

## VII. Guide to Agency Programs

### Executive Office

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Executive Office
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	J. Kevin Ward, Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$488,043
<b>Number of FTEs as of August 31, 2008</b>	6.00

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

The Executive Office consists of three main areas: (1) Executive Administrator, (2) Governmental Relations, and (3) Policy Integration & Federal Coordination. The primary objectives of the office are to support the TWDB and represent the agency before policymakers and stakeholders. Internal Audit reports directly to the Board, with administrative oversight by the Executive Administrator.

#### Executive Administrator

- Reports directly to the Board
- Implements Board policies and directives
- Accountable for the functions and operations of the agency
- Manages agency priorities and budgets
- Directs and oversees agency initiatives
- Responsible for prudent management of financial portfolio

#### Governmental Relations

- Reports directly to the Executive Administrator
- Coordinates agency interaction with the state legislature
- Leads development of action plan for legislative session
- Advises the Executive Administrator and Board on legislative and policy initiatives
- Briefs the Board and Executive Administrator on status of legislative activity
- Promptly responds to inquiries from state legislators, legislative oversight agencies, and other state agencies

#### Policy Integration & Federal Coordination

- Reports directly to the Executive Administrator

- Leads the coordination and integration of the agency's policy decisions to ensure consistent and comprehensive application
- Serves as liaison to the Texas congressional delegation, congressional committees, and federal agencies
- Monitors and provides input into the development of legislative, policy, and appropriations initiatives by Congress and federal agencies
- Supports the Executive Administrator and Board on memberships in regional and national water resources and financing organizations

#### **Internal Audit**

- Assists members of management and the Board in the effective discharge of their responsibilities by furnishing them with analyses, recommendations, counsel, and information concerning the activities reviewed
- Reports directly to the Audit Committee of the Board
- Performs audits of the TWDB
- Performs follow-up reviews to determine what corrective action was taken and whether or not it is achieving the desired results
- Performs assurance services to parties outside of the TWDB, such as contractors or other state agencies
- Acts as a liaison with external auditors reviewing TWDB activities or programs
- Has primary responsibility for the investigation of all suspected fraudulent acts and for coordinating investigative activities

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

The Executive Office is a vital function. It coordinates activities with the legislature, ensuring prompt and adequate response to inquiries from the legislature, customers, and stakeholders. The Executive Office also performs the monthly mailout of agenda items for Board meetings, coordinates correspondence for prompt response, and ensures that all Board member communications are in place.

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

Services and functions of the Executive Office have not changed from the original intent. The Executive Administrator, however, recognized a need to strengthen integration and coordination of policy decisions across the agency. In 2009, the Executive Administrator created the Policy Integration & Federal Coordination Division to ensure that policy decisions and implementation accounted for an agencywide perspective.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

The activities of the Executive Office affect all aspects of the agency’s business. The Executive Office supports the Board, executive and legislative branches of state government, and stakeholders. The Executive Office also provides guidance and support to agency staff and other public agencies and non-governmental organizations.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

The Executive Administrator is the agency’s chief executive officer, reporting directly to the Board. The Executive Office delegates authority for specific program areas to five Deputy Executive Administrators, the Chief Financial Officer and the General Counsel, as depicted in the agency’s organizational chart and described elsewhere in this section. In addition, within the Executive Office, the Director of Governmental Relations and Director of Policy Integration & Federal Coordination report directly to the Executive Administrator. All of these positions are part of the Executive Administrator’s Leadership Team.

**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Executive</b>	
General Revenue	\$249,115
Federal Funds	219,834
Appropriated Receipts	<u>19,094</u>
Total \$488,043	

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

The Office of State-Federal Relations (OSFR) in Washington, D.C., performs services similar to the Policy Integration & Federal Coordination Division. OSFR serves as a liaison between the Governor, state legislature, and Texas congressional delegation. OSFR monitors legislation and interacts with congressional offices on priority issues for the state, which currently do not include water issues. The Policy Integration & Federal Coordination Division performs similar duties, with a much more specific focus on water resources issues and programs. The Policy Integration & Federal Coordination Division is often called on to provide specific input on draft legislation and appropriations related to water resources policy and funding. The Policy Integration & Federal Coordination Division also coordinates federal

communications with various regional and national water organizations to ensure a cohesive message where appropriate.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

As mentioned above, the Policy Integration & Federal Coordination Division coordinates its federal outreach with regional and national water organizations, including the Texas Water Conservation Association, Western States Water Council, Interstate Council on Water Policy, Council for Infrastructure Financing Authorities, and Alliance for Water Efficiency. In addition, where applicable, the Executive Office coordinates with other state and federal agencies on water policy and funding.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

The Executive Office works closely with a broad range of governments, from local to federal levels. The Executive Office interacts directly with municipalities, water districts, river authorities, state and federal agencies, and the executive and legislative branches of Texas and federal government.

**K. If contracted expenditures are made through this program please provide:**

- the amount of those expenditures in fiscal year 2008;
- the number of contracts accounting for those expenditures;
- a short summary of the general purpose of those contracts overall;
- the methods used to ensure accountability for funding and performance; and
- a short description of any current contracting problems.

FY 2008 expenditures: \$5,500

Number of contracts: 1

The only contract for this area was for peer review services for the Internal Audit section. These services are obtained periodically to ensure best practices. This contract requires a report and presentation to the Board to fulfill the required services.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

Eliminating out-of-state travel limitations for business conducted in Washington, D.C.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

None.

**N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**

- why the regulation is needed;
- the scope of, and procedures for, inspections or audits of regulated entities;
- follow-up activities conducted when non-compliance is identified;
- sanctions available to the agency to ensure compliance; and
- procedures for handling consumer/public complaints against regulated entities.

Not applicable

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable

## Legal Services

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Legal Services
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Kenneth L. Petersen, General Counsel
<b>Actual Expenditures, FY 2008</b>	\$566,663
<b>Number of FTEs as of August 31, 2008</b>	7.00

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

The objective of the Legal Services Division is to provide legal advice and representation to the TWDB Board members and staff in the areas of financial assistance, water planning, water policy, natural resources, environmental compliance, legislation, tort claims, human resources, contracting and purchasing, real estate, ethics, open records, open meetings, and rulemaking. This includes, but is not limited to, preparing and reviewing documents, researching and preparing formal and informal legal opinions, representing the agency on interagency working groups, drafting and reviewing regulations and policies, and working with the Office of the Attorney General regarding agency litigation and contested matters.

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

Although the day-to-day activities of the Legal Services Division include a number of matters that are not easily counted (see, B, above), the following are a few statistics that reflect the work of the Legal Services Division.

- In FY 2008, assisted with the application review and loan process for the Clean Water State Revolving Fund (CWSRF) program, which resulted in 19 loans closed, totaling \$93,634,236. Assisted with the application review and loan process for the Drinking Water State Revolving Fund (DWSRF) program, which resulted in 30 loans closed, totaling \$426,735,000. Also assisted with the application review and loan process for state programs, resulting in 35 loans closed, totaling \$119,445,00.

- In FY 2009, provided legal advice and assistance pertaining to funds received as part of the American Recovery and Reinvestment Act which solicited over 726 CWSRF program projects and 800 DWSRF program projects. The Legal Services Division is assisting with the application review and loan process for the DWSRF program for approximately 34 projects identified as eligible for American Recovery and Reinvestment Act funding. The division is also assisting with the application review and loan process for the CWSRF program for approximately eight projects identified as eligible for funding through the American Recovery and Reinvestment Act.
- Developed and proposed/adopted 261 new rules or rule amendments and 23 miscellaneous documents in FY 2008 and 133 new rules or rule amendments and 30 miscellaneous documents in FY 2009.
- Worked with the Office of the Attorney General in defending six lawsuits pending against the TWDB in FY 2008 and FY 2009. Assisted the Office of the Attorney General in pursuing lawsuits.
- Responded to four complaints filed with the Equal Employment Opportunity Commission (EEOC) in FY 2008 and one complaint filed in FY 2009.
- Responded to approximately 50 open records requests in FY 2008 and 153 open records requests in FY 2009.
- Prepared bill analyses for over 400 bills during the 81<sup>st</sup> Texas Legislature.

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

Prior to 2005, there existed a Legal Services Division and a separate section titled “Administration and Northern Legal Services” within the division of Project Finance and Construction Assistance. In 2004 or 2005, reorganization occurred, budgets were consolidated, and the attorneys working in the Project Finance and Construction Assistance Division became part of the Legal Services Division. The functions performed by these attorneys also moved to the Legal Services Division. The primary impacts of the consolidation of the functions performed by the attorneys was (1) the elimination of strict lines separating attorneys’ job duties and (2) the availability of a single source for legal services. This also provides an opportunity for cross training.

The Legal Services Division is currently part of the Executive Office. The division consists of a General Counsel, a Deputy General Counsel, seven staff attorneys, a program specialist, and two executive assistants. The program specialist serves as the agency open records coordinator and as the primary coordinator for bill analyses and review. The executive assistants provide administrative support to and staffing for agency Board meetings.

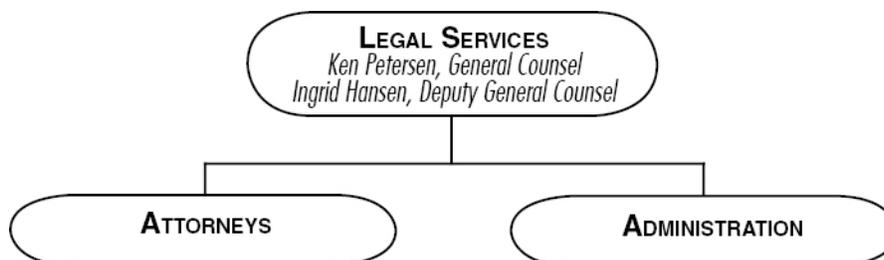
**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

The Legal Services Division provides legal services and advice internally to the entire agency. The types of legal services vary depending on the issues that arise within the agency. A breakdown of the services provided by the Legal Services Division is as follows:

- Financial Assistance (project finance and construction planning): 45 percent
- Water Science and Conservation: 20 percent
- Water Resources Planning and Information: 15 percent
- Claims and lawsuits against the TWDB: 5 percent
- General government and agency operations: 15 percent

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

The General Counsel reports to the Executive Administrator. The staff attorneys, program specialist, and executive assistants report to the General Counsel. The following is the Legal Services Division organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Legal Services</b>	
General Revenue	\$ 321,146
Agricultural Water Conservation Fund	1,217
Federal Funds	170,591
Appropriated Receipts	<u>73,709</u>
<b>Total</b>	<b>\$ 566,663</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

There are no other programs, internal or external to TWDB, that provide services that are identical or similar to the functions of the Legal Services Division. The Office of the Attorney General represents the TWDB in civil litigation. Other state agencies have legal divisions, and private law firms provide legal services to some governmental bodies. However, given the broad and unique nature of the TWDB's mission, no other program provides services that are identical or similar to the services provided by the TWDB Legal Services Division.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

Although there is little risk of duplication or conflict, the Legal Services Division seeks to ensure coordination with other agencies to increase efficiency. For example, the TWDB participates in the State Agency Coordinating Committee Legal Subcommittee. The TWDB's attorneys and program specialist participate in periodic meetings of agency public information coordinators. In addition, the TWDB attorneys are members of various state and local bar groups.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

The Legal Services Division works with entities seeking loans and grants from the TWDB, including but not limited to cities; counties; local and special districts created under Section 52, Article III or Section 69, Article XVI, Texas Constitution; groundwater districts, other political subdivisions of Texas; any interstate compact commission to which the state is a party; and any nonprofit water supply corporation created and operating under Chapter 67.

The Legal Services Division also supports agency staff in water science and conservation and water planning issues, including groundwater. This might include interacting with the groups involved in these issues, such as local governments, special and local districts, regional water planning groups that have been designated by the TWDB, and groundwater management areas.

The Legal Services Division supports the work of other TWDB divisions in their routine work with other agencies, including but not limited to the following: (There are incidental projects and issues that might require limited coordinated and communication with another state or federal entities. These are not included here.)

- Office of the Governor on American Recovery and Reinvestment Act matters related to the American Recovery and Reinvestment Act and reporting and general government issues
- The Texas Commission on Environmental Quality, the Texas Department of Rural Affairs (formerly the Office of Rural Community Affairs), the Secretary of State's Office, the Health and Human

Services Commission, and the U.S. Environmental Protection Agency on CWSRF and DWSRF and state loan and grant programs

- Federal Emergency Management Agency on flood mitigation planning issues
- U.S. Geological Survey
- The Comptroller's Office, the Texas Facilities Commission, the Texas State Library and Archives Commission, and the Department of Information Resources on general government issues
- The Attorney General's office on claims and litigation, as well as public information matters
- The Texas Workforce Commission and federal Equal Opportunity Commission regarding claims of discrimination. Other TWDB divisions may also be very involved in such matters, but the Legal Services Division is the lead division for such contacts.

**K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$42,053

Number of contracts: 2

The Legal Services Division entered into an outside counsel contract for intellectual property rights, including legal advice and services related to trademark rights. Legal Services also entered into a contract for expert engineering consulting services in preparation for litigation. The staff attorney assigned to these issues and who works most closely with the contractor reviews each invoice for work prepared and consistency with the contract. All invoices are also approved for payment by the Office of the Attorney General, in accordance with their procedures. In addition to review by program staff, contract administration staff review invoices to ensure that submissions are proper and correspond to contract requirements.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

Judicial remedies to enforce specific covenants and obligations in bonds and other securities, including loan and grant agreements, executed or issued by financial assistance applicants, may be extended or more clearly specified in statute, as discussed in greater detail in Section IX, Policy Issues ("Adequacy of Judicial Remedies").

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

Not applicable.

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- **why the regulation is needed;**
  - **the scope of, and procedures for, inspections or audits of regulated entities;**
  - **follow-up activities conducted when non-compliance is identified;**
  - **sanctions available to the agency to ensure compliance; and**
  - **procedures for handling consumer/public complaints against regulated entities.**

Not applicable.

- O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable.

## Water Science and Conservation

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Water Science and Conservation
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 4 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Robert E. Mace, Deputy Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$8,381,195
<b>Number of FTEs as of August 31, 2008</b>	72.45

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

Water Science and Conservation provides the scientific expertise required to analyze and supply objective information on the water resources of Texas as well as provide technical assistance for water conservation activities. With a staff that holds 17 Ph.D.'s, 10 registered professional engineers, and 22 registered professional geoscientists, Water Science and Conservation provides these functions through four primary programs:

- Conservation
- Surface Water Resources
- Groundwater Resources
- Innovative Water Technologies

### Conservation

- Promotes conservation strategies in regional and statewide water resources planning
- Reviews, plans and annually reports water conservation plans, which are required to receive financial assistance from the TWDB
- Assists water suppliers with developing water conservation plans and water loss audits
- Provides technical assistance to implement water conservation best management practices
- Provides technical and financial assistance to implement agricultural conservation programs
- Provides water conservation education, literature, outreach, and public awareness programs

### Surface Water Resources

- Provides data collection and analytical studies to determine freshwater inflow needs to maintain the health and productivity of Texas' bays and estuaries
- Provides data collection and analytical studies to determine the conditions in Texas' rivers and streams necessary to support a sound ecological environment
- Provides data collection and analysis to determine reservoir volumes and sediment accumulation
- Evaluates the availability of surface water for water and wastewater infrastructure projects submitted to the TWDB for financial assistance

- Provides modeling studies to determine the amount of water available to meet the multiple needs for water in Texas

### **Groundwater Resources**

- Monitors wells and springs in all major and minor aquifers to determine water levels and ambient water quality and assess changes over time
- Administers and maintains the groundwater database, which provides public information on groundwater levels, water quality, and other information concerning groundwater wells
- Reviews desired future conditions submitted by groundwater conservation districts, develops managed available groundwater estimates, and assists with reviews of petitions appealing the reasonableness of the desired future conditions
- Evaluates the availability of groundwater for water and wastewater infrastructure projects submitted to the TWDB for financial assistance
- Develops and runs groundwater flow models to support development of groundwater management plans, assists with defining desired future conditions, and calculates managed available groundwater in overall support of managing groundwater resources in Texas
- Assists groundwater conservation districts in developing their groundwater management plans and reviews these plans for administrative completeness

### **Innovative Water Technologies**

- Researches, develops, and disseminates information to advance the development of innovative water management strategies, including desalination, water reuse, rainwater harvesting, and aquifer storage recovery
- Provides educational outreach on innovative water technologies
- Manages technology demonstration contracts and research studies

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

### **Performance Measures**

- Number of responses for water conservation information, groundwater data, technical assistance, and educational activities provided by the TWDB staff
- Percent of communities receiving technical and/or financial assistance for water planning and conservation
- Percent of information available to adequately monitor the state's water supplies
- Number of bay, estuary, and instream study elements completed
- Number of data units collected and/or processed by the TWDB staff in support of monitoring, investigating, and defining the state's surface water and groundwater resources

### **Key Statistics**

- Since 1985, the TWDB has developed annual irrigation water use estimates for each of the 254 counties.
- The National Research Council of the National Academies of Science positively reviewed the Texas Instream Flow Program in which the TWDB is a partner.

- Since 1982, the TWDB has surveyed 128 lakes and reservoirs. The updated elevation-area-capacity tables have been used by regional water planning groups.
- The TWDB currently supports 93 streamflow measurement sites and 57 lake level monitoring sites in cooperation with the U.S. Geological Survey.
- In FY 2008, the TWDB staff and cooperators collected 14,074 annual water levels, 10,866 continuous recorder water levels from recorders (counted at six per month), and 834 water quality samples.
- Since inception of the Groundwater Availability Modeling Program in 1999, 24 models have been developed, representing all 9 major aquifers and 10 of the 21 minor aquifers.
- Hydrodynamic models have been developed for all major estuaries in Texas.
- The TWDB has advanced the seawater desalination initiative from a preliminary planning level through a completed pilot plant study phase.
- The TWDB has funded nine brackish groundwater desalination projects and two seawater pilot plant studies.
- Continuous (hourly) measurements of water quality data have been collected in all major bays since 1986, except Sabine Lake, which began in 1990 and Laguna Madre in 1992.
- Freshwater inflow studies and reports have been completed for all major bays, with the minor bays presently being studied.

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

### **Conservation**

House Bill 1, passed by the 69<sup>th</sup> Texas Legislature in 1985, was the start of the current era of water conservation programs in water planning activities by the TWDB and other agencies. In 1997, Senate Bill 1 established the regional water planning process, which includes optional consideration of water conservation strategies as a means to meet future water supply needs. In 2003, the 78<sup>th</sup> Legislature approved several conservation activities, including consolidation of several existing agricultural water conservation funding programs to better use funding for grants and staff activities, development of a Water Conservation Best Management Practices Guide (TWDB Report 362) to be used by regional water planning groups and individual retail water suppliers, and requirements related to water conservation plans and water audits. The 80<sup>th</sup> Legislature authorized the TWDB to implement a statewide water conservation public awareness program.

### **Surface Water Resources**

Studies of Texas' bays and estuaries by Texas state agencies began in the late 1960s with the recognition that these downstream ecosystems are influenced by inflows and they are economically important. The earliest inflow recommendations for all of Texas' major estuaries were developed in the late 1970s and early 1980s, culminating in a series of reports authored by the TWDB, Texas Commission on Environmental Quality, and Texas Parks and Wildlife Department. With additional data and improved models and methods, the agencies developed updated recommendations for the major estuaries in the early 2000s. Senate Bill 2, passed in 2001, created the Texas Instream Flow Program, which is administered by the three agencies and is focused on instream flow needs of entire river sub-basins. Senate Bill 3, passed in 2007, established the Texas Environmental Flows Science Advisory Committee, basin and bay area stakeholder committees, and basin and bay area expert science teams. These committees and teams are now reevaluating existing data, models, and analyses in an accelerated process to develop further updated inflow recommendations.

The hydrographic survey program was authorized in 1991 to provide accurate and affordable methods for determining current and future reservoir storage capacities.

The TWDB uses the water availability models developed in 2001 and 2004 by Texas Commission on Environmental Quality but modifies them to evaluate water management strategies as part of state water planning. The Water Availability Modeling Program provides guidelines and technical assistance for planning efforts at the regional level. These committees and teams are relying on technical and administrative assistance from the TWDB and other state agencies.

### **Groundwater Resources**

Until 1988, groundwater monitoring team leaders managed four different regions in the state and determined the goals of all water level and water quality monitoring programs. After 1988, the TWDB management centralized decisions about groundwater data collection and initiated programs resulting in the annual measurement of water level depths in all counties, technological upgrades to recorder equipment, and periodic/cyclic sampling of wells (and springs) for water quality. Part of the shift to centralized data collection was the creation of a centralized, relational database for all types of information in all aquifers. After 2000, these data became available online through several avenues. These online resources frequently receive national recognition for their comprehensive nature and ease of downloading data.

Both the groundwater technical assistance and the groundwater availability modeling functions were formed and have evolved as a result of legislation. The Groundwater Technical Assistance Program started on September 1, 1997, with the implementation of Senate Bill 1, 75<sup>th</sup> Legislative Session. Initially, the section focused on assisting groundwater conservation districts in developing groundwater management plans. In the legislative sessions following the 75<sup>th</sup> Session, the requirements for developing the management plan increased, requiring the TWDB to provide additional services and review.

The Groundwater Availability Modeling Program was an outgrowth of the regional water planning process created by Senate Bill 1, 75<sup>th</sup> Legislative Session. To assist with regional planning of aquifers shared by multiple regional water planning groups, the TWDB developed a regional scale model of the Hill Country portion of the Trinity Aquifer in 2000. The program was deemed successful and, in 2001, Senate Bill 2, 77<sup>th</sup> Legislative Session, required that models of the major and minor aquifers be developed and provided to groundwater conservation districts and regional water planning groups to assist in their planning and management efforts. During the same legislative session, legislation was passed that required groundwater conservation districts to use groundwater availability modeling information in conjunction with any available site-specific information provided by the districts and acceptable to the TWDB.

Both sections have expanded further since the passage of House Bill 1763, 79<sup>th</sup> Legislative Session. This act requires that groundwater conservation districts develop desired future conditions of relevant aquifers within their boundaries. In many instances, groundwater conservation districts have sought technical assistance and groundwater modeling to assess alternative desired future conditions. Ultimately, once the desired future conditions are adopted, staff from the Groundwater Technical Assistance and Groundwater Availability Modeling sections will develop managed available groundwater numbers that will be used by regional water planning groups and groundwater conservation districts.

### **Innovative Technologies**

Innovative Water Technologies was formed to address the 78<sup>th</sup> Texas Legislature's statutory directive to the TWDB to take all necessary action to advance the development of seawater desalination supplies. In addition to seawater desalination activities, this section is also responsible for programs concerning brackish

groundwater desalination, reuse, rainwater harvesting, and aquifer storage recovery. Staff members provide information on innovative technologies for consideration when regional water plans are being developed.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

Water Science and Conservation provides foundational information and data for other agency activities and for regional water planning groups. This involves interaction with, support of, and/or membership in numerous entities:

- Water Conservation Advisory Council
- Drought Preparedness Council
- Texas Groundwater Protection Committee and subcommittees
- Advisory Council of the Irrigation Technology Center
- Groundwater conservation districts (95)
- Regional water planning groups (16)
- Environmental interest groups
- International Boundary and Water Commission
- Texas Commission on Environmental Quality
- U.S. Geological Survey
- Bureau of Economic Geology at The University of Texas Austin
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- Local municipal water districts and city water departments
- Coastal commercial and recreational fisheries
- Texas Parks and Wildlife Department
- General public

Many entities benefit from data collected and posted online by Water Science and Conservation, including governmental entities at all levels, university researchers, different divisions within the TWDB, private companies, and the general public. These data are necessary for planning, preparing special reports and studies, and contributing to general knowledge. There are no qualifications for use of the data; water resources information is always available online. For example, a person looking to drill a water well can contact our agency or visit our Web site to learn about depth to water, water quality, and expected well productivity.

Water conservation literature and educational information, both printed and on the Web, provide public awareness and educational opportunities. Water IQ is a statewide public awareness water conservation program providing information on water-efficient practices and raising awareness about the importance of water conservation.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

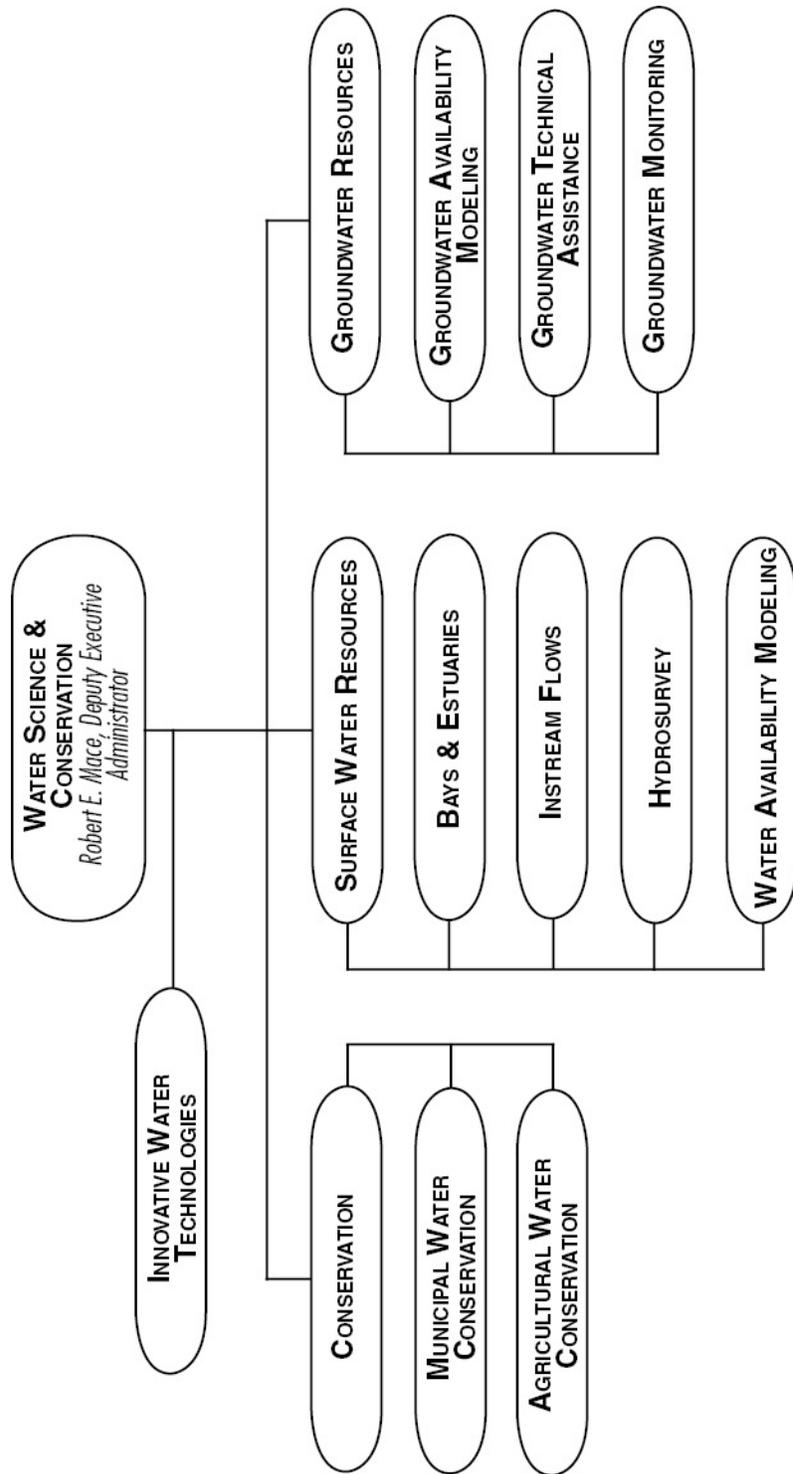
Water Science and Conservation is divided into three divisions, along with a function to address innovative water technologies, reporting to the Deputy Executive Administrator:

- Conservation
- Surface Water Resources
- Groundwater Resources

Each division is led by a division director and divided further into sections. The responsibilities of management include performing or delegating responsibility for the following tasks:

- Facilitating, assigning, and prioritizing projects
- Completing administrative tasks including budget, performance plans, timesheets, hiring and de-hiring of staff, annual raises or merit bonuses, staff meetings, meeting reports, and oversight
- Reviewing products, such as reports and papers, to provide quality assurance
- Coordinating and developing the sections' processes and procedures internally and externally
- Overseeing contract management
- Directing updates to Web content and Web development
- Arranging and coordinating annual technical advisory group meetings
- Serving as a source person for various work-related questions or concerns regarding the program

The following is the Water Science and Conservation organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Water Science and Conservation</b>	
General Revenue	\$5,667,946
Agricultural Water Conservation Fund	275,430
Water Assistance Fund	16,884
Federal Funds	983,028
Appropriated Receipts	1,392,755
Interagency Contracts	<u>45,152</u>
<b>Total</b>	<b>\$8,381,195</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

No internal or external programs provide the same identical services and functions as Water Science and Conservation; however, there are similar programs in various areas.

**Conservation**

- The Texas Commission on Environmental Quality requires water conservation plans in conjunction with a surface water right of 1,000 acre-feet or more for municipal use and 10,000 acre-feet for irrigation use, and the TWDB requires water conservation plans from all financial assistance applicants.
- Some groundwater conservation districts require irrigators to submit annual reports of irrigation water use. When available, these data are incorporated into the TWDB’s estimates of irrigation water use.
- Other entities, including the Lower Colorado River Authority, Texas AgriLife Extension Service, and several larger municipalities, also provide educational conservation materials; however, these are specific to their area.
- The Texas Commission on Environmental Quality also has a public awareness campaign titled “Take Care of Texas,” which includes energy and water conservation aspects.
- Some large regional and municipal utilities use their own specific public awareness programs, although some use Water IQ.

**Surface Water Resources**

- The Texas Parks and Wildlife Department, Texas Commission on Environmental Quality, and the Texas Department of Health also collect randomly located point measurements of salinity and some nutrient data and conduct studies on Texas’ estuaries. However, the primary focus of Texas Parks and Wildlife Department data collection is to maintain commercial and recreational fisheries, and it considers many factors other than freshwater inflows. The collection of long-term (5 to > 20 years) continuous (hourly) water quality data in Texas’ estuaries is unique to the TWDB. However, the Lower Colorado River Authority, Mission-Aransas National Estuarine Research Reserve, and Padre Island National Seashore have begun collecting similar data in their respective locales.

- The Texas Parks and Wildlife Department and the Texas Commission on Environmental Quality run hydrologic, water quality, and hydraulic models, though the focus on the effects of freshwater inflows and the modeling expertise for estuaries found in the Bays and Estuaries Program are unique to the TWDB.
- The National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, and the U.S. Geological Survey collect water velocity or flow data at limited locations in some bays, though the broad spatial coverage across all of Texas' bays is unique to the TWDB.
- The TWDB, the Texas Parks and Wildlife Department, and the Texas Commission on Environmental Quality jointly provide technical and administrative assistance to the environmental flows process, although expertise in coastal hydrology and estuarine modeling is unique to the TWDB.
- The Texas Parks and Wildlife Department and the Texas Commission on Environmental Quality are partner agencies with the TWDB in the Texas Instream Flow Program. Each partner shares in data collection activities, and they are jointly responsible for characterizing aquatic ecosystems, evaluating impacts to those systems, and determining their instream flow needs. However, expertise in hydraulic and sediment transport modeling is unique to the TWDB staff.
- The TWDB, the Texas Parks and Wildlife Department, and the Texas Commission on Environmental Quality jointly provide technical and administrative assistance to the environmental flows process, although expertise in hydraulic and sediment transport modeling is unique to the TWDB.
- Many river authorities, cities, and private interests also subsidize the collection of river flow data through the U.S. Geological Survey. However, the statewide coverage of the TWDB-funded gages and focus on data needs for water planning is unique to the TWDB.
- The National Oceanic Atmospheric Administration conducts hydrographic surveys to produce the nation's nautical charts, though their focus is on navigation safety and in areas near the coast and offshore.
- The Texas Parks and Wildlife Department, the Texas Commission on Environmental Quality, and river authorities in Texas all conduct water availability modeling analyses. However, the Texas Commission on Environmental Quality focuses on water permitting issues; the Texas Parks and Wildlife Department focuses on streamflow conditions; and river authorities conduct only regional studies, while the TWDB focuses on water availability issues and use of water strategies for the entire state.
- The U.S. Geological Survey and the U.S. Army Corps of Engineers monitor reservoirs in the state, but the TWDB covers a wider range of reservoirs for the entire state and integrates and analyzes water storage conditions for all of the major reservoirs in the state.
- The National Weather Service collects precipitation and some evaporation data in Texas, but the TWDB collects evaporation data at many locations that the National Weather Service does not serve. The TWDB program also provides estimated areal precipitation and evaporation data for Texas at finer geographical scale.

### **Groundwater Resources**

- More than 40 groundwater conservation districts, the U.S. Geological Survey, municipal water districts, cities and municipalities, and the International Boundary and Water Commission measure groundwater levels in wells in their areas of interest or jurisdiction. They provide this information to the TWDB for inclusion in its groundwater database, and the TWDB does not measure these wells.
- Some of these entities also sample for groundwater quality through in-house, portable lab analysis of a few inorganic constituents. By contrast, the TWDB contracts with a National Environmental

Laboratory Association Program accredited lab, using U.S. Environmental Protection Agency approved methods, to analyze for 35 or more inorganic constituents and for stable and radioactive isotopes.

- Water districts and cities operating public supply wells regulated by the Texas Commission on Environmental Quality may sample and analyze for some of the same inorganic and radioactive constituents that the TWDB does, also using accredited labs; however, they analyze drinking water after treatment, primarily for bacteria and other organic compounds such as chlorination disinfection byproducts and pesticides or herbicides. The U.S. Geological Survey also conducts water quality sampling for specific projects typically involving only 30 wells and no more frequently than once a year.
- The Texas Commission on Environmental Quality has limited resources to address questions about groundwater management plan approval but handles questions on groundwater conservation district formation, collects all districts' administrative information, and creates a statewide map of the districts they recognize. Texas AgriLife Extension Service provides educational materials on district activities and presentations to unconfirmed districts or areas considering forming a district.
- Groundwater availability models developed by the TWDB were initially used to broadly define groundwater availability for regional water planning groups and groundwater conservation districts. They are now being used to assist in establishing desired future conditions and, ultimately, determining managed available groundwater. Several local agencies (such as the Lower Colorado River Authority and the San Antonio Water System) have developed local scale groundwater models to address local scale groundwater management issues. To improve their reliability and accuracy, these local scale models depend on the TWDB groundwater availability model for data on pumping outside the immediate area of interest of the local scale model.
- Groundwater models that cover a larger scale have been developed by the U.S. Geological Survey. The U.S. Geological Survey is typically the sole source of information concerning aquifers within the boundaries of states with insufficient resources dedicated to studying and monitoring groundwater resources. The U.S. Geological Survey frequently works cooperatively with local agencies. Of particular note was their Regional Aquifer System Analysis Program, which was initiated in 1978 and completed in 1995 and covered 25 aquifer systems in the United States. The results were published in a national Ground Water Atlas. The scale of the models was considered too coarse to use for the TWDB Groundwater Availability Modeling Program.

### **Innovative Water Technologies**

- There are no other state programs focused specifically on advancing the development of alternative water supplies by means of innovative technologies. A possible and notable exception, however, is the Texas Emerging Technology Fund, which seeks to expedite the development and commercialization of new technologies and, conceivably, may include water-related technologies. In contrast to this program, the TWDB's Innovative Water Technologies programs focus exclusively on existing and proven technologies or refinements to existing technologies or processes that can result in cost savings for water utilities.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

### **Conservation**

- TWDB coordinates with the Texas Commission on Environmental Quality in developing conservation plan materials and will accept a water conservation plan that satisfies the Texas Commission on Environmental Quality's requirements.
- TWDB data is coordinated with local data on annual irrigation water use whenever possible.
- TWDB conservation literature is designed to be generic for statewide applicability.
- Water IQ is specific to water, but the Texas Commission on Environmental Quality's program focuses on federal air and water quality standards.
- TWDB offers the use of Water IQ materials to interested parties upon completion of a usage agreement.

### **Surface Water Resources**

- The Bays and Estuaries Program coordinates its long-term water quality monitoring of Texas' estuaries by directly contracting with the Texas Parks and Wildlife Department to assist in conducting the program. Synoptic (short-term, bay-wide) studies and other types of data collection activities are also coordinated with the Texas Parks and Wildlife Department and in the past with the Texas Commission on Environmental Quality, the U.S. Army Corps of Engineers, the U.S. Geological Survey, and universities by having them directly participate in the design and execution of data collection efforts. The TWDB is aware of and has been provided biological data collected by the Texas Parks and Wildlife Department Coastal Fisheries Program, thereby preventing functional overlap.
- The TWDB, the Texas Parks and Wildlife Department, and the Texas Commission on Environmental Quality signed a memorandum of agreement in October 2002 related to instream flow studies. In December 2002, they published a Programmatic Work Plan outlining the scope, time frame, and methodology for planning and conducting priority studies. As documented in that plan, the agencies agreed to work collaboratively on all study elements. In accordance with respective agencies' specific expertise and responsibilities in conserving fish and wildlife resources and water resources management, they selected lead agencies for activities described in the Programmatic Work Plan. The three agencies have also worked with river authorities and other local stakeholders to develop study goals, objectives, and indicators. Instream Flow staff members also serve as technical representatives on the Texas Environmental Resource Stewards forum where federal and state resource agencies discuss common issues.
- The Hydrographic Survey Program contracts with lake owners and water rights owners. Program staff members conduct extensive background research to identify any past surveys conducted on a particular lake or reservoir and who conducted the survey. The TWDB's Hydrographic Survey program is the only known program that uses the multi-frequency sub-bottom profiler for conducting sedimentation surveys within major lakes and reservoirs in Texas.
- The TWDB's water availability modeling activities have clear purposes that do not overlap with Texas Commission on Environmental Quality or Texas Parks and Wildlife Department applications of the model. The TWDB maintains close contact with the Texas Commission on Environmental Quality to ensure that we have the latest version of its water availability model and understand the

latest model functions. The data collection and synthesis activities of the Water Availability Modeling Program use data from the U.S. Geological Survey and the National Weather Service in addition to data collected by the TWDB to develop water resources data or reports; thus, the TWDB is aware of and does not overlap with data collection from other programs.

### **Groundwater Resources**

- The Groundwater Monitoring Section has operated under informal agreements with groundwater conservation districts and the U.S. Geological Survey for decades. These organizations routinely send water level data to the TWDB annually, generally after each has finished its measuring season. The TWDB Monitoring Section personnel encourage districts to meet for informal training that ultimately is designed to promote district take-over of water level monitoring duties. The TWDB also hosts annual “Groundwater 101” workshops in which we emphasize our assistance with water level monitoring. Other periodicals, such as the monthly Aquifer Monitor email, remind recipients (representatives in all mentioned entities are included) of monitoring activities, database developments, and assistance.
- The U.S. Geological Survey and the Texas Commission on Environmental Quality also share water quality data with the TWDB upon demand. Within a more formal setting, the Groundwater Monitoring Section manager’s position as vice-chair of the Texas Groundwater Protection Committee and co-chair of its Data Management Subcommittee has ensured that all groundwater information about previous, current, and future water quality sampling projects is shared with the interested representatives of each entity. The TWDB has served as vice-chair of this state agency (as the Texas Groundwater Protection Committee is considered) since the committee’s inception in 1989. The Texas Commission on Environmental Quality routinely uses TWDB data when producing their bi-annual 305(b) report to the U.S. Environmental Protection Agency, which includes an assessment of groundwater quality in all of the state’s aquifers. Most important, to ensure that no duplication or conflict occurs, members of the Texas Groundwater Protection Committee meet quarterly and work together throughout the year on a number of publications describing monitoring activities, such as the yearly joint monitoring and contamination report.
- The TWDB and the Texas Commission on Environmental Quality have a memorandum of understanding to communicate results of management plan reviews and approvals. The TWDB sends letters to the Texas Commission on Environmental Quality once a month to update the status of overdue plans. In addition, the TWDB sends letters to indicate when districts have submitted plans for the official approval process, have officially withdrawn a plan from the approval process, or have their management plan officially approved. The Texas Commission on Environmental Quality sends the TWDB a letter whenever they have new administrative information about or action toward a district.
- To avoid duplication of modeling efforts, the TWDB has evaluated existing groundwater flow models developed from outside sources to determine their validity for being incorporated into the Groundwater Availability Modeling Program. If appropriate, the TWDB has “adopted” existing models.
- Because outside sources recognize the TWDB will only adopt groundwater availability models that meet the agency’s criteria, these groups typically request oversight or participation in their projects. The groups ask for agency collaboration so that their models will meet TWDB standards and be adopted as official groundwater availability models.
- To avoid any duplication of efforts or studies, the TWDB and the Texas office for the U.S. Geological Survey are in regular communication. The most relevant project that could be perceived as a duplication of efforts is the current regional modeling effort that includes the High Plains Aquifer, referred to as the Ogallala Aquifer in Texas. The U.S. Geological Survey has determined

that they will use existing models for the central and southern portions of the High Plains Aquifer and only develop a new model for the northern portion of the High Plains Aquifer. The TWDB has already provided copies to the U.S. Geological Survey of the groundwater availability models developed for the Ogallala Aquifer. In return, the U.S. Geological Survey will collect additional information that can be used at a later date to improve our models.

### **Innovative Water Technologies**

- TWDB staff members monitor projects that are funded through the Texas Emerging Technology Fund to ensure there is no duplication of effort.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

### **Conservation**

- Staff members provide technical assistance to local and regional governments to meet requirements for water conservation plans or water loss audits or to implement water conservation activities.
- The Conservation Division provides grants to political subdivisions to implement local agricultural water conservation programs.
- Staff members receive data from the U.S. Department of Agriculture—Farm Service Agency, local groundwater conservation districts, and the Texas Commission on Environmental Quality for irrigation water use estimates.
- The Texas High Plains Agricultural Water Enhancement program operates under an agreement between the TWDB, which provides program promotion and impact analysis activities, and the U.S. Department of Agriculture—Natural Resources Conservation Service, Texas, which manages the cost-share funding provided to agricultural producers.

### **Surface Water Resources**

- Several federal agencies are involved in funding studies, cost sharing, and data sharing, including the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the National Weather Service, and the National Oceanic and Atmospheric Association.
- The Texas Parks and Wildlife Department and the Texas Commission on Environmental Quality cooperate on data collection, joint studies, and support of the environmental flows process.
- Technical assistance is provided to the General Land Office on the Oil Spill Program.
- Feedback and comments on water availability modeling are provided to the Texas Commission on Environmental Quality.
- Data and technical support is provided to local governments, river authorities, port authorities, and regional water planning groups.

### **Groundwater Resources**

- Groundwater Resources staff provides support and assistance to local groundwater conservation districts as directed by statute. Examples of this support and assistance includes the following:
  - Developing groundwater models
  - Using groundwater models to develop estimates of the annual flow into and out of the district within each aquifer and between aquifers in the district

- Using groundwater models and other available data and information to develop estimates of managed available groundwater based on a district's desired future condition.
- Reviewing groundwater conservation district management plans for administrative completeness
- Groundwater Resources staff provides support and assistance to regional water planning groups as directed by statute, such as reporting estimates of managed available groundwater for inclusion in regional water plans.
- On occasion, federal agencies such as the U.S. Geological Survey and the U.S. Department of the Interior—Bureau of Reclamation cooperate in special studies or modeling efforts.

### **Innovative Water Technologies**

- Innovative Water Technologies staff provides presentations and other information to regional water planning groups and their designated consultants to assist in identifying and assessing potential water management strategies.
- Innovative Water Technologies' outreach targets include cities, public utility boards, water supply corporations, groundwater management districts, and universities. Staff members interact with these entities in a contract management capacity if they receive TWDB grants for technology demonstration projects and/or research studies. Staff also responds to questions from representatives of these entities about technology matters and provides presentations, if requested.
- Innovative Water Technologies staff maintains close collaboration with the U.S. Bureau of Reclamation on matters related to research on advanced water treatment technologies and funding opportunities for water technology projects.

**K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$2,150,681

Number of contracts: 35

Water Science and Conservation contracts are awarded for monitoring, laboratory analysis, data analysis, and scientific studies in support of model development and enhancements. For each contract the scope of work, budget, timeline, reporting requirements, and project deliverables are documented. Scheduled progress reports are required in many of the contracts. In addition to review by program staff, contract administration staff reviews invoices to ensure that submissions are proper and correspond to contract requirements.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

Please refer to the agency's policy recommendations in Section IX.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

Additional information on Water Science and Conservation programs and data that they provide via the Web can be found at:

**Bays and Estuaries:** [http://www.twdb.state.tx.us/data/bays\\_estuaries/bays\\_estuary\\_toc.asp](http://www.twdb.state.tx.us/data/bays_estuaries/bays_estuary_toc.asp)

**Conservation:** <http://www.twdb.state.tx.us/assistance/conservation/consindex.asp>

**Desalination:** <http://www.twdb.state.tx.us/iwt/desal.asp>

**Instream Flows:** <http://www.twdb.state.tx.us/InstreamFlows/index.html>

**Hydrographic Survey:** <http://www.twdb.state.tx.us/assistance/lakesurveys/volumetricindex.asp>

**Water Availability Modeling:** <http://wiid.twdb.state.tx.us/ims/resinfo/viewer.htm>

**Groundwater Monitoring:** <http://www.twdb.state.tx.us/GwRD/HEMON/GMSA.asp>

**Groundwater Technical Assistance:** <http://www.twdb.state.tx.us/GWRD/GTA/gtahome.htm>

**Groundwater Availability Modeling:** <http://www.twdb.state.tx.us/gam/>

**Rainwater Harvesting:** <http://www.twdb.state.tx.us/iwt/rainwater.asp>

**Water Reuse:** <http://www.twdb.state.tx.us/iwt/reuse.asp>

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- why the regulation is needed;
  - the scope of, and procedures for, inspections or audits of regulated entities;
  - follow-up activities conducted when non-compliance is identified;
  - sanctions available to the agency to ensure compliance; and
  - procedures for handling consumer/public complaints against regulated entities.

Not applicable.

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable.

## Water Resources Planning and Information

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Water Resources Planning and Information
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 4 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Carolyn L. Brittin, Deputy Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$9,478,928
<b>Number of FTEs as of August 31, 2008</b>	46.93

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

Water Resources Planning and Information collects, analyzes, and disseminates water-related data and provides other services necessary to aid in planning and managing the state's water resources. It provides statewide geographic data services and flood mitigation planning, including administering federal assistance programs. With a staff that holds 23 advanced degrees (22 Masters and 1 Ph.D.) and has 3 registered professional engineers, 1 registered professional geoscientist, and 7 Certified Floodplain Managers, WRPI provides these functions through three primary program areas:

- Water Resources Planning
- Flood Mitigation Planning
- Texas Natural Resources Information System (TNRIS)

### Water Resources Planning

- Coordinates the regional water planning process
- Develops population and water demand projections
- Compiles annual municipal and industrial water use data and information regarding water sales and purchases among users and suppliers
- Develops estimates of agricultural water use
- Evaluates the social and economic impacts of not meeting forecasted water needs
- Develops and maintains data management structures for water planning and water supply and strategy analysis
- Develops the state water plan, a comprehensive guide to the water resources in the state
- Works with state, federal, and local partners to implement water management strategies recommended in the planning process
- Administers the Regional Water and Wastewater Facility Planning grant program, which offers state funds to political subdivisions for studies to evaluate the most feasible alternatives to provide regional water supply and wastewater services for areas in Texas
- Operates the Texas Water Bank and Trust

- Reviews applications for financial assistance to ensure consistency with regional water plans and the state water plan, including approved population and water demand projections, and ensures compliance with water use survey reporting requirements
- Develops procedures to facilitate the availability and exchange of water resources data in Texas
- Provides technical support to the Water Conservation Advisory Council

### **Flood Mitigation Planning**

- Serves as the state coordinator for the National Flood Insurance Program to enable communities to enroll and maintain eligibility in the program so that citizens and businesses are eligible for national flood insurance
- Administers the Flood Protection Planning Program, a feasibility level-planning grant program that provides state funds to political subdivisions to study flood problems within their watersheds and to evaluate the feasibility of structural and non-structural solutions
- Administers the Federal Emergency Management Agency's (FEMA) Flood Mitigation Assistance Program to provide planning and project grants to develop or update flood mitigation plans and to implement flood mitigation projects
- Administers the FEMA Severe Repetitive Loss Program to reduce or eliminate the risk of flood damage to severe repetitive loss residential structures insured under the National Flood Insurance Program

### **Texas Natural Resources Information System (TNRIS)**

- Organizes and manages state historical aerial photographic and mapping inventory
- Provides direct and Internet access to geographic data and maps
- Conducts training and workshops to broaden understanding and use of public geographic data resources
- Manages the Strategic Mapping Program to maintain current and accurate standard geographic base data
- Manages the National Flood Insurance Program mapping services activities to support development of digital maps for the public
- Maintains the Borderlands Information Center to coordinate development and exchange of data along the Texas-Mexico Border
- Coordinates the process for updates and changes to the Geographic Names Information System
- Supports emergency management activities through implementation of geographic information systems (GIS) and data

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

### **Performance Measures**

- Percent of key regional and statewide water planning activities completed
- Number of active grants for regional water, wastewater, flood, and research studies funded from the Research and Planning Fund
- Number of communities assisted through Community Assistance Contacts and Community Assistance Visits
- Number of person-hours in training classes and conferences sponsored by TNRIS
- Number of strategic mapping pool

- Number of responses to requests for TNRIS-related information that are filled

### **Key Statistics**

- Since 1997, the TWDB has supported the development and adoption of 16 regional water plans during two five-year planning cycles.
- Since the early 1960s, the TWDB has developed six state water plans, including two (2002 and 2007) based on the regional water planning process.
- Since 1985, the TWDB has developed county level annual water use estimates for agricultural producers (livestock and irrigation) and mining industries for each of the state's 254 counties.
- Since 1985, the TWDB has administered a statewide Water Use Survey that today includes nearly 7,000 water utilities, manufacturers, and electric utilities. TWDB staff members collect, analyze, and publish survey data each year and maintain historical water use databases for use by internal and external customers.
- Since the 1990s, the TWDB has committed \$21.6 million for almost 200 regional facility planning projects and almost \$15.6 million for over 100 flood protection planning projects throughout the state.
- Since 2007 (when the TWDB assumed administration of the program), Flood Mitigation Planning staff members have conducted 68 Community Assistance Visits, over 1,000 Community Assistance Contacts, and 53 training workshops pursuant to the National Flood Insurance Program.
- In 2008, the TWDB awarded two FEMA Severe Repetitive Loss grants for a total of \$26.6 million to buy out nearly 130 properties within Harris County, which represent roughly 10 percent of the Severe Repetitive Loss properties identified by FEMA statewide.
- Since 2004, the TWDB has awarded \$12.8 million in funding through the FEMA Flood Mitigation Assistance Program to assist communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program.
- Since 1968, TNRIS has served as a centralized information system incorporating all Texas natural resource data, socioeconomic data related to natural resources, and indexes related to that data that are collected by state agencies or other entities.
- The TNRIS data catalog has over 1,000,000 frames of aerial photography, more than 50 unique data sets equal to 500 gigabytes, and averages 10,000 data downloads a month.
- Following the devastation of Hurricane Rita, TNRIS developed a geospatial emergency management support system to serve as a data repository for emergency management in Texas through a \$1 million grant from FEMA awarded in 2007.
- TNRIS hosts the annual GIS Forum, the largest event of its kind in Texas, offering GIS and geospatial professionals the opportunity to share products, services, and knowledge and to network with nationally recognized experts in the geospatial field.

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

**Water Resources Planning**

Although the TWDB has planned for the state's water needs since the 1950s, the process has evolved over the years in response to state legislation. The drought of 1996 led to the passage of Senate Bill 1 in 1997, which established a new water planning process that relies primarily upon regional water plans prepared and adopted by local and regional decision makers. In essence, the planning process shifted from a centralized approach to a consensus-driven, regional model. Teams of regional and local leaders of different backgrounds and various social, environmental, and economic interests, with technical assistance from the TWDB and other state agencies, provide a thorough regional assessment that can be merged into a comprehensive state water plan. This approach has produced the 2001 and 2006 Regional Water Plans, and the 2002 and 2007 State Water Plans.

Senate Bill 2, passed by the 77<sup>th</sup> Texas Legislature in 2001, addressed a number of issues that emerged during the first round of regional water planning. The bill directed the TWDB to obtain or develop groundwater availability models for major or minor aquifers in coordination with groundwater conservation districts and regional water planning groups. Senate Bill 2 also allowed the TWDB to conduct surveys of entities using groundwater and surface water to gather data to be used for water supply planning. The legislation also clarified the meaning of the designation of river or stream segments of unique ecological value.

In addition, Senate Bill 2 created the Water Infrastructure Fund to pay for the implementation of water projects recommended through the state and regional water planning processes. Although the fund was created by the 77<sup>th</sup> Texas Legislature, it did not receive any appropriations until it was funded by the 80<sup>th</sup> Texas Legislature in 2007.

In 2007, the 80<sup>th</sup> Texas Legislature passed Senate Bill 3, the third significant omnibus water bill that included a number of provisions related to water planning. The legislation established the Water Conservation Advisory Council, a panel of experts in water conservation, to provide state leadership. Senate Bill 3 also established the Environmental Flows Advisory Group and the Texas Environmental Flows Science Advisory Committee, including a process to provide for developing and adopting environmental flow regimes for the major river basins in Texas.

In addition, Senate Bill 3 provided for a process to allow for a "minor amendment" to a regional water plan. The legislation also designated sites of unique value for constructing a reservoir and stream and river sites of unique ecological value recommended in the 2007 State Water Plan. The bill also established the Study Commission on Region C Water Supply to review water demand and water supply alternatives within the Region C Regional Water Planning Area and evaluate measures to comply with regulatory mitigation requirements. Senate Bill 3 created the Legislative Joint Interim Committee to evaluate water infrastructure needs and make recommendations on any legislative actions necessary to address funding needs to support the state's water programs. Senate Bill 3 also increased the amount of permitted withdrawals from the Edward's Aquifer and directed the Edwards Aquifer Authority, with assistance from Texas A&M University, to develop a recovery implementation program for all federally threatened or endangered species associated with the aquifer.

### **Flood Mitigation Planning**

The TWDB has been providing state funds for flood mitigation planning since the early 1990s. In 1994, the National Flood Insurance Reform Act created the Flood Mitigation Assistance Program, which provides FEMA funds to assist states and communities in implementing measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program. The TWDB first awarded grants through the Flood Mitigation Assistance Program in 2001.

In 2004, Congress authorized the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act, which amended the National Flood Insurance Act of 1968 to provide funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss structures insured under the National Flood Insurance Program. The TWDB first awarded grants through the Severe Repetitive Loss Program in 2008.

In 2007, the 80<sup>th</sup> Texas Legislature transferred the administration of the National Flood Insurance Program in Texas from the Texas Commission on Environmental Quality to the TWDB. The mission of the program remains the same, but the services provided have continued to improve with the expansion of the program, which now includes staff in all five TWDB field offices (Austin, San Antonio, Harlingen, Houston, and Mesquite).

### **TNRIS**

TNRIS was established by the Texas Legislature in 1968 as the Texas Water-Oriented Data Bank. In 1972, after four years of growth and diversification, it was renamed the Texas Natural Resources Information System. In 1997, the 75<sup>th</sup> Legislature passed Senate Bill 1, which merged the TNRIS Task Force and the GIS Planning Council into the Texas Geographic Information Council and provided funding for the Texas Strategic Mapping Program (StratMap). In 2000, TNRIS completed the Texas Orthoimagery Program, with 17,772 digital images created across Texas.

In 2001, StratMap completed its seven layers by using approximately \$40,000,000 in state and matching funds, in-kind contributions, and related data. The 77<sup>th</sup> Legislature provided funds for maintaining orthoimagery, transportation, and political boundaries and for creating the National Hydrographic Dataset for Texas. Also that year, TNRIS made StratMap data available online via a Digital Data Distribution System interface.

In 2003, member agencies of the Texas Geographic Information Council and other local, regional, and federal agencies extensively employed GIS technology to assist with the Space Shuttle Columbia recovery. In 2004, TNRIS entered into agreement with the U.S. Department of Agriculture—Farm Service Agency for new statewide orthoimagery to update the data from 1995 to 1996. The Texas Commission on Environmental Quality, the U.S. Geological Survey, and the U.S. Department of Agriculture—Natural Resources Conservation Service contributed funding.

In 2006, TNRIS entered into agreements with FEMA, the International Boundary and Water Commission, and the Lower Colorado River Authority to produce very high resolution elevation data with LiDAR technology that employs an airborne laser sensor to rapidly and accurately measure elevations.

Also in 2006, TNRIS began supporting the Texas Height Modernization Program and spatial reference center, which established the elevation reference system for the state. The system is the key to producing accurate and reliable maps and is especially important for mapping areas of flooding, coastal surge impacts, and other engineering-related projects that depend on accurate data.

In 2007, the Texas Water Code was amended by the 80<sup>th</sup> Legislature to provide authority for TNRIS to include data related to emergency management. Several projects were undertaken to strengthen the capacity of the state to respond and manage emergency events. The legislature also passed the National Flood Insurance Program bill that created authority for state participation in floodplain mapping.

TNRIS partnered with the Farm Services Agency for the second time in 2008 to acquire 1-meter, multi-band imagery for Texas. The aerial products support diverse requirements, including 911 call management, air quality, facilities planning, and vegetation classification.

In 2009, the Council on Competitive Government established a new procurement process designed to strengthen Texas' capabilities to create and maintain digital maps for government and the public. The new process, called High Priority Imagery and Data Sets, established a unified approach to digital map development and promotes coordination among state, regional, and municipal government.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

Water Resources Planning and Information provides administrative and technical support for the 16 regional water planning groups, the Water Conservation Advisory Council, and political subdivisions in Texas that are awarded grants for regional water and wastewater facility planning and flood protection planning projects. Water Resources Planning and Information provides information and data for regional water planning groups, countless state and local governments, and businesses and citizens through historical water use data from the Water Use Survey and projected water use data from the regional water planning database and the TNRIS data catalog. This involves interaction with numerous entities:

- Water Conservation Advisory Council
- Groundwater conservation districts (95)
- Regional water planning groups (16)
- Wholesale and retail water providers
- Industrial water users
- Local governments
- River authorities and other special law districts
- Environmental interest groups
- State and federal agencies
- General public

The functions of TNRIS affect not only external customers but also internal TWDB customers, providing services necessary for a number of TWDB activities by supporting the following:

- The groundwater division by developing the groundwater availability model geodatabase to provide integrated access to all geographic groundwater datasets and by developing and deploying the Geologic Atlas of Texas.
- Groundwater monitoring by incorporating groundwater monitoring data into the development of the Texas Hydrologic Information System.

- Water availability modeling by deployment, training, and use of National Hydrography and other StratMap datasets.
- The Bays and Estuaries Program by incorporating coastal water quality data into the development of the Texas Hydrologic Information System.
- Project Finance by applying GIS analysis tools and updated census and business information to review socioeconomic factors.
- Economically Disadvantaged Areas Program by providing border-area data services and analysis, including census, transportation, and physiographic studies including elevation and watersheds.
- Flood Mitigation Planning by providing emergency management related data services, including mapping of National Flood Insurance Zones.
- The agency as a whole by applying GIS analysis tools and updated census and business information to review socioeconomic factors, by data developing and disseminating data, and by providing training and education.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

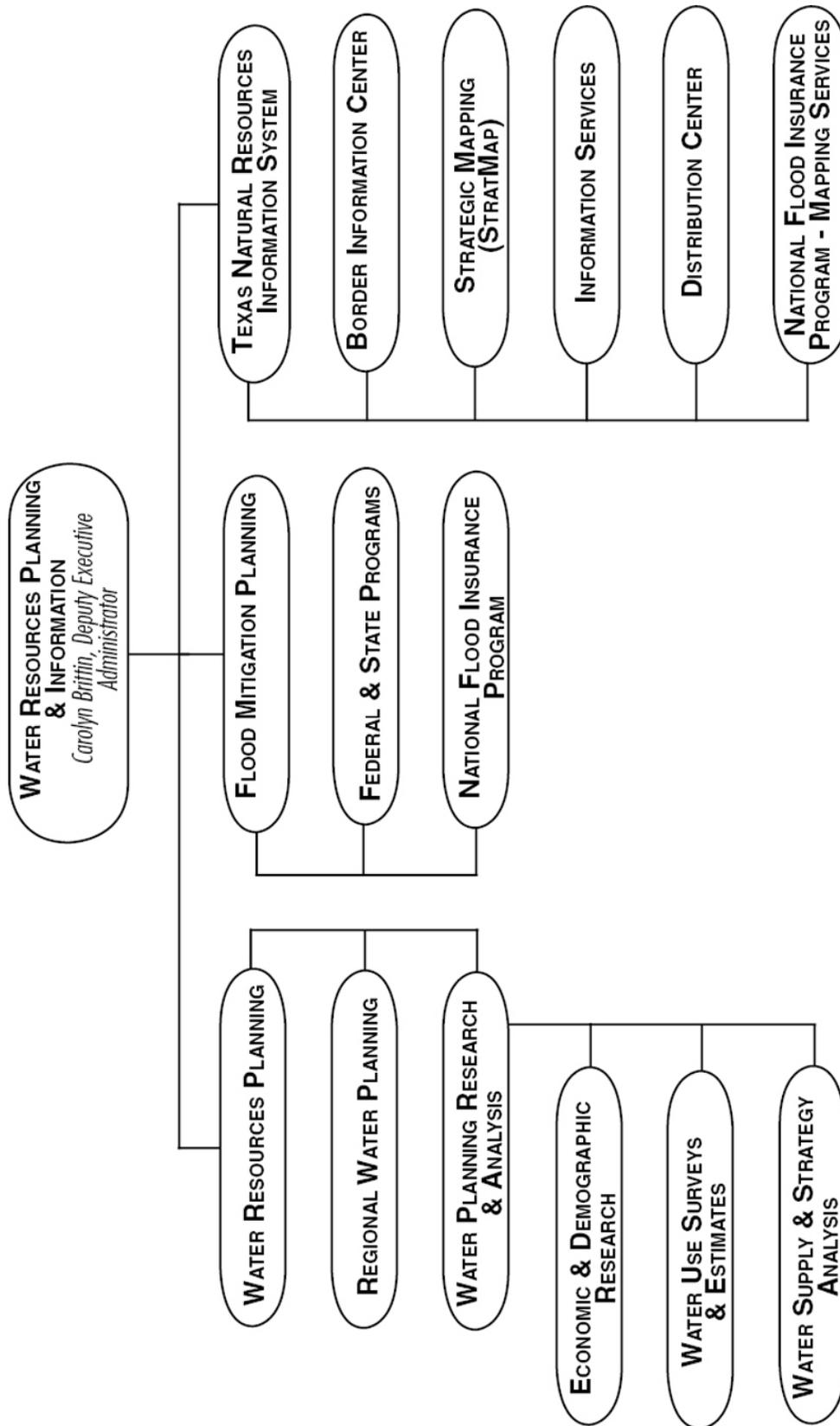
Water Resources Planning and Information is divided into three divisions with directors reporting to the Deputy Executive Administrator:

- Water Resources Planning
- Flood Mitigation Planning
- TNRRIS

Each division is led by a division director and divided further into sections. The responsibilities of management include performing or delegating responsibility for the following tasks:

- Managing contracts
- Providing administrative and technical assistance
- Facilitating, assigning, and prioritizing projects
- Completing administrative tasks, including budget, performance plans, timesheets, hiring and de-hiring of staff, annual raises or merit bonuses, staff meetings, meeting reports, and oversight
- Reviewing products, such as reports and papers, to provide quality assurance
- Coordinating and developing the processes and procedures internally and externally
- Directing updates to Web content and Web development
- Serving as a source person for various questions or concerns regarding the program

The following is the Water Resources Planning and Information organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Water Resources Planning and Information</b>	
General Revenue	\$4,019,453
Agricultural Water Conservation Fund	1,805
Water Assistance Fund	35,500
Federal Funds	1,349,164
Appropriated Receipts	2,957,193
Interagency Contracts	<u>1,115,813</u>
<b>Total</b>	<b>\$9,478,928</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

No internal or external programs provide services and functions identical to Water Resources Planning and Information; however, there are similar programs in various areas.

**Water Resources Planning**

Although water supply planning is done at the local level by water providers, no other programs perform comprehensive water planning at the regional or state level.

**Flood Mitigation Planning**

The division works very closely with FEMA in administering the National Flood Insurance Program and the Flood Mitigation Assistance and Severe Repetitive Loss programs. FEMA administers these programs at the national level, and the TWDB serves as the state coordinator, providing services, awarding funds, and managing contracts with communities in Texas.

The division coordinates with the Texas Floodplain Management Association, a professional organization of those involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, flood preparedness, and warning and disaster recovery. The organization certifies professional floodplain managers and provides educational opportunities and professional skills to the state’s floodplain management professionals. The division also coordinates with the Association of State Floodplain Managers, a national professional organization involved in similar activities.

The division also works closely with the Governor’s Division of Emergency Management, an agency charged with carrying out a comprehensive all-hazard emergency management program for the state and for assisting cities, counties, and state agencies in planning and implementing their emergency management programs.

## **TNRIS**

TNRIS is recognized as the state clearinghouse for geographic information. Its principal role is to develop statewide base data for use by all agencies and the public.

Other agencies acquire data specific to their programs but do not serve as a clearinghouse or referral center for data dissemination. TNRIS' base data serves as the common geographic reference for all other mapping data used in other agencies. In its role as the clearinghouse, TNRIS maintains expertise in data and its application to a wide range of needs.

The Department of Information Resources is responsible for establishing information technology standards and rules related to managing of geographic data. This role serves to ensure interoperability of geographic data through standard technology practices.

The Department of Information Resources is also managing the transformation of selected state agencies to a centralized data center. The Department oversees the contract that provides the technology infrastructure services to the state. The data center will host agency data and represents a support function for TNRIS data dissemination services. In this arrangement, TNRIS personnel are the subject matter experts for designing and implementing GIS and are working with the Department of Information Resources to deploy systems for access by government and the public.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

### **Water Resources Planning**

Not applicable.

### **Flood Mitigation Planning**

The division holds regular meetings with different agencies and associations to avoid duplicating efforts. Quarterly reports are provided to FEMA to inform them of current and proposed activities. Staff members also work with the Governor's Division of Emergency Management, as required, to address specific issues, such as Hurricane Ike in 2008.

## **TNRIS**

- Coordination for data collection is provided by the Texas Geographic Information Council. Regular meetings and collaboration are held to communicate initiatives. Special joint funding projects are established to solicit participation in geographic data collection partnerships.
- Statewide purchasing of geographic data is administered in conjunction with the Council on Competitive Government. The Council on Competitive Government identified GIS as a state service and developed a state purchasing contract for "High Priority Imagery and Data Sets." The responsibility for the contract places TNRIS in a key central role to receive notices for proposed projects and serve as an advisor and partner for finding additional partnerships and product needs.
- Activities related to the High Priority Imagery and Data Sets are coordinated with the Texas Geographic Information Council and other potential government entities. These activities involve sharing specifications and data, in addition to pursuing additional funding that can increase match

dollars to state contributions.

- High Priority Imagery and Data Sets also provide the ability for agencies to contract directly with selected vendors, resulting in streamlined purchasing. This lessens the dependency for agencies to go through interagency agreements and avoids delays or conflicts in timing while still contributing to the awareness of projects and their locations.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

**Water Resources Planning**

The program works with local governments and other political subdivisions of the state to provide guidance, funding, and technical and administrative support for regional water planning and regional water and wastewater facility planning. Through the regional water planning process, the program coordinates with other state agencies in developing population and water demand projections and in developing the state water plan. The program also works with federal agencies such as the U.S. Army Corps of Engineers to facilitate the implementation of water management strategies in the 2007 State Water Plan and to enhance TWDB efforts in water data and science.

**Flood Mitigation Planning**

The program works with local governments and other political subdivisions of the state to provide funding and technical and administrative support for flood protection planning. Flood Mitigation works closely with the Governor's Division of Emergency Management, the agency charged with carrying out a comprehensive all-hazard emergency management program for the state and for assisting cities, counties, and state agencies in planning and implementing their emergency management programs. The TWDB coordinates with the Governor's Division of Emergency Management in assisting citizens and businesses in Texas in responding to any disaster that may result in flooding. Hurricane response has been the largest priority, and the most recent example is Hurricane Ike in 2008.

Flood Mitigation works very closely with FEMA on Community Assistance through the National Flood Insurance Program to assist communities in preparing for and mitigating flooding. The program also works with FEMA to administer the Severe Repetitive Loss and Flood Mitigation Assistance programs.

**TNRIS**

TNRIS works with a number of state and federal partners to acquire and disseminate geographic data. Main partners include these groups:

- U.S. Geological Survey—Federal agency with primary responsibility for national mapping programs. This agency is charged with developing the national map, a seamless digital compilation of thematic data including imagery, elevation, political boundaries, geographic names, and hydrography.
  - Data collection partnerships
    - U.S. Geological Survey regularly contributes funding for Texas mapping programs that meet national objectives
    - U.S. Geological Survey coordinates components of U.S. Department of Homeland Security mapping, including imagery and critical infrastructure datasets
  - Data stewardship

- Texas coordinates stewardship of national map by adopting standards and developing best practices for maintaining digital data
- Data standards
  - U.S. Geological Survey maintains national data standards through contributions made as part of the Federal Geographic Data Committee
- Geographic names coordination
  - TNRIS manages the geographic names program for Texas
- Grants for special projects to support the national map
  - U.S. Geological Survey provides funding for developing special mapping products and supporting technology for maintenance of the national map
- U.S. Department of Homeland Security—Principal federal agency responsible for security, preparedness, and response to security threats and disasters in the United States
  - Disaster preparedness/Response coordination
    - TNRIS maintains data supplied by the U.S. Department of Homeland Security for use in emergency management and response activities and combines these sources with state geographic information as required
- U.S. Army Corps of Engineers—Agency responsible for civil works projects and determination of wetlands through Section 404 of the Clean Water Act
  - Technical collaboration
    - Sharing data and technology requirements to support interoperability of data resources
  - Disaster preparedness/Response coordination
    - Support Corps of Engineers field teams that mobilize to emergency events
  - Program coordination
  - Provide regular communication about activities and identification of new datasets and designations
- Federal Emergency Management Agency
  - Dissemination of Flood Insurance Rate Maps
  - Technical collaboration—specifications for digital elevation data
  - Disaster preparedness/Response coordination—data access and transmission to field offices and emergency management teams
  - Program coordination alignment of technology development initiatives
  - Data collection partnerships
  - Source of grant funding through the Hazard Mitigation Grant Program
- U.S. Department of Agriculture—Farm Services Agency
  - Data collection partnerships—responsible for key federal program to acquire imagery across the United States; primary partner for receiving StratMap data funds for statewide aerial imagery
- U.S. Department of Agriculture—Natural Resources Conservation Service
  - Data collection partnerships—provides funding to StratMap
  - Data management—coordination of soils mapping information
- U.S. Forest Service
  - Technical coordination of map products—StratMap works to develop compatible map products
- U.S. National Park Service
  - Data collection partnerships—provides funding to StratMap
- National Oceanic and Atmospheric Administration
  - Technical coordination of geodetic control

- U.S. Environmental Protection Agency
  - Technical coordination—digital data and interoperability
  - Source of grant funding to TNRIS
- International Boundary Waters Commission
  - Data collection partnerships—provides funding to StratMap
- U.S. Fish and Wildlife Service
  - Data distribution—wetlands map
- Regional Councils of Government
  - Data sharing
  - Technical exchange
- Texas Spatial Reference Center/National Oceanic Atmospheric Administration
  - Data standards coordination
- Columbia Regional Geospatial Service Center
  - Data sharing
  - Technology transfer

**K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$985,348

Number of contracts: 34

Water Resources Planning and Information contracts are executed to support water resource planning, federal flood mitigation assistance, and mapping information services. For each contract, the scope of work, budget, timeline, reporting requirements, and project deliverables are documented. In addition to review by program staff, contract administration staff reviews invoices to ensure that submissions are proper and correspond to contract requirements.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

No statutory changes are recommended at this time.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

Additional information on Water Resources Planning and Information programs be found on the following Web sites:

**State Water Plan:** <http://www.twdb.state.tx.us/wrpi/swp/swp.htm>

**Regional Water Planning:** <http://www.twdb.state.tx.us/wrpi/rwp/rwp.htm>

**Planning Data:** <http://www.twdb.state.tx.us/wrpi/data/data.htm>

**Water Use Survey:** <http://www.twdb.state.tx.us/wrpi/wus/wus.htm>

**Flood Mitigation Planning:** <http://www.twdb.state.tx.us/wrpi/flood/flood.htm>

**TNRIS:** <http://www.tnris.state.tx.us/>

**StratMap:** <http://www.tnris.state.tx.us/StratMap.aspx>

**Borderlands Information Center:** <http://www.tnris.state.tx.us/BIC.aspx>

**TNRIS Education and Training:** <http://www.tnris.state.tx.us/Education.aspx>

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- why the regulation is needed;
  - the scope of, and procedures for, inspections or audits of regulated entities;
  - follow-up activities conducted when non-compliance is identified;
  - sanctions available to the agency to ensure compliance; and
  - procedures for handling consumer/public complaints against regulated entities.

Not applicable.

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable.

## Project Finance

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Project Finance
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Amanda Lavin, Deputy Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$6,640,875
<b>Number of FTEs as of August 31, 2008</b>	24.00

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

The primary business functions of the office of Project Finance involve various aspects of making loans and granting financial assistance to customers through the TWDB's financial assistance programs. These programs provide funding for planning, designing, and constructing customer's water- and wastewater-related projects. The objective of Project Finance is to maximize the availability and effectiveness of the financial assistance programs accessed by political subdivisions throughout Texas, while providing the appropriate program oversight.

Project Finance provides its services through two divisions—the Program Development Division and the Project Development Division. Collectively, these divisions are responsible for the following business functions:

- Collecting, managing, and distributing information describing water and wastewater facility needs in Texas
- Marketing the TWDB's financial assistance programs
- Conducting pre-application meetings with entities interested in TWDB financial assistance
- Reviewing work processes, rules, and procedures and making improvements to ensure efficiency and effectiveness
- Working with applicants throughout the financial assistance process to ensure that the customer's schedules and expectations are met and that the application, closing, and construction of projects proceed smoothly and in a timely manner
- Conducting financial reviews of grant and loan applicants
- Providing project tracking and oversight
- Providing annual and interim reports to the U.S. Environmental Protection Agency regarding federally funded programs
- Managing the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) Intended Use Plan process
- Developing and implementing new financial assistance programs

Prior to May 2009, Project Finance was combined with the office of Construction Assistance. Project Finance and Construction Assistance were reorganized into two separate units in order to provide additional focus on each area of expertise. The two offices work closely together to ensure the effective and efficient use of program funds and the timely completion of projects.

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

Project Finance manages over 20 Goal 2 performance measures related to administering the TWDB financial assistance programs.

The selected measures below reflect the effectiveness of the various programs administered.

*Output Measure 02-01-01.02 - KEY*

Total dollars committed to projects to implement the state water plan	
FY 2008 Performance	FY 2008 Target
\$511,440,000	\$234,910,000

*Output Measure 02-01-03.02 - KEY*

Number of commitments to small and disadvantaged communities	
FY 2008 Performance	FY 2008 Target
66	26

*Output Measure 02-01-03.03 - KEY*

Total dollars of financial assistance committed	
FY 2008 Performance	FY 2008 Target
\$827,679,205	\$679,700,000

*Output Measure 02-01-03.04*

Total dollars committed to small, rural, and disadvantaged community projects through agency programs targeting such communities	
FY 2008 Performance	FY 2008 Target
\$151,598,682	\$35,000,000

*Outcome Measure 02-01-03.02*

Total dollars saved resulting from Texas Water Development Fund financial assistance	
FY 2008 Performance	FY 2008 Target
\$120,280,038	\$80,700,000

Two efficiency measures for FY 2008 are listed below. In these two measures, the agency performed better than target, holding administrative costs down and managing significantly higher dollars per FTE.

*Efficiency Measure 02-01-03.01 - KEY*

Administrative cost per active financial assistance agreement.	
FY 2008 Performance	FY 2008 Target
\$1,408	\$3,231

*Efficiency Measure 02-01-03.02*

Total non-EDAP financial assistance dollars managed per FTE.	
FY 2008 Performance	FY 2008 Target
\$64,061,641	\$44,228,834

The following highlights key marketing activities in FY 08:

- Developed the Economically Distressed Areas Program (EDAP) Marketing Plan with a goal to focus on strategic areas of the state to educate and provide technical assistance and awareness regarding EDAP to potential customers. Marketing efforts were focused in East Texas, North East Texas, South Texas/Coastal Bend Area, and the Brazos Region.
- Conducted six DWSRF and CWSRF workshops around the state in Bryan, Amarillo, Edinburg, Dallas, Abilene, and Odessa.
- Key activities and achievements:
  - Number of marketing trips—30 in various regions of the state
  - Number of outreach calls—80 (includes all program inquiries)
  - Number of technical assistance calls completed—420 (all programs)

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

The primary function of providing financial assistance to political subdivisions for water and wastewater services has not changed. However, the programs and manner in which financial assistance is provided has changed to meet the needs of our customers and to ensure efficient use of the program. One such change is illustrated by the stepped financing approach in EDAP. Additional information on the financial assistance programs is included in Section XII.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

Project Finance affects political subdivisions throughout the state through the marketing and administering the financial assistance programs. Those entities who apply for financial assistance loans and/or grants for water and/or wastewater systems are assisted through the process by Project Finance staff. The specific qualifications for the various programs are identified in Section XII.

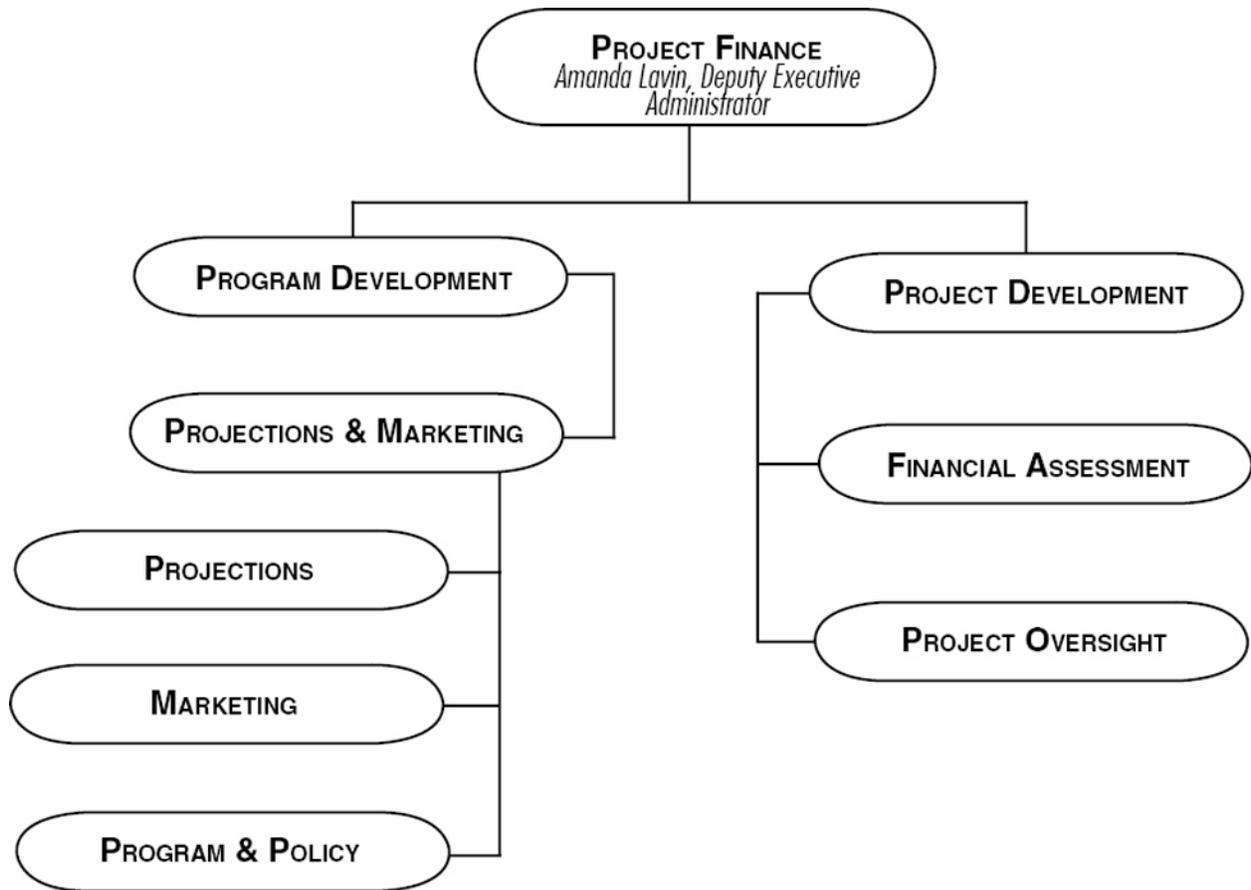
**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

Project Finance is organized into two divisions:

- Program Development Division – This division is responsible for marketing, developing, and implementing the TWDB financial assistance programs. The division also develops policies to facilitate the management of the financial assistance programs. Division staff monitors and ensures agency compliance with state and federal laws, policies, and standards as it relates to administering the TWDB financial assistance programs. The division conducts water and wastewater needs assessments and projections for two federally funded programs (CWSRF and DWSRF), in addition to handling all annual and interim reports. Staff actively pursues opportunities to market and provide outreach regarding TWDB programs.
- Project Development Division – This division assesses the financial viability of projects by reviewing and analyzing financial data provided by potential applicants requesting financial assistance. Division staff oversees projects to ensure they are progressing in a timely manner. Staff also leads the efforts of multi-disciplinary project work groups to ensure progress on projects is achieved from the pre-application phase through commitment, closing, and final completion. The division coordinates loan closing activities associated with the financial applications. Staff works closely with the Program Development Division to ensure program requirements are being followed and that they are aware of the program implications of potential and existing projects. The division is responsible for coordinating, compiling, reviewing, and finalizing monthly Board presentation material regarding proposed projects and presenting financial applications to the Board for consideration.

Generally, most financial assistance programs administered by Project Finance follow the same process of pre-application, application, commitment, and closing.

The following is the Project Finance organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Project Finance</b>	
General Revenue	\$3,854,359
Agricultural Water Conservation Fund	1,510,144
Federal Funds	1,090,815
Appropriated Receipts	<u>185,557</u>
<b>Total</b>	<b>\$6,640,875</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

No other entity provides identical financial assistance services. Within the state, the Texas Department of Rural Affairs, formerly known as the Office of Rural and Community Affairs, also provides matching grants to entities to construct water and wastewater facilities in economically distressed areas. In addition, the U.S. Department of Agriculture—Rural Development program provides financial assistance for constructing water and wastewater projects. These financial assistance programs are generally coordinated to assist entities in financing their projects.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency’s customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

The TWDB coordinates with both the Texas Department of Rural Affairs and the U.S. Department of Agriculture—Rural Development in providing financial assistance. The General Appropriations Act regularly includes a rider for both TWDB and the Texas Department of Rural Affairs that continues a memorandum of understanding. The focus of the memorandum is to ensure that none of the appropriated funds are used to aid in the proliferation of colonias or are in a manner inconsistent with the intent of EDAP and to maximize the delivery of the funds and minimize administrative delay.

The TWDB also works closely with the Texas Border and Mexican Affairs Division of the Secretary of State to ensure project coordination among the various funding and oversight agencies. The Secretary of State leads coordination of the various entities and holds quarterly meetings in which the TWDB participates.

The TWDB coordinates with the various Councils of Government on all grant projects to avoid duplicating projects.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

The primary federal governmental entity Project Finance interacts with is the U.S. Environmental Protection Agency (EPA), which provides capital grants to support the DWSRF and the CWSRF programs. EPA has also previously provided funding for the Colonia Wastewater Treatment Assistance Program, which has complemented EDAP.

Certain levels of EDAP grant funding are impacted by health and safety nuisance determinations made by the Texas Department of State Health Services. The TWDB maintains an interagency contract with the department to perform nuisance findings.

Coordination efforts between the TWDB and the Texas Historical Commission are necessary on various projects receiving financial assistance. The Texas Historical Commission assesses and protects archeological, architectural, and historical state landmark resources. Federal and state antiquities laws require all funded projects to be evaluated for their potential effect on archeological features present on a project site and cleared by the Texas Historical Commission. To facilitate this coordination, a memorandum of understanding between the TWDB and the Texas Historical Commission has been established.

The TWDB also coordinates with Texas Department of Rural Affairs and the U.S. Department of Agriculture—Rural Development in providing financial assistance to economically distressed areas.

For the DWSRF, the Texas Commission on Environmental Quality performs the priority ranking of applications. The Texas Commission on Environmental Quality, as the state primacy agency, is responsible for state program management, small systems technical assistance, source water protection, and capacity development, in addition to ranking of applications.

**K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

No contracted services were obtained in FY 08.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

During the 81<sup>st</sup> Legislative Session (2009), Senator Eddie Lucio, Jr., authored Senate Bill 2284 and Representative Eddie Lucio III authored House Bill 3542, neither of which passed. The bills would have allowed for 100 percent grant funding with EDAP bond authority. Current statute requires that no more than

90 percent of the total principal amount of issued and unissued bonds under the EDAP authority may be provided as grant assistance. Thus the remaining 10 percent of EDAP funds is required to be in the form of loan assistance. Please refer to Section XII for a full explanation of the proposed statutory change.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

**Financial Assistance Programs**

[http://www.twdb.state.tx.us/assistance/financial/financial\\_main.asp](http://www.twdb.state.tx.us/assistance/financial/financial_main.asp)

**N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**

- why the regulation is needed;
- the scope of, and procedures for, inspections or audits of regulated entities;
- follow-up activities conducted when non-compliance is identified;
- sanctions available to the agency to ensure compliance; and
- procedures for handling consumer/public complaints against regulated entities.

Not applicable

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable

## Construction Assistance

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Construction Assistance
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Steve Rodriguez, Deputy Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$3,599,729
<b>Number of FTEs as of August 31, 2008</b>	54.30

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

Construction Assistance provides environmental and engineering reviews and approvals required for projects financed with funds administered by the TWDB. In addition Construction Assistance staff provides technical and construction management assistance to project owners during all phases of project construction. Staff members include professional engineers, environmental reviewers, and technical and administrative personnel who provide these services through two primary divisions:

- Project Engineering and Review
- Inspection and Field Support

### Project Engineering and Review

This division is responsible for processing and assessing the engineering and environmental effects of an application for financial assistance from the TWDB, which includes the following tasks:

- Reviewing and approving the engineering feasibility reports for the proposed project
- Reviewing environmental documents and issuing an environmental determination
- Reviewing and approving plans and specifications for every contract of each project
- Reviewing contract bid tabulations and authorizations to award
- Reviewing and approving of executed construction contract documents
- Reviewing and approving contract change orders

### Inspection and Field Support

This division is responsible for overseeing project construction and providing technical assistance to project owners from the preconstruction phase, throughout the construction phase, and contract and project close-out, which includes the following tasks:

- Reviewing bidability and constructability of plans and specifications
- Participating in and reporting on preconstruction conferences
- Conducting monthly construction inspections and writing progress reports
- Conducting contract and project final inspections and writing final reports
- Gathering contract close-out documents and issuing a Certificate of Approval for each contract

- Conducting post-construction performance and warranty assistance as required
- Maintaining project database with current and historical project information

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

Construction Assistance, in conjunction with Project Finance, contributes to the following performance measures:

- Output 02-01-01.01 – Number of Board actions to amend, confirm, or modify an applicant's terms of previously approved Economically Distressed Areas Program (EDAP) financial assistance
- Output 02-01-02.03 – Number of completed EDAP projects
- Output 02-01-02.04 – Number of EDAP construction contracts in progress
- Output 02-01-03.06 – Number of construction contracts managed
- Output 02-01-03.08 – Number of Board actions to amend, confirm, or modify an applicant's terms of previously approved financial assistance from the Board

These measures reflect the number of projects managed and approved for financial assistance from the TWDB. In FY 2008, each of these performance measures has met or exceeded agency outcome and output performance targets, demonstrating progress in these programs.

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

Not applicable

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

The TWDB provides financing to a variety of public entities for constructing water and wastewater infrastructure statewide. Construction Assistance works with the engineering, environmental impacts assessment, and the construction aspects of project funding. The persons and entities affected are in the following three general categories:

**1) Political subdivisions of the state with the authority to own and operate water and/or wastewater utilities.**

All applicants of the TWDB funding programs administered by Project Finance and Construction Assistance must be public entities that can own and operate water and/or wastewater systems. These entities include cities, authorities, districts, water supply corporations, and in limited cases, counties.

The only exceptions to this are the Drinking Water State Revolving Fund (DWSRF) and the TWDB Self-Help programs. In the DWSRF, private water providers may qualify for funding under specific criteria. In Self-Help funding, financing may be offered to nonprofit entities who can help communities provide sweat equity in constructing infrastructure.

As a result, the people affected by the programs are the public and public officials who are affiliated with the entities that apply for funding. This ranges from citizens and staff associated with the individual entities applying for funding to local, state, and federal elected officials who may have an interest in the outcome of construction projects.

## **2) Professional Community in Texas**

Project financing and construction is accomplished in Texas with the involvement of the professional community in several fields, including financing, engineering, environmental impacts assessment, legal, and construction. As such, the TWDB programs involve working interactively with all of these professional areas.

Coordination in Construction Assistance, therefore, focuses on the engineering, environmental, and construction communities. This also involves work with the various professional societies in these fields.

## **3) Governmental Agencies**

The construction of water and wastewater projects in Texas is governed by statute and regulation. In addition, some of the programs administered by the TWDB are funded in part or whole by federal funds. As a result, other state and federal agencies are affected by projects funded by the TWDB. These would include, but are not limited to, the Texas Commission on Environmental Quality, the Texas Historical Commission, the Texas Parks and Wildlife Department, the U.S. Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service.

Funding in Texas is also provided by other agencies. These programs are operated independently, but the TWDB works conjunctively with them to provide complete funding packages for projects. As a result, these other agencies are affected by TWDB funding. These include, but are not limited to, the Texas Department of Rural Affairs, the U.S. Department of Agriculture—Rural Development, North American Development Bank, Border Environment Cooperation Committee, and Housing and Urban Development funding for entitlement counties.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

Construction Assistance is divided into two divisions reporting to the Deputy Executive Administrator:

- Project Engineering and Review
- Inspection and Field Support

**Project Engineering and Review** has a director with one executive assistant and three team leads overseeing three areas, including Environmental Impact Assessment, State Engineering, and Federal Engineering.

The Project Engineering and Review Division is located at Austin Headquarters: 1700 N. Congress, Austin 78711.

**Inspection and Field Services** has a director with one executive assistant and one staff services officer at the Austin headquarters, four field offices and one satellite office. The four field offices are located in Mesquite, Houston, Harlingen, and Austin, with a one-man satellite office in San Antonio.

**Mesquite Office** – Covers an area from the Oklahoma border south to about 40 miles north of Waco and from the Arkansas/Louisiana border west to the eastern edge of the Panhandle.

**Staff:** Four full-time inspectors, one team lead/inspector, and one administrative assistant.

**Location:** Near East Loop 635 and Interstate 30 at 801 W. Kearney, Suite 200, Mesquite 75149

**Houston Office** – Covers an area from the Gulf of Mexico north to about Nacogdoches and from the Louisiana border west to a line approximately from Bryan to Port Lavaca.

**Staff:** Five full-time inspectors, one team lead/inspector, and one administrative assistant.

One inspector maintains a sub-office in a City of Houston office building in downtown Houston to better serve the City of Houston projects.

One inspector works primarily from a home-based office in Anahuac and is responsible for projects in far East Texas.

**Location:** Main office – Northwest side of Houston at 3920 FM 1960, Suite 330, Houston 77068

**Harlingen Office** – Covers an area from the Mexico border north to a line just north of Corpus Christi to north of Laredo.

**Staff:** Two full-time inspectors, a manager<sup>2</sup>, and one administrative assistant.

**Location:** 1828 W. Jefferson, Harlingen 78550

**Austin Field Office** – Has a total of four full-time inspectors and one lead inspector. Administrative support is provided by the division executive assistant.

**Staff:** Three inspectors and the lead inspector are in the TWDB headquarters in Austin.

One inspector is in a sub-office in San Antonio.

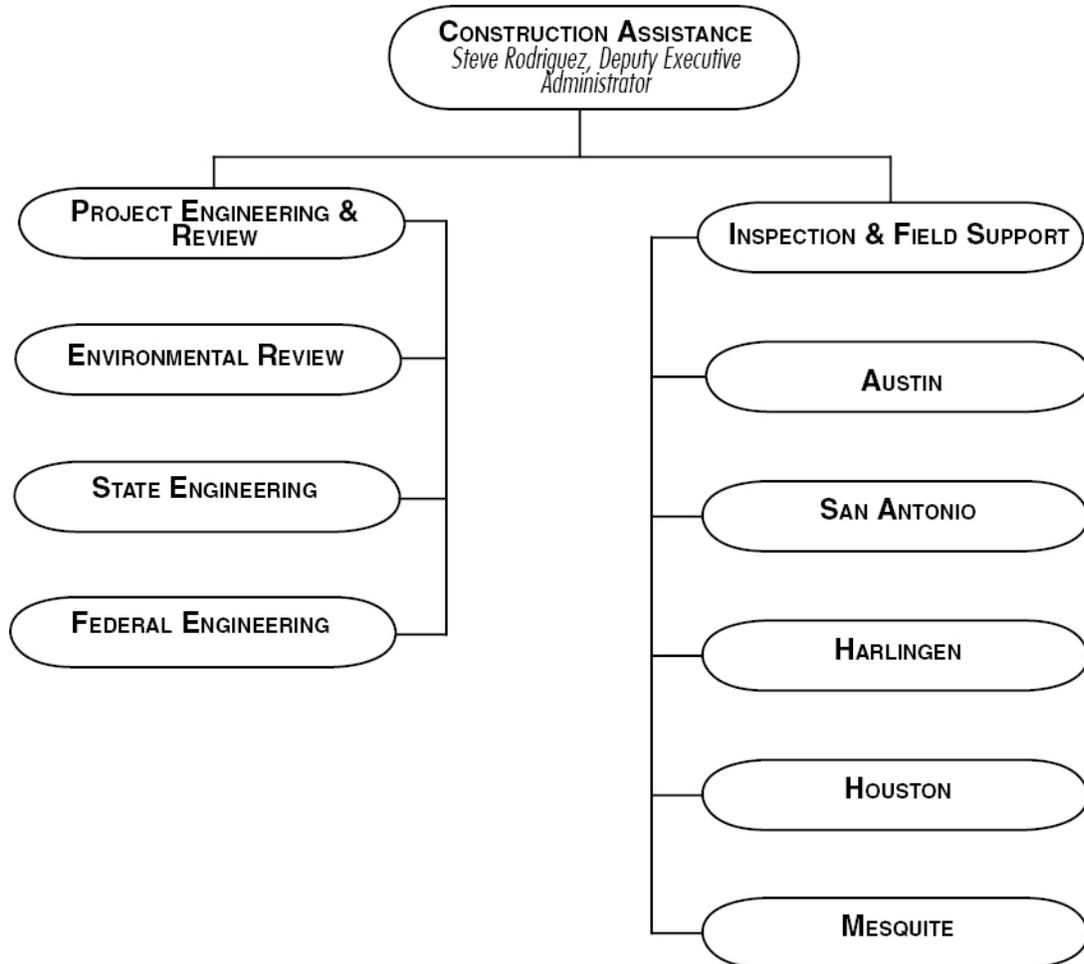
**Location:** Austin Headquarters: 1700 N. Congress, Austin 78711

**Location:** San Antonio: 321 Center Street, Suite 400, San Antonio 78202

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<sup>2</sup> As of the date this report was written, the manager position in Harlingen was not yet filled because of a division restructuring.

The following is the Construction Assistance organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

**Construction Assistance**

General Revenue	\$ 526,426
Agricultural Water Conservation Fund	874
Federal Funds	2,288,026
Appropriated Receipts	<u>784,403</u>
<b>Total</b>	<b>\$3,599,729</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

The Texas Commission on Environmental Quality also reviews plans and specifications for water projects. They have implemented a different protocol for wastewater projects. The TWDB review of plans and specifications for water projects is governed by an agreement with the Texas Commission on Environmental Quality.

There is no duplication, per se, in funding of infrastructure between the Texas Department of Rural Affairs, the North American Development Bank, the U.S. Department of Agriculture—Rural Development, and the Border Environment Cooperation Committee because we typically compliment each other to develop complete funding packages. One exception may exist with U.S. Department of Agriculture—Rural Development funding in some cases. From time to time there seems to be some tension with that federal agency regarding the "shopping" of projects by applicants between us and them.

The Texas Commission on Environmental Quality has a bond review section for projects funded for water districts.

The TWDB Water Resources Information and Planning area offers funding programs for research, planning, and flood projects. However, the nature and intent of the programs do not duplicate those in Construction Assistance.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

- Coordination of reviews of plans and specifications for water projects with the Texas Commission on Environmental Quality are governed by a memorandum of agreement.
- Close ongoing coordination, mostly to cooperate to completely fund projects addresses any duplication. This is due to the scarcity of funding compared to the needs statewide.

- Because of an agreement between the TWDB and the Texas Commission on Environmental Quality, there is no duplication. If a water district comes to us for funding, the applicant does not have to receive approval for a bond transaction from the Texas Commission on Environmental Quality (only applies to districts).
- Clear assignments of responsibilities and autonomously operating programs eliminate duplication. Construction Assistance coordinates with Water Resources Information and Planning on funding opportunities and joint packaging of funding, if necessary, as we would with any other entity that may offer funding for projects.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

Although the TWDB may commit funds, it cannot deliver them until all appropriate permits, concurrences, or comments are obtained from state and federal agencies with jurisdiction. Many of these are related to the environment, and the information provided in their assessment will facilitate review by other agencies and will be of use in preparing any permit applications. The following is a partial list of state and federal agencies that, depending upon the type of project and/or its location, may comment on the project, issue a permit, or provide easements. Any of these agencies may require changes in the project design or stipulate measures to be taken to protect the environment.

**The Texas Commission on Environmental Quality**

The Texas Commission on Environmental Quality is the state agency responsible for regulating water and wastewater issues in the state. The TWDB adheres to regulations and permitting administered by the Texas Commission on Environmental Quality. In addition, the Texas Commission on Environmental Quality and the TWDB jointly manage the Drinking Water State Revolving Fund (DWSRF), coordinating their roles closely.

**Texas Historical Commission**

The Texas Historical Commission reviews projects for potential impacts to cultural resources of the state, including historical sites, and performs other related activities within its purview. Conditions identified by the Texas Historical Commission are inserted into the TWDB's environmental findings and into the construction documents as necessary.

**Texas Parks and Wildlife Department**

The Texas Parks and Wildlife Department reviews projects to identify potential impacts to fish and wildlife and threatened and endangered species and performs other related activities within its purview. Conditions that are identified by the Texas Parks and Wildlife Department are inserted into the TWDB's environmental findings and into the construction documents as necessary.

**U.S. Environmental Protection Agency (EPA)**

The EPA provides funding to the state for use in various programs. Two of the main programs include the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF). Programs that receive funding from the EPA are administered by the TWDB to comply with EPA requirements.

**U.S. Army Corps of Engineers**

The U.S. Army Corps of Engineers reviews projects for potential impacts to wetlands and navigable waterways and performs other related activities within its purview. The TWDB adheres to permits granted

by the Corps of Engineers. Conditions identified by them are inserted into the TWDB's environmental findings and into the construction documents as necessary.

#### **United States Fish and Wildlife Service**

The U.S. Fish and Wildlife Service reviews projects to identify potential impacts to fish and wildlife and threatened and endangered species and performs other related activities within its purview. Conditions identified by the U.S. Fish and Wildlife Service are inserted into the TWDB's environmental findings and into the construction documents as necessary.

#### **Funding Agencies**

Funding in Texas is also provided by other agencies. These programs are operated independently, but the TWDB works conjunctively with them to provide complete funding packages for projects. As a result, these other agencies are affected by TWDB funding. These include, but are not limited to, the Texas Department of Rural Affairs, the U.S. Department of Agriculture—Rural Development, North American Development Bank, Border Environment Cooperation Committee, and Housing and Urban Development funding for entitlement counties.

#### **Other Agencies**

Construction in Texas, depending upon the nature of the project, can also involve other agencies on some projects but not all. When projects fall within these agencies' purview, coordination and feedback are added to the project. These would include the Council of Governments, Texas General Land Office, the International Boundary and Water Commission, the U.S. Bureau of Reclamation, the U.S. Department of Agriculture—Natural Resources Conservation Service, the U.S. Federal Emergency Management Administration, and the Occupational Safety and Health Administration.

#### **K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$6,800

Number of contracts: 4

Construction Assistance contracted services are operational in nature. Requirements and deliverables are documented and reviewed by Construction Assistance staff. In addition to review by program staff, contract administration staff reviews invoices to ensure that submissions are proper and correspond to contract requirements.

#### **L. What statutory changes could be made to assist this program in performing its functions? Explain.**

Not applicable

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

The Texas Water Development Board Web site for the previously combined Project Finance and Construction Assistance departments provides information on organization, procedures, and processes; Intended Use Plan participants; training; and various program and project information reference material. The information is located on an agency intranet page.

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- **why the regulation is needed;**
  - **the scope of, and procedures for, inspections or audits of regulated entities;**
  - **follow-up activities conducted when non-compliance is identified;**
  - **sanctions available to the agency to ensure compliance; and**
  - **procedures for handling consumer/public complaints against regulated entities.**

Not applicable

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable

## Finance

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Finance
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Melanie Callahan, Chief Financial Officer
<b>Actual Expenditures, FY 2008</b>	\$2,668,927
<b>Number of FTEs as of August 31, 2008</b>	32.80

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

### Debt and Portfolio Management

- Performs the function of debt issuance of general obligation (self-supporting and non-self supporting) and revenue debt of which the proceeds are subsequently lent or, in certain cases granted, to eligible entities of the TWDB's financing programs. This includes evaluating and recommending the instrument, structure, and terms of the debt.
- Provides ongoing review and monitoring of specific program and TWDB portfolios. This includes reviewing program debt service coverage ratios, capacity and program perpetuity management, loan risk, market risk, and concentration risk. It also includes establishing loan rates and fulfilling other program and loan-specific requirements. An objective is to achieve and maintain the highest credit ratings for long-term lower program debt costs for the assistance programs.
- Provides oversight of investments to ensure compliance with the TWDB's investment policies and the Public Funds Investment Act.
- Assigns, monitors, and tracks the use of bond proceeds, repayments, and other related funds to ensure compliance with tax-exempt financing regulations including arbitrage requirements.
- Provides state debt reporting, Internal Revenue Service arbitrage compliance reporting, and appropriate disclosure reporting for U.S. Securities Exchange Commission.

### Financial Monitoring

- Monitors compliance with bond covenants and applicable statutes to minimize risk of default.
- Monitors stability reviews, subrecipient monitoring, and final accountings.

### Accounting

- Maintains the general ledger
- Ensures integrity of financial data
- Prepares financial reports
- Prepares federal grants accounting and billing

- Processes payables and loan and grant disbursements
- Processes payroll
- Processes revenue and loan receipts
- Management of the Micro Information Products (MIP) financial system

**Budget**

- Prepares annual operating budget
- Prepares Legislative Appropriations Request
- Prepares legislative fiscal notes

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

- Debt portfolio managed through refundings, which achieved \$10.8 million in General Revenue savings
- No defaults in the history of the Water Financial Assistance or State Revolving Fund programs
- No financial findings resulting from audits
- \$695,400,000 in general obligation bonds issued in FY 09
- \$257,740,000 in revenue bonds issued in FY 09
- 65 single audits reviewed in FY 09
- 530 annual financial stability/compliance reviews performed in FY 09

**D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.**

There have been no changes from the original intent; however, recent changes within the financial markets have affected the services and functions of the TWDB's financial assistance programs. These include but are not limited to the following:

- Weakened and reduced number of municipal insurers
- Perceived weakening of portfolio due to insurer downgrades
- Limited municipal market access for those issuers that relied upon insurance, increasing the demand for TWDB financing for primary infrastructure construction
- Reduced number of providers and increased market costs due to market liquidity disruptions

Other impacts have resulted from requirements related to federal disclosure and the implementation of the Municipal Securities Rulemaking Board's new Electronic Municipal Market Access disclosure reporting system. In addition, the federal Tax Increase Prevention and Reconciliation Act implemented new requirements for pooled tax-exempt issuances, creating increased disclosure, monitoring, smaller and more frequent issuances, and increased interest costs.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

Bonds are issued to provide funding for political subdivisions eligible for financial assistance under current funding programs, including regional water authorities, districts, cities, counties, water supply corporations, and other political subdivisions. Recipients of financial assistance are then subject to monitoring by the TWDB.

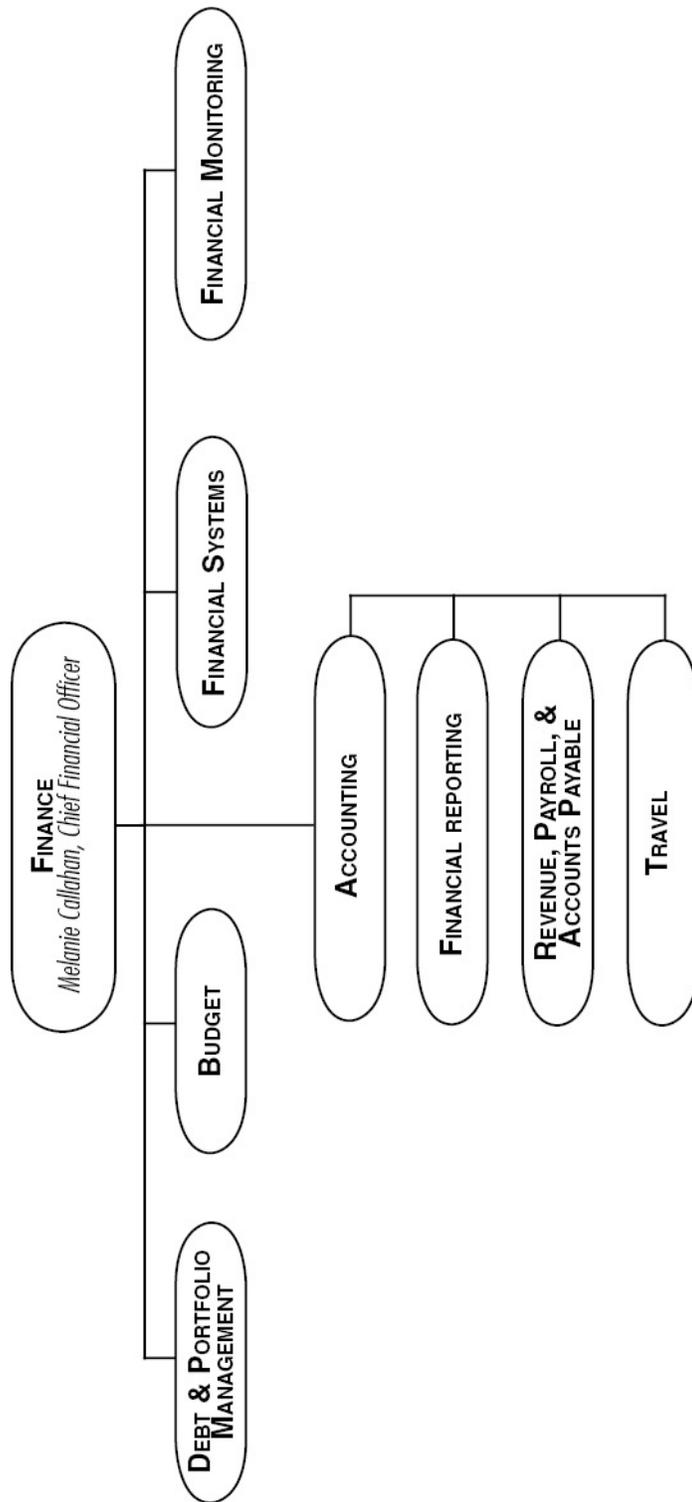
All internal programs of the TWDB are supported by the accounting and budget functions.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

The Finance function is administered through the Chief Financial Officer and leadership of the five primary divisions of Finance. Weekly meetings are held by the leadership to discuss actions needed regarding initiatives, and notes from these meetings are available to all Finance staff.

Functions are carried out in accordance with guidance from state and federal oversight agencies and generally accepted accounting practices for governmental entities.

Following is the Finance organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Finance</b>	
General Revenue	\$ 44,597
Agricultural Water Conservation Fund	23,265
Federal Funds	1,394,406
Appropriated Receipts	<u>406,658</u>
<b>Total</b>	<b>\$2,668,927</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

No other state entity issues debt and provides loans for water and wastewater infrastructure. Although single audit desk reviews are not uncommon, no other entity performs the specific monitoring of TWDB financial assistance recipients. Most agencies have staff that provides similar accounting and budget functions, although few deal with bond and loan accounting to the extent the TWDB does.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

Not applicable

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

Finance coordinates and provides other areas of the agency with information, statistics, and analysis for the federal Clean Water and Drinking Water programs. The area also works with federal grantors, including the U.S. Environmental Protection Agency, U.S. Department of Commerce, U.S. Department of Interior, and the U.S. Department of Homeland Security. All required coordination and reporting to oversight agencies, including the Bond Review Board, the Comptroller, and the Legislative Budget Board, is performed. Finally, political subdivisions across the state receive financial assistance from the TWDB.

**K. If contracted expenditures are made through this program please provide:**

- the amount of those expenditures in fiscal year 2008;
- the number of contracts accounting for those expenditures;
- a short summary of the general purpose of those contracts overall;

- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$276,267

Number of contracts: 8

Finance contracts are for services related to debt service, investments, and audit and loan-closing services. Accountability is ensured by documenting the needs, selection process, and required deliverables. All invoices are reviewed by staff, and contract administration staff reviews invoices to ensure that submissions are proper and correspond to contract requirements. In addition, many of these contracts require the reporting of performance to the Bond Review Board.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

Additional constitutional general obligation debt issuance authority is needed to ensure the TWDB's ability to provide funds to eligible borrowers.

The elimination or streamlining of state debt authorization would be helpful to ensure the TWDB can enter the financial markets in a timely manner.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

None

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- **why the regulation is needed;**
  - **the scope of, and procedures for, inspections or audits of regulated entities;**
  - **follow-up activities conducted when non-compliance is identified;**
  - **sanctions available to the agency to ensure compliance; and**
  - **procedures for handling consumer/public complaints against regulated entities.**

Not applicable

**O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable

## Operations & Administration

**A. Provide the following information at the beginning of each program description.**

<b>Name of Program or Function</b>	Operations and Administration
<b>Location/Division</b>	1700 North Congress Avenue Stephen F. Austin Building, 5 <sup>th</sup> Floor Austin, Texas 78701
<b>Contact Name</b>	Lisa Glenn, Deputy Executive Administrator
<b>Actual Expenditures, FY 2008</b>	\$5,803,394
<b>Number of FTEs as of August 31, 2008</b>	57.26

**B. What is the objective of this program or function? Describe the major activities performed under this program.**

This Operations and Administration area is responsible for performing customer service in the following areas: Human Resources; Communications, Strategic Planning, and Records Management; Information Technology; and Support Services and Contract Administration.

### Human Resources Division

- Administers a comprehensive human resources program
- Advises supervisors and managers in personnel matters to promote greater staff productivity and ensure a work environment free of discrimination
- Serves as an advisor to senior management and other key management and supervisory staff on personnel policies and procedures relating to all aspects of employee relations
- Maintains a position classification system used to evaluate jobs in accordance with the State Classification Plan
- Ensures that jobs are classified according to the compensation provisions of the State Classification Salary Schedule
- Provides a recruitment program that locates, selects, and retains employees from diverse backgrounds in compliance with various Equal Employment Opportunity laws, regulations, and guidelines; prepares Equal Employment Opportunity data; and reports employment data to state and federal entities
- Establishes a comprehensive training program designed to increase employee motivation and productivity
- Administers employee benefits such as group insurance, retirement, deferred compensation, Employee Assistance Program, and TexFlex
- Processes employee complaints and grievances according to the established policies;
- Maintains the highest level of confidentiality and security as it relates to employee personnel records and transactions

- Establishes, maintains, and retains personnel files and other employment records according to state law
- Counsels and assists employees on problems or issues related to the workplace and advises employees about the Employee Assistance Program as needed
- Develops, posts, and advertises job vacancy announcements
- Establishes and coordinates recruitment activities with appropriate recruitment sources
- Screens job applications for minimum qualifications and makes referrals to the selecting authority for interviews
- Checks employment references and notifies interviewed candidates regarding final hire decisions
- Monitors the performance appraisal system, including notifying supervisors of evaluation due dates, filing copies of evaluations in employees' personnel files, and reporting overdue evaluations to appropriate management staff
- Counsels separating employees regarding their retirement benefits and insurance coverage (COBRA) and conducts exit interviews with the Human Resources Division
- Reports work-related injuries or illnesses to the State Office of Risk Management
- Ensures compliance with all leave provisions for state employees in accordance with the Fair Labor Standards Act

### **Communications, Strategic Planning, and Records Management Division**

The objective of this division is to provide communications, records management, Web administration, publication production support, and other services to agency staff and customers. The primary responsibilities are specified below:

- Informs stakeholders of agency activities and actions of the Board
- Answers inquiries from the public and the media
- Distributes press releases
- Answers questions from the media
- Processes public information requests

#### *Records Management*

- Ensures that the agency maintains records in an efficient and cost-effective manner
- Provides support and training to all areas of the agency in managing records
- Oversees destruction of records that have met their retention
- Provides routing and tracking of incoming mail for portions of the agency
- Maintains water project files for the agency

#### *Web Administration*

- Administers the TWDB's Internet and Intranet, ensuring the public effective and quick access to latest TWDB information.

#### *Publications and Graphics Support*

- Provides editorial, design, and production assistance on water resources materials for the agency, including these projects:
  - Numbered scientific reports based on agency data collection
  - Conservation brochures and materials
  - State water plan
  - Various legislatively mandated reports
  - Administrative reports

- National Flood Insurance Program workbooks and brochures
- Program information sheets
- Other agency materials as needed (for example, letterhead, business cards)
- Posts materials on the agency Web site and serves as the backup department for managing the site.

### **Information Technology Division**

The objective of the Information Technology Division is to provide security and infrastructure, Help Desk assistance, application services, database administration, project management, and systems analysis support to the agency staff and customers. The primary responsibilities for each section are specified below:

#### *Security and Infrastructure*

- Provides intrusion protection services
- Provides security awareness training
- Maintains and supports network
- Coordinates and consolidates for Department of Information Resources data center
- Provides field office connectivity

#### *Application Services*

- Performs software development activities to support agency needs relating to collecting and disseminating water information
- Writes and debugs code for legacy applications developed in Microsoft ASP and Microsoft Access
- Develops new Web applications using the latest technologies to enhance applications and security

#### *Database Administration*

- Provides support to administer databases to support software development for creating, securing, and modifying data and generating reports

#### *Help Desk*

- Provides Information Technology assistance to the agency
- Provides new workstation setup
- Assists staff in troubleshooting application errors
- Provides BlackBerry support
- Establishes user accounts
- Installs software
- Provides field office support
- Sets up video projector and laptops for Board meetings and other agency meetings

#### *Project Management*

- Tracks project activities, scope, schedule, and budget and maintains documentation

#### *Systems Analysis*

- Generates requirements and test plans
- Provides assistance with development, design, documentation, maintenance, evaluation, and support of agency applications.

### **Support Services and Contract Administration:**

The objective of the Support Services and Contract Administration Division is to provide staff support, purchasing, contracting, and other services to agency staff and customers. The primary responsibilities for each section are specified below:

#### *Support Services*

- Provides facility management (building maintenance and associated repairs, space management, lease management)
- Provides staff support (telecommunications, fleet management, mail services, supplies)
- Provides other duties (fraud prevention coordination, annual inventory, safety management, cost-savings initiatives)

#### *Contracting and Purchasing*

- Develops and administers contracts
- Procures goods and services
- Coordinates contract payment
- Coordinates outlay processing

**C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.**

### **Human Resources**

The Human Resources Division maintains a weekly status report that provides updates to activities and projects performed by the division. This weekly report details specific information related to the following:

- Number of employees (YTD)
- FTE cap
- Management-to-staff ratio
- Number of new hires
- Number of separations
- Employee turnover rate
- Current job posting status report
- Internship program
- Contractor/Temporary employee report
- Recruitment events
- Special leave and benefits issues (Family and Medical Leave Act, military, sick leave pool, and extended sick leave)
- Workers' compensation report
- Human Resources reports and status updates
- Human Resources special projects

This comprehensive reporting tool provides management with a weekly summary that assesses the performance of the Human Resources Division. Highlights of this performance of the last year include the following:

- Managed 104 active position in 2008; hired 85 positions
- Reduced turnaround times for job posting review by 75 percent, allowing a shorter time from selection to offer
- Implemented new Human Resources policies and procedures with annual review and revision
- Completed certification—three out of five Human Resources staff members have successfully completed the HRCI - PHR Certification exam. The remaining staff members are scheduled to attend the preparatory course in the Fall 2009.
- Completed second year of successful partnering with the Mickey Leland Internship Program
- Developed a comprehensive recruitment program to include career fair attendance/sponsorship, successful advertisement program, and brand development.
- Implemented a comprehensive wellness program with an agency designated wellness coordinator
- Trained mediator—one Human Resources staff member is now a trained mediator and has successfully mediated several issues
- Completed a successful series of management training, designed to address deficiencies in hiring, performance appraisal, and disciplinary actions
- Developed additional training on new hire, on-boarding, and leave issues for both managers and staff

### **Communications, Strategic Planning, and Records Management**

This division strives to answer media requests effectively by providing responses on the same day requests are received and uses an online Communications Tracking System to keep track of all media requests made and responses given. In addition, the Communications staff has managed to maintain positive coverage in the press on water-related issues.

#### *Records Management*

Project documentation is easily accessible, available to the staff and public, and the Records Retention Schedule is up to date and available.

#### *Web Administration*

The agency's Web site hits have increased in traffic due to higher demand for online browsing of agency data and information. Although Web site traffic has increased, Web Administration has received very few complaints. Additionally, to promote a higher level of efficiency on the Web site, Web Administration has several projects underway, with the biggest project dubbed the "Web Revitalization." These projects include the following:

- Implementation of an improved search engine, enabling users to locate hard-to-find documents quickly
- Content provider management and policies
- Reduction of broken links and orphaned files
- Enhanced support to the agency with more accurate and updated contents

- Implementation of accessibility policy and requirements set forth in Texas Accessibility Code, Sections 206 and 213, World Wide Web Consortium’s Web Content Accessibility Guidelines 2.0, and Section 508 of American Disabilities Act

*Publications and Graphics Support*

The best indication of the effectiveness of the Publications and Graphics Support group is the number of projects produced in the year-and-a-half this office has existed, which include the following initiatives:

- Water conservation
- Legislative reporting
- Public information
- Water planning
- Water use
- Water research

Staff members use the state bidding process for selecting low-bid printers and measures performance by producing materials on time and on (or under) budget.

**Information Technology**

*Security and Infrastructure*

The network is very stable; outages are very rare. The last network outage was over a year ago and it was due to an electrical problem on the fourth floor of the Stephen F. Austin building. The network was back up within an hour.

The agency servers have not had an infection or intrusion since July 2004. Desktops have only experienced sporadic malware incidents. This information is reported monthly to the Department of Information Resources Security Incident Reporting System.

*Application Services and Database Administration*

Development has created a three-tier application framework on top of Microsoft .NET 3.5 Framework. The framework consists of common libraries used in new Web applications being developed to provide users with a consistent look and feel among the TWDB Web applications and to provide methods for accessibility, authentication, authorization, and roles to be used by individual Web applications. Applications developed on the TWDB framework use the Application Program Management System security framework libraries to perform user authentication and authorization. The TWDB framework is continuously being enhanced to improve the process for developing new Web applications that collect and disseminate water information for other departments, agencies, and the general public.

Below is a list of Web applications that have been developed using the TWDB application framework since September 2007.

Solution Name	Application Name
TWDB.GWM Groundwater	Monitoring
TWDB.LTS	Legislative Tracking System
TWDB.IUP	Intended Use Plan
TWDB.MRP	Major Rivers Program
TWDB.PMA	Performance Measures Application
TWDB.WCS	Water Conservation Survey
TWDB.WIQ Water	IQ

TWDB.WLA
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Water Loss Audit
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### *Help Desk*

Meetings with business areas have indicated overall satisfaction with the Help Desk and the level of service received. During the second quarter of calendar year 2009, 968 tickets were opened and 949 tickets were closed.

### *Project Management and Systems Analysis*

The project management function within the Information Technology Division is a relatively new program area, created during FY 2008. The project management function provides project management structure, project scheduling, project scope monitoring, and project documentation centralization. These functions are considered management controls to enhance Information Technology project effectiveness and efficiency and are exercised for appropriate agency projects.

## **Support Services and Contract Administration**

Summary of key statistics for FY 08:

- Number of new contracts executed: 94.
- Total dollar amount of executed contracts: \$29,501,029.
- Number of purchase orders processed: 1469.
- Total dollar amount of purchase orders: \$7,459,824
- Number of outlays processed: 333
- Total dollar amount of processed outlays: \$146,832,340
- Number of contract payments: 608
- Total dollar amount of contract payments: \$37,992,074

The division is composed of 15 FTE's at the present time and has eliminated three FTE positions over the past years by using existing staff to perform the work once performed by these FTE's. These efficiencies provided the agency an extensive cost savings without affecting customer support. Additionally, the staff is constantly praised for providing excellent customer service and response, which is a reflection of the division's effectiveness. Lastly, Contract Administration has created a contract tracking database that tracks certain measures. This data is used for various agency reports and for tracking contract status. The information is reported to the Board members and TWDB management staff on a monthly basis and has been very well received by all parties. In total, Contracting and Purchasing staff members have processed more than 2,500 individual work assignments/transactions during FY 2009

<b>D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.</b>
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The Human Resources Division has continued to maintain its original intent to serve as the agency in the following ways:

- An organization characterized by flexibility, creativity, and timely responsiveness to the numerous and diverse needs of employees and managers seeking an array of consultative and support services
- An effective and efficient organization to both external and internal customers that provides practical, reliable advice and services to all employees and managers
- A dynamic, responsive organization with the internal capability to address emerging needs and issues

- An integral part of the strategic planning process at all levels of the TWDB, with the ability to understand and bring value to the missions of our customers
- A supported, highly valued, and respected partner with senior leadership in accomplishing the TWDB's mission
- Employees who demonstrate these professional qualities, competencies, and attitudes through
  - An ability to clearly articulate the role and value of human resources in meeting the needs of our customers
  - A commitment to work together as a team, through both our internal and external partnerships
  - An ability and desire to redefine and simplify business strategies, structures, and processes to improve organizational efficiency and competitiveness
  - An eagerness to acquire and apply professional/technical knowledge, skills, and experience to accomplish results and serve customers better
  - An ability to generate innovative solutions, explore non-traditional ideas, and apply best practices to positively impact our mission and key initiatives
  - An ability to respond to customers needs in a manner that generates significant customer satisfaction

In accomplishing this mission, the Human Resources Division has strived to

- Ensure that employees of the TWDB receive the best possible combination of employee benefits, especially in the area of medical care
- Ensure the salaries paid to TWDB employees are both attractive and competitive in the job market
- Provide TWDB employees opportunities for professional development through effective training programs
- Maintain accurate and complete personnel records
- Be responsive to questions and concerns of employees regarding all aspects of their employee/employer relationship
- Provide well-qualified applicant pools representing a broad cross section of the community from which the TWDB may assemble a high quality and diverse workforce
- Ensure compliance with all internal and external human resource rules and regulations under which the TWDB is required to operate
- Use electronic technology to make services more responsive and accessible to TWDB employees

### **Communications, Strategic Planning, and Records Management**

The original intent of the Communications Division has not changed. However, the division has been enhanced with the addition of a Publications and Graphics Support section. Due to increased awareness of water by the public, the agency recognized the need for expanded resources in the Communications Division to disseminate information to the public.

#### *Records Management*

Historically, the Records Management section, known as "the File Room," is a central repository for agency files. The File Room is responsible for processing mail received for many divisions of the agency. During the upcoming fiscal year, staff members will be implementing an electronic filing application that can be used throughout the agency to enhance file management activities.

#### *Web Administration*

The original intent of Web services was to facilitate access to agency data and information. The intent has not changed, except in volume, scope, and complexity.

#### *Publications and Graphics Support*

The Publications and Graphics Support section was formed in February 2008. Before that time, the three staff members were scattered throughout the agency. By moving the staff into one office, they have been able to better serve the entire agency and coordinate their efforts more efficiently and economically. The formation of the office marked the first time the agency could offer consolidated editorial, design, and print services.

### **Information Technology**

The original intent of the Information Technology Division has not changed substantially; however, the division has been affected by the implementation of new legislation and enhanced its operations as follows:

#### *Security and Infrastructure*

Important history relates to House Bill 1516 and House Bill 3112 and the agency's data center services contract, which was executed with the Department of Information Resources in May 1, 2007.

#### *Application Services and Database Administration*

The Information Technology Division is moving from a decentralized development methodology to a more centralized approach that utilizes a Web application framework. The division is in the process of developing new applications in Microsoft ASP.NET 3.5 and rewriting legacy Microsoft ASP and Microsoft Access applications using the TWDB framework. Development has moved from a process in which the programmer does the analysis, requirements, coding, testing, and deployment to having systems analysts performing the analysis, and gathering requirements and documentation.

#### *Help Desk*

The Help Desk has added video streaming, BlackBerry devices, and remote telecommuting and has also created network/e-mail accounts over the last few years.

#### *Project Management and Systems Analysis*

The project management function within the Information Technology Division is a new program area created during FY 2008. This program area was established to better manage, track, and report on various Information Technology projects and activities at the TWDB, as well as assist agency staff with project activities. The systems analysis function, although existing previous to FY 2008, was considerably enhanced during FY 2008 by adding new FTE's and establishing a new support configuration to better respond to the agency's internal customers.

### **Support Services and Contract Administration**

From 1986 through 1992, the agency received most of the staff services functions through an interagency contract with the Texas Water Commission. The agency was paying in excess of \$186,000 annually to the Texas Water Commission for mailroom services, facility assistance, receiving, and warehouse and storage management instead of hiring TWDB staff to do this work. This contract was terminated in 1993 by the current Division Director who in turn hired two FTE's to perform these functions. The end result was a savings of \$80,000 annually for the TWDB. Additionally, in 2007 the agency consolidated all contracting and purchasing functions into one centralized section. This centralization provided the agency with much better control over these functions, better reporting capabilities, and better customer service/support. The current organizational structure of this division also provides effective controls in purchasing and

contracting. The budget, purchasing/contracting, and actual payment processes all fall in separate areas in the agency. This structure helps reduce the opportunity for fraudulent activities and theft.

**E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.**

### **Human Resources**

The Human Resources Division serves every current and prospective employee of the TWDB. As a service-oriented division, Human Resources must respond and be accountable to the Board, the Executive Administrator, the management team, Legal Services, Internal Audit, and staff. The Human Resources Division must keep apprised of the latest laws, regulations, requirements, statutes, and rules regarding the various aspects of employment and employment law. Furthermore, the Human Resources Division serves as the representative for the agency at fairs, seminars, and conventions and typically is the first point of contact for prospective job applicants.

### **Communications, Strategic Planning, and Records Management**

The Communications Division affects all TWDB stakeholders as well as the general public. The division is responsible for getting relevant information in front of interested parties through the media. There are no qualifications or eligibility requirements for person or entities affected by this division.

#### *Records Management*

Ultimately, this section's work provides guidance and support to the entire agency. Historically, the group has worked closest with Project Finance and Construction Assistance staff in housing and routing their files. Staff members also work closely with Internal Audit and Legal Services staff in responding to audit, litigation, and open records requests.

80 percent Project Finance and Construction Assistance  
10 percent Legal Services  
10 percent Internal Audit

#### *Web Administration*

This function affects agency customers, stakeholders, and employees using an Internet browser to access the TWDB information. There is no qualification or eligibility requirement.

#### *Publications and Graphics Support*

This program affects the entire agency. All print and editorial projects are funneled through this office. Staff members also help support several state-mandated functions of the agency.

### **Information Technology**

The Information Technology Division affects all the TWDB staff as follows:

#### *Security and Infrastructure*

These areas affect all agency employees, including field offices, and visitors, with respect to network connectivity and the ability to access data on servers and the Internet. Information security affects all agency employees and visitors, desktops/notebooks, servers, and network infrastructure equipment. Agency employees must abide by the agency's information security policies.

#### *Application Services and Database Administration*

These functions affect Information Technology customers using the applications and databases, which are primarily internal agency staff. However, at times, the functions affect external customers, such as the general public, individuals, and organizations who receive agency services or are considered agency stakeholders who submit requests for information and/or assistance.

#### *Help Desk*

The Help Desk services the entire agency including remote offices. Currently, there are three FTE's providing Help Desk services. These staff members must have broad technical skills with the ability to troubleshoot any hardware- or software-related incident.

#### *Project Management and Systems Analysis*

Both of these functions affect Information Technology customers, who are primarily internal agency staff. However, at times, the functions affect external customers, such as the general public, individuals, and organizations who receive agency services or are considered agency stakeholders who submit requests for information and/or assistance. The two functions assist the TWDB staff with technology support to aid them in carrying out their daily activities.

### **Support Services and Contract Administration**

The Support Services and Contract Administration staff members provide various services to all agency staff as well as many stakeholders. All division staff must be customer service oriented and familiar with state and federal rules and regulations. Appropriate certifications have been obtained by certain contracting and purchasing staff to support the roles they provide to the agency.

**F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.**

Human Resources; Communications, Strategic Planning, and Records Management; Information Technology; and Support Services and Contract Administration serve under the direction of the Deputy Executive Administrator for Operations and Administration.

### **Human Resources**

The Human Resources Director works with the Deputy of Operations and Administration, executive management, and legal staff to ensure effective implementation of Human Resources policies and practices for the agency.

### **Communications, Strategic Planning, and Records Management**

The Director of the Communications Division works with staff in carrying out the primary functions for processing open records requests, media requests, and news clips service distribution, and planning and distributing in-house publications. The Director works with the Deputy of Operations and Administration, executive management, and legal staff to ensure effective implementation of policies and procedures for each of these primary functions.

#### *Web Administration*

Major changes in format or content on the agency Web site go through the leadership for review and approval before the changes go into effect; otherwise, minor changes or some general content can be reviewed by the Web Administrator or assigned to content providers before they go into effect.

#### *Publications and Graphics Support*

The Director of Communications oversees this office. Agency staff request Publications assistance, and the Publications Team Lead confers with the Director to prioritize projects.

### **Information Technology**

The Information Technology Division is within Operations and Administration. The Division Director oversees and manages daily operations of this division and reports directly to the Deputy Executive Administrator of Operations and Administration. All division policies and procedures are reviewed and approved by the Deputy Executive Administrator of Operations and Administration and the executive management team prior to adoption and implementation. All staff members are housed at the agency's main headquarters.

#### *Security and Infrastructure*

Network infrastructure and security is monitored through a series of tools allowing the Information Technology staff to monitor the traffic, isolate bottlenecks, troubleshoot network connectivity issues, and provide means to improve network performances.

#### *Application Services and Database Administration*

The development management function is administered by the Team Lead under the direction of the Information Technology Division Director.

#### *Help Desk*

Calls and emails received are entered into c.Support—the TWDB incident tracking tool. Once the incident has been resolved, the time worked on the incident is entered and the ticket is closed. Some calls may be assigned to other groups in the Information Technology department through c.Support. This resource manages the incident to resolution and closes the ticket in c.Support.

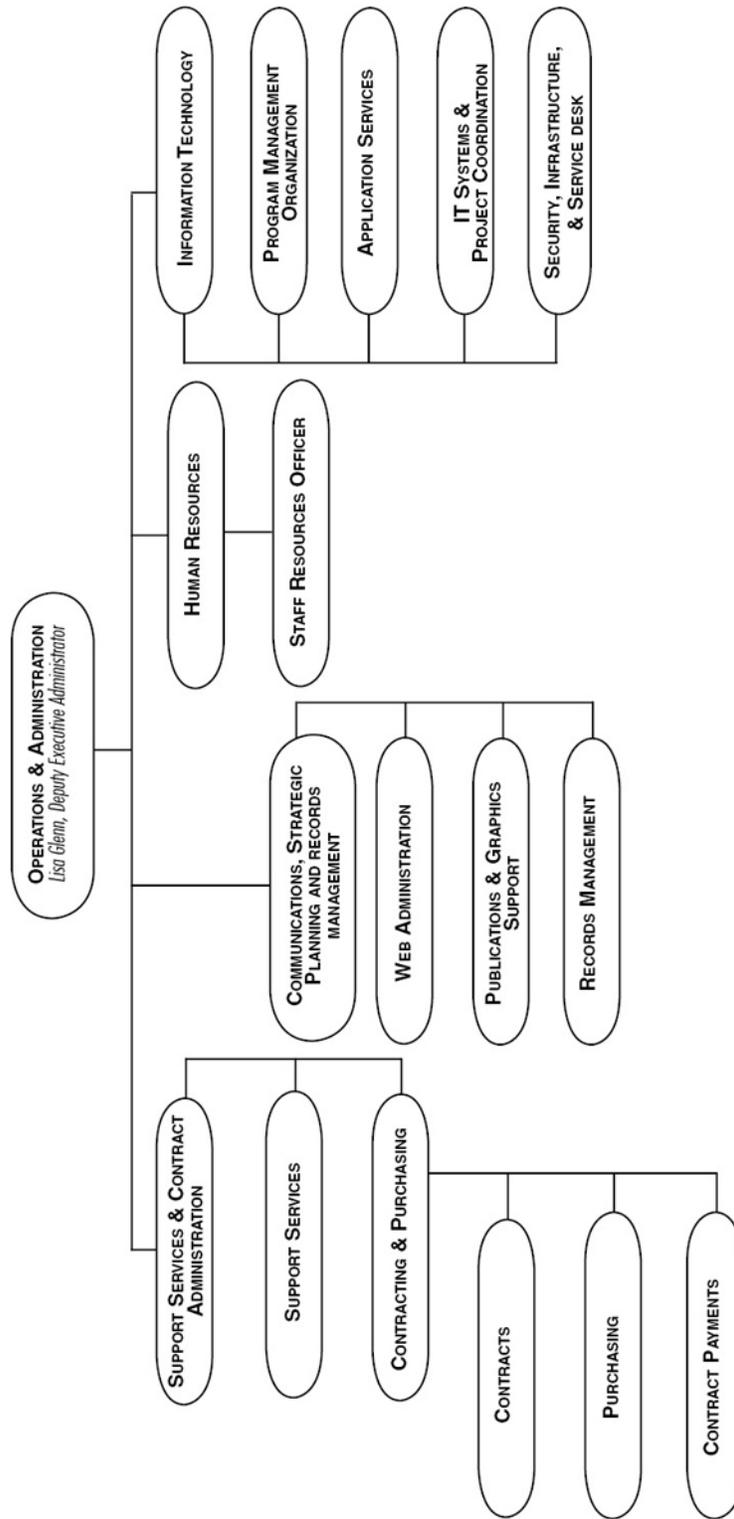
#### *Project Management and Systems Analysis*

Both the project management and system analysis functions are administered by the Information Technology Division Director. Each of the functions is “clustered” into their own functional areas and is configured to support different business areas of the TWDB.

### **Support Services and Contract Administration**

The Support Services and Contract Administration Division is within Operations and Administration. The Division Director oversees and manages daily operations of this division and reports directly to the Deputy Executive Administrator of Operations and Administration. All division policies and procedures are reviewed and approved by the Deputy Executive Administrator of Operations and Administration and the executive management team prior to adoption and implementation. All Support and Contract Administration staff is housed at the agency's main headquarters.

Following is the Operations and Administration organization chart:



**G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).**

<b>Operations and Administration</b>	
General Revenue	\$3,582,834
Agricultural Water Conservation Fund	11,062
Federal Funds	1,648,806
Appropriated Receipts	556,576
Interagency Contract	<u>4,116</u>
<b>Total</b>	<b>\$5,803,394</b>

**H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.**

**Human Resources**

The Human Resources function must be performed by all state agencies in some capacity. The TWDB has determined that an internal program best suits its business needs as opposed to outsourcing these duties and responsibilities. The Human Resources function is centralized at the TWDB, and there is no redundant function elsewhere in the agency.

**Communications, Strategic Planning, and Records Management**

This division serves as the main point of contact for the agency, which is standard for all government entities. As with other water agencies and associations, staff members provide news and information and serve as a resource to the public. This is not duplicated. However, the agency’s mission is to provide education and assistance to the public. Therefore, there are many other areas of the agency that provide this function on a topical basis.

*Records Management*

By law, each state agency is required to have one records management program, which cannot be duplicated either internally or externally.

*Web Administration*

Externally—most state agencies have a Web Administration group that maintains their agency’s Web site. Web sites differ in their content management system, programming language, color and design schemes, navigation, file system infrastructure, and Web authoring tools. However, most Web sites have the same goal of providing access to vital information (such as documents, publications, agendas, and minutes); forms (such as application, surveys, and feedback); policies; accessibility (as in accessibility coordinator); and data storage.

Internally—there are assigned content providers contributing content on the Web site, both on the public site and Intranet to reduce the overhead on Web Administration. Content providers, however, cannot create templates, create new Web sites without prior authorization from Web Administration and

leadership, and they do not have the ability to repair or clean up the Web site or Web pages. They can post and edit contents, delete old pages or files (with prior authorization), and be part of the Web team.

#### *Publications and Graphics Support*

The Publications section functions are not duplicated internally or externally.

### **Information Technology**

The Information Technology function must be performed by all state agencies in some capacity. The TWDB has determined that an internal program best suits its business needs as opposed to outsourcing these duties and responsibilities.

#### *Security and Infrastructure*

There are no internal or external programs that provide similar services.

#### *Application Services and Database Administration*

The section known as the Texas Natural Resources Information System, or TNRIS, has staff members who develop their Web site, which is specific to providing a centralized information system incorporating Texas natural resources data in GIS.

#### *Help Desk*

The Help Desk is the only internal program providing this function. Externally, similar functions are provided by Department of Information Resources and Team For Texas staff.

Team for Texas (IBM) is used for data restores and all server functions. If a data restore is requested, the Help Desk contacts IBM with all of the information needed for a restore. A Remedy ticket is entered at the Department of Information Resources by either IBM or the Help Desk. Once the incident/request is completed and the customer is satisfied, the Help Desk notifies IBM to close the ticket.

#### *Project Management and Systems Analysis*

There are various business areas of the agency, other than Information Technology, that have staff members who perform project management and systems analysis activities; however, staff members in these areas who perform these functions generally do not have these duties as a primary focus of their job duties and responsibilities.

For example, within the Finance and Water Resources Planning and Information areas, some staff have project management and systems analysis responsibilities relative to those areas of expertise; however, these duties are not the primary responsibilities of those positions.

TNRIS has staff members who perform project management and systems analysis functions from an Information Technology perspective to various degrees; however, these functions focus on and are in direct support of the mandated mission of TNRIS and involve providing a centralized information system incorporating Texas natural resources data in GIS.

### **Support Services and Contract Administration**

Internal—Within the TWDB, there is no other division or section that performs the same functions or services as the Support Services and Contract Administration staff members do. All state agencies have staff members that provide similar or same services/functions for their agency staff and stakeholders. These functions are necessary in order for each agency to operate.

External—As mentioned above, all state agencies have similar in-house administrative staff. These employees support the agency and its programs. These functions are not performed by any external parties at any state agency.

**I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.**

### **Human Resources**

There is coordination of training with internal divisions to avoid duplication of services. The Human Resources Division coordinates with external agencies such as the Equal Employment Opportunity Commission, State Auditor's Office, Attorney General's Office, Texas Workforce Commission, Employees Retirement System, and the State Office of Risk Management as needed to ensure mandated training, legal claims, unemployment claims, worker's compensation claims, employee benefits information, and other personnel matters are appropriately handled or resolved.

### **Communications, Strategic Planning, and Records Management**

This division works closely with internal stakeholders as well as external stakeholders, including other water agencies.

#### *Records Management*

By law, each state agency is required to have one records management program, which cannot be duplicated either internally or externally.

#### *Web Administration*

Externally—There is none.

Internally—Web Administration will be implementing content provider guidelines that will eliminate overlap or duplication of effort between content providers and Web administrators.

#### *Publications*

Not applicable

### **Information Technology Division**

#### *Security and Infrastructure:*

Not applicable

#### *Application Services and Database Administration*

As mentioned in Item H above, the development performed elsewhere is generally not viewed as redundant but more supplemental to activities performed in Information Technology, largely due to the different types of focus, concentration of services, and levels of services.

#### *Help Desk*

When the Help Desk receives an e-mail sent to “Help Desk” or takes a phone call from a business customer, the person who takes the email or call follows through the resolution unless another Information Technology resource has been assigned to address the incident.

#### *Project Management and Systems Analysis*

As mentioned in Item H above, the project management and systems analysis activities performed elsewhere are generally not viewed as redundant but more supplemental to activities performed in Information Technology, largely due to the different types of focus, concentration of the services, and levels of services.

### **Support Services and Contract Administration**

- All fleet functions are consolidated to improve efficiency and to ensure all data is accurately reported.
- All safety efforts are performed by Support Services staff. This ensures consistency in this area.
- All building-related issues are coordinated by the Support Services staff. No other staff is allowed to do this type of work.
- Contracting services are coordinated internally to eliminate duplication of effort and to ensure compliance with state and federal statutes.
- Contract payment review is solely performed in this division. This helps eliminate duplication of effort and ensures consistency.
- Only the agency purchaser is allowed to procure goods and services. No other TWDB staff is allowed to procure except in case of absolute emergency (such as roadway incident).
- All outlays are reviewed within the division. The division does rely on Construction Assistance staff to certify the outlay, but all reviews are performed by outlay staff.

**J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.**

### **Communications, Strategic Planning, and Records Management Division**

The division works collaboratively with media relations and public information professionals at other city, county, state, and federal agencies as needed for media communication topics of mutual concern. No specific function requires us to work with a local, regional, or federal unit of government.

#### *Records Management*

The Records Management Section submits regular reporting to the Texas State Library and Archives Commission to fulfill Texas Government Code, section 411, as well as 13 Texas Administrative Code, section 6.1. Since the agency works directly with local governments, staff members also work under regulations set forth in Texas Local Government Code, section 201-203.

Because some projects receive funding directly from the U.S. Environmental Protection Agency, there are requirements on record keeping and reporting for those projects.

#### *Web Administration*

There are some external links to and from various entities' Web sites. For example, TWDB's Web site contains links to the Texas Online and the Fraud and Waste (through the State Auditor's Office) Web sites.

Save Texas Water ([www.savetexaswater.org](http://www.savetexaswater.org)) is an external Web site separate from the TWDB function but hosted on the TWDB Web server. The content on this Web site is maintained by the staff in the Conservation Division in Water Science and Conservation for the Water Conservation Advisory Council.

*Publications and Graphics Support*

Staff members provide copies of all our materials to the State Library and also work with state printers on the Council of Competitive Government list.

**Information Technology Division**

*Security and Infrastructure:* Not applicable

*Application Services and Database Administration:* Not applicable

*Help Desk:* Not applicable

*Project Management and Systems Analysis*

The project management program area serves in a management capacity for the Texas Water Information System Expansion project, also known as the TxWISE project. Additionally, staff from the systems analysis program area is involved in support roles on the project.

This project, which involves consolidating data from various agency data systems into one application, is in part funded with federal funds from the U.S. Environmental Protection Agency (EPA). In addition to the federal funding, the TWDB uses an EPA national consultant from Northbridge for the developing and deploying this new data management information system. Also, as the EPA consultant has deployed systems of this type in other states, project management staff members network with government staff in other states such as California, Arizona, New Mexico, and Louisiana to share information.

**Support Services and Contract Administration**

The Support Service staff members work daily with the Texas Facilities Commission on building issues, maintenance, facility improvements and other related functions. The TWDB has a very good working relationship with this agency.

The Contract Administration staff works closely with the Comptroller's office and other state/federal agencies, as well as local entities on various contracting and purchasing issues. Again, the TWDB appears to have good working relationships with these parties.

**K. If contracted expenditures are made through this program please provide:**

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 2008 expenditures: \$1,444,563

Number of contracts: 21

Operations and Administration contracted services are primarily for Information Technology services, but other operational contracts for Human Resources services are executed. The primary contract in Operations and Administration is an interagency contract with the Department of Information Resources for data center consolidation. Other services require the documentation of scope of work, budget, timeline, reporting requirements, and project deliverables. In addition to review by program staff, contract administration staff members review invoices to ensure that submissions are proper and correspond to contract requirements.

### **Security and Infrastructure**

The Department of Information Resources data center services contract was executed on May 1, 2007. Data center services expenditures in FY 08: \$1,212,494.40

This is a single, legislatively mandated contract between the TWDB and the Department of Information Resources to have a selected service, now known as IBM Team for Texas (IBM), manage the agency's data center.

The general purpose of this contract is to consolidate 27 state agency data centers into two state data centers managed by a single contract. For the TWDB, this means IBM now manages our data center to include servers, network storage, systems administration, and disaster recovery of agency data. The TWDB is currently scheduled to transform our data center to the state data centers (Austin and San Angelo) by December 2009.

The methods used to ensure accountability for funding and performance include a monthly invoice, validation of invoices, and continual monitoring of servers, backups, and IBM's ticketing system known as Remedy, which is used to track changes, incidents, and solution requests.

Service provided by IBM continues to degrade and is hampering the ability of the TWDB to work efficiently. Some examples include:

IBM continues to provide insufficient backup of TWDB systems. Not all systems are being backed up nor being addressed appropriately. The TWDB received a backup audit from IBM on 8/25/2008; we met with IBM and the Department of Information Resources on 11/12/08 to identify issues, and change requests were submitted; however, not all changes have been completed.

There continues to be a lack of movement by IBM regarding establishing a site-to-site encrypted tunnel between the TWDB and the state data centers, which has caused a delay in the network connectivity of the TWDB and, in turn, is delaying TWDB's transformation.

IBM has not successfully completed the TNRIS backup and restoration of approximately six terabytes of special geographic information systems data. This request is older than 26 weeks and has prevented TNRIS from loading additional data from portable hard drives, thereby putting this data at risk of being lost. This same request would have taken the TWDB a maximum of two weeks to complete.

### **Application Services and Database Administration**

Two contractors are employed to augment the development staff. One contractor is providing programming services for infrastructure financial reports, report interface projects, and Water Use Survey applications. The other contractor is developing the security framework modules and Application Program Management System that will be used by Water Information Integration & Dissemination applications such as the Water Use Survey. The Application Program Management System provides user authentication and a single point

of access to TWDB’s Web applications. The development of this system is in response to the security vulnerabilities identified in Texas Administrative Code 202 and is part of the Information Resources Deployment Review Corrective Action Plan response.

**Help Desk:** Not applicable

**Project Management and Systems Analysis**

*TxWISE Project Information*

- Amount of expenditures for FY 2008 (state expenditures) – \$10,895.67
- Number of contracts (state expenditures) – One
- Short summary of purpose of contract – Developing and implementing the state portion of a comprehensive management information system for agency loan, grant, and contract funding assistance programs. Contract obtains the services and expertise of an EPA national consultant who has performed these activities in other states.
- Consultant performance is monitored by the Information Technology project manager using weekly and monthly status reporting from the consultant, weekly status meetings with the project team, and semi-weekly meetings with the steering committee. Funding is monitored by the TWDB Contracts and Purchasing staff and the Information Technology project manager through the invoice review and approval process.
- No current contracting problems exist.

**Support Services and Contract Administration**

Below is a summary of the FY 08 contracts and purchases:

Category	Number Processed	Value
New Contracts Executed	94	\$29,501,029.68
Total Purchase Orders	1,469	\$7,459,824.66
Federal Outlays	333	\$146,832,340.68
Contract Payments	608	\$37,992,074.30

All of these contracts and purchases were performed in accordance with state and federal rules and regulations and are subject to both state and federal audit.

**L. What statutory changes could be made to assist this program in performing its functions? Explain.**

None.

**M. Provide any additional information needed to gain a preliminary understanding of the program or function.**

**Publications and Graphics Support**

Although this section’s primary task is to edit, design, and print major agency publications, they also assist agency staff with a multitude of small projects. These projects do not fit neatly into categories, but they include the following:

- Scanning and posting historical agency reports on our Web site

- Producing over-sized maps, posters, and other materials
- Providing graphic support
- Producing event-announcement post cards
- Copying, collating, and binding in-house reports
- Providing logos and photos for presentations

We also assist our Web Administrator daily in managing the 105,000 files on our Web site.

- N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:**
- **why the regulation is needed;**
  - **the scope of, and procedures for, inspections or audits of regulated entities;**
  - **follow-up activities conducted when non-compliance is identified;**
  - **sanctions available to the agency to ensure compliance; and**
  - **procedures for handling consumer/public complaints against regulated entities.**

Not applicable

- O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.**

Not applicable