standing coordination team to ensure awareness of issues affecting the DWSRF program; special purpose teams are created as necessary to address issues.

### **Clean Water State Revolving Fund**

- The TNRCC administers the nonpoint source program, and regulates and enforces water quality standards within the state. The TWDB provides funding for nonpoint source projects. The TWDB coordinates with the TNRCC to ensure that best management practices are followed and that funding will be awarded to projects in a Priority Segment based on the TNRCC's 303(d) Clean Water Act list of threatened and impaired water bodies. (§319 of the Clean Water Act)
- The TWDB obtains the latest water quality information and self-reporting data from the TNRCC for use in assigning priority rankings for wastewater projects applying for CWSRF financing.

### **Other drinking water projects**

- The TNRCC is responsible for reviewing the plans and specifications for water infrastructure projects statewide to ensure they comply with the water hygiene rules of the state. (30 TAC Chapter 290)
- The TWDB reviews plans and specifications to confirm that they will meet local community needs and are eligible for any applicable TWDB program funding.
- To avoid a duplicate review between the two agencies, the TNRCC has agreed to allow the TWDB to review plans and specifications for all water distribution infrastructure projects which the TWDB funds; however, the TNRCC has retained responsibility for treatment plants. (Letter of Agreement)

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**The TWDB obtains the latest water quality information and self-reporting data from the TNRCC for use in assigning priority rankings for wastewater projects applying for CWSRF financing.**

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### **Other wastewater projects**

- The TNRCC prepares an area-wide wastewater management plan identifying designated management agencies responsible for providing specified services within their assigned boundaries. (§208 of the Clean Water Act)
- The TWDB coordinates with the TNRCC to verify consistency with area-wide wastewater management plans and to ensure that funding is awarded to the most appropriate applicants.
- The TNRCC establishes design criteria for wastewater systems, and develops procedures concerning the submission and review of proposed designs; the TWDB may offer proposed variances to design criteria for sewage systems to ensure consistency between the agencies. (30 TAC 317)
- Projects receiving funding from the TWDB are exempt from the TNRCC review when the TWDB approves the plans and specifications. (Water Code §17.276(d))

Additionally, the TWDB coordinates on a smaller-scale with the following agencies:

#### **The Texas Historical Commission (THC)**

- The THC assesses and protects archeological, architectural and historical state landmark resources. Many TWDB-funded projects have the potential to impact these resources, so the TWDB employs archeologists to assist applicants with determining impacts to historical and archeological resources.
- Federal and state antiquities laws require all funded projects be evaluated for their potential impact to archeological features present on a project site, and that all projects obtain clearance from the THC. To facilitate this coordination, a Memorandum of Understanding (MOU) between the TWDB and the Texas Antiquities Committee (formally merged in the last legislative session with the THC) has been established. (31 TAC 353.14)

#### **The Economic Development Administration (EDA)**

- The EDA provides matching grants to state and local governments, regional economic development districts, and public and private organizations, to construct water and wastewater facilities in economically distressed areas.

- The TWDB coordinates with the EDA on companion projects, such as partial financing for sewer lines to an industrial park, or expanding a wastewater treatment plant through CWSRF assistance.
- The EDA works with the TWDB on wastewater projects by requesting a “Certificate of Adequacy of Treatment” to ensure that any wastewater generated by a project will receive adequate treatment. The TWDB performs this function on behalf of the Environmental Protection Agency through a delegation agreement.

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**The TWDB coordinates with the EDA on companion projects, such as partial financing for sewer lines to an industrial park, or expanding a wastewater treatment plant through CWSRF assistance.**

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## **Coordination on the TWDB’s Economically Distressed Areas Program (EDAP) Financial Assistance Strategy**

### **EDAP Funding**

- Upon request of the TWDB, the TNRCC investigates the severity of nuisance conditions in a colonia that has applied for EDAP funding. The TNRCC issues a letter concerning the severity of the health hazards in the colonia.
- If the TNRCC has not made a finding that a nuisance condition relating to inadequate water and sewer services exists in the colonia, the TWDB must limit the percentage of EDAP assistance available to the applicant in the form of a grant.
- The TWDB consults with the TNRCC to determine whether an innovative technology is appropriate for use on colonia projects when such technology is proposed by applicants.
- The TNRCC employs a Texas Small Towns Environment Program (STEP) coordinator to assist local communities in applying for the STEP program, which is partially funded by the TWDB.

### **The Texas Border Infrastructure Group (TBIG)**

- The TWDB and the TNRCC both participate in the Texas Border Infrastructure Group (TBIG) in order to set priorities and coordinate the efforts of state and federal agencies to provide water, wastewater and solid waste infrastructure and affordable housing in order to eliminate the substandard living conditions in existing colonias, and prevent the development of new colonias, or colonia-like conditions.

- The TBIG is working on adopting an action plan to develop strategies for securing hook-ups for all water and wastewater projects associated with the EDAP, and to create and adopt common operating procedures for the enforcement of mandatory hook-up policies and project coordination and implementation.
- The TNRIIS, through the Border Information Center, is providing tools and information to support the TBIG's activities.

### **The Department of Housing and Urban Development through the Texas Department of Housing and Community Affairs**

- This agency provides financing up to \$40 million per year in loans and grants for construction projects, including utility infrastructure and housing. Some projects receive joint funding from both the TWDB and the TDHCA.
- The Office of Colonia Initiatives (OCI) coordinates border issues and manages a portion of the department's existing programs targeted for colonias. These programs include housing finance and mortgage revenue bond set-asides, community development block grants and self-help centers, and the implementation of legislation effecting the colonias (Senate Bills 336 and 1509, 74th Texas Legislature).
- A formal Memorandum of Understanding (MOU) between the TWDB and the TDHCA assures that none of the funds appropriated by the TDHCA are expended in a manner that aids the proliferation of colonias or are otherwise used in a manner inconsistent with the intent of the TWDB's Economically Distressed Areas Program. (31 TAC 363.511)

### **The United States Department of Agriculture through the Rural Development Division (USDA-RD)**

- The USDA-RD may finance up to \$83 million in grants and loans for construction projects in rural areas. The agency has provided funding for several projects in areas that did not meet the TWDB's EDAP eligibility requirements, but still had low per capita income levels.
- The TWDB closely coordinates with the USDA-RD on engineering, financing, and environmental reviews of jointly funded projects, and on payment processing procedures on EDAP projects.

### **The North American Development Bank (NADBank)**

- The NADBank may provide funding for components of projects that are not eligible for the TWDB's EDAP funding. (An example would be a collection system in a colonia created after June of 1989.)
- The TWDB identifies projects that may qualify for NADBank funding and obtains input regarding financing opportunities. The NADBank has become involved in joint financing of some EDAP projects.

### **The Border Environment Cooperation Commission (BECC)**

- The BECC certifies projects for funding through NADBank. The BECC often relies on the TWDB's environmental review of prospective NADBank projects, such as critically needed and often socially and environmentally complex water infrastructure projects.
- The BECC evaluates the TWDB's priority list of EDAP projects to ensure that the BECC commences coordination efforts promptly on projects that may need BECC certification and funding from the NADBank.
- A current project, financed by the TWDB and the EPA, is developing an Internet-facilitated regional environmental review process for water infrastructure projects proposed for municipalities and districts in Cameron, Hidalgo, and Starr counties. This system is anticipated to replace the currently redundant and duplicative federal review process. The BECC, the TWDB, and the Environmental Protection Agency are also investigating similar programmatic approaches to environmental reviews of water public works improvements projects for other parts of Texas and Mexico.

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**The BECC often relies on the TWDB's environmental review of prospective NADBank projects, such as critically needed and often socially and environmentally complex water infrastructure projects.**

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## Upper Trinity Regional Water District (UTRWD)

This case study focuses mainly on the financial assistance the TWDB has provided to the Upper Trinity Regional Water District. The initial \$125,000 planning grant awarded to Denton County initiated the establishment of the UTRWD as a major purveyor of water and wastewater service. The TWDB has continued to partner with the UTRWD on several projects to expand the UTRWD into a water and wastewater provider that serves more than 50 small, medium, and large cities in northeast Texas. The following illustration highlights a few of the data, planning and financial services the TWDB has provided to the UTRWD in the last ten years.

### INTEGRATED FUNCTIONS

#### Water Resources Planning

- Upper Trinity Aquifer groundwater study conducted that ultimately aided in the decision to convert from groundwater usage to surface water usage in the Upper Trinity Regional Water District service area
- Population and water demand projections coordinated for all member cities and districts that were used in the state participation loan

#### Data Collection and Dissemination

- Maps, aerial photographs, census data, as well as state and federal digital data were accessed via the Texas Natural Resources Information System to facilitate water resources planning

#### Financial Assistance

- \$125,000 water supply and wastewater planning grant awarded to Denton County, which determined that groundwater supplies could not support the region's projected growth and ultimately led to the decision to construct a regional water system to meet future water needs
- \$6,065,000 loan provided to construct 20.0 million gallons per day (MGD) water treatment plant at Lake Lewisville, a 0.5 MGD package water treatment plant at Lake Ray Roberts, ground storage tanks, pump stations, transmission lines, and other facilities to provide water to 13 different entities
- \$24,745,000 loan granted to purchase the wastewater treatment facility owned by Lake Cities Municipal Utilities Authority and to expand it from 1.0 MGD to 3.5 MGD, in addition to building lift stations and conveyance lines to add Highland Village and the southeast portion of Corinth to the regional system
- \$3,085,000 loan provided to construct a 6.0 MGD wastewater reuse pump station
- \$17,165,000 loan used for the expansion of the UTRWD's regional water treatment plant; building the plant to the optimum size now using State Participation financing will result in a total present worth savings of \$5 million during the 20-year planning period

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**Resulted in the  
establishment  
of the UTRWD.**

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# VII Agency Performance Evaluation

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## A. What are the agency's most significant accomplishments?

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**The Texas Water Development Board selected a number of significant achievements. A list of these achievements is provided below. A brief description of each achievement is outlined on the proceeding pages.**

- Adopted the 1997 State Water Plan as a consensus effort among the Texas Water Development Board (TWDB), the Texas Natural Resource Conservation Commission (TNRCC), and the Texas Parks and Wildlife Department (TPWD); coordination has continued since the plan was approved in August 1997;
- Successfully launched Texas' revolutionary regional water planning initiative, using extensive public participation;
- Successfully led the effort to make environmental needs assessments, such as bays and estuaries research, a more prominent part of natural resources planning;
- Successfully led the effort to make water conservation an accepted part of utility operations; raised the profile of non-conventional water resources management practices to an equal footing with conventional surface water and groundwater development;
- Implemented groundwater districts management plan certification program and certified 37 plans;
- Provided significant contributions to the state's drought management efforts;
- Played an instrumental role in the development of critical regional water supply projects;
- Expanded interagency and public sector coordination;

- Led interagency coordination efforts to improve effectiveness and efficiency of Texas government and provide the best available information to the public;
- Initiated and managed initial phases of the StratMap program which serves as a national model for collaborative state-based mapping efforts;
- Developed the Borderlands Information Center;
- Led the creation of the Texas Border Infrastructure Group and the Border Activity Tracker;
- Enhanced financial assistance services;
- Created the Texas Water Resources Finance Authority, making available additional funds for projects;
- Implemented numerous customer service improvements in financial assistance programs which have helped the financial programs achieve significant growth without the necessity of staffing increases;
- Created multi-disciplined teams with a regional focus in order to provide one-stop shopping for project financing;
- Achieved a perfect track record on loans;
- Participated in funding the state's first international wastewater project (Nuevo Laredo Project);
- Increased Historically Underutilized Business (HUB) utilization and participation; and,
- The TWDB continues to provide outstanding dollar savings to Texas communities through its innovative financial assistance programs.

**Adopted the 1997 State Water Plan as a consensus effort among the Texas Water Development Board (TWDB), the Texas Natural Resource Conservation Commission (TNRCC), and the Texas Parks and Wildlife Department (TPWD); coordination has continued since the plan was approved in August, 1997**

This was the first time these agencies had participated in the development of the State Water Plan. Additional support and input was obtained from technical advisory committees, focus group workshops, interviews with community and professional leaders, and more than 20 public meetings.

This consensus effort also produced a legislative summary of key findings titled, **Water for Texas Today and Tomorrow, Legislative Summary of the 1996 Consensus-based Update of the State Water Plan, January 1997**. Many of the findings in this summary were incorporated into law by Senate Bill 1, 75th Texas Legislature. The TWDB continues to lead the process and collaborate with TNRCC and TPWD staff to consider and determine changes to population and water use projections for regional water planning efforts. These projections are the basis for water plan development by Regional Water Planning Groups (RWPGs), and utilizing a consensus-based approach ensures that the plans are developed to meet realistic targets for the state's future water needs.

**Successfully launched Texas' revolutionary regional water planning initiative, using extensive public participation**

The TWDB adopted rules for Senate Bill 1 state and regional water planning and designated 16 regional water planning areas six months ahead of statutory deadlines. This accomplishment provided additional time for the RWPGs to form and develop their regional water plans that will be incorporated into the 2002 State Water Plan. This achievement is particularly remarkable considering the substantial amount of public participation in the process. Input was received during four public comment periods, 27 public meetings, and one public hearing, all of which occurred between July 1997 and the TWDB's adoption of final rules and areas in February 1998.

## **Successfully led the effort to make environmental needs assessments, such as bays and estuaries research, a more prominent part of natural resources planning**

In cooperation with other state natural resources agencies, the TWDB has successfully championed the considerations of environmental needs as a more standard part of natural resources planning. One of the avenues the agency has used to further integrate the assessment of environmental needs into natural resources planning is in the development of the State Water Plan.

In the 1997 State Water Plan, the TWDB recommended future water projects, based on multiple criteria. The 1997 State Water Plan highlighted the widespread acceptance of the evaluation of human and environmental water needs when planning for new water projects. This agreed-upon method proved to be a valuable tool as it was later used by the TNRCC to assess changes in the operational plans of several Texas water providers.

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**In cooperation with other state natural resources agencies, the TWDB has successfully championed the considerations of environmental needs as a more standard part of natural resources planning.**

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## **Successfully led the effort to make water conservation an accepted part of utility operations; raised the profile of non-conventional water resources management practices to an equal footing with conventional surface water and groundwater development**

The TWDB's efforts to educate water service providers regarding the importance of water conservation have contributed to the acceptance of conservation practices as a standard part of water utility operations. The agency's initiatives have contributed to the following:

- Per capita municipal water use in 1997 was the lowest since 1980;
- Manufacturing and agricultural water use has not increased since 1980, yet output has risen significantly;
- Water reuse in Texas has increased from under 20,000 acre-feet per year to over 160,000 acre-feet per year; and,
- The use of desalinated water has grown from 1,000 acre-feet of capacity in 1980 to nearly 15,000 acre-feet per year in 1999.

Additionally, the TWDB's requirement that applicants for state loan funds maintain water conservation plans has resulted in a 21 percent decrease in per capita water use rates for cities of 250,000 population or above. By contrast, those cities in the same population category that do not have a TWDB approved conservation plan show a slight increase in water use over the same period of time.

### **Implemented groundwater districts management plan certification program and certified 37 plans**

Senate Bill 1 included a provision charging local groundwater conservation districts with developing district management plans and certifying the plans' compliance with statutory requirements through the TWDB. This provision was not popular with the groundwater districts. The controversial nature of this provision required the TWDB to be exceptionally careful about the process the agency would follow to certify management plans.

While the TWDB was not required to develop rules to govern the process of certifying the district management plans, the agency developed rules to ensure that the process would be effective and efficient for all involved entities. Additionally, the agency provided extensive customer assistance in implementing this program including performing 291 separate "consultation calls" or technical assists to these districts.

### **Provided significant contributions to the state's drought management efforts**

The TWDB staff contribute to the state's drought monitoring and response efforts by participating in the state's Drought Preparedness Council, including chairing two of the council's subcommittees. The TWDB constantly monitors drought indicators including reservoir storage, and provides such information through the TWDB Internet web page, giving state and local water providers instant access to the most up-to-date information needed to manage their water supplies under drought conditions. In addition, the TWDB staff assist in state drought response efforts by providing workshops for the development of local drought response plans, awarding emergency financial assistance, promoting the Water Smart Campaign, conducting special studies and investigations, and providing technical assistance to other agencies and individuals. These drought response efforts help to ensure the existence of adequate water supplies during times of drought.

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**TWDB's requirement that applicants for state loan funds maintain water conservation plans has resulted in a 21 percent decrease in per capita water use rates for cities of 250,000 population or above.**

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## **Played an instrumental role in the development of critical regional water supply projects**

The TWDB's regional planning grants encourage the development of regional projects. These studies have resulted in major solutions to meeting the state's water supply needs for certain parts of the state. Examples of projects implemented as a result of the TWDB's planning grant program include the following:

- A pipeline from Lake Texana to Corpus Christi which will provide up to 41,840 acre-feet of water each year to meet the region's water supply needs until approximately 2030;
- The sale of raw water by the Lower Colorado River Authority to Williamson County water providers;
- A pipeline from Stillhouse Hollow Lake providing water to the cities of Round Rock and Georgetown; and,
- The diversions of treated wastewater to provide for the water needs of the Corpus Christi bay and estuary.

## **Expanded interagency and public sector coordination**

The TWDB has long valued coordination and collaboration with other governmental entities as a means to increase the effectiveness and efficiency of the TWDB and state government in general. During the last biennium (fiscal years 1998 and 1999), the TWDB continued to provide leadership in this arena through its sponsorship and chairing of the Texas Geographic Information Council, the Texas Water Monitoring Council, and the Senate Bill 1 Interagency Data Steering Team. The TWDB also chaired both subcommittees of the Division of Emergency Management Drought Response and Monitoring Committee. All of these efforts have resulted in the reduction of duplication, increased efficiencies and more effective provision of services.

## **Led interagency coordination efforts to improve effectiveness and efficiency of Texas government and provide the best available information to the public**

By Memorandum of Agreement, the TNRCC, the TPWD, and the TWDB agreed to work together to provide water resources information to the RWPGs and other participants in the planning process through an interagency committee known as Water Information Integration Committee, or WIIC. The WIIC, chaired by the TWDB, developed user-friendly web pages that integrate all relevant regional planning information and make it available to individuals who need it. The TWDB houses the web pages.

## **Initiated and managed initial phases of the StratMap program which serves as a national model for collaborative state-based mapping efforts**

StratMap is a four-year cost-sharing program that will produce seven digital layers (or themes) of commonly needed geographic information for Texas (authorized by Senate Bill 1). The TWDB, along with the other members of the Texas Geographic Information Council (TGIC), have successfully shepherded the development of the StratMap program and secured federal, state, and local contributions (totaling millions of dollars) to develop these data sets for Texas. The legacy of StratMap will include not only a comprehensive set of compatible base maps, but also the means to better integrate public sector programs and make government in Texas more effective and efficient.

## **Developed the Borderlands Information Center**

Recognizing a need to provide specialized information services to agencies with programs addressing the Texas/Mexico border region, the TWDB, with funding provided by the EPA, created the Border Information Center (BIC) as a division of TNRIS in 1993. The demand for this area-specific information and the growing number of alliances between the BIC and other border-related organizations have confirmed the need for this type of organization. The authors of Senate Bill 1 recognized the value of this facility by codifying in Water Code Statute 16.021 a charge to the TNRIS to maintain such capabilities.

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**The legacy of StratMap will include not only a comprehensive set of compatible base maps, but also the means to better integrate public sector programs and make government in Texas more effective and efficient.**

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## **Led the creation of the Texas Border Infrastructure Group and the Border Activity Tracker**

Since the Texas Legislature created the Economically Distressed Areas Program to provide adequate water and wastewater services to colonias, several state, federal, and international agencies have come together to determine how to best serve these economically distressed areas. The agencies immediately recognized a need to formalize their coordination efforts in order to ensure that services are provided in the most effective and efficient manner. The TWDB led the effort to create a formal coordination group of 12 entities now referred to as the Texas Border Infrastructure Group (TBIG).

The TNRIIS, through the Borderlands Information Center (BIC), developed a system for integrating information needed by TBIG members. This system, called the Border Activity Tracker (BAT), is currently under development. Once completed, the BAT will provide an inventory of border projects available to all state agencies and entities interested in the border area.

## **Enhanced financial assistance services**

The TWDB has successfully implemented several new programs and authorizations to meet a large portion of the state's water resources infrastructure financing needs. The TWDB has financed over \$3.4 billion in loans and grants since 1985.

Some of the accomplishments contributing to the expansion and improvement of the TWDB's financial assistance services include the development of a comprehensive, leveraged Clean Water State Revolving Fund (CWSRF) program that is nationally recognized as a premier program; the implementation of a State Participation program which facilitates the development of large regional projects; and the consolidation and modernization of funding authority made possible through the creation of the Development Fund II.

## **Created the Texas Water Resources Finance Authority (TWRFA) making available additional funds for projects**

In 1989, the TWRFA issued over \$511 million in revenue bonds secured only by loans that originated from TWDB programs. The revenue bond proceeds were used to satisfy debt service on all of the TWDB outstanding general obligation bonds, to produce an initial \$41 million payment and additional cash flow in subsequent years to provide a myriad of financial assistance, and to reduce the use of general revenue appropriations in TWDB programs.

## **Implemented numerous customer service improvements in financial assistance programs which have helped the financial programs achieve significant growth without the necessity of staffing increases**

Perhaps the most significant contributor to the growth of the TWDB's financial assistance programs was the agency's efforts to make the programs more accessible and efficient. Beginning in the early 1990s, the TWDB launched an initiative to identify customer needs and opportunities for program improvements. One of the many resulting improvements was the change in the timing of loan closings so that applicants could secure funding to help them develop project plans and perform environmental assessments. This option, known as the "pre-design funding" option, when combined with other implemented program improvements such as interest rate reductions and faster loan approval turnaround times, has transformed the TWDB from a lender of last resort to a preferred lender.

## **Created multi-disciplined teams with a regional focus in order to provide one-stop shopping for project financing**

In 1997, the agency reorganized the divisions responsible for the financial assistance programs from functional "silos" that required inefficient hand-offs and resulted in less than ideal project coordination, into multi-disciplined regional teams, in which all aspects of an application are handled. The six multi-disciplined teams are assigned to specific geographic areas of the state. This reorganization has enabled the financial assistance program areas to expand and improve services without increasing overall staffing levels.

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**This option, known as the "pre-design funding" option, when combined with other implemented program improvements such as interest rate reductions and faster loan approval turnaround times, has transformed the TWDB from a lender of last resort to a preferred lender.**

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## **Achieved a perfect track record on loans**

In the 42 year history of the agency's loan assistance programs, the TWDB has never had a borrower default on a loan repayment. Since the TWDB's inception, the agency has provided approximately \$3.8 billion in loan assistance. This perfect track record is exceptional given the enormous volume of loans, the continued growth of the agency's loan portfolio, and the "hardship" criteria that are attached to most of the agency's funding programs, which means that many of the agency's customers are those who face particular financial challenges.

## **Participated in funding the state's first international wastewater project (Nuevo Laredo Project)**

For many years the city of Nuevo Laredo operated a sewage collection system without operational sewage treatment facilities, resulting in the discharge of raw sewage directly into the Rio Grande. Recognizing the severity of the problem, the International and Boundary Water Commission (IBWC) developed a solution calling for joint funding from the United States and Mexico to build a new sewer and a new sewage treatment plant. In 1989 the Texas Legislature authorized the TWDB to participate in the project. The TWDB and the IBWC entered into a Memorandum of Agreement to finance the Nuevo Laredo Project. The Nuevo Laredo sewage treatment plant was on-line and dedicated in April 1997.

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**In the 42 year history of the agency's loan assistance programs, the TWDB has never had a borrower default on a loan repayment.**

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## **Increased Historically Underutilized Business (HUB) utilization and participation**

The TWDB has made significant strides to ensure that HUB vendors and firms are being utilized in the agency's procurement process. The agency's HUB vendor utilization has increased from 15.8 percent in Fiscal Year 1996 to 28.6 percent in Fiscal Year 1998.

While definite improvements in HUB utilization have been accomplished, the above figures do not truly reflect the agency's effort to ensure that HUB vendors are participating throughout the procurement process. Bids and quotes are taken from HUB vendors on nearly all orders less than \$2000 (except for contract and emergency purchases). Bids and quotes are also taken from HUB vendors on all orders exceeding \$2000 in order to comply with the state procurement manual rules. As in all

cases, the contracts are awarded to the vendors that offer the best, lowest price for the requested goods and/or services.

Notably, the TWDB has made internal process changes to increase HUB firm participation in the bond issuance and distribution processes. The agency has created a bond counsel team composed of three firms, one of which is a certified HUB firm. This team allows the HUB firm to be utilized during the bond sale process. In addition, the TWDB has increased its HUB firm participation by creating an underwriting team, composed of 14 firms, five of which are certified HUB firms. The creation of this team will allow HUB firms to be utilized throughout the TWDB bond distribution process. These process changes allow the TWDB to offer HUB firms the opportunity to participate in all facets of the bond sales process.

### **The TWDB continues to provide outstanding dollar savings to Texas communities through its innovative financial assistance programs**

The financial assistance provided by the TWDB results in significant cost savings to local communities, which translates to lower monthly water and wastewater utility bills to individuals. Since 1985, the TWDB financial assistance programs have resulted in an estimated projected savings of \$4.2 billion.

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**B. Describe the internal process used to evaluate agency performance, including how often performance is formally evaluated and how the resulting information is used by the policymaking body, management, the public, and customers.**

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## **TWDB Performance Management**

The TWDB continuously seeks to enhance performance. In order to build upon the performance management activities already in place in fiscal year 1999, the agency implemented two new internal processes to improve its ability to analyze and influence factors affecting performance. The agency's performance management system seeks to:

- Clarify performance issues and factors;
- Identify short, near, and long-term opportunities for improving the agency's services and products;
- Promote responsible and accountable agency management;
- Recognize the agency's success; and,
- Enhance senior management's knowledge of each sector of the agency's business.

The TWDB's performance management mechanisms produce valuable information that is used by Board members, managers, and staff to continually improve operations. Future initiatives planned in this area include putting performance information on the TWDB web site and in the Water for Texas newsletter in order to facilitate external customer and taxpayer feedback.

## **Performance Review of Agency Programs**

The TWDB uses the performance objectives and measures outlined in the agency's Strategic Plan to monitor the agency's effectiveness and efficiency. Each quarter, the three agency offices that have measures listed in the Strategic Plan analyze their performance and present both written and verbal reports on their performance to the Executive Administrator and to the Deputy Executive Administrators. During this performance review session, the program staff, Executive Administrator, and Deputy Executive Administrators discuss performance issues and identify opportunities for improvement.

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**During this performance review session, the program staff, Executive Administrator, and Deputy Executive Administrators discuss performance issues and identify opportunities for improvement.**

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## **Performance Review of Internal Support Functions**

The TWDB's commitment to continuously identify more effective and efficient ways to provide services extends beyond the agency's programs to its internal operations. Performance objectives and corresponding measures have been developed for internal support functions and are reported in a manner similar to that of the program areas. On a quarterly basis, the Divisions present written and verbal analyses of their performance to the agency's executive management team. The agency's internal support divisions include the Human Resources Division, the Accounting and Finance Division, the Budget and Planning Division, the Staff Services Division (facilities management), the Performance Measurement and Strategic Planning Division, the External Customer Relations Division, the Office of the General Counsel, and the Technology Services Division.

## **TWDB's Enhanced Compensation Program**

In 1997, the 75th Texas Legislature adopted Section 66, Article IX of the General Appropriations Act, which allowed qualifying agencies to award enhanced compensation to their staff during fiscal years 1998 and 1999. The TWDB was one of a small number of agencies that qualified for this program. The TWDB successfully utilized this program as a performance management tool. The agency used the program to reward outstanding performance demonstrated by superior performance measures results, and to retain key, high-performing employees.

## **Additional TWDB Performance Management Practices**

In addition to the mechanisms described above, the TWDB has instituted additional performance management practices. Several are listed below.

- Brief the TWDB Board members on the agency's quarterly performance;
- Participate in the University of Texas Organizational Excellence Survey every two years to assess the TWDB staff's perceptions of TWDB performance;
- Capitalize on the State Auditor's Office and internal audit findings and recommendations for improvement; and,
- Conduct customer satisfaction measurement efforts such as a survey of external customers regarding agency service; more information on customer satisfaction measurement activities can be found in Section 7-G.

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## **C. What are the agency's biggest opportunities for improvement?**

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### **Further automation of water resources data collection**

Significant progress has been achieved in the collection and distribution of real-time data describing our water resources. However, many types of water resources information, such as data describing the quantity of groundwater in wells and facility needs information, are not easily accessible to customers. If the data were available in a real-time environment, water supply management and drought response would improve.

### **Improve intra-agency coordination between the Office of Planning (OoP) and the Office of Project Finance and Construction Assistance (OPFCA)**

The State Auditor's Office recommended that the TWDB evaluate how to improve coordination between the regional water planning programs administered by the Office of Planning and the financing programs administered by the Office of Project Finance and Construction Assistance. Currently, no formal mechanism exists to direct The TWDB's financial assistance toward projects identified by the Regional Water Planning Groups. The agency has formed an intra-office team to address these issues and develop coordination improvements. The team has drafted a charter, including the following mission statement: "To determine procedures and coordination efforts necessary to better link planning and project finance processes in order to better serve customers and stakeholders of the TWDB." The team will be drafting recommendations for senior management this fall.

### **Provide more data and services on the Internet**

The evolution of telecommuting technologies, the expansion of state agency digital data holdings and the expectations of citizens to receive immediate Internet-based responses to their needs present a tremendous opportunity for improving government service delivery. Because of the history of coordination and collaboration at the TWDB, the agency is in a unique position to facilitate such an improvement.

Based on significant efforts by the TWDB's TNRS and information resources staff, the agency submitted an exceptional item for improved agency Internet access in its Legislative Appropriations Request (LAR) to

the 76th Legislature. Although this initiative was not funded, the reasons for funding such a program remain valid. Other legislation passed in the 76th Session indicate that this is the direction in which Texas government is evolving and that such capabilities will soon be a fundamental part of government.

## **Re-engage customer outreach**

Some potential customers are not aware of how the agency can best serve them. Several years ago TWDB staff routinely presented the agency's programs, changes and current events at statewide and regional meetings of trade organizations and water utility associations. Such efforts were instrumental in the successful expansion of TWDB programs to direct existing programs and resources to target customer groups.

Staff have focused recent efforts on handling increased demands, implementing new programs, responding to state and federal law changes, and implementing new federally required administrative procedures. Many of these externally-driven changes have led to customer confusion about program requirements and accessibility. The TWDB can benefit greatly from shifting back to an outreach focus at this time to educate customers on program changes and funding availability, and to receive feedback on programs and performance. This effort has already begun.

One method to efficiently communicate to TWDB customers is via the Internet. An intra-office team has been formed to revamp the TWDB web site and to improve the information available to the public. In addition to marketing the financial programs through the TWDB's web site and periodicals, the agency can return to its prior practice of participating in statewide and regional workshops to educate existing and potential customers on how to successfully access TWDB programs.

## **Develop an integrated project tracking system**

Several different organizational units maintain project tracking data for differing purposes. Agency staff spend a considerable amount of time preparing status reports on specific projects when there has not been sufficient development of databases to accumulate and report on project status. While ongoing development of such systems is in progress, many efforts are done by staff as an ancillary duty, impeding fast implementation of improvements.

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**In addition to marketing the financial programs through the TWDB's web site and periodicals, the agency can return to its prior practice of participating in statewide and regional workshops to educate existing and potential customers on how to successfully access TWDB programs.**

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## **Continue to improve the Economically Distressed Areas Program (EDAP) procedures and processes**

The TWDB has recognized the need to improve processing and implementation of EDAP projects in order to provide better customer service, and to accelerate the attainment of adequate water and sewer services in economically distressed areas. Over the last year, the TWDB has created process improvement teams to address the more problematic areas, such as facility planning, procurement of services, project tracking, contract management, and payment processing. These teams are providing clarification of requirements, policy, and guidance materials for both staff and external customers. They are also providing staff training and developing curriculums for external customer training/education.

To further improve the accountability within the EDAP, the agency has developed internal performance measures primarily directed at processing time. These measures will help to pinpoint where further improvements need to be made, and to emphasize the importance of prompt action on processing project information. The agency is also supporting the development of a project tracking system which will be a prototype for the other financing programs.

The TWDB recognizes the importance of continuing ongoing improvements to the EDAP program. It is anticipated that upcoming projects will require more effort to implement than the projects funded to date. These challenges will necessitate maximum efficiency and accessibility for the program.

## **Improve data collection on the facility needs of small communities**

Current processes to assess the water and wastewater facility needs of Texas' smaller communities are insufficient. To better understand and ultimately serve small communities, the TWDB needs to gather a broader base of information on the needs of small communities.

## **Make the processes for assessing customer satisfaction more systematic**

The TWDB business units engage in a variety of customer satisfaction measurement activities (see Section 7-F for more details); however, the agency recognizes that the current system can be enhanced. Consolidating the various activities into a centralized, coordinated effort would enable the TWDB to make the process more effective at

determining how well the agency products and services are meeting customer needs.

The agency will comply with Senate Bill 1563 provisions regarding customer service standards and related performance measures beginning September 1, 1999. The agency anticipates that undertaking implementation of this bill's provisions will improve the customer satisfaction measurement system.

### **Formalize the complaint handling process**

The TWDB does not have a formal process for handling complaints. Generally, most complaints are from entities involved in the TWDB's programs, and are handled by the individual program offices themselves. Each office has developed its own process for handling complaints and maintaining a record of them in project files (See Section 7-G).

Although the current practice allows for expedited handling of complaints, it is not conducive for maintaining a centralized file or tracking system, which is essential for developing trend analysis and potential process improvements. A centralized complaint handling system would also serve as a tool for evaluating customer satisfaction and overall agency performance. The Office of External Customer Relations will be leading the agency's efforts to develop a formal complaint handling process.

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**The agency will comply with Senate Bill 1563 provisions regarding customer service standards and related performance measures beginning September 1, 1999.**

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## **D. How does the agency ensure its functions do not duplicate those of other entities?**

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The TWDB strives to ensure its functions do not duplicate those of other entities through close coordination on relevant laws and clearly defined agency programs. Entering into agreements, including contracts, Memoranda of Understanding, Letters of Agreement, and operating agreements with outside entities further facilitates the clear definition of areas of responsibility.

The agency communicates with other data collection and research programs so that information-sharing takes place. Information is also made available on the TWDB's web site so that interested outside parties will know what the TWDB is doing. Additional ways the agency avoids overlap with other organizations' functions and programs follow:

- The TWDB is an active participant in the Texas Water Monitoring Council and the Texas Geographic Information Council; and,

- The agency requires public notification and accepts comments prior to the planning for provision of financial assistance to a community so that any duplication in local planning efforts will be highlighted and addressed. TWDB financial assistance programs generally accept engineering and environmental documents related to applications for financial assistance in the format used by other agencies when the project is funded by multiple agencies.

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## **E. Are there any other entities that could perform any of the agency's functions?**

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Although small parts of the TWDB's functions could be performed by other organizations, no other entity could undertake the complete range of functions. For example, the Texas Public Finance Authority (TPFA) has the capability to issue bonds, but no other entity can equal the TWDB staff's expertise in the water business, has the appropriate legislative direction and funding, nor has the ability or obligation to consider the statewide perspective. The agency's financial services staff, business processes, and extensive network of relationships in the public and private financial services communities enable the TWDB to manage its financial programs in a cost-effective manner. More specifically, the agency's integrated functions make it possible for the agency to issue debt when it is needed, and invest and disburse funds in a manner that corresponds to the anticipated need of those funds. The Texas Water Development Board is uniquely suited to provide full-service water management, planning, and financial programs to the State of Texas.

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**. . . no other entity can equal the TWDB staff's expertise in the water business, has the appropriate legislative direction and funding, nor has the ability or obligation to consider the statewide perspective.**

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## **F. What process does the agency use to determine customer satisfaction and how does the agency use this information?**

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The TWDB takes great pride in providing service in a highly professional and timely manner. To determine whether agency programs and services are meeting the needs of customers, the TWDB surveyed customers on the quality of services received and the usefulness of the TWDB's financing programs. Beginning in 1993 and continuing on a biennial basis since then, the TWDB contracted with the Public Policy Research Institute (PPRI) at Texas A&M University to develop and conduct a survey of the TWDB's customers and stakeholders. The objectives of the survey included:

- **Determine why some entities went to the open market instead of coming to the TWDB for financing water-related infrastructure projects;**
- **Measure the effectiveness of the TWDB's programs;**
- **Determine customer satisfaction with the TWDB's performance in the administration of its programs; and,**
- **Collect feedback from its customers on needs that were not being met.**

In November and December of 1998, the survey was administered to five target groups. In this version, questions were included with greater emphasis on specific aspects of the TWDB's programs, especially regarding the administration of the Economically Distressed Areas Program (EDAP). The results of this survey were received by the TWDB in late July 1999, and have not yet been evaluated by management. As with the previous surveys, the TWDB will capitalize on this opportunity to use the results to improve operations, paying special attention to the verbatim customer comments on possible process improvements. The TWDB also will use the results to identify areas in which increased education or marketing efforts are required. In addition, the survey results will be used as a tool for the TWDB to determine resource allocation for those programs and services that are most frequently utilized by customers.

### **Additional Customer Satisfaction Information**

The Texas Natural Resources Information System distributes a comment and suggestion card that is available at the front desk for walk-in customers and mailed to customers who correspond by e-mail.

Customer satisfaction data from these cards are compiled and analyzed by type of service provided. Results are reported quarterly, and management uses these results to identify opportunities for improvement.

Additional customer satisfaction information is gathered from frequent interaction with customers to elicit feedback. For example, the Office of Planning staff attend each regional Water Planning Group meeting, note any customer complaints or suggestions for program improvements, and take action as appropriate. Also, staff members habitually ask customers, in the course of routine business, for their ideas on improving customer satisfaction, and management has stressed the concept of continuous process improvement with both staff members and external customers.

Furthermore, the TWDB plans to expand its customer satisfaction measurement efforts as it implements provisions of Senate Bill 1563 beginning September 1, 1999. The bill requires agencies to create an inventory of external customers for each budget strategy, gather external customer satisfaction data, implement Legislative Budget Board-defined customer satisfaction performance measures, appoint a customer relations representative, and develop a "Compact with Texas" related to complaint-handling procedures and customer service standards.

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**G. Describe the agency's process for handling complaints against the agency, including the maintenance of complaint files and procedures for keeping parties informed about the process. If the agency has a division or office, such as an ombudsman, for tracking and resolving complaints from the public or other entities, please provide a description.**

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The Texas Water Development Board (TWDB) does not have a formal complaint handling process. Due to the nature of the agency's business, most complaints received relate to the requirements of and process involved with implementing of the agency's planning and financing programs. Each office has an informal process for tracking and addressing these complaints.

Most complaints from entities involved in TWDB programs are received and processed by staff who have a direct involvement with the program. For such complaints that are received, many go directly to senior management, who address them immediately. However, complaints received from members of the general public or from the offices of elected officials are forwarded to the External Customer Relations (ECR) Division for resolution. ECR staff review the complaints and, if needed,

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**Most complaints from entities involved in TWDB programs are received and processed by staff who have a direct involvement with the program.**

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forward a request to the agency program areas for assistance. If minor complaints from the public or elected officials are received in one of the TWDB's program offices and can be resolved quickly over the phone, the office is encouraged to proceed and notify ECR of the complaint and action taken. Copies of the complaint and the action taken are kept in files maintained by ECR. In all cases, the complainant is informed of actions that were taken. As mentioned in Section 7-C, the TWDB intends to improve the ability to track and monitor complaints.

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**H. Please fill in the following chart. The chart headings may be changed if needed to better reflect the agency's practices.**

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As stated previously, the agency currently does not have a system for tracking complaints, therefore, we have omitted the chart for this section.

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**I. What process does the agency use to respond to requests under the Public Information (Open Records) Act?**

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Open records requests are forwarded to the Office of the General Counsel and assigned to the appropriate attorney for handling. A broadcast e-mail is then sent to all TWDB employees informing them of the type of information requested and asking them to search their files and archives for all information that responds to this request. A deadline for sending all relevant information to the attorney for review is set well in advance of the 10-day statutory deadline.

Next, the assigned attorney reviews the information to determine if any of the information is exempt from release under the Public Information Act. Any information that is exempt is sent to the Attorney General's Office for an opinion within the appropriate statutory time frame. The rest of the relevant information is either released to the requestor or prepared for inspection, depending on the requestor's wishes. A copy of any letter sent to the Attorney General requesting an opinion is also given to the requestor. If the request produces a substantial amount of information (over 10 pages of information), a bill based on the General Services Commission fee schedule is prepared and given to the requestor.

Procedures for open records requests are currently being reviewed and will be modified as needed to assure compliance with changes made to the Public Information Act during the last legislative session.

**J. Please fill in the following chart:**

**Labels may be provided for these customers, or interest groups, upon request. The names provided below are random selections from various lists.**

*A map of the Regional Water Planning Group boundaries is included in Section X for your reference page 157.*

<b>Texas Water Development Board Contacts</b>		
<b>INTEREST GROUPS</b> (groups affected by agency actions or that represent others served by or affected by agency actions)		
<b>Group or Association Name/Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number</b>
George D. Janning First Southwest Company (financial advisor)	98 San Jacinto Blvd., Suite 370 Austin, TX 78701-4039	512/481-2000 512/481-2010 fax
Eugene B. Shepherd Legg, Mason, Wood and Walker, Inc. (financial advisor)	1111 Bagby, Suite 1400 Houston, TX 77002-2510	713/750-6335 713/750-6360 fax
Milton Halpern Dain, Rauscher, Inc. (financial advisor)	153 Treeline Park, #100 San Antonio, TX 78209-1873	210/805-1100 210/805-1145 fax
Raymond Newman Southwest Securities, Inc. (financial advisor)	1201 Elm Street, Suite 4300 Dallas, TX 75270-2180	214/658-9450 214/658-9475 fax
Jerry Turner Vinson & Elkins (bond counsel)	600 Congress Avenue, Suite 2900 Austin, TX 78701-3200	512/495-8400 512/495-8612 fax
Fred Carter Fulbright and Jaworski (bond counsel)	2200 Ross, Suite 2800 Dallas, TX 75201	214/855-8000 214/855-8200 fax
Peter M. Tart McCall, Parkhurst & Horton (bond counsel)	717 North Harwood, 9th floor Dallas, TX 75201-6587	214/754-9200 214/754-9250 fax
Michael G. Page Schwartz, Page & Harding, L.L.P. (bond counsel)	1300 Post Oak Blvd., Suite 1400 Houston, TX 77056	713/623-4531 713/623-6143 fax
Alan Plummer, P.E. Alan Plummer & Associates (engineer)	6300 La Calma, Suite 400 Austin, TX 78752	512/452-5905 512/452-2325 fax

<b>Texas Water Development Board Contacts</b>		
<b>INTEREST GROUPS - continued</b> (groups affected by agency actions or that represent others served by or affected by agency actions)		
<b>Group or Association Name/Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number</b>
Bob Nichols, P. E. Freese and Nichols, Inc. (engineer)	4055 International Plaza, Suite 200 Fort Worth, TX 76109-4895	817/735-7300 817/735-7491 fax
Fred L. Kurth, P.E. Melden and Hunt, Incorporated (engineer)	115 West McIntire Edinburg, TX 78539	956/381-0981 956/381-1839 fax
John Kelley, P.E. Parkhill, Smith & Cooper, Inc. (engineer)	4010 Avenue R Lubbock, TX 79412	806/747-0161 806/747-7146 fax
Terrace W. Stewart, Director Dallas Water Utilities (city) Also Chairman of Regional Planning Area C	1500 Marilla, 4A-N Dallas, TX 75201	214/670-3011 214/670-3946 fax
Chuck Settle, P.E. City of Houston (city)	P.O. Box 1562 Houston, TX 77002	713/837-0448 713/837-0464 fax
William Bart Hines, P.E. Utility Manager City of McAllen (city)	P.O. Box 220 McAllen, TX 78505	956/972-7150 956/972-7155 fax
Randy Goss, Director Water and Wastewater Utilities City of Austin (city)	P.O. Box 1088 Austin, TX 78767	512/322-3685 512/322-2842 fax
Ed Archuleta, General Manager El Paso Water Utilities (city)	P.O. Box 511 El Paso, TX 79961	915/594-5501 915/594-5666 fax
Bill West General Manager Guadalupe-Blanco River Authority (river authority)	933 E. Court Street Seguin, TX 78155	830/379-5822 830/379-1766 fax
Jack P. Nelson General Manager Lavaca Navidad River Authority (river authority)	P.O. Box 429 Edna, TX 77957-0429	512/782-5229 512/782-5310 fax

<b>Texas Water Development Board Contacts</b>		
<b>INTEREST GROUPS</b> - continued (groups affected by agency actions or that represent others served by or affected by agency actions)		
<b>Group or Association Name/Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number</b>
James R. Adams General Manager San Jacinto River Authority (river authority) Also Chairman of Regional Planning Area H	P. O. Box 329 Conroe, TX 77305-0329	409/588-1111 409/588-3043 fax
Danny F. Vance General Manager Trinity River Authority (river authority)	P. O. Box 60 Arlington, TX 76004-0060	817/467-4343 817/465-0970 fax
Tom M. Wilkinson, Jr. Executive Director Brazos Valley Development Council (council of government)	P. O. Box 4128 Bryan, TX 77805-4128	409/775-4244 409/775-3466 fax
John P. Buckner Executive Director Coastal Bend Council of Governments (council of government)	P. O. Box 9909 Corpus Christi, TX 78469-9909	361/883-5743 361/883-5749 fax
Robert R. Weaver Executive Director Concho Valley Council of Governments (council of government)	P. O. Box 60050 San Angelo, TX 76906-0050	915/944-9666 915/944-9925 fax
Ken Jones Executive Director Lower Rio Grande Valley Development Council (council of government)	311 North 15th Street McAllen, TX 78501-4705	956/682-3481 956/631-4670 fax
Ken Kramer, Executive Director Lone Star Sierra Club (associations)	P. O. Box 1931 Austin, TX 78767	512/476-6962 512/477-8526 fax
Frank J. Sturzl Texas Municipal League (association)	1821 Rutherford Lane, Suite 400 Austin, TX 78754-5128	512/719-6300 512/719-6390 fax
Tom Duck Texas Rural Water Association (association)	1616 Rio Grande Austin, TX 78701-1173	512/472-8591 512/472-5186 fax
Leroy Goodson Texas Water Conservation Association (association)	221 East 9th Street, Suite 206 Austin, TX 78701-2510	512/472-7437 512/472-0537 fax

<b>Texas Water Development Board Contacts</b>		
<b>INTEREST GROUPS - continued</b> (groups affected by agency actions or that represent others served by or affected by agency actions)		
<b>Group or Association Name/Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number</b>
Evelyn Bonavita League of Women Voters (association) Also Chairman of Regional Planning Area L (South Central Texas RWPG)	334 Royal Oaks San Antonio, TX 78209	210/828-1368 210/828-1627 fax
Jerry W. Chapman, Manager Greater Texoma Utility Authority	5100 Airport Drive Denison, TX 75020	903/786-4433 903/786-8211 fax
Thomas Taylor, Executive Director Upper Trinity Regional Water District	P.O. Drawer 305 Lewisville, TX 75067	972/219-1228 972/221-9896 fax
Ronald J. Neighbors, General Manager Harris-Galveston Coastal Subsidence District	1660 West Bay Area Boulevard Friendswood, TX 77546	281/486-1105 281/488-6510 fax
Greg Ellis, General Manager Edwards Aquifer Authority	P.O. Box 15830 San Antonio, TX 78212	210/222-2204 210/222-9748 fax
Carola Serrato, General Manager South Texas Water Authority	P.O. Box 1701 Kingsville, TX 78363	361/592-9323 361/592-5965 fax
John Burke, General Manager Aqua Water Supply Corporation Also Chairman of Regional Planning Area K (Lower Colorado RWPG)	P.O. Drawer P Bastrop, Tx 78602	512/303-3943 512/303-4881 fax
C. E. Williams Panhandle Ground Water Conservation District No. 3 Also Chairman of Regional Planning Area A (Panhandle RWPG) Also Texas Association of Groundwater Districts	P.O. Box 637 White Deer, TX 79097	806/883-2501 806/883-2162 fax
A. Wayne Wyatt, General Manager High Plains Underground Water Conservation District No. 1 Also Chairman of Regional Planning Area O (Llano-Estacado RWPG)	2930 Avenue Q Lubbock, TX 79405	806/762-0181 806/762-1834 fax
James Dodson, Division Director Coastal Division Nueces River Authority	630 Ocean Drive, NRC 3100 Corpus Christi, TX 78412	361/980-3193 361/980-3195 fax

<b>Texas Water Development Board Contacts</b>		
<b>INTERAGENCY, STATE, OR NATIONAL ASSOCIATIONS</b> (that serve as an information clearinghouse or regularly interact with the agency)		
<b>Group or Association Name/ Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number E-mail Address</b>
Jim Smith Executive Director Council of Infrastructure Financing Authorities	1625 K Street, Suite 200 Washington, DC 20006	202/371-9694 202/371-6601 fax
Mike Howe American Water Works Association - Texas Section	P.O. Box 80150 Austin, TX 78708	512/238-9292 512/238-0496 fax
Dan Black Municipal Advisory Council	P.O. Box 2177 Austin, TX 78768-2177	512/476-6947 512/476-6403 fax
John Howard Natural Resources/Environmental Governor's Office	P.O. Box 12428 Austin, TX 78711	512/463-2198 512/463-1975 fax
Scott Storment Colonias Coordinator Secretary of State's Office	P.O. Box 12697 Austin, TX 78711	512/463-8948 512/475-2761 fax
Jim Thomassen Public Finance Attorney General's Office	P. O. Box 12548 Austin, TX 78711	512/475-2929 512/463-2063 fax
Carmen Cernosek Natural Resources Lieutenant Governor's Office	P.O. Box 12068 Austin, TX 78711	512/463-0010 512/463-0039 fax
Bobby Gierisch Director of Research Office of the Speaker of the House	P.O. Box 2910 Austin, TX 78768	512/463-1100 512/463-0921 fax

<b>Texas Water Development Board Contacts</b>		
<b>LIAISONS AT OTHER STATE AGENCIES</b> (with which the agency maintains an ongoing relationship, e.g., the agency's assigned analyst at the Legislative Budget Board, or attorney at the Attorney General's office)		
<b>Agency Name/ Relationship/ Contact Person</b>	<b>Address</b>	<b>Telephone Number Fax Number E-mail Address</b>
Adam Haynes Office of the Speaker of the House	P.O. Box 2910 Austin, TX 78761	512/463-1100 512/463-0921 fax
Dave Mitamura Legislative Budget Board	105 West 15th Street, 3rd Floor Austin, TX 78701	512/463-1189 512/475-2902 fax
Joe Riddell Attorney General's Office	P. O. Box 12548 Austin, TX 78711	512/475-4019 512/463-2063 fax
Trey Powers Texas Department of Agriculture	P.O. Box 12847 Austin, TX 78711-2487	512/463-4375 512/463-8170 fax
Jeff Saitas, Executive Director Texas Natural Resource Conservation Commission (TNRCC)	P. O. Box 13087 Austin, TX 78711-3087	512/239-3900 512/239-3939 fax
Andrew Samson, Executive Director Texas Parks and Wildlife Department (TPWD)	4200 Smith School Road Austin, TX 78744-9822	512/389-4802 512/389-4814 fax
Larry McKinney TPWD Water Policy and Resource Protection Director	4200 Smith School Road Austin, TX 78744-9822	512/389-4864 512/389-4394 fax
Daisy Stiner Executive Director Texas Department of Housing and Community Affairs (TDHCA)	P.O. Box 13941 Austin, TX 78711-3941	512/475-3932 512/469-9606 fax
Ruth Cedillo Director, Community Development Block Grant TDHCA	P.O. Box 13941 Austin, TX 78711-3941	512/475-3882 512/469-9606 fax
Tom Millwee, State Coordinator State Emergency Management Council	5805 North Lamar Boulevard P.O. Box 4087 Austin, TX 78773-0001	512/424-2138 512/424-2444 fax
Carolyn Purcell, Executive Director Texas Department of Information Resources	P. O. Box 13564 Austin, TX 78711-3564	512/475-4720 512/475-4759 fax
Larry Soward, Senior Deputy Land Commissioner General Land Office	1700 North Congress Austin, TX 78701	512/463-5001 512/475-1558 fax
Kim Edwards, Executive Director Texas Public Finance Authority	P.O. Box 12906 Austin, TX 78711-2047	512/463-5544 512/463-5501 fax
Robert G. Buckley, Executive Director Texas State Soil and Water Conservation Board	P.O. Box 658 Temple, TX 76503	254/773-2250 254/773-3311 fax
William Reynolds Archer III, M.D. Commissioner of Health Texas Department of Health	1100 W. 49 <sup>th</sup> St. Austin, TX 78756	512/458-7375 cats@comm.tdh.state.tx



# VIII 76th Texas Legislative Session Chart

Texas Water Development Board 76th Texas Legislative Session Chart		
Legislation Enacted in the 76th Legislative Session		
Bill Number/ Author	Subject	Summary of Key Provisions/Intent
House Bill 1 By Junell	General Appropriations Act	<p>The Texas Water Development Board received appropriations of \$93.4 million to fund baseline operations and fully fund the Regional Water Planning Groups to complete the first round of planning and to begin the second round of planning in FY 2001. Also included in the appropriations is \$3.9 million in Oil Overcharge monies to be used for the Agricultural Water Conservation Loan Program. Total full time employees (FTEs) remain unchanged from current biennium at 313.5. The agency was reclassified as a Group 4 agency.</p> <p>Approved riders provide the TWDB with the following:</p> <ul style="list-style-type: none"> <li>• Authorized to issue \$50 million in State Participation bonds for the biennium;</li> <li>• Continued coordination on plumbing hook-ups in colonias with the Texas Department of Housing and Community Affairs;</li> <li>• Appropriated unexpended balances for the Canadian River Basin Chloride Control Project;</li> <li>• Authorized use of \$100,000 out of appropriated General Revenue for funding studies to review the benefits of increasing aquifer recharge in the Brazos River Basin through modification of existing Soil Conservation Service structures;</li> <li>• Appropriated \$400,000 in General Revenue to Water Assistance Fund for a water and wastewater project for the community of Sand Branch in Dallas County; and,</li> <li>• Contingency rider for Senate Bill 1862, reducing general revenue by \$40,000 and increasing appropriated receipts by \$40,000 in FY 2001.</li> </ul>

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Legislation Enacted in the 76<sup>th</sup> Legislative Session - continued</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent</b>
Senate Bill 1421 By Lucio	Regulation of Subdivision or Development of Land in Economically Distressed Areas	<p>This is the Omnibus Colonia Bill, which will improve the administration of the Economically Distressed Areas Program (EDAP). The bill includes provisions recommended by the TWDB, the Offices of the Attorney General and the Secretary of State, the Senate International Relations, the Trade and Technology Committee, and the Border Water Works Group. It also incorporates various legislation filed by Senators Lucio, Shapleigh, Truan and Zaffirini and Representative Cuellar.</p> <p>The bill provides the following for the TWDB:</p> <ul style="list-style-type: none"> <li>• Allows the TWDB to assist struggling applicants in hiring engineers, and as a last resort, to undertake the planning process when planning efforts have been too slow or inadequate;</li> <li>• Allows the TWDB to require an application for colonia grant funds to include an assessment by the Texas Natural Resource Conservation Commission ( TNRCC) of the Managerial, Financial, and Technical ( MFT) capability of the applicant; and to condition the award of the grant on MFT capability or deny for lack of MFT capability;</li> <li>• Prohibits the revenues from a colonia grant fund project from being used for transfers to a city's General Revenue fund;</li> <li>• Transfers the responsibility of issuing a finding of public health nuisance for EDAP project grants greater than 50 percent from the TNRCC to the Texas Department of Health; and,</li> <li>• Redefines economically distressed areas by deleting the 80 percent occupancy requirement, but requires a residential subdivision to be established as of June 1, 1989. All other requirements are unchanged.</li> </ul>
Senate Bill 1593 By Brown	Development of Allens Creek Reservoir	<p>This legislation authorizes the TWDB to use the State Participation program to purchase up to a 50 percent interest in the Allens Creek Reservoir project, including 100 percent of the cost of the reservoir site. It directs the TNRCC to re-issue the abandoned Allens Creek water rights permit upon application by the TWDB. It also grants the TWDB additional water rights to the unappropriated flows of the Brazos River and Allens Creek.</p>

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Legislation Enacted in the 76<sup>th</sup> Legislative Session - continued</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent</b>
Senate Bill 272 By Brown	Regional Water Planning Groups	This legislation provides changes to Senate Bill 1 Regional Water Planning Groups (RWPGs). It authorizes the RWPGs to enter into contracts with political subdivisions for assistance in developing and revising regional water plans. It clarifies that the RWPGs, their members, and any employees of the political subdivision under contract with the RWPGs are immune from liability for any acts or omissions in the course and scope of their work with the RWPGs. If the RWPG, its members, or employees of the contracting political subdivision are sued for RWPG-related actions or omission, the Texas Attorney General's Office will represent them. Senate Bill 272 also requires that RWPGs maintain representation of interests comprising the region and only have to appoint additional members from interests that are not adequately represented.
Senate Bill 657 By Brown	Development of Water Management Strategies	This legislation provides changes to Senate Bill 1 regional water planning. It removes the requirement for the TNRCC to provide the projected amount of water that would be available when flows are at 75 percent and 50 percent of normal conditions. It also removes provisions for regional water plans to include water management strategies for flows at 75 percent and 50 percent of normal conditions. Regional water plans must identify each source of water supply in the planning area and identify factors specific to each source of water supply to be considered in determining whether or not to initiate a drought response.
Senate Bill 658 By Brown	Adoption of Regional and State Water Plans	This bill changes the dates when the regional water plans and the State Water Plan must be adopted. The date for the regional water plans changed from September 1, 2000 to January 5, 2001, and the State Water Plan changed from September 1, 2001 to January 5, 2002.
Senate Bill 1862 By Ratliff	State Participation	Under this legislation, the TWDB is allowed to charge an administrative fee to recover the costs associated with processing, monitoring and auditing State Participation projects. The fee is an amount necessary to recover costs to be incurred in administering the program.

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Other Bills Impacting The Texas Water Development Board</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent</b>
House Bill 2660 By Swinford	Drought Planning and Preparation	This legislation designates the coordinator of the Division of Emergency Management as the state drought manager responsible for managing and coordinating drought planning and response, and also expands the membership of the state drought committee. It provides for Texas Department of Agriculture (TDA) representation on the Regional Water Planning Groups (RWPGs) and input in the regional water planning process. TDA representation on RWPGs is also contained in Senate Bill 1310 by Brown.
House Bill 3079 By Kuempel	Aquatic Vegetation Management	Under this legislation, the Texas Parks and Wildlife Department is allowed to develop and adopt by rule a state Aquatic Vegetation Management Plan. Local governments with jurisdiction over public bodies of surface water are required to either adopt the state plan or develop and adopt a local plan. The bill creates an Aquatic Vegetation Management Fund as a special account within the Water Assistance Fund administered by the TWDB, through monies appropriated to provide grants for development and implementation of these plans. The TWDB is required to adopt necessary rules establishing procedures for the application and award of grants, distribution of grants and administration of grants. No monies were appropriated for this purpose.
House Bill 3277 By Cook	Agriculture/ Wildlife Research and Management Advisory Committee	This bill establishes an advisory committee consisting of 13 members appointed for a two-year term, including one to be appointed by the Executive Administrator of the TWDB. The committee advises the Texas Agricultural Experiment Station on agricultural/wildlife issues and establishes a framework for more efficient management of water in the Gulf Coast Region in order to maintain wildlife habitats and agricultural production.
House Bill 3682 By Gutierrez	Waiving Matching Funds Requirement for Disadvantaged Counties	Under this legislation, state agencies may waive or adjust any matching fund requirement that is a condition for a county to receive a grant or other form of financial assistance from the agency. This applies only to those counties that meet the criteria of an economically disadvantaged county. [Note: The bill language is permissive and could apply to the TWDB's Research and Planning Fund, which has matching fund requirements].

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Other Bills Impacting The Texas Water Development Board - continued</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent</b>
House Joint Resolution 62 By Mowery	Elimination of Duplicative, Executed, Obsolete, Archaic and Ineffective Constitutional Provisions	This is a constitutional revision, which significantly amends Article III of the State Constitution provision authorizing the TWDB to issue bonds. As proposed, this will not have a negative impact on the TWDB. The Constitutional amendment is third on the November 2, 1999 ballot.
Senate Bill 708 By Jackson	National Estuary Program	This bill designates the TNRCC as the lead agency for implementation of approved comprehensive conservation and management plans developed under the National Estuary Program. The TWDB is named as a participating state agency in implementing the approved action plans.
Senate Bill 991 By Lucio	Operation of the Texas Water Bank	This legislation amends the Texas Water Code to allow the TWDB to implement water conservation measures in irrigation districts through the Texas Water Bank with the resulting water saved to be deposited into the Water Bank for transfer to municipalities, industries or other agricultural users. The cost of these conservation measures could be repaid by the sale of the conserved water. Implementation requires seed monies, which were not appropriated by the Legislature.
Senate Bill 1310 By Brown	Providing for Agricultural Interests in Water Resource Planning and Management Activities of the State	This legislation amends numerous sections of the Water Code that were amended or created by Senate Bill 1, 75 <sup>th</sup> Texas Legislature, by including the Texas Department of Agriculture (TDA) in interagency or other multi-agency activities concerning water resources planning or management. The Department of Agriculture is added to the group of agencies including the TWDB, the TNRCC, and the TPWD, who coordinate on water resources planning and management activities. Inclusion of the TDA should have no significant impact on the TWDB other than to add one more agency to the coordination process.
Senate Bill 1563 By Armbrister	Establishing Customer Service Standards for State Agencies	This bill requires all state agencies to collect external customer satisfaction data for each strategy listed in the General Appropriations Act. The bill states that the Legislative Budget Board (LBB) will create the means to measure customer satisfaction as well as create performance measures for agencies in this area.

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Other Bills impacting The Texas Water Development Board - Continued</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent</b>
Senate Concurrent Resolution 68 By Armbrister	Interim Study Committee	This legislation creates a committee to examine ways to improve coordination among the Texas Natural Resource Conservation Commission, the Texas Water Development Board, the Small Business Administration, the General Land Office, the Texas Department of Transportation and the Division of Emergency Management in mitigating damage after floods and other natural disasters.

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Legislation Not Passed in the 76th Legislative Session</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent/Reason the Bill did not Pass</b>
House Bill 276 By Flores	Meeting Content of the Texas Water Development Board	This legislation would have required that the TWDB hold quarterly meetings on all EDAP projects with applications pending before the Board at a location near the project area. The bill did not have a committee hearing. The TWDB is already doing this.
House Bill 1260 By Hill; Senate Bill 1710 By Ellis	Financial Assistance for Disadvantaged Communities	These bills would have created a new Subchapter M in Chapter 17 of the Texas Water Code, authorizing the TWDB to provide low interest or no interest loans to disadvantaged communities. The magnitude of the problem or the need could not be determined. The fiscal note prepared by the Legislative Budget Board was \$17 million. The bills were left pending in committee.
Senate Bill 1422 By Lucio	Financial Assistance for Residential Hook-Ups to Water	With passage of the constitutional amendment Senate Joint Resolution 30, this bill would authorize an additional \$250 million in bonds for EDAP. The bill did not have a committee hearing. The state would have to provide General Revenues to pay for debt service.

<b>Texas Water Development Board 76th Texas Legislative Session Chart</b>		
<b>Legislation Not Passed in the 76th Legislative Session- continued</b>		
<b>Bill Number/ Author</b>	<b>Subject</b>	<b>Summary of Key Provisions/Intent/Reason the Bill did not Pass</b>
Senate Bill 1695 By Brown	Creating the Texas Vital Infrastructure Program	With passage of the constitutional amendment Senate Joint Resolution 42, this bill would have allowed the state to create a program involving the issuance of bonds backed by money received from the tobacco settlement. The TWDB would be responsible for recommending water-related projects. The bill was left pending in committee. There was concern with the future liability of the debt service payment by the state.



# IX Policy Issues

## ISSUE NUMBER 1:

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### A. Brief Description of Issue

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**Should the availability of Texas' unique reservoir sites and their associated water rights be protected?**

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### B. Discussion

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#### General Scope of the Issue

It is projected that Texas will almost double in population by 2050. In order to meet the future water supply needs of the state, a wide array of water management strategies will need to be implemented, including new water supply development. The 1997 State Water Plan calls for eight new reservoirs to be developed to meet the needs of the population by 2050. Sites for new water supply development are limited due to existing development, environmental constraints or other factors. Additionally, the better reservoir sites are already occupied and there is a relatively small amount of unappropriated water available for new reservoirs.

Water planning as required by Senate Bill 1, 75th Texas Legislative Session, provides that state and regional water plans may recommend unique sites for reservoir protection. Protecting future unique reservoir sites could help ensure sufficient water is available for future projects when needed and decrease the ultimate cost of developing the site. Such protection now would ultimately save Texas' communities money because any industrial or commercial development of the site would increase the cost of obtaining the land and mitigating the non-environmental impacts of using the land for a reservoir. Furthermore, without such protection, water rights may not be available for reservoirs when needed as available water may be allocated for other non-reservoir uses. Therefore, it is recommended that the unique reservoir sites recommended in the 2002 State Water Plan be protected.

The TWDB's authority to protect reservoir sites is limited to partnering with a political subdivision to participate in the financing of projects

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**Protecting future unique reservoir sites could help ensure sufficient water is available for future projects when needed and decrease the ultimate cost of developing the site.**

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through the State Participation Program. Existing law makes it difficult, if not impossible, to secure water rights use permits significantly in advance of the need for the water. The TWDB is limited in the State Participation Program to contributing 50 percent of the total project costs and is required to use near-term General Revenue appropriations for debt service payments. In addition, without a participant with sufficient financial resources to fund up to 50 percent of future needs, the TWDB is unable to protect a site for future development.

Current requirements for water rights permitting of a reservoir include a demonstration of the need for the project as well as the requirement that construction must begin within two years of obtaining a permit unless such time is extended by the Texas Natural Resource Conservation Commission. This latter requirement means that construction would have to begin well in advance of the need for the water. Furthermore, the construction of these reservoirs would require substantial General Revenue funds that have not been appropriated to the TWDB.

The 76th Texas Legislature passed Senate Bill 1593 which directs the Texas Natural Resource Conservation Commission (TNRCC) to issue to the TWDB a previously held water right permit for the Allens Creek Reservoir in Austin County and to reserve ample unappropriated water which may be available for the future project. The bill also provides the TWDB with the specific authority to participate in the purchase of land and construction of the reservoir. This bill enables the TWDB to contribute up to 100 percent of the purchase price of the land. The TWDB is working with the TNRCC, the Brazos River Authority, and the City of Houston to ensure this future surface water resource development project will be available when needed by the region's rapidly growing population.

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## **C. Possible Solutions and Impact**

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### **Authorize the TWDB to acquire and solely own property associated with unique reservoir sites.**

The Legislature could direct the TWDB as to which sites to purchase. As land is acquired, a corresponding amount of mitigation reserve would be required. Outright ownership of the reservoir site would provide direct control of the site prior to reservoir construction. Any solution that entails the state obtaining sole ownership of the property would require appropriations for debt service payments, in addition to statutory authority including eminent domain. Governmental entities relying on property taxes would be negatively impacted by the TWDB's ownership as the land would no longer be on the tax roles. As a result, entities would likely request compensation for their loss of tax income.

**Authorize the TWDB to obtain development or conservation easements on property associated with unique reservoir sites.**

To be effective, the agency should be authorized to acquire the easements through the eminent domain process. This would provide the TWDB with a mechanism to control further development of a site which could result in reduced costs to develop the reservoir when needed. As with the previous recommendation, this would require appropriations and there could be tax consequences to local governments. Existing landowners within reservoir sites could object to the state directing the use of their property.

**Authorize the TWDB to obtain through TNRCC action (designed specifically for protection of reservoir sites which should include environmental considerations) and hold water rights permits associated with recommended future surface water reservoirs that are not subject to cancellation for lack of construction activity.**

This would ensure that water would be available for reservoirs when the reservoir would be needed. A consequence of this action would be that others seeking a water right would be unable to obtain that water even though the reservoir has not been built. The TNRCC could issue term permits that would allow water to be used by others until it is needed for the unique reservoir.

**Require counties to zone the land associated with unique reservoir sites for reservoir use only.**

The TWDB lacks the appropriate enforcement mechanism for this solution. Additionally, this solution could also result in property tax values being reduced and could be determined to be an infringement of private property rights. Counties must be given explicit authority for this.

**Restrict the development of mineral interests in a unique reservoir site to those activities that are compatible with the operation of a reservoir.**

Development that is not compatible with reservoir operations can result in large mitigation costs relative to mineral interests when the reservoir is developed. For example, the completion of the Alan Henry Reservoir in Garza County was delayed due to oil well production in the reservoir site. To date, this reservoir cannot be filled to capacity due to the continued litigation with one oil well owner producing within the reservoir site. This solution could be viewed as an unfunded mandate by the owners of mineral interests. In addition, enforcement would be needed through either the Texas Railroad Commission or counties.

**Require the TNRCC to reserve the unappropriated water necessary for a legislatively designated unique reservoir sites and to solely issue term permits for the surface water needed for reservoir development.**

This would ensure that the water was available for the reservoir at the time the reservoir would be needed for water supply purposes. The consequences of this solution are the same as in the third bullet above.

**Conclusion:**

State protection of unique reservoir sites would provide local and regional water providers with added assurances that they will be able to meet the states surface water supply needs at a reasonable cost. These proposed policy actions would enhance the state's ability to plan and guide the cost-effective development and management of the state's water resources and provide cost-effective financing for the development of water supply projects. Possible drawbacks to protecting unique reservoir sites include the additional expenditures of General Revenue to construct the sites prior to the actual use of the water, and the reduction in tax receipts associated with reserved land. Opposition from landowners in a unique reservoir site is expected.

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**State protection of unique reservoir sites would provide local and regional water providers with added assurances that they will be able to meet the states surface water supply needs at a reasonable cost.**

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## **ISSUE NUMBER 2:**

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### **A. Brief Description of Issue**

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**How can the TWDB better ensure that the state's water resources priorities are achieved?**

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### **B. Discussion**

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#### **General Scope of the Issue**

##### **State Funding Priorities**

As the lead agency for Texas' water resources development and planning needs, the TWDB advocates cost-effective, long-term solutions to secure the availability of water supplies for the next 50 years. The state's projected funding needs for water-related facilities are enormous; at least \$22 billion is needed in the next 20 years to address an array of water, wastewater, and flood control issues, including the following:

- Implement long-range water supply planning activities (as will be recommended by the Regional Water Planning Groups formed under Senate Bill 1);
- Encourage the construction of large and small scale regional water facilities to improve the quality of services and/or reduce the cost of providing reliable water services;
- Remedy the insufficient water resources and services in small and disadvantaged communities; and,
- Address other water infrastructure opportunities.

The 75th and 76th Texas Legislatures designated large amounts of funding to assist in the development of regional plans mandated by Senate Bill 1. These regional plans will ultimately produce the framework by which local water supply projects will be developed, by recommending projects that promote conservation and regionalization. If such projects are not supported by the state, where appropriate, vital opportunities will be lost. While there has been success in expanding state assistance to local and regional authorities, many opportunities still exist to support local and regional projects. The state's current funding mechanisms, however, are insufficient to ensure progress toward these goals.

## Costs Associated with Federal Funding Programs

Many of the state financing options available through the TWDB for water-related projects use general obligation bonds, which take advantage of the state's good credit rating to benefit customers. This financing approach, however, only assists communities with a generally low credit rating, who could not otherwise access the public bond market for assistance at reasonable rates and for whom the minor interest rate subsidy provided by this method is sufficient. The TWDB's federally-funded financial assistance programs offer deeper interest rate subsidies and have been very successful. However, while offering better financial terms, federally-funded programs have an array of requirements that makes them less customer friendly, and furthermore, federally-funded programs emphasize federal priorities which may not align with Texas' water resources priorities.

Aspects of federally-created funding mechanisms can be disadvantageous to the communities applying for financial assistance, as well as to the program administrators (the TWDB and the state). Stringent federal requirements are associated with the programs, which impose additional compliance hassles and increase the cost of a project. Some of the subsidy is used to offset the cost to local governments of complying with these federal requirements.

Furthermore, federal financing programs encourage short-term solutions to local compliance problems in order to satisfy federal priorities, when a longer term regional solution may better meet the state's needs. An example of this is the federal government's consideration of the short-term needs of a service area (a maximum 20 year consideration) to evaluate alternatives for water or wastewater treatment facilities. Using short-term parameters in their analysis precludes a longer-term, cost-effective regional solution from being implemented. These short-term solutions are relatively inflexible to longer-term issues of state priorities such as funding reservoirs and regional projects adequate for future growth. Such proactive considerations, however, are vital to the state achieving solutions to its long-term water resources management challenges and to securing a stable economy and healthy environment in the future at a reasonable cost.

## Challenges for Texas' Small and Disadvantaged Communities

Texas' small and disadvantaged communities have particular difficulty obtaining the necessary funding to meet their water resources needs. If federal funds are not available, the TWDB has few alternatives to offer to these needy communities. Consequently, if it is state policy to better assist these communities, it will be necessary for Texas to design financial assistance mechanisms that make available additional funds for small disadvantaged communities in a manner that meets the needs of these communities and in an administratively efficient and effective manner.

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**However, while offering better financial terms, federally funded programs have an array of requirements that makes them less customer friendly, and furthermore, federally-funded programs emphasize federal priorities which may not align with Texas' water resources priorities.**

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Existing financing programs would have to be altered to better meet the needs of small and disadvantaged communities. Providing assistance to small or disadvantaged communities is likely to be the subject of intensive interim study by the legislature. The TWDB and Sunset staff need to be aware of this important policy matter, as it will likely be deferred to this legislative initiative.

### **Existing Funding Mechanisms**

The past two state legislatures have started to take action against the lack of adequate funding mechanisms for state priorities. For example, in 1997 and 1999 the Texas Legislature authorized the issuance of a total of \$100 million in general obligation bonds for the TWDB's State Participation Program. This financing program allows the state to participate as a partner in regional water supply, wastewater treatment projects, and flood control projects, so that facilities can be built to optimum capacity, saving the cost of building additional facilities in the future as the regional population grows. Additionally, this investment reaps huge savings for the rate payers in the area served as it ultimately reduces the cost of water and sewer service at the local level.

Likewise, in both 1997 and 1999, significant federal appropriations were applied to the newly-created Safe Drinking Water Act State Revolving Fund loan program (DWSRF). These funds were earmarked for use to disadvantaged communities, privately owned water systems, and non-profit non-community water systems which lack adequate facilities to comply with state and federal drinking water standards.

As important as these steps are, however, they will still only address a small amount of the projected \$22 billion needed for water-related facilities in the next 20 years. While state assistance is not necessary for all of these needs, it will be necessary to assist local communities in closing key gaps in which their local resources are insufficient.

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## **C. Possible Solutions and Impact**

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### **Pursue an “evergreen” strategy for the agency’s general obligation bond authorization.**

This solution would allow the TWDB to structure a program that would provide self-renewing bond authorization but only for self-supporting bonds, instead of having to ask the voters to authorize an additional, non-replenishable amount each time the agency needs supplemental financing to support projects. The current combined, unissued balances for bond authorizations are less than \$1 billion. The currently planned and projected bond issuances for water projects will reduce the balance of unissued bonds to

less than \$500 million by the next legislative session. In order to continue providing financing for future projects, the TWDB would need to request voters to consider the authorization of additional bonds. Instead, a program could be structured to provide a replenishing amount of bonds, with a limit on the amount of outstanding bonds at any given time, provided they are self-supporting. For example, if a limit of \$3 billion were established, then the TWDB could issue approximately \$150 million per year in self-supporting debt, because based on 20 year bonds, approximately \$150 million would be paid off each year. This proposal would need to be implemented as a new authorization during the next legislative session and approved as a constitutional amendment by the voters. This change would have no fiscal impact to the state, but would benefit many communities by providing a long-term funding mechanism for water resources management.

### **Provide incentives to increase the number of regional water and wastewater systems.**

Local governments will need additional incentives and assistance to create or enlarge regional systems. While in the long run, the regional option almost always proves to be the most cost-effective for the state and the region as a whole, in the short term, the incremental costs associated with developing a regional project may increase utility service rates, which could prove to be politically or economically unsupported by the community. Large regional providers and their current members may need incentives, financial or otherwise, to reach outside of their current service areas to provide long-term solutions for what are now considered rural areas. Other mechanisms may need to be developed to encourage smaller-scale regional projects.

The TWDB and the TNRCC are currently engaged in an effort to further develop both regulatory and financial incentives to encourage regionalization. As this effort proceeds, specific recommendations for statutory or program changes will be developed and shared with Sunset Commission staff.

The State Participation Program, which encourages regionalization, has led to some notable successes, but its resources are limited and its application constrained by agency rule and law. Expanding the manner in which this program can be used is one fertile area for further investigation.

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## **Create additional funding mechanisms to ensure the implementation of water plan recommendations.**

As of January 5, 2002, in order for a water project to be eligible for financial assistance from the TWDB, it must be addressed in a manner consistent with the approved regional water plan. In some cases, a project that is consistent with the plan may have a short-term cost that is not supported by local constituents. Additionally, a new or unusual project may not be suitable for TWDB financing, due to the limited funding mechanisms available. Consequently, the local government may not be able to build the project it identified as a need or may be forced to use other costlier funding sources.

As the Regional Water Planning Groups (RWPGs) develop their recommendations, issues of financial viability will have to be considered by both the RWPGs and the state. Plan recommendations that are beyond the legal, administrative, and/or financial capability of local or regional entities will have to be identified and implementable solutions derived. This may well entail a significant financial contribution by the state. The magnitude of this will of course depend on the specific recommendations made by the RWPGs. The TWDB will be following this issue closely and will provide updates to Sunset staff as the dimensions of this issue become clearer.

## ISSUE NUMBER 3:

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### A. Brief Description of Issue

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**How can the state maximize the effectiveness and minimize the costs associated with the collection and use of water data and natural resources information without increasing state appropriations?**

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### B. Discussion

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#### General Scope of the Issue

##### **Moving Toward Better Management of State Natural Resources Information**

Texas is making significant strides toward creating a statewide clearinghouse for its natural resources information. In recent years, several organizations such as the Texas Water Monitoring Congress (TWMC), the Texas Geographic Information Council (TGIC) and the TWDB's Texas Natural Resources Information System (TNRIS), have launched collaborative efforts to build and share natural resources data in order to cut costs and save money associated with the acquisition, storage, and dissemination of this information. These cost-saving efforts would enable agencies to work together more productively for the benefit of the state.

These collaborative initiatives have produced multiple recommendations, which if implemented, would ultimately lead to better natural resources data management, better customer service, and more efficient use of state funds.

The TWDB's Texas Natural Resources Information System is and will continue to be a key player in the implementation of these recommendations. Current state funding mechanisms limit the TNRIS' ability to perform the functions that are essential to better management of the state's natural resources information.

##### **Challenges to Efficiently Managing State Natural Resources Information Systems**

In 1998 the Texas Water Monitoring Council produced a report of recommendations regarding water monitoring in Texas. The report highlighted the need for continual Texas Water Development Board

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**Current state funding mechanisms limit the TNRIS' ability to perform the functions that are essential to better management of the state's natural resources information.**

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leadership in the arena of state natural resources information systems through the agency's Texas Natural Resources Information System.

One specific recommendation stated that water-monitoring entities should use the products of the Texas Strategic Mapping Program (StratMap, managed by TNRIS) as the base map upon which to locate water-monitoring data.

In January 1999 the Texas Geographic Information Council (TGIC) published the Geographic Information Framework for Texas (GIFT). This framework outlines five initiatives that were unanimously supported by the 46 TGIC member agencies (see below). If properly crafted and launched, these initiatives would serve to further streamline Texas' management of natural resources information. As a member of the TGIC, the TWDB wishes to share these recommendations with the Sunset Commission. They are general recommendations that need to be further researched; however, they represent promising concepts to pursue for better, more cost-effective government.

**The initiatives include:**

1. Ongoing development of intergovernmental partnerships: The TGIC's vision of building these relationships between state, national, local and private sector participants will extend the benefit of investments in this technology to the broadest possible community.
2. Cooperative base mapping: The TGIC calls for the completion of StratMap and for natural resource agencies to use StratMap products and not duplicate the considerable efforts made to develop this data.
3. Electronic data sharing: The high cost of developing digital data necessitates that efficient Internet-based data dissemination mechanisms be put in place.
4. Field Data Collection: Advances in computers and Global Positioning Systems (GPS) are rapidly making this technology a key tool for state agencies collecting field data. The TGIC supports the broadcast of GPS correctional data, and the creation of a state geodetic advisor position.
5. Educational outreach: The TGIC calls for an educational outreach program to ensure the broadest benefit from the above activities.

## **The Central Role of Texas Natural Resources Information System (TNRIS)**

Both the Texas Water Monitoring Council and the Texas Geographic Information Council have identified the Texas Water Development Board's TNRIS as a key component to fulfilling their objectives. Because TNRIS provides state agencies, the general public, and other public and private institutions with a centralized, cost-effective means for accessing geographic data for state agencies and for the public, these coordinating bodies recognize the TNRIS as the focal point of the state's natural resources information activities.

However, the TNRIS' ability to make the investments desired by data users to process and distribute information while maintaining important existing functions is hindered by state appropriation limitations. Examples of these hindrances include the following:

- The TNRIS has gradually filled the void for Digital Basemap Distribution without new appropriations of funds or full time employees (FTEs). New services have been added, and the TNRIS must still secure funding for the purchase of Internet Servers, and hiring experienced programmers and database experts. Even with outside funding, through grants and other sources, the FTE cap prohibits TNRIS from adding to the three person Information Services Distribution Section. Such programs, in a small division, become lost within the two-year statewide appropriations cycle.
- The TNRIS distributes large data sets, yet the division's Internet connection is only a 10 megabit bandwidth while the technology has advanced past this many times over. Such limitations restrict the flow of information to other agencies and the general public.

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## **C. Possible Solution and Impact**

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### **Explore modifications to the TNRIS statutory appropriations authority to allow innovative approaches to funding strategies and especially encourage public-private partnerships for data dissemination.**

The TWDB recommends that the TNRIS be provided the authority to pilot new funding strategies through public and private collaboration that can increase services to state agencies at no additional state funding. This may for example include utilizing funding from federal, non-profit and private sector sources for the creation and maintenance of a public/private funded Internet

distribution center. As an incubator of emerging technologies and approaches, the TNRIS will be able to promote cooperative linkages with the private sector, without entering into competition with them, and create increased interaction and cost sharing among public and private entities. This approach will increase the usefulness and availability of basic data sets throughout Texas and enhance private sector economic opportunities within the computer, remote sensing and geographic information systems fields.

These proposed changes will better prepare the TNRIS to actively pursue and support the implementation of the Texas Water Monitoring Council and the Texas Geographic Information Council initiatives.



# X Comments

This section highlights three themes central to the TWDB's effective and efficient operation. The agency's employees are indispensable to the success of the agency: The TWDB requires talented people, with a highly-sophisticated knowledge of water planning, engineering, computer modeling, public policy, and the intricacies of finance. Without these quality people, the agency's performance would suffer. On a broader scale, the development of Texas' water supplies and the health and economic welfare of the state would decline without the TWDB filling the role as advisor to the lawmakers and citizens of the state. The TWDB continuously serves in the capacity of advisor to the Texas Legislature, and the agency was an instrumental player in developing the recommendations that were utilized in Senate Bill 1 to rewrite Texas' water legislation and revolutionize the way water resources planning and developing is conducted.

This section touches on each of these issues in more detail:

<p style="text-align: center;"><b>The TWDB's Knowledge Capital</b></p> <p style="text-align: center;"><b>The TWDB's Role as Advisor to the Texas Legislature</b></p> <p style="text-align: center;"><b>The Significance of Senate Bill 1</b></p>
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## **The TWDB's Knowledge Capital**

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Over the last several years, the demand for the TWDB's services has increased dramatically. With more political subdivisions and Regional Water Planning Groups assuming responsibility for the state's water resources development, the TWDB is proactively stepping up to the challenge of operating as a one-stop shop to fulfill all of these customers' needs for low-cost financing, water planning, technical assistance and data collection and dissemination. As the TWDB's services continue to improve and expand, the agency strives to hire and retain the best employees to complement these services.

The booming economic growth and vast employment opportunities in Austin have impacted the TWDB's workforce, making it difficult to recruit

and retain high-caliber employees. The agency must effectively compete with other organizations, both private sector and public, to sustain a high-performing staff. This level of competition is new to the agency, and to the state at large.

The TWDB has recognized the need to market the agency, the uniqueness of its programs, and the value of public service. TWDB staff need to research the marketplace to stay abreast of significant trends occurring within the labor force. Additionally, the TWDB must initiate better outreach programs, both web-based and site-based, to ensure that suitable individuals are engaged to fill the agency's highly-specialized positions. Most importantly, the TWDB requires appropriate funding to compensate and retain employees for their expertise and performance.

Over the past three years, key staff have left the agency to pursue other opportunities in both the public and private sector. In many instances, the agency has not been able to replace these individuals with persons who possess comparable experience/skills, and in some instances, the agency has been forced to offer higher salaries for less experience/skills.

The TWDB has been addressing this employment challenge through retention programs that enable the agency to be a competitive employer. Lost employees are costly, in terms of expense and agency performance, and the cost of replacing critical technical and management knowledge and experience far outweighs the cost of retaining qualified staff.

The State Auditor's Office (SAO), in a Management Audit Report of the TWDB dated January 1998, concluded: "Many of the Board (TWDB)'s key employees are highly marketable or eligible for retirement. We suggest that the Board (TWDB) conduct a wage/salary survey to assist in establishing appropriate compensation for employees."

Under the SAO's advisement, the TWDB contracted with a private consulting firm to conduct an external salary survey in October 1998. The TWDB compared the results with 42 entities, of which over 85 percent were public agencies. The majority of the comparisons for the information resources, engineering, and environmental professions were with private companies.

This report revealed:

- The TWDB is not a competitive employer;
- Eighty percent of the TWDB's benchmark job classes (salaries) are more than five percent below the prevailing rates; and

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**... the TWDB is proactively stepping up to the challenge of operating as a one-stop shop to fulfill all of these customers' needs for low-cost financing, water planning, technical assistance and data collection and dissemination.**

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- The TWDB’s salary structure comparatively breaks down as follows:

**Administrative/Financial .....8.9% below average**

**Professional/Natural Resource Science ....14.9% below average**

**Engineering .....5.9% below average**

**Information Technology .....20.2% below average**

**Legal .....35.6% below average**

- The TWDB would require at least \$2.7 million in appropriations to adjust key positions to the market rate.

The TWDB was appropriated \$793,100 in additional salary dollars (all funds). The General Revenue portion was only 57 percent of the amount requested.

While this appropriation will contribute to the agency’s efforts to stabilize the workforce in the upcoming biennium, it is doubtful that the amount appropriated will significantly impact the TWDB in the long run.

Therefore, the TWDB expects to continue to lose highly-qualified employees as wage growth in the public sector lags in comparison with competing industries. The TWDB, therefore, will need to pursue more aggressive recruitment and retention strategies, or will need to request additional appropriations during the next legislative session.

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## **The TWDB’s Role as Advisor to the Texas Legislature**

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### **How the TWDB discharges its responsibilities to advise and counsel the Legislature, legislative committees and other appropriate public and private entities on water or wastewater development**

In recent years, the TWDB has proven its professionalism and expertise in the arenas of water management issues and infrastructure financing. The agency receives special requests and actively seeks opportunities to provide assistance to the Texas Legislature and to local governments regarding an array of water resources issues. The Legislature relies on the TWDB to provide data and advice on complex water issues, and clearly values the TWDB’s expertise.

The TWDB has provided countless services to the Texas Legislature including:

- Development of aquifer models to help in evaluation of various water management plans;
- Financing options for meeting water and wastewater needs;
- Best practices in the field of water resources planning and financing;
- Specific analysis of local water problems; and
- An array of water information requests.

### **Drought of 1996**

Historically, Texas has suffered a drought every decade. However, the two most recent droughts have occurred within a three year period, in 1996 and in 1998. Not only were the droughts devastating to the agricultural industry, but the droughts also put a severe strain on the water supplies of most municipalities statewide.

Lieutenant Governor Bob Bullock charged the TWDB, along with the Texas Natural Resource Conservation Commission (TNRCC) and the Texas Parks and Wildlife Department (TPWD), to identify existing problems and opportunities related to water supply and management in Texas, and to provide a comprehensive list of policy options to address those issues.

The TWDB and partner agencies provided the report of policy options to Lieutenant Governor Bullock in August 1996. In January 1997, in conjunction with the 1997 State Water Plan, the agencies submitted a comprehensive report to the Legislature. The report became the impetus for passing the revolutionary Senate Bill 1, 75th Texas Legislature.

### **75th Texas Legislature (1997) and Interim**

During the Senate Bill 1 hearing process the TWDB was repeatedly called upon as a resource witness to explain or provide clarification on complex water supply issues such as interbasin transfers, groundwater management, and alternative water sources.

During the interim, the TWDB was asked to provide testimony at every hearing of the Joint Interim Committee on Water Resources Management. Hearings were held around the state on current water conditions and water projections for the year 2020.

The TWDB was called upon by the Joint Interim Committee staff to develop specific recommendations which would help facilitate the implementation of the initiatives of Senate Bill 1.

During the recent droughts, the TWDB was asked to brief the Governor and other state heads on current water conditions and to suggest an action plan to assist those areas of the state that were in imminent danger of not being able to meet water demands. The TWDB's recommendations for assisting the Lower Rio Grande Valley were used as the basis for an emergency appropriations this past legislative session.

### **76th Texas Legislature (1999)**

The TWDB was requested by members of the Legislature to provide information and develop illustrations explaining complex water issues involving the flow patterns of aquifers. These tools aided legislators in developing legislation for the creation of groundwater conservation districts.

TWDB staff provided language to assist with the development of Senate Bill 1421, the omnibus colonia bill authored by Senator Lucio (and co-sponsored by many other border legislators). At each hearing of the Senate Special Committee on Border Affairs, TWDB staff were asked to serve as resource witnesses. The work of the TWDB on this legislation was noted by Senator Truan during passage of the bill on the Senate floor, and his remarks were entered into the Senate Journal.

Agency staff also worked extensively with the House Committee on Urban Affairs to identify options for providing assistance to unincorporated areas of the state that have inadequate water or wastewater services.

### **Texas' Need for Leadership to Guide Water Resources Planning**

Texas' population growth and unpredictable weather conditions make the business of planning and providing for Texas' water supply needs a formidable challenge. The TWDB can provide the expertise to help Texas meet this challenge. The agency will continue to offer its services to the Texas Legislature as well as to local governments in the effort to ensure that Texas has water for today and tomorrow.

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## Senate Bill 1's Impacts on the TWDB

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Senate Bill 1 received abundant statewide, and even national attention when it was enacted by the 75th Texas Legislature and signed into law by Governor George W. Bush in June 1997. Described as the “most comprehensive rewrite of Texas water law in the last 30 years,” passage of this bill touched virtually every aspect of the agency, from revisions to the TWDB’s constitutional duties, to affecting the agency’s day-to-day activities.

This legislation has initiated a radical transformation in the agency’s service offerings, including major reforms to the TWDB’s financing programs, data collection and dissemination services, and water planning and management strategies. While this legislation is only two years old, the TWDB has adapted to the significant transition in duties, streamlining processes and improving customer service. Continuing the evolution of this landmark legislation is essential, to allow the TWDB, its partner agencies, and the RWPGs to fulfill their roles and responsibilities in meeting the challenges of developing Texas’ current and future water supplies. The success of this legislation will not be determined until put to two definitive tests — demonstrating the state’s ability to successfully mitigate Texas droughts, and safeguarding an abundance of water supplies for Texas’ explosive population growth.

### The TWDB’s New Roles and Responsibilities

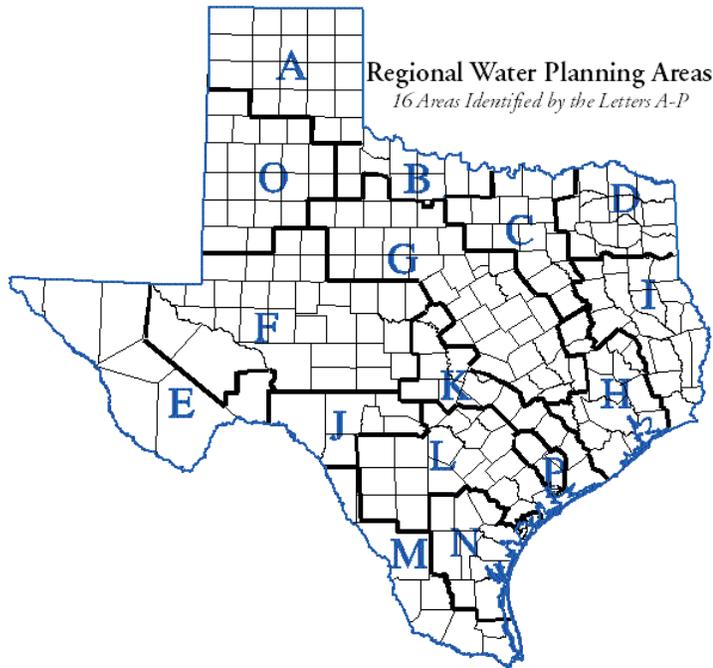
#### Water Planning

Senate Bill 1 designates the TWDB as the lead state agency for coordinating the regional water planning process. In February 1998, after extensive review and public comment, the TWDB adopted state and regional water planning rules, delineated 16 regional planning areas and selected 270 individuals to serve as initial members of Regional Water Planning Groups. Non-voting memberships were included in the groups, to encourage coordination between boundary RWPGs, state and federal agencies, and the Republic of Mexico. The TWDB assigned staff to act as liaisons and to participate in RWPG meetings as non-voting members. The TWDB is now moving into a leadership and support role: approving regional plans and incorporating them into the State Water Plan, resolving any conflicts between plans, and providing financial and technical assistance to RWPGs. Once the 2002 State Water Plan is adopted in January, TWDB financial assistance will be provided only to water supply projects that meet needs in a manner that is consistent with the approved regional water plans.

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**... passage of this bill touched virtually every aspect of the agency, from revisions to the TWDB’s constitutional duties, to affecting the agency’s day-to-day activities.**

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### Data Collection and Dissemination

The TWDB continues to lead the charge in developing a statewide network of easily-accessible water information. Senate Bill 1 and the accompanying appropriation expanded the agency's basic water data collection to provide the state with increased, timelier groundwater and surface water information. Through improvements in the agency's information delivery mechanisms and with oversight of the Texas Natural Resources Information System, the TWDB is playing an active role in improving statewide access to water resources data in cost-effective ways with significant enhancements to electronic data distribution. The TWDB participates in several geographic information councils to develop comprehensive data dissemination tools that will facilitate general information-sharing and support regional water planning efforts.

### Financing Programs

Senate Bill 1 expanded the use of the TWDB's financing programs and improved the use and cost-effectiveness of state bond programs by rewriting the constitutional language authorizing bonds. Additionally, the legislation grants the TWDB the leverage to offer financial assistance to privately-owned public water systems, and to provide "forgiveness of loan principal" to disadvantaged communities through the federally-financed Drinking Water State Revolving Fund.

Likewise, Senate Bill 1's restructuring of the Texas Water Code made it possible for the TWDB to expand the range of uses of the Agricultural

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Water Conservation Loan Program and modified the way the program was capitalized.

### **Coordination with Other State Agencies**

The TWDB works with other agencies to ensure the successful implementation of these revolutionary changes to water planning, financing, and information collection and distribution. Senate Bill 1 envisions strong interagency coordination through a large range of mandated coordination activities and by dove-tailing agency functions (e.g., the Texas Natural Resource Conservation Commission may not issue a water right for municipal purposes unless it is consistent with an approved regional water plan after 2002.)

Other examples of interagency coordination include, but are not limited to:

- Agency participation in numerous data dissemination activities;
- Multiple state agency representation (non-voting) on RWPGs;
- The Texas Natural Resource Conservation Commission (TNRCC)'s findings of managerial, financial, and technical capabilities for the TWDB's Drinking Water State Revolving Fund loan applicants;
- The TWDB and the Texas Parks and Wildlife Department (TPWD)'s coordination with the TNRCC on surface water availability model development;
- The TNRCC and the TPWD's participation in the TWDB's determination of water demand projections in support of Senate Bill 1 plan development; and
- The TWDB, TNRCC, and TPWD coordinate studies of the freshwater inflow needs of the state's bays and estuaries.

## List of Useful Acronyms

<b>Acronym</b>	<b>Description</b>
BAT	Border Activity Tracker
BIC	Border Information Center
CMBL	Centralized Master Bidders List
CPLP	Colonia Plumbing Loan Program
CWSRF	Clean Water State Revolving Fund
CWTAP	Colonia Wastewater Treatment Assistance Program
DEA	Deputy Executive Administrator
DWSRF	Drinking Water State Revolving Fund
EA	Executive Administrator
ECR	External Customer Relations
EDAP	Economically Distressed Areas Program
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Administration
FMA	Flood Mitigation Assistance
FTE	Full Time Employee
GIFT	Geographic Information Framework for Texas
HUB	Historically Underutilized Business
IBWC	International and Boundary Water Commission
INEGA	Instituto Nacional de Estadistica Geografica e Informatica
LAR	Legislative Appropriations Request
LBB	Legislative Budget Board
LCRA	Lower Colorado River Authority
LRGV	Lower Rio Grande Valley
MFT	Managerial, Financial, and Technical
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NADBank	North American Development Bank
OoP	Office of Planning
OPFCA	Office of Project Finance and Construction Assistance
PGMA	Priority Groundwater Management Areas
PPRI	Public Policy Research Institute
RIO	Resource Information Office
RWPG	Regional Water Planning Group
SAO	State Auditor's Office
SRF	State Revolving Fund
STEP	Small Town Environment Program
StratMap	Strategic Mapping Initiative
TBIG	Texas Border Infrastructure Group
TDA	Texas Department of Agriculture
TDHCA	Texas Department of Housing and Community Affairs
TDWR	Texas Department of Water Resources
TGIC	Texas Geographic Information Council
TGIN	Texas Geographic Information Network
TNRCC	Texas Natural Resource Conservation Commission
TNRIS	Texas Natural Resources Information System
TPFA	Texas Public Finance Authority
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TWRFA	Texas Water Resources Finance Authority
USGS	United States Geological Survey
WAMs	Water Availability Models
WIIC	Water Information and Integration Committee

