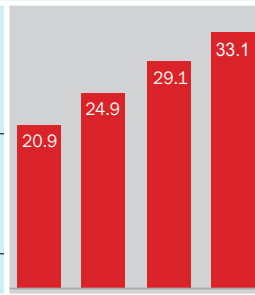
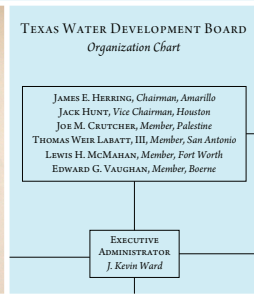


Strategic Plan



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

Fiscal Years 2009–2013

TEXAS WATER DEVELOPMENT BOARD

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Dear friends of the Texas Water Development Board:

On behalf of the Board members of the Texas Water Development Board, I am pleased to present to you the 2009–2013 Agency Strategic Plan.

Water has been the foundation for growth and development in Texas from the state's inception to the present, and this necessary resource will continue to mold and define our great state. As Board members of this distinguished agency, we have the statutory charge to ensure sustainable, affordable, and quality water for Texans, our economy, and our environment.

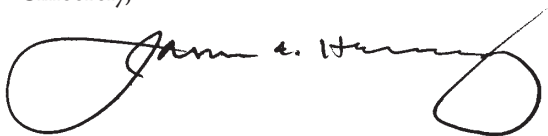
There are many challenges we must face in pursuing this noble and essential cause. Texas is a varied state with a multitude of climates and landscapes, from urban to rural, desert to coast, hill country to the great plains—Texas is as they say, “like a whole other country.” As stewards of the state, we must account for these differences and plan accordingly to ensure that Texans have adequate resources for the continued development and advancement of our state.

This plan reflects the goals, directions, and outcomes of the Texas Water Development Board and is aligned with the State's comprehensive strategic plan, *Securing our Future: The Statewide Strategic Planning Elements for State Government*. As we move forward in our efforts in 2009–2013, the Board has identified areas in which additional resources must be expended in order to ensure the success of our agency's mission and vision. These areas include:

- Education
- Innovative Water Technologies
- Water Conservation
- Project Planning, Implementation, and Financing
- Flood
- Information Dissemination
- Climate Change

On behalf of all members of the Board, we thank you for your support of our continuous efforts.

Sincerely,



James E. Herring
Chair
Texas Water Development Board



JAMES E. HERRING
CHAIRMAN

“As Board members of this distinguished agency, we have the statutory charge to ensure sustainable, affordable, and quality water for Texans, our economy, and our environment.”

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Dear friends and colleagues of the Texas Water Development Board:

With Chairman Herring and the members of the Board, I am pleased to present to you the 2009–2013 Texas Water Development Board Strategic Plan.

Preparation for this plan began well over a year ago in the summer of 2007 with increased stakeholder meetings, surveys, and additional solicitation for feedback from our customers around the state. In the course of this process, the Texas Water Development Board celebrated its 50th anniversary with a comprehensive water summit that provided an overview of current challenges, issues, topics, and new opportunities for the future of water in Texas and around the globe. Numerous nationally and internationally recognized speakers were featured on a wide variety of topics covering science and technology; infrastructure financing, planning, and economics; water conservation; and water law, and a host of participants attended to commemorate achievements to date and to prepare for what is yet to come in the world of water.

In the pages to come, we will lay out our proposals for increasing the number and type of educational outreach programs regarding water resources and the mission of the Texas Water Development Board; developing new and innovative water technologies, including initiatives started by the Governor for brackish and seawater desalination plants to pilot production of drinkable water for Texans from previously unusable sources; promoting water conservation; increasing partnerships and relationships to ensure adequate and smooth project planning, implementation, and financing; educating the communities in Texas on flood issues, including the National Flood Insurance Program and its benefits; undertaking initiatives to remain at the forefront on advances in information dissemination; and quantifying what global climate change means to the impact of available water resources in our future.

With the strategies set forth in the *Water for Texas* state water plan, the innovation and vision of the members of the Board, and the team at the Texas Water Development Board, we are relentlessly working to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas. With your continued support, I know that we will succeed.

Sincerely,



J. Kevin Ward
Executive Administrator
Texas Water Development Board



J. KEVIN WARD
EXECUTIVE ADMINISTRATOR

“... we are relentlessly working to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.”

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Strategic Plan

Fiscal Years 2009–2013

TEXAS WATER DEVELOPMENT BOARD

BOARD MEMBER	TERM	HOMETOWN
JAMES E. HERRING, CHAIRMAN	12/31/09	AMARILLO
JACK HUNT, VICE CHAIRMAN	12/31/09	HOUSTON
THOMAS WEIR LABATT III	12/31/11	SAN ANTONIO
LEWIS H. MCMAHAN	12/31/11	DALLAS
EDWARD G. VAUGHAN	12/31/13	BOERNE
JOE M. CRUTCHER	12/31/13	PALESTINE

JULY 11, 2008

A handwritten signature in black ink, appearing to read "J. Kevin Ward", written over a horizontal line.

J. Kevin Ward, Executive Administrator

A handwritten signature in black ink, appearing to read "James E. Herring", written over a horizontal line.

James E. Herring, Chairman

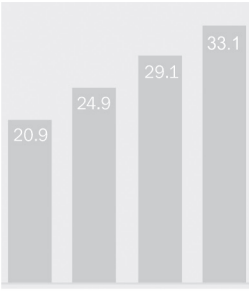
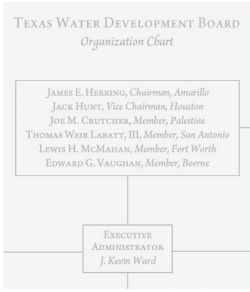
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Introduction



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

Statewide Vision, Mission, and Philosophy

Relevant Statewide Goals and Benchmarks

Agency Vision and Mission

Agency Philosophy

TWDB Today and Tomorrow

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Introduction

Statewide Vision, Mission, and Philosophy

Statewide Vision

Texas State Government must ensure that its role is limited and that its endeavors are done with maximum efficiency and fairness. The Governor's dedication to creating greater opportunity and prosperity for the citizens of Texas can be accomplished by focusing on the following critical priorities:

- Assuring open access to an educational system that not only guarantees the basic core knowledge necessary for citizenship, but also emphasizes excellence and accountability in all academic and intellectual undertakings;
- Creating and retaining job opportunities and building a stronger economy that will lead to more prosperity for our people, and a stable source of funding for core priorities;
- Protecting and preserving the health, safety and well-being of our citizens by ensuring healthcare is accessible and affordable, and our neighborhoods and communities are safe from those who intend us harm; and
- Providing disciplined principled government that invests public funds wisely and efficiently.

Statewide Mission

Texas State Government must be limited, efficient, and completely accountable. It should foster opportunity and economic prosperity, focus on critical priorities, and support the creation of strong family environments for our children. The stewards of the public trust must be men and women who administer state government in a fair, just, and responsible manner. To honor the public trust, state officials must seek new and innovative ways to meet state government priorities in a fiscally responsible manner.

*Aim high... we are not here to achieve
inconsequential things!*

Statewide Philosophy

The task before all state public servants is to govern in a manner worthy of this great state. We are a great enterprise, and as an enterprise we will promote the following core principles:

- First and foremost, Texas matters most. This is the overarching, guiding principle by which we will make decisions. Our state, and its future, is more important than party, politics, or individual recognition.
- Government should be limited in size and mission, but it must be highly effective in performing the tasks it undertakes.
- Decisions affecting individual Texans, in most instances, are best made by those individuals, their families, and the local government closest to their communities.
- Competition is the greatest incentive for achievement and excellence. It inspires ingenuity and requires individuals to set their sights high. Just as competition inspires excellence, a sense of personal responsibility drives individual citizens to do more for their future and the future of those they love.
- Public administration must be open and honest, pursuing the high road rather than the expedient course. We must be accountable to taxpayers for our actions.
- State government has a responsibility to safeguard taxpayer dollars by eliminating waste and abuse, and providing efficient and honest government.
- Finally, state government should be humble, recognizing that all its power and authority is granted to it by the people of Texas, and those who make decisions wielding the power of the state should exercise their authority cautiously and fairly.

Relevant Statewide Goals and Benchmarks

Below are the statewide goals and benchmarks relevant to the Texas Water Development Board (TWDB). Direct linkages from this agency's activities to the Natural Resources, Agriculture, and General Government benchmarks are clear. The TWDB also contributes to the areas of Economic Development, Health and Human Services, and Regulatory Government.

Natural Resources and Agriculture

Priority Goal: To conserve and protect our state's natural resources (air, water, land, wildlife, and mineral resources) by

- *Providing leadership and policy guidance for state, federal, and local initiatives; and*
- *Encouraging responsible, sustainable economic development.*

Relevant Benchmarks:

- Acre-feet of desalinated brackish and ocean water produced for Texas.
- Percent of water conservation through decreased water usage, increased water reuse, and brush control.
- Percent of Texas water that meets or exceeds safe water quality standards.
- Percent of regulatory permits processed while ensuring appropriate public input.
- Percent of implemented new technologies that provide efficient, effective, and value-added solutions for a balanced Texas ecosystem.
- Average time required in responding to natural disasters, such as wildfires and hurricanes.
- Number of jobs created or retained in rural communities through state investment.

General Government

Priority Goal: To provide citizens with greater access to government services while reducing service delivery costs and protecting the fiscal resources for current and future taxpayers by

- *Supporting effective, efficient, and accountable state government operations;*

- *Ensuring the state's bonds attain the highest possible bond rating; and*
- *Conservatively managing the state's debt.*

Relevant Benchmarks:

- Total state taxes per capita.
- Total state spending per capita.
- Percent change in state spending adjusted for population and inflation.
- State and local taxes per capita.
- Ratio of federal dollars received to federal tax dollars paid.
- Number of state employees per 10,000 population.
- Number of state services accessible by Internet.
- Total savings realized in state spending by making reports/documents/processes available on the Internet.
- Funded ratio of statewide pension funds.
- Texas general obligation bond ratings.
- Issuance cost per \$1,000 in general obligation debt.

Economic Development

Priority Goal: To provide an attractive economic climate for current and emerging industries that fosters economic opportunity, job creation, capital investment, and infrastructure development by

- *Promoting a favorable and fair system to fund necessary state services; and*
- *Developing a well trained, educated and productive workforce.*

Relevant Benchmarks:

- Per capita gross state product.
- State taxes per capita as a percent of personal income.
- Texas unemployment rate.
- Median household income.
- Net number of new non-government, non-farm jobs created.
- Number of Texans receiving job training services.

Health and Human Services

Priority Goal: To promote the health, responsibility, and self-sufficiency of individuals and families by

- *Making public assistance available to those most in need through efficient and effective systems; and*

- *Continuing to create partnerships with local communities, advocacy groups, and the private and not-for-profit sectors.*

Relevant Benchmarks:

- Infant mortality rate.

Regulatory

Priority Goal: To ensure Texans are effectively and efficiently served by high-quality professionals and businesses by

- *Implementing clear standards;*
- *Ensuring compliance;*
- *Establishing market-based solutions; and*
- *Reducing the regulatory burden on people and businesses.*

Relevant Benchmarks:

- There are no relevant benchmarks listed for regulatory agencies that are pursuant to the goal of the TWDB because of the agency’s limited regulatory function. In administering the National Flood Insurance Program, the agency has acquired a regulatory role and will adhere to the priority goals set forth for these agencies.

Agency Vision and Mission

Agency Vision

Sustainable, affordable, quality water for Texans, our economy, and our environment.

Agency Mission

To provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

Agency Philosophy

To accomplish our mission, the TWDB will continue to focus on these core values:

INNOVATION:

We thrive on innovation and originality by encouraging risk-taking and divergent voices. We search for better ways. We want to stay at the forefront of the water arena.

EXCELLENCE:

Our goal is to develop the best science and most accurate analysis and to provide the highest quality customer service. We want to achieve excellence in everything we do.

COMMUNICATION:

Our standard is openness, accuracy, and accountability in our communications. We value freedom—to seek the truth and express it. We strive toward enhancing our communication and sharing information regarding business performance.

CUSTOMER SERVICE:

We value each of our customers—internal and external—by putting their needs and interests at the center of everything that we do.

EXTRAORDINARY PEOPLE:

We respect each person at the TWDB regardless of their position or role within the agency. We recruit the best people we can to become part of our agency. We look for people who are passionate about our work. We recognize our foremost responsibility is to the people of Texas and expect all employees will perform their duties in the highest ethical manner. We have earned our current positive reputation, which we will guard and build upon.

LEADERSHIP:

To be successful, we must develop the next generation of leaders in water policy/planning, financing, and data collection. We will increase the capacity of our people to learn, to work together, and to lead. Through strong leadership and effective delegation at all levels, we will strive to create as positive and productive a work environment as possible.

Agency Philosophy of Customer Service

The TWDB strives to achieve excellence in meeting and exceeding customer expectations and in providing information and services in a highly professional and timely manner. To achieve these goals, the TWDB is committed to encouraging customer feedback on products and services provided and to the continual evaluation of our programs to ensure they meet the needs of our customers.

TWDB Today and Tomorrow

Today...

The TWDB has had many major accomplishments in the past few years, receiving numerous awards and surpassing all expectations and forecasts set forth in previous strategic planning cycles. The agency has become nationally and internationally recognized for the work it does to ensure safe and adequate water supplies for Texas. Following is a high-level overview of significant recognitions the agency and our staff have received, noteworthy committees and organizations the TWDB is involved with, and innovations in which TWDB has been a driving force.

RECOGNITION

Water Conservation

In 2005, the TWDB, in conjunction with the Texas Water Conservation Association, co-founded and established Texas Water Day to be held annually in Washington, D.C.

Global Water Awards

The TWDB received the Water Agency of the Year Award in 2006 from Global Water Intelligence, which pronounced that the TWDB had “set an example for other U.S. water agencies planning to tap non-traditional water resources.”

State Revolving Fund Administration

In 2007, the Environmental Protection Agency (EPA) bestowed their prestigious EPA PISCES Award (Performance and Innovation in the SRF [State Revolving Fund] Creating Environmental

Success) on the TWDB to recognize the extraordinary success of our dedication to the Clean Water Revolving Fund (CWSRF) program. Projects financed under the CWSRF programs support the Clean Water Act by protecting environmental health and water quality. The PISCES Awards highlight successfully designed projects that further the goal of clean and safe water with exceptional planning, management, and financing.

In recognition of this achievement, U.S. Representative Eddie Bernice Johnson (Dallas) filed House Resolution 832, which was co-sponsored by 13 members of the Texas congressional delegation, applauding the TWDB’s achievements.

Water Resources Planning

As a result of continued refinement of the process, the TWDB has continued to receive recognition as one of the leading water planning organizations in the nation. The *Water for Texas 2007 State Water Plan* won praise from the American Planning Association (APA), a professional organization focused on city planning and community development. In October 2007, the Texas chapter of the APA presented the TWDB with the 2007 Long Range Planning Award, “given to an outstanding plan that concentrates on a single long-range planning element.” The 2007 State Water Plan also received one of the national APA’s four Letters of Commendation from the Awards Jury for its nomination for the Planning Excellence Award for Best Practice.

SERVICE

Many in the TWDB family have been selected to serve on prestigious boards and entities in the water industry.

Current Board member Thomas Weir Labatt III serves as Secretary/Treasurer of the Western States Water Council, and it is anticipated that he will be elevated to the role of Vice Chair in the near future.

Executive Administrator J. Kevin Ward serves as Treasurer of the Council of Infrastructure Financing Authorities and is eligible to be nominated as the Vice President of this organization in 2009.

Bill Mullican, Deputy Executive Administrator for Water Science and Conservation, is a member of the

National Advisory Council for Environmental Policy and Technology.

Barney Austin, Director of Surface Water Resources, currently serves on the Board of Directors for the Interstate Council on Water Policy.

Dr. Hari J. Krishna, P.E., recently retired from the Innovative Water Technologies division of Water Science and Conservation, serves as the Executive Vice President of the International Rainwater Catchment Systems Association.

Many additional staff members at the TWDB serve on statewide and local committees and serve as informational resources to many of these entities.

Worldwide

In June 2007, Dr. Hari J. Krishna, P.E., of the Innovative Water Technologies division of Water Science and Conservation, was invited to participate in the Water Efficiency Technologies Conference in London and present on rainwater harvesting technology and its costs and benefits.

Dr. Krishna also attended the Asian Water Summit held in Beijing, China, in January 2008. Attendees included key administrators, policy makers, senior engineers, and water suppliers from most Asian countries. Dr. Krishna was invited to give a presentation on rainwater harvesting systems. During the upcoming 2008 Olympics, the main stadium in Beijing will include a rainwater harvesting system for non-potable uses. This will serve as a great demonstration of rainwater harvesting technology for the thousands of global visitors expected there for the Olympics next summer.

Jorge Arroyo of the Innovative Water Technologies division has recently been named a winner of the International Desalination Association's first fellowship competition. The fellowship is co-sponsored by the Singapore Public Utilities Board, a recognized leader in the research and development of water desalination and reuse technology. Jorge Arroyo will conduct water desalination and water reuse work in coordination with the Singapore Public Utilities Board. His proposal is to examine the Singapore experience in developing their water supply and the path leading to their success in the use of desalination and water reuse supplies. Additionally, he will conduct on-site training on

operation and maintenance of membrane filtration equipment at Singapore Public Utilities Board' flagship desalination and reuse facilities.

INNOVATION

Texas Natural Resources Information System (TNRIS)

Texas Natural Resources Information System (TNRIS), a division of the TWDB, is taking the initiative to prepare for emergency situations by making available through its Web site event-specific spatial data and resources to local, state, and federal entities.

During the 2005 hurricane season, TNRIS was called upon to assist the Federal Emergency Management Agency (FEMA) with geographic information systems (GIS) support at the FEMA Joint Field Office in Austin. Staff supported FEMA response efforts on a part-time basis over a three-to-four week period starting soon after Hurricane Rita came ashore. TNRIS continued to support FEMA during recovery operations.

As part of the hurricane coordination effort, FEMA proposed that TNRIS create a repository for all of the geographic data collected during the Hurricane Rita response and recovery event. FEMA wanted the data to be permanently housed within TNRIS and available for analysis, planning, and mitigation activities. TNRIS worked with FEMA to define a proposal for this purpose and was encouraged to submit the proposal for funding to the Governor's Division of Emergency Management under the Hazard Mitigation Grant Program. Subsequently, TNRIS was awarded a grant for \$750,000 to create the Geospatial Emergency Management Support System.

Desalination

In April 2002, Governor Rick Perry directed the TWDB to pursue the development of drought-proof water supplies from seawater desalination. Governor Perry's initiative called for implementing Texas' first large-scale demonstration seawater desalination project. Subsequently, the 78th Texas Legislature in 2003, passed legislation directing the TWDB to pursue development of seawater desalination.

Acting on these directives, the TWDB identified three sites with the highest potential for implementing large-scale seawater desalination: Brownsville, Corpus Christi, and Freeport. In 2004, based on the results of TWDB-funded feasibility studies for these sites, the TWDB requested a legislative appropriation to continue supporting development of seawater desalination. In 2005, the 79th Texas Legislature appropriated \$2.5 million for seawater desalination pilot plant studies

The TWDB has historically been engaged in developing desalination water supplies in Texas. Financial assistance for planning level studies was instrumental in developing current model plants such as the Southmost Regional Water Authority and the El Paso-Ft. Bliss Brackish Desalination Plant. The TWDB currently has over seven demonstration projects active.

Tomorrow...

The leadership of the TWDB has identified major themes that the agency must address in order to continue to meet our mission and maintain our status as the leading water agency in the nation.

EDUCATION

Education is an integral component to the TWDB mission. It is critical for the agency to continue striving for excellence and effectiveness in this arena because it is our connection with the customers. Our stakeholders must know what we do, what our mission is, and what is available in order for us to help them reach their goals.

Agency staff has expertise in a variety of fields and are called upon regularly to speak at civic and water-related programs, providing information about the agency and their area of expertise. In addition to regular speaking engagements, the agency has several avenues that are successful tools for educating the public on the mission and vision of the agency.

One of the most successful educational components that the agency offers is the Major Rivers Program. This program is available for purchase for use in 5th and 6th grade science classrooms to teach youth about water sources and water conservation.

The program supports many of the Texas Education Agency's TEKS and TAKS objectives for social studies, science, language arts, and math. The TWDB online Kid's Page contains fun activities designed to help youth learn about managing water wisely.

Another educational program, Water IQ, is designed to educate Texans on where their water comes from and how to use it efficiently in order to conserve it for the future growth of Texas.

The TWDB currently has numerous publications that inform the public on water conservation activities in and around the home, and we offer a Spanish version of these water conservation publications as well. The TWDB also develops and distributes groundwater and other scientific reports that provide valuable water-related information. In addition, the agency offers a variety of complimentary newsletters that are circulated to stakeholders and customers. These publications are designed to highlight major milestones at the agency, agency business, externally focused activities of agency staff, process improvements, new staff arrivals, and honors awarded to the agency.

The agency also organizes an information booth at numerous conferences and fairs to promote water awareness and provide information on our programs and employment activities. Recently, the agency has dedicated time and resources to creating the Project Finance Construction and Assistance Marketing Team to provide further outreach to communities, informing them of what the TWDB has to offer.

In the future, in order to keep up with demanding times, the agency plans to develop and produce television programs and podcasts aimed at addressing all the components of water development. The TWDB also intends to continue improving all current programs that it offers as well as provide additional educational outreach in a smarter, more efficient way. These innovations will be in the form of visual media available through our Web site and direct distribution—specifically targeting groundwater conservation districts, municipal entities, and regional planning groups—to support the mission for providing water to Texans.

INNOVATIVE WATER TECHNOLOGIES

The TWDB has gained valuable experience and recognition by implementing the seawater and brackish groundwater demonstration initiatives. These initiatives largely were prompted by the emergence of highly efficient reverse-osmosis membranes, a prime example of technology as an effective tool for creating new water supplies. As discussed by the panel of water technology experts at the agency-sponsored Water Summit 2007 in San Antonio, water treatment technology, desalination and otherwise, will play an increasingly greater role in creating new supplies and/or assisting utilities to meet more stringent water quality standards.

Over the next five years, staff envisions an expanded Innovative Water Technology program that will keep track of key technological developments and research and organize that knowledge for the use of the water community. A key focus of this effort will be direct water reuse. This effort would likely result in tasks such as monitoring the aggressively changing water technology market, cataloging and analyzing water technology innovations and research; creating opportunities for verifying and demonstrating the performance of new technologies; identifying challenges and/or barriers to their use; and developing effective partnerships for cost-effective technology demonstration projects and educational opportunities. This effort will require additional staff resources and funding for technology demonstration projects.

WATER CONSERVATION

As a result of the TWDB's efforts to promote water conservation, the 2007 State Water Plan doubled the volume of water saved through conservation strategies compared with the 2002 Plan. The agency's goal is to again double that volume in the 2012 State Water Plan.

In order to accomplish this, the TWDB envisions a concentrated effort to expand coordination with Texas water utilities, regional water planning groups, other Texas water conservation entities, and agencies or entities in other states or at the national level. This collaborative effort will help develop and implement a statewide water conservation public awareness program that also allows use of local programs.

Accomplishing these goals will require expanded funding for TWDB staff support of the Water Conservation Advisory Council and development and implementation of the public awareness program.

PROJECT PLANNING, IMPLEMENTATION, AND FINANCING

The TWDB continues to be a leader in water-related infrastructure financing and has been recognized both statewide and nationwide for innovative programs designed to meet the needs of the citizens. State recognition of the vital role the TWDB plays was underscored in the last legislative session when the agency received large appropriations for implementing state water plan project-related funding and continuing State Participation Program and Economically Distressed Areas Program funding.

As with all businesses, external and internal factors have a strong influence on day-to-day operations. Such is the same with the TWDB, and these influencing factors must be addressed in order to continue to provide services. In the area of Project Planning, Implementation, and Financing, these influencing factors must be addressed by continuing to educate legislative leaders on the financing needs of the agency and state, increasing outreach and education on the TWDB programs, continuing to build strong partnerships with stakeholders, and helping direct planning to meet the needs of a growing population.

FLOOD

As a major national and regional issue, floods have frequently left their mark on Texas. Aging infrastructure, project funding, increased needs for better technology and environmental information and science, as well as education on current resources, are all factors that play into preventing and predicting floods. Recently, the TWDB was given the opportunity to administer the National Flood Insurance Program (NFIP) for Texas, and the agency views educating the public on this program as a new enterprise in the fight against flooding.

The NFIP is a federal initiative administered by the Federal Emergency Management Agency (FEMA). To participate, and thereby make federal

flood insurance coverage available to their residents and businesses, local government officials adopt the federal rules and regulations pertaining to this program in the form of ordinances or court orders.

In order for the TWDB to excel as the state coordinating agency for the NFIP, staff will need to improve partnerships with FEMA to ensure that proposed changes to federal legislation will not inhibit local floodplain management programs. Further, staff will need to work with other states' coordinating agencies, the Texas Floodplain Management Association, and stakeholders to remain current on floodplain management initiatives.

Strengthening these partnerships will be best accomplished by attending national conferences where significant groups involved in this program gather. At present this initiative is hampered by the inability to attend many functions due to state limitations on travel expenditures outside of Texas. In addition, to maintain the level of assistance being sought by the state's communities, the current level of state funding must remain intact.

INFORMATION DISSEMINATION

The practices and techniques of information dissemination are radically changing with advances in Internet-based technologies and services. Examples include interactive data and mapping services such as Virtual Earth, knowledge sites such as Wikipedia, and the rise of collaborative networks. These technologies make it easy to explore and interact with knowledge- and information-rich organizations like the TWDB. Moreover, commitment to adopting Web-based services will provide for greater collaboration within the TWDB and deliver real-time awareness of our business and policy issues to executive leadership. This Web-centric approach will produce many benefits, such as strengthening

our connections with federal partners, establishing the TWDB as a world class public service provider, allowing the agency to build an open scientific network of data resources and systems that publish Web services accessible to anyone, and increasing public understanding of the issues and value of our science, planning, and finance missions. As a leader in this industry, the TWDB must remain on the forefront of these advances to ensure our continued success.

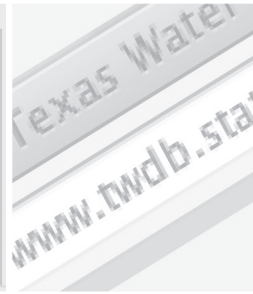
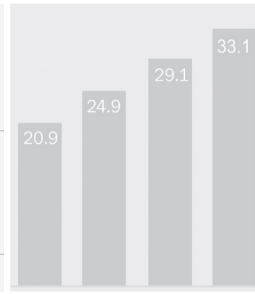
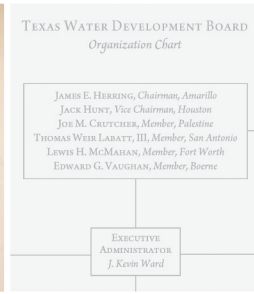
CLIMATE CHANGE

The 2007 State Water Plan describes the recent history of climate in Texas and provides a simple overview of the science of climate change. However, it stops short of quantifying potential impacts to water availability and demand in Texas. The main reasons for these omissions are the lack of consensus in the global climate models for Texas and the scarcity of good information on what a warming climate means for the water resources for the state.

For the 2012 State Water Plan, the TWDB intends to provide a quantitative assessment of both the various global climate model predictions for Texas and how these model predictions might impact the availability of surface and groundwater in the future. Given the nature of this discipline and fact that the science of climate change is evolving rapidly, it may be that the results are presented in terms of risk or uncertainty.

The TWDB staff proposes to work with university researchers and other agencies to ensure that the latest and greatest science is used in the proposed analytical work. The hope and expectation is that federal grants will be obtained to help facilitate this process. Without these funds, the TWDB will face a major obstacle in pursuing research related to this increasingly important topic.

Agency Overview



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

Enabling Statutes and Legislation

TWDB History

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Agency Overview

The TWDB is the state’s water planning and water project financing agency. The agency’s main responsibilities are threefold: collecting and disseminating water-related data; assisting with regional water planning and preparing the state water plan for the development of the state’s water resources; and administering cost-effective financial programs for the construction of water supply, wastewater treatment, flood control and agricultural water conservation projects.

Since 1957, the TWDB has been charged with addressing the state’s water needs. With

the Texas Legislature’s passage of Senate Bills 1 (75th Legislature), 2 (76th Legislature), and 3 (80th Legislature), federal and state organizations, political subdivisions, and regional water planning groups have assumed increased responsibility for ensuring sufficient water supplies for the state. The TWDB has a leadership and support role through guiding, enabling, and supporting the responsible development of the state’s water resources to ensure that sufficient water will be available at a reasonable cost while protecting the agricultural and natural resources of the state.

Enabling Statutes and Legislation

Strategies	Descriptions	Statutory References
Strategy 01-01-01 Collection, Analysis, and Reporting of Environmental Impact Information	Collect, receive, analyze, process, and facilitate access to basic data and summary information concerning water necessary to support a sound ecological environment in the state’s streams, rivers, bays, and estuaries	Water Code §§11.1491, 16.012, 16.058
Strategy 01-01-02 Water Resources Data	Collect, receive, analyze, process, and facilitate access to basic data and summary information to support planning, conservation, and responsible development of surface water and groundwater for Texas and studies to determine the quantity and quality of water available and environmental flow needs.	Water Code Chapter 15 (Subchapter M), Chapter 16 (Subchapter B), §16.059 Water Code §§11.153, 11.155, 15.4063
Strategy 01-01-03 Automated Information Collection, Maintenance, and Dissemination	Operate statewide program to provide training and to produce, maintain, and disseminate public domain geographic data in support of the state’s water planning programs and related activities.	Water Code Chapter 16 (Subchapter B), §§36.1071, 36.1072, 36.1073, 36.159, 36.160, 36.161, 36.169 Education Code §88.503
Strategy 01-02-01 Technical Assistance and Modeling	Conduct studies on surface water and groundwater resources; provide technical information and assistance to citizens, groundwater conservation districts, river authorities, water utilities, and regional water planning groups; and develop, maintain, and adapt surface water and groundwater availability models to support planning, conservation, and responsible development of water in Texas.	Water Code Chapter 16 (Subchapters B and C), §§16.012, 16.015, 16.019, 16.051, 16.053, 35.004, 35.007, 35.012, 35.013, 35.018, 36.015, 36.108, 36.120, 36.1071 through 36.1073. Local Government Code §§212.0101, 232.0032.

Strategy 01-02-02 Water Resource Planning	Assist in the development and implementation of regional and state water plans and of measures resulting in protection from floodwaters. Efforts include managing contracts and providing technical assistance to regional water planning groups and political subdivisions for: 1) the preparation of regional water plans that are the foundation for the state water plan, 2) regional facility planning that initiates implementation of the state water plan, and 3) researching water resource problems and issues.	Water Code §§6.011, 6.012, 11.1271, 11.1272, 12.0151, Chapter 15 (Subchapters A, B and F), Chapter 16 (Subchapters B, C, D and I), National Flood Insurance Reform Act of 1994, 42 United States Code, Chapter 50, Subchapter III, §§4001 through 4107, 44 CFR, Chapter I, Part 78, §§78.1 through 78.14
Strategy 01-03-01 Water Conservation, Education, and Assistance	Provide water conservation information, data, and other technical assistance and services to promote increased water-use efficiency in Texas through statewide water conservation activities and as included in the regional and state water plans	Water Code §§5.701, 11.1271, 13.146, 15.102, 15.103, 15.106, 15.208, 15.607, 15.701, 15.708, 15.735, 15.910, 15.975, 15.995, 16.012, 16.015, 16.0121, 16.022, 16.051, 16.053, 16.054, 16.055, Chapter 16, Subchapter K, 17.122, 17.125, 17.274, 17.277, 17.857, and 17.927, and Chapter 17, Subchapter J.
Strategy 01-04-01 Perform Community Assistance pursuant to the National Flood Insurance Program	Perform community assistance pursuant to the NFIP.	Water Code §§ 16.314, 16.316, 16.317.
Strategy 02-01-01 State and Federal Financial Assistance Programs	Provide financial assistance through state and federal programs to save money for Texas communities for water supply, water quality protection, and other water-related projects.	Water Code §§6.011, 6.012, 16.093, 17.0821, 17.961, 17.853; Chapter 15 (Subchapter J); 33 United States Code §§1251 et seq. (Federal Water Pollution Control Act); 42 United States Code §§ 300f-300j-26 (Safe Drinking Water Act); Texas Constitution Article III, §§49-c, 49-d, 49-d-1, 49-d-2, 49-d-3, 49-d-4, 49-d-5, 49-d-6, 49-d-7, 49-d-8, 49-d-9, 50-d; Water Code §§6.011, 6.012, Chapter 15, (Subchapters A-F, M, N, O, Q, and R); Chapter 16 (Subchapters E and F); Chapter 17 (except for Subchapter M); §§36.159-.161, 36.371-374
Strategy 02-02-02 Economically Distressed Areas Programs	Provide economically distressed areas access and connections to adequate water supply and/or wastewater treatment systems and/or indoor plumbing improvements.	Texas Constitution Article III, §§49-d-7, 49-d-8, 49-d-9, Water Code §§6.011, 6.012, 15.401, 15.407, Chapter 15 (Subchapters A, B, C, L, P and Q); Chapter 16 (Subchapter J); Chapter 17 (Subchapters K, M), applicable Federal Appropriations Acts.

TWDB History

TWDB Timeline:

1904	A constitutional amendment was adopted authorizing the first public development of water resources.
1913	The 33rd Texas Legislature created the Board of Water Engineers to regulate appropriations of water.
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<i>Texas suffered the most severe drought in the state's modern history</i>	
<b>1957</b>	The TWDB was created by legislative act and constitutional amendment. The constitutional amendment, approved by Texas voters, authorized the TWDB to issue \$200 million in State of Texas General Obligation Water Development Bonds for the conservation and development of Texas' water resources through loans to political subdivisions.
<b>1962</b>	The Board of Water Engineers was reorganized, renamed the Texas Water Commission, and given specific responsibilities for water planning by the 57th Texas Legislature.
<b>1965</b>	The Texas Legislature restructured the state water agencies, transferred water resource planning functions to the TWDB, and renamed the Texas Water Commission as the Texas Water Resource Commission (TWRC).
<b>1972</b>	The Texas Natural Resources Information System (TNRIS) was created, succeeding the Texas Water-Oriented Data Bank and incorporating a centralized repository and clearinghouse of maps, census information, and water-related information.
<b>1977</b>	The three existing water agencies: -the Texas Water Development Board; -the Texas Water Rights Commission; and -the Water Quality Board were combined by the Texas Legislature, creating the Texas Department of Water Resources (TDWR). This new agency was responsible for developing Texas' water resources, maintaining the quality of water, and ensuring equitable distribution of water rights.
<b>1985</b>	Sunset legislation reorganized the Texas Department of Water Resources, splitting the agency into two separate agencies: the Texas Water Commission and the Texas Water Development Board. The TWDB was charged with long-range planning and water project financing.
<b>1989</b>	The 71st Texas Legislature and voters of the state passed comprehensive legislation and constitutional amendments establishing the Economically Distressed Areas Program (EDAP), to be administered by the TWDB.
<b>1997</b>	The 1997 State Water Plan was adopted as a consensus effort by the TWDB, the Texas Parks and Wildlife Department (TPWD), and the Texas Natural Resource Conservation Commission (now the Texas Commission on Environmental Quality or TCEQ).

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

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With enactment of SB 1, the Strategic Mapping Initiative was developed and the Texas Geographic Information Council (TGIC) was formed.

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Sunset review resulted in passage of SB 312, which preserved existence of TWDB for 12 more years and mandated program changes. The TWDB revised all forms and procedures and adopted all necessary rules required to implement program changes mandated in SB 312.

1999

The 76th Texas Legislature passed Senate Bill 2 (SB 2), which added additional requirements to the TWDB's technical data collection and groundwater modeling programs, and created two new funding programs to be administered by the TWDB. SB 2 also created the Texas Water Advisory Council, a 13-member organization of which the TWDB is a member.

2001

The 2002 State Water Plan was published, the first state water plan to be adopted by the TWDB since the passage of SB 1 by the 1997 Texas Legislature.

2003

The 78th Texas Legislature passed several bills focused on conservation: setting new requirements to address conservation issues when applying for financial assistance; requiring water audits by water utilities; consolidating financial assistance programs to provide financial assistance for agricultural water projects; and establishing the Water Conservation Implementation Task Force to review, evaluate, and recommend optimum levels of water use efficiency and conservation in the state.

2005

The 79th Texas Legislature resulted in many changes in the EDAP Program. The program was re-focused as a statewide program vs. primarily border/colonias. The moratorium on new projects was removed during this session for this program as well.

In 2005, with Executive Order No. RP-50, Governor Rick Perry created the Environmental Flows Advisory Committee, whose charge is to develop recommendations to establish a process that will achieve a consensus-based, regional approach to integrate environmental flow protection into the water allocation process while ensuring that human water needs are satisfied. The committee, made up of the TWDB, TCEQ, and TPWD representatives, examines relevant issues and makes recommendations for action and legislation concerning flow allocation to meet human and environmental needs at all times, including during drought conditions.

2007

The 80th Texas Legislature may be regarded as one of the most successful for water policy changes and increased funding to develop future water supplies for the State of Texas. With the passage of SB 3, historic actions on water conservation, environmental flows, and reservoir site designation were made. HB 1 provided unprecedented funding to implement 7 of the 14 exceptional item requests for water management strategies and all 5 of the State Water Plan requests. In addition, the TWDB received \$30.6 million over and above the agency's baseline for agency programs and administration.

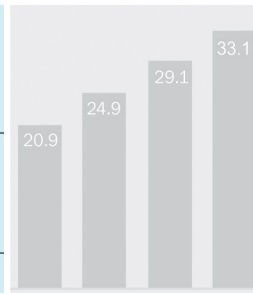
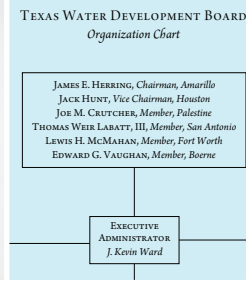
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With the passage of Proposition 16, the TWDB received \$250 million in bond authorization, providing funding for the Economically Distressed Areas Program.

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The National Flood Insurance Program was transferred from the TCEQ to the TWDB.

External/Internal Assessment



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

Overview of Agency Scope and Functions

Organizational Aspects

Fiscal Aspects

Service Population Demographics

Technological Developments

Economic Variables

Impact of Federal Statutes and Regulations

Other Legal Issues

Self Evaluation and Opportunities for Improvement

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External/Internal Assessment

Overview of Agency Scope and Functions

The Texas Water Development Board:

- Supports the development of regional water plans and incorporates them into a statewide water plan for the orderly and responsible development, management, and conservation of the state's water resources.
- Provides loans to local governments for water supply projects; water quality projects, including wastewater treatment, municipal solid waste management, and nonpoint source pollution control; flood control projects; agricultural water conservation projects; rural and small community water and wastewater projects; and expenses for creating groundwater conservation districts.
- Provides grants and loans for the water and wastewater needs of the state's economically distressed areas.
- Provides agricultural water conservation and water-related research and planning grants.
- Conducts studies of the occurrence, quantity, quality, and availability of the state's surface water and groundwater, including development of groundwater availability models for the state's major and minor aquifers.
- Collects data and conducts studies concerning the freshwater needs of the state's bays and estuaries. In conjunction with other natural resources agencies, maintains an instream flow data collection and evaluation program. This includes conducting studies and analyses to determine appropriate methodologies for determining flow conditions in the state rivers and streams necessary to support a sound ecological environment.
- Facilitates the state's efforts to determine the feasibility and identify the requirements for implementing large-scale seawater desalination projects and supports their implementation as appropriate. Supports ongoing desalination research

and the sharing of technological information to enhance brackish groundwater and seawater desalination activities throughout the state.

- Maintains a centralized data repository of information on the state's natural resources called the Texas Natural Resources Information System (TNRIS) and manages the Strategic Mapping (StratMap) Initiative, a Texas-based, public and private sector cost-sharing program to develop consistent, large-scale digital base maps describing surface water, elevation, transportation, aerial photography, and other information. In addition, TNRIS houses the Geospatial Emergency Management Support System and works in coordination with the U.S. Environmental Protection Agency, Federal Emergency Management Agency, and the Governor's Division of Emergency Management.
- Coordinates the National Flood Insurance Program within the state of Texas acting as a liaison between the federal component of the program and the local communities.

Organizational Aspects

Size and Composition of Workforce FULL TIME EQUIVALENTS

As of March 2008, the agency had 279 full time equivalent employees (FTE), including part-time workers and contractors. For FY08, 326.1 FTEs were appropriated. The agency received a significant increase in FTEs in the last legislative session and is currently working toward satisfying all vacant positions. Due to the specific nature and field location of many of these positions, recruitment has been a key element in obtaining qualified individuals to join our workforce.

RACE/GENDER

Per the Equal Opportunity Report for January 1, 2007 to December 31, 2007, the state agency workforce comprised the following:

| | Total Employees | Caucasian Males | Caucasian Females | African Males | African Females | Hispanic Males | Hispanic Females | Total Males | Total Females |
|---------------------------|-----------------|-----------------|-------------------|---------------|-----------------|----------------|------------------|-------------|---------------|
| Officials | 26 | 10 | 11 | 0 | 1 | 1 | 2 | 11 | 15 |
| Professionals | 262 | 125 | 60 | 8 | 9 | 20 | 21 | 167 | 95 |
| Para Professionals | 34 | 2 | 18 | 1 | 5 | 2 | 6 | 5 | 29 |
| Technicians | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Total | 323 | 138 | 89 | 9 | 15 | 23 | 29 | 184 | 139 |

The TWDB is dedicated to ensuring equality in the workforce. Because the figures from the Civil Rights Division (CRD) of the Texas Workforce Commission do not single out a professional profile comparable to that of the TWDB, it is difficult to compare the two figures for professionals. CRD figures for professionals represent a wide variety of professions, of which women are represented in various proportions depending on the nature of the profession. The profile of professional positions in the TWDB explains part of the shortage of women in the professional category: the TWDB employs many natural scientists and engineers. Women continue to enter the natural sciences and engineering fields in lower proportions than men. Initiatives by the federal government and non-profit organizations to encourage women to enter the natural science and engineering fields are increasing. As women increasingly enter these fields, TWDB expects that it will be better able to approach the CRD figures.

MANAGEMENT-TO-STAFF RATIO

The 78th Texas Legislature required that state agencies employing more than 100 full-time equivalent employees must attain a ratio of one full-time equivalent employee in a management position for every 11 full-time employees (1:11) no later than August 31, 2008 (Texas Government Code, Ann., §2053.004). The management to staff ratio at the agency (as of the March 2008 MtoS Report) was 1:14.

In theory, these minimum management-to-staff ratio requirements should result in increased operational efficiency. Organizations can allow managers to focus solely on the business of managing

without having to perform technical work. However, the TWDB has not been in a position to allow managers to focus solely on management; the TWDB relies on our managers to perform significant amounts of technical work in order to meet statutory and critical program requirements. This is further exacerbated by only a small number of staff available to handle multiple programs. The implementation of this statute has created a situation whereby “working managers” are called upon to oversee a greater number of programs and people. An additional unintended consequence with negative effects is that overloaded staff members have limited time to devote to quality training for succession planning.

HUMAN RESOURCES STRENGTHS AND WEAKNESSES

The State Auditor’s Office indicates the TWDB’s turnover rates have fluctuated in the past decade. The turnover rate in 2004 was 10.3 percent, 2005 had a 10.6 percent rate and 2007 was 17.2 percent. To date, the agency has had a 12.6 percent turnover rate in FY 2008.

Loss of institutional knowledge due to attrition and an aging workforce threaten all organizations. Most difficult to recover is the loss of tacit knowledge, known to few workers and not available in procedures and training manuals. With the large amount of retirements that have occurred over the past several years, the TWDB had to ensure that remaining staff was quickly developed so that the agency was able to continue running our operations.

It is extremely important for TWDB to realize that the tenure and age of staff have changed dramatically over the past several years. As the workforce ages,

it is important for the agency to develop an active succession planning effort to ensure that critical skills are adequately replaced. Also, the agency must look at developing career ladders so that the majority of the employees will know what their growth potential is at the TWDB.

Organizational Structure

TEXAS WATER DEVELOPMENT BOARD MEMBERS

The TWDB is governed by a six-member citizen

Board appointed to six-year staggered terms by the Governor. This Board meets monthly, usually on the last Monday of the month in Austin, and considers loan applications from eligible applicants, awards grants for water-related research and planning, and conducts other TWDB business, such as approving the state water plan.

The Board is also divided into two self-functioning committees: the Finance and Audit committees. Each committee consists of a chair and two additional Board members. Meetings occur quarterly for the

| TEXAS WATER DEVELOPMENT BOARD
BOARD MEMBERS | | | | |
|--|---|-----------------------------|--|---|
| Member Name | Term/Appointment Dates | Qualifications | Address | Contact Information |
| James E. Herring | Appointed: 01/2004
Appointed Chairman:
02/2008
Term Expires: 12/31/09 | Member and
Chairman | Friena Industries, L.P.
P.O. Box 15568
Amarillo, TX 79105 | Office: 806-374-1811
Fax: 806-374-1324
Email:
jeh@frionaind.com |
| Jack Hunt | Appointed: 01/1998
Elected Vice-Chairman:
3/2002
Re-appointed: 01/2004
Term Expires: 12/31/09 | Member and
Vice Chairman | King Ranch, Inc.
Three Riverway, Suite
1600
Houston, TX 77056 | Phone: 832-681-5763
Fax: 832-681-5729
Email:
jhunt@king-ranch.com |
| Lewis H. McMahan | Appointed: 02/2008
Term Expires: 12/31/11 | Member | 12123 Edgestone Road
Dallas, TX 75230 | Phone: 972-763-0686
Fax: 972-763-0687
Email:
lewis.mcmahan@gmail.com |
| Thomas Weir Labatt III | Appointed: 02/2002
Term Expires: 12/31/11 | Member | 135 West Elsmere Place
San Antonio, TX 78212 | Office: 210-260-3196
Fax: 210-732-8082
Email:
wlabatt@satx.rr.com |
| Edward G. Vaughan | Appointed: 02/2008
Term Expires: 12/31/13 | Member | Attorney at Law
1580 S. Main, Suite 200
Boerne, TX 78006 | Office: 830-816-2456
Fax: 830-249-7850
Email:
egv@texas.net |
| Joe M. Crutcher | Appointed: 02/2008
Term Expires: 12/31/13 | Member | East Texas National Bank
P.O. Box 770
Palestine, TX 75802 | Office: 903-729-6043
Fax: 903-729-1141 |

Audit Committee and monthly for the Finance Committee and usually are held in conjunction with regularly scheduled Board meetings. The TWDB Board members also oversee the TWDB Internal Audit office.

FINANCE COMMITTEE

Jack Hunt, Chair
Thomas Weir Labatt III
Edward G. Vaughan

AUDIT COMMITTEE

Joe M. Crutcher, Chair
James E. Herring
Lewis H. McMahan

AGENCY STRUCTURE

The agency is structured into executive administration, and five separate program areas, each led by a Deputy Executive Administrator. These program areas and their divisions are as follows:

Executive Administration

Office of the Executive Administrator

- General Counsel and Legal Services
- Governmental Relations

Operations and Administration

- Administrative Services
- Communications and Records Management
- Human Resources
- Information Technology
- Support Services and Contract Administration

Finance

- Accounting
- Budget
- Debt and Portfolio Management
- External Audit
- Financial Systems

Project Finance Construction and Assistance

- Inspection and Field Support
- Program Development
- Project Development
- Project Engineering and Review

Water Resources Planning and Information

- Flood Mitigation Planning
- Texas Natural Resources Information System
- Water Resources Planning

Water Science and Conservation

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

Geographic Location

The main office of the TWDB is located at 1700 N. Congress Ave, on the basement, fourth, and fifth floors of the Stephen F. Austin Building. The majority of the TWDB employees work at this location.

In addition, the TWDB houses field offices located across the state. Staff members in the field offices provide technical assistance and outreach for the construction site inspection program and serve as contacts for communities in regard to the National Flood Insurance Program. There are approximately 20-25 employees in agency field offices, which are located in these cities:

- El Paso
- Harlingen
- Houston
- Mesquite
- San Antonio

Austin staff is also involved directly with regional water planning groups, groundwater management groups, groundwater conservation districts, and other local and regional entities. Each area has dedicated staff divided by region. These staff members regularly attend meetings in each of the various locations throughout the state and are in constant communication with the stakeholders and customers in their region.

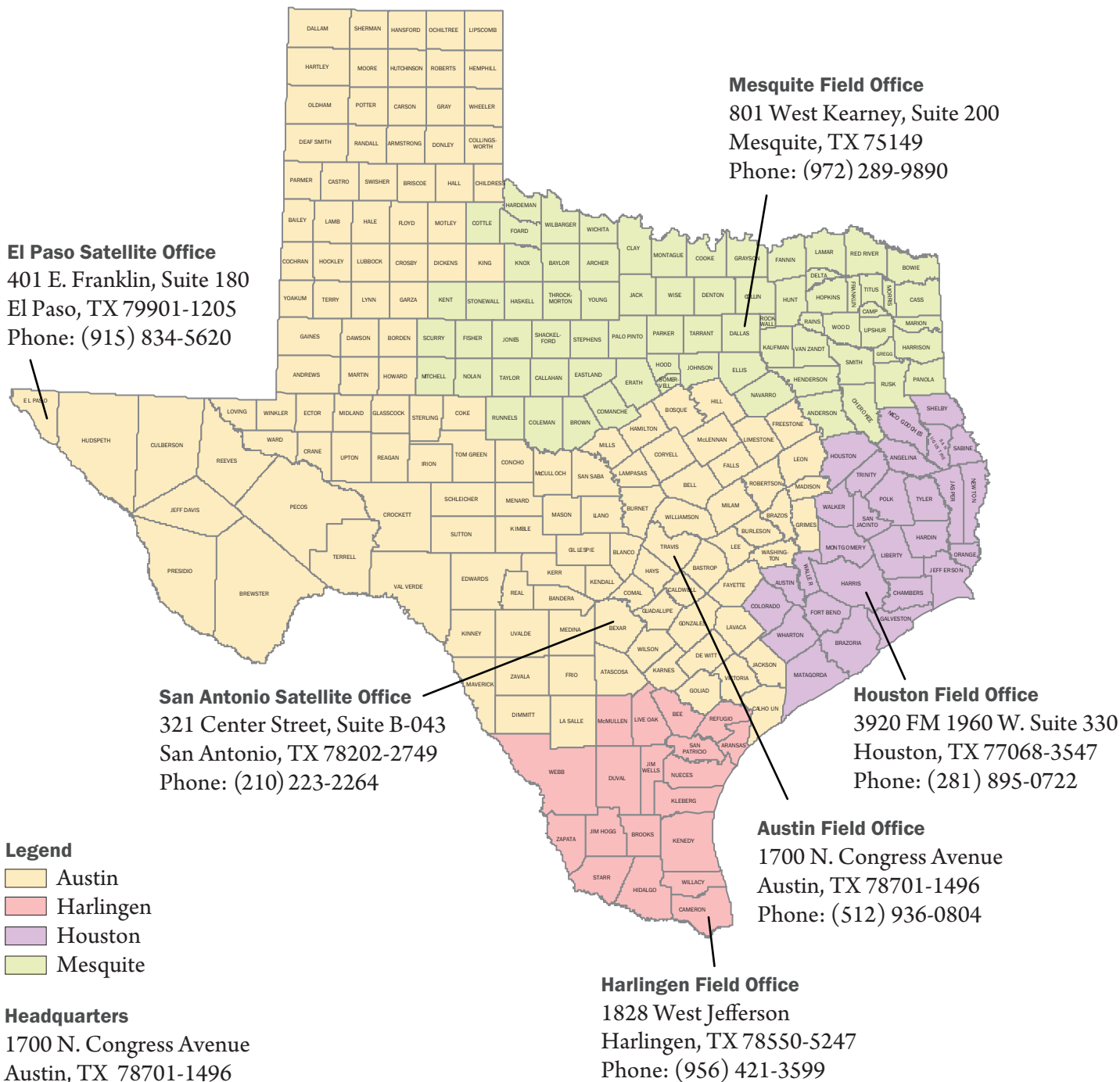


Figure 1. Location of TWDB field offices.

Capital Assets

Capitalized assets are defined as assets with an initial, individual cost of \$5,000 or more and have an estimated useful life in excess of one year. These assets are capitalized at cost or, if not purchased, at appraised fair value as of the date of acquisition. The TWDB property manager is ultimately responsible for all agency assets. However, the agency assigns fixed assets directly to agency staff.

The property manager conducts an annual inventory in order to account for each asset. Employees are required to certify the possession of these assets during the annual inventory. All agency assets are continuously tracked, updated, and reported through the State Property Accounting System.

As of May 5, 2008, the TWDB has \$18,758,267 in capitalized assets. Examples of capitalized assets at the TWDB are vehicles, boats, water meters, and/or gages.

Historically Underutilized Businesses

A historically underutilized business (HUB) is generally defined as a for-profit business enterprise (sole proprietorship, partnership, joint venture, corporation, limited partnership, or company) with its principal place of business located in Texas. Such businesses must have at least 51 percent of the assets and interests of all classes of stock and equitable securities owned by one or more persons who are members of the following groups identified as economically disadvantaged: Asian Pacific Americans, Black Americans, Hispanic Americans, Native Americans, and American women. HUB owners must be active participants in the day-to-day operations of the business and must also be citizens of the United States and residents of Texas.

HUB INITIATIVES

The TWDB fully understands the goals of the statewide HUB program and is committed to

providing increased opportunities for HUB participation in all the TWDB expenditures. The agency has been successful in exceeding and/or improving HUB participation in three of the four applicable procurement categories where expenditures have occurred. The TWDB's executives, managers, and staff will continue current efforts, which have proven successful in meeting the statewide goals, and will explore new opportunities to improve and increase HUB participation, wherever possible.

Examples of the TWDB's initiatives include

- continued assessment of internal policies and procedures to improve the TWDB's HUB program;
- increased participation and attendance at Economic Opportunity Forums, where economically feasible;
- increased collaboration and communication among the TWDB's staff involved with procurements and contract awards;
- continued improvements to the TWDB's Web site to provide notification of current procurement opportunities and updated links to HUB search resources;
- increased participation in monthly HUB discussion work groups and quarterly HUB Coordinator meetings;
- increased efforts to coordinate presentations by HUB vendors who are interested in highlighting their goods and services;
- increased efforts on outreach and marketing to educate current HUB vendors on TWDB procurement opportunities and to identify new HUB vendors; and
- continued meetings with certified HUB vendors to discuss the merits of the Mentor-Protégé Program and encourage participation in agency-sponsored agreements.

HUB GOALS

| Goal | Historically Underutilized Businesses |
|------------------------|--|
| | <i>To establish procurement and contracting policies and procedures that support the identification, promotion, and utilization of qualified HUBs in all applicable procurements, contracts, and subcontracts awarded by the TWDB.</i> |
| First Objective | To make a good faith effort to meet or exceed the statewide HUB goals in all applicable procurement categories. |
| Strategy | Implement good faith efforts to identify, solicit, and utilize qualified HUBs in all applicable TWDB procurement and contracting opportunities. |
| <i>Output Measure</i> | 1. Percent (%) of total combined dollar value of procurements, contracts, and subcontracts awarded to HUBs reflected in the semiannual and annual HUB reports. |
| Strategy | Participate in economic opportunity forums and other outreach/ educational efforts to inform the public about contracting opportunities with the TWDB. |
| <i>Output Measure</i> | 1. Number of forums attended and number of direct contacts made with HUBs. |
| Strategy | Identify subcontracting opportunities in all TWDB procurements that meet the established criteria for requiring HUB subcontracting plans |
| <i>Output Measure</i> | 1. Percent (%) of TWDB contracts that equal or exceed \$100,000 that have documented compliance with the state's HUB subcontracting plan requirements. |
| Strategy | Participate in the Mentor-Protégé Program. |
| <i>Output Measure</i> | 1. Documented agency-sponsored mentor-protégé agreement, with the agency acting as an additional resource to assist the participants in obtaining state contracts. |

The TWDB regularly assesses our HUB program initiatives and strategies as they relate to actual performance and actively seeks opportunities to enhance and improve the program.

HUB ACTIVITY

| Fiscal Year | Total Board Expenditures | Total Expenditures with HUBs | HUB Expenditure Percentage | Number of Certified HUB Bids Received | Number of Certified HUB Awards | Percent of HUB Utilization Bids -vs- Awards |
|----------------|--------------------------|------------------------------|----------------------------|---------------------------------------|--------------------------------|---|
| FY 2005 | \$ 3,610,732 | \$ 843,203 | 23.4% | 467 | 457 | 98% |
| FY 2006 | \$ 2,716,582 | \$ 761,987 | 28.0% | 475 | 457 | 96% |
| FY 2007 | \$ 4,925,876 | \$ 1,260,274 | 25.5% | 473 | 400 | 85% |
| Total | \$11,253,190 | \$2,865,464 | 25.5% | 1,415 | 1,314 | 93% |

Key Organizational Changes

January 2008 was a month of change for the Board, as three of the six Board members were up for reappointment. Within the first few months of the year, the Governor's Office named a new chairman to the Board, current member James E. Herring, and filled three vacating seats with Joe M. Crutcher of Palestine, Edward G. Vaughan of Boerne, and Lewis H. McMahan of Dallas.

Since the 2007–2011 Strategic Plan, the agency has undergone significant organizational changes. These changes were not arbitrary changes but were aimed at shaping the agency to more support our mission and goals. With the exponential growth of the agency's responsibility, assessment of resources, staff, and workflow was necessary.

In early 2007, the Office of Operations and Administration moved from under the direct purview of the Executive Administrator to act as a stand-alone area under the direction of a Deputy Executive Administrator. This organizational change proved to be effective in more efficiently managing the agency's resources and thus began the process for studying the agency's current organization and taking into consideration the new mandates, increased staffing needs, and future growth to effectively provide transition for one of the most key organizational changes in the agency's recent history.

In December 2007, the Executive Administrator announced the final product of months of research and leadership input, with a new agency organizational structure. A new area was established, an old area was dissolved, and resources were reallocated among the agency.

The area formerly known as the Resource Information Office was dissolved, and Information Technology (IT), Programming Applications and Development (PADD), and the Texas Natural Resources Information System (TNRIS) were split. IT and PADD are agency-wide support functions and were moved to Operations and Administration. TNRIS was moved to the newly created Water Resources Planning and Information area.

Water Resources Planning and Information is aimed at providing support to the local regions around the state to assist in their water planning and flood

protection needs. This new area consists of the Water Resources Planning, Flood Mitigation Planning, and TNRIS divisions. A new Deputy Executive Administrator was also named to lead this office.

The former Office of Planning that consisted of Innovative Technologies, Surface Water Resources, Groundwater Resources, Water Conservation, and Water Resources Planning was charged with refocusing its efforts on science and technology. The area's new name, Water Science and Conservation, depicts its mission on face. With Water Resources Planning removed from this area, staff is able to focus their efforts on the many legislatively mandated issues that affect the work of staff in this area.

Recently, the agency completed a nationwide recruiting effort for two leadership positions: General Counsel and Deputy Executive Administrator for Project Finance Construction and Assistance. After careful consideration, the Executive Administrator hired two highly recommended individuals to become a part of the TWDB leadership team. The agency's new General Counsel began in May 2008, and the new Deputy Executive Administrator for Project Finance Construction and Assistance began June 2.

Use of Consultants

The TWDB uses consulting services intermittently. These services are only used when there is a significant need and when agency staff or another agency is unable to perform the service. As required by the State of Texas Purchase Policy, consultants are selected based on demonstrated competence, knowledge, and qualifications, as well as the reasonableness of the proposed fee for the service. The TWDB uses the services of qualified historically underutilized businesses whenever the opportunity arises. The agency notifies the Legislative Budget Board and the Governor's Budget, Planning, and Policy Office prior to contracting any consultant services exceeding \$14,000.

The TWDB anticipates continued use of consulting services throughout 2009–2013 to help achieve our mission to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

Fiscal Aspects

The actions of the 80th Legislative Session provided TWDB with significant funding increases, primarily to implement the recommendations of the 2007 State Water Plan. After several sessions of funding reductions, the TWDB received a 32 percent increase in overall appropriations over the 2006–07 biennium for agency operations. The combined increases for exceptional items and funding for new programs resulted in an almost 50 percent increase (\$18 million) in General Revenue from the 2006–07 biennium.

In addition to funding the TWDB's baseline request of \$78 million, seven of the 14 exceptional items requested by the agency were approved. Those exceptional items included funding for

- the statewide expansion of the Economically Distressed Areas Program;
- implementing unfunded mandates of HB1763 from the 79th Legislative Session for groundwater management;
- providing grant funding for wastewater service for areas along the Texas-Mexico border as part of the Colonia Self-Help Program;
- restoring previous reductions in grants for regional planning;
- providing match funding for disadvantaged communities under the Federal Safe Drinking Water Act; and
- funding the municipal water conservation program.

Funding for new legislation included the enhancement of the National Flood Insurance Program, which was transferred from TCEQ to the TWDB; special legislation related to funding the construction of the Boeye Reservoir in McAllen and a water infrastructure project for the La Joya Special Utility District; implementation of new water legislation (instream flows and conservation); and funding for the statewide Data Center Consolidation initiative.

TOTAL APPROPRIATIONS

FY 2004–2009

| | |
|------------|----------------|
| FY 2004-05 | \$ 75,546,455 |
| FY 2006-07 | \$ 82,400,833 |
| FY 2008-09 | \$ 108,787,808 |

GENERAL REVENUE APPROPRIATIONS

FY 2004–2009

| | |
|------------|---------------|
| FY 2004-05 | \$ 39,040,519 |
| FY 2006-07 | \$ 37,159,733 |
| FY 2008-09 | \$ 55,484,226 |

Service Population Demographics

Historical and Current Characteristics

AFFECTED POPULATIONS

In fulfilling our mission to provide leadership, planning, financial assistance, information, and education for the responsible development and conservation of the state's water resources, the TWDB serves an array of customers throughout Texas, including but not limited to these entities:

- Texas Legislature
- political subdivisions
- municipalities
- counties
- industries
- agriculture
- consultants
- environmental interests
- small businesses
- institutions of higher education
- energy sector
- river authorities
- regional water planning groups
- water districts
- water utilities

However, as water is a basic necessity, ultimately the agency's customers are all of the residents of Texas.

Today, Texas has one of the fastest growing populations and economies in the nation. Rapid growth, combined with the state’s susceptibility to severe drought and the potential long-term impacts of climate change, makes managing current water supplies and planning for future water supplies a crucial endeavor. Without abundant and reliable water supplies, Texas could face serious social, economic, and environmental consequences—not only in our large metropolitan cities, but also in rural areas. As the state continues to grow, water providers and water resource managers are finding it increasingly difficult to meet growing water demands. As a result, over the past several years water has emerged as a key issue in nearly every legislative session. Much of the recent legislation related to water has expanded the breadth and size of the TWDB’s service populations. Keeping up with legislative mandates intended to ensure that Texas has the water it needs to remain as one of the nation’s largest and most robust economies and one of the most geographically and culturally diverse states in the nation has posed challenges for the agency.

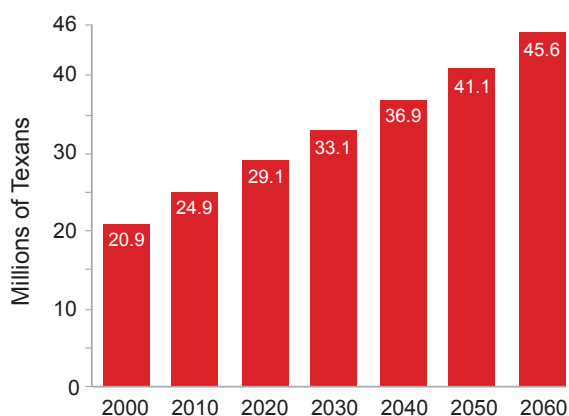


Figure 2. Texas population projections for 2000–2060.

Providing the financial assistance, science, planning, administration and management, and data demanded by our expanding customer base is becoming increasingly difficult in light of workforce changes.

Financial Assistance

The TWDB provides financial assistance to customers through grants and loans for water-related projects. In recent years, legislative changes

have expanded the scope of customers that may be eligible for the TWDB’s Economically Distressed Areas Program (EDAP). Historically, EDAP focused on colonias along the Texas-Mexico border. However, the passage of House Bill 1875 (78<sup>th</sup> Texas Legislature) expanded the TWDB’s ability to provide assistance to other disadvantaged, small, and rural communities throughout the entire state.

Preceding the 50<sup>th</sup> anniversary of the TWDB’s creation, the Texas Legislature convened for its 80<sup>th</sup> session. In addition to historic actions on water conservation, environmental flows, and reservoir site designation, the legislature approved unprecedented funding to help implement water management strategies in the 2007 State Water Plan. House Bill 1, the General Appropriations Act, included substantial appropriations investments for water supply and distribution and delivery systems serving Texas communities, including funding requests identified in the 2007 State Water Plan. Specifically, the legislature appropriated almost \$47 million over and above the agency’s \$54.7 million baseline request to pay debt service on general obligation bonds that will finance state water plan projects through existing agency programs. These programs include the State Participation Program and the Water Infrastructure Fund. Total project funding from bond proceeds amounts to about \$762.4 million, which represents a major milestone that will be instrumental in helping communities implement recommended water management strategies. The actions of the 80<sup>th</sup> Legislature have increased demand for the TWDB’s financial programs from customers throughout the state.

State and Regional Water Planning

The TWDB also provides planning, project management, contract management, and technical assistance to the 16 regional water planning groups who formulate water management strategies to ensure that Texas will have adequate water supplies in the future. In addition to providing technical and administrative assistance to these groups, the TWDB collects, manages and disseminates critical water-related data. To effectively manage and plan for the state’s current and future water supplies, water

providers and water resource managers need reliable, comprehensive, and current data regarding all aspects of historical and projected water use and water availability. The TWDB is the state's lead agency for providing this type of information and has recently

embarked on a major initiative to significantly improve the collection and dissemination of water data by developing Internet information technology applications that will greatly facilitate the availability and exchange of water resources data in Texas.

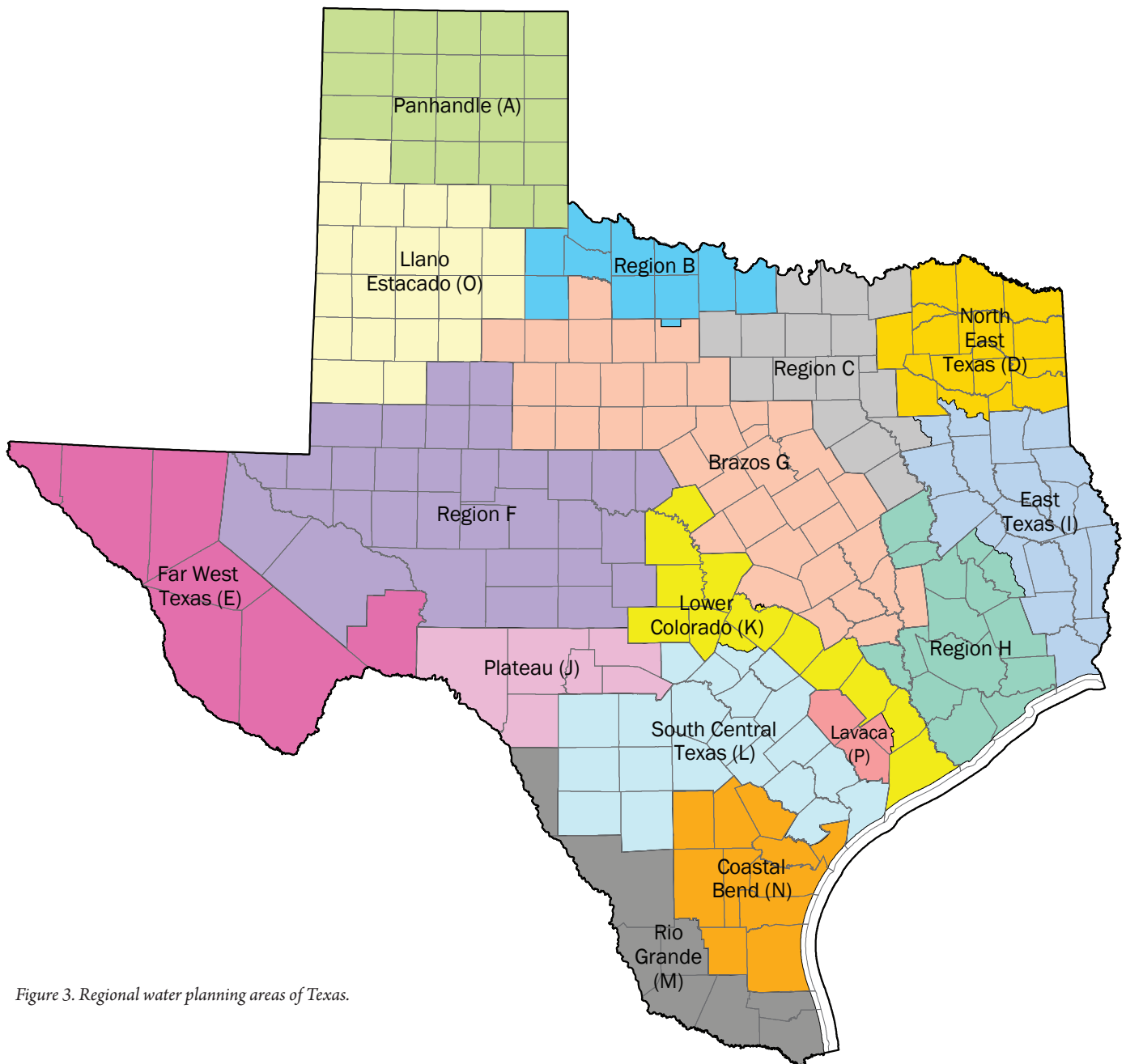


Figure 3. Regional water planning areas of Texas.

Groundwater Resources

The TWDB serves customers through three core groundwater services: groundwater monitoring, groundwater technical services, and groundwater availability modeling. These customers are primarily managers and technicians of groundwater conservation districts; hydrologic consultants to regional water planning groups, districts, and municipalities; and private well owners. Customers

of the Groundwater Resources division will increase as more groundwater conservation districts are created in the eastern, northeastern, and southern areas of the state. The TWDB also expects that as the Groundwater division completes groundwater availability models for major and minor aquifers in Texas and as joint planning in groundwater management areas progresses, interest in the program will rise, as will the number of customers.

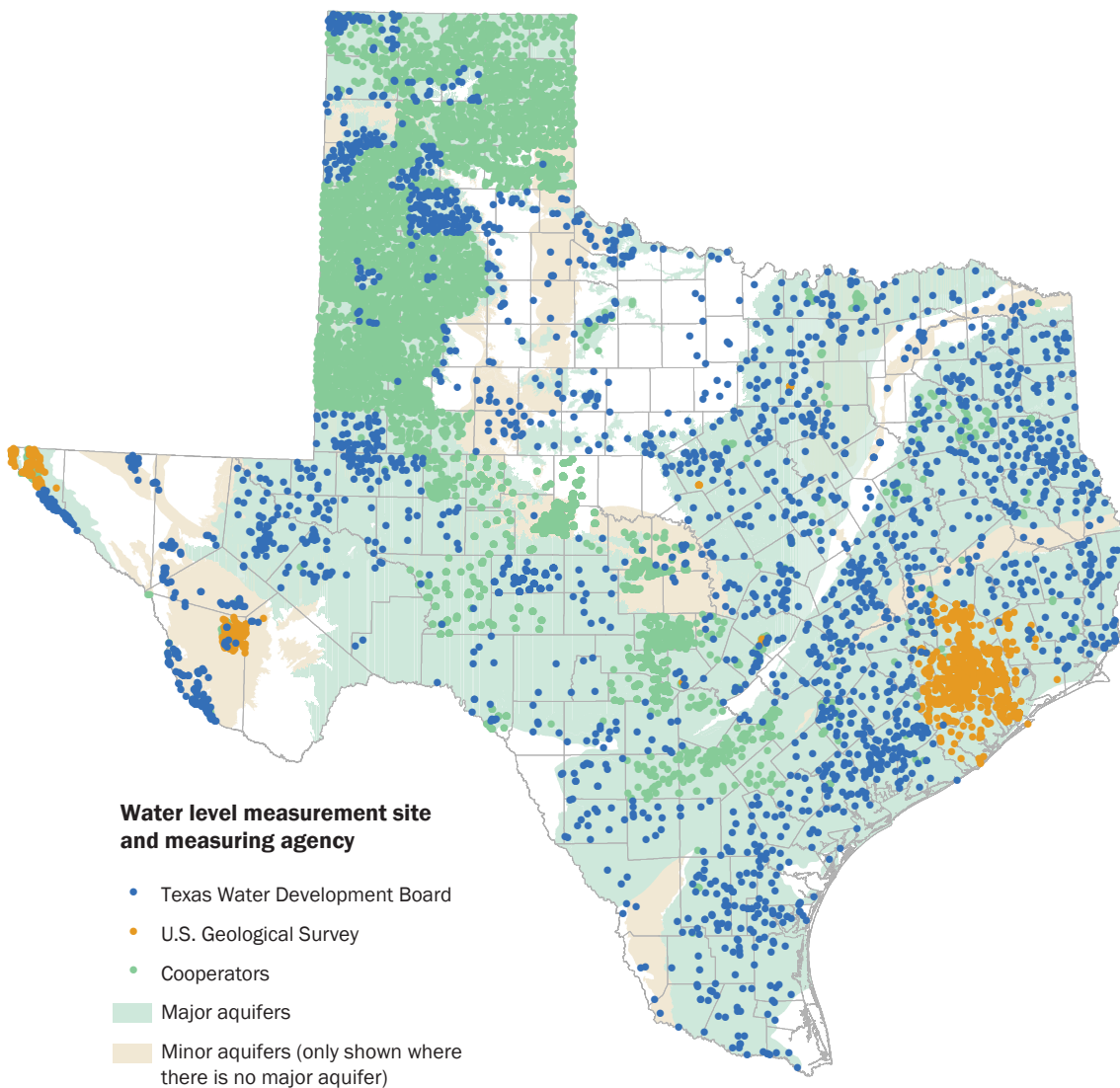


Figure 4. Location of wells measured by TWDB, the U.S. Geological Survey, groundwater conservation districts, and other cooperators in fiscal year 2005.

Surface Water Resources

The TWDB collects, analyzes, and provides the water-related data necessary to aid water resources planning and management efforts to maintain the ecological health and productivity of Texas reservoirs, streams, rivers, bays, and estuaries. Data, models and results are produced for state water planners, regulatory agencies, lake and reservoir owners, and other decision makers to use as required. Environmental publications are made available to the state library system. Virtually all surface water data, including lake hydrographic survey data, are

published. As much of the data as possible is made available to TWDB’s customers, partners, and other interested parties via the agency Web site. The 80<sup>th</sup> Texas Legislature placed considerable emphasis on water needs for the environment. One of its major accomplishments in this area was the establishment of a basis-by-basin stakeholder-driven process to address instream flow requirements in rivers and streams. Scientist and managers who specialize in surface water resources at the TWDB are heavily involved in this process.

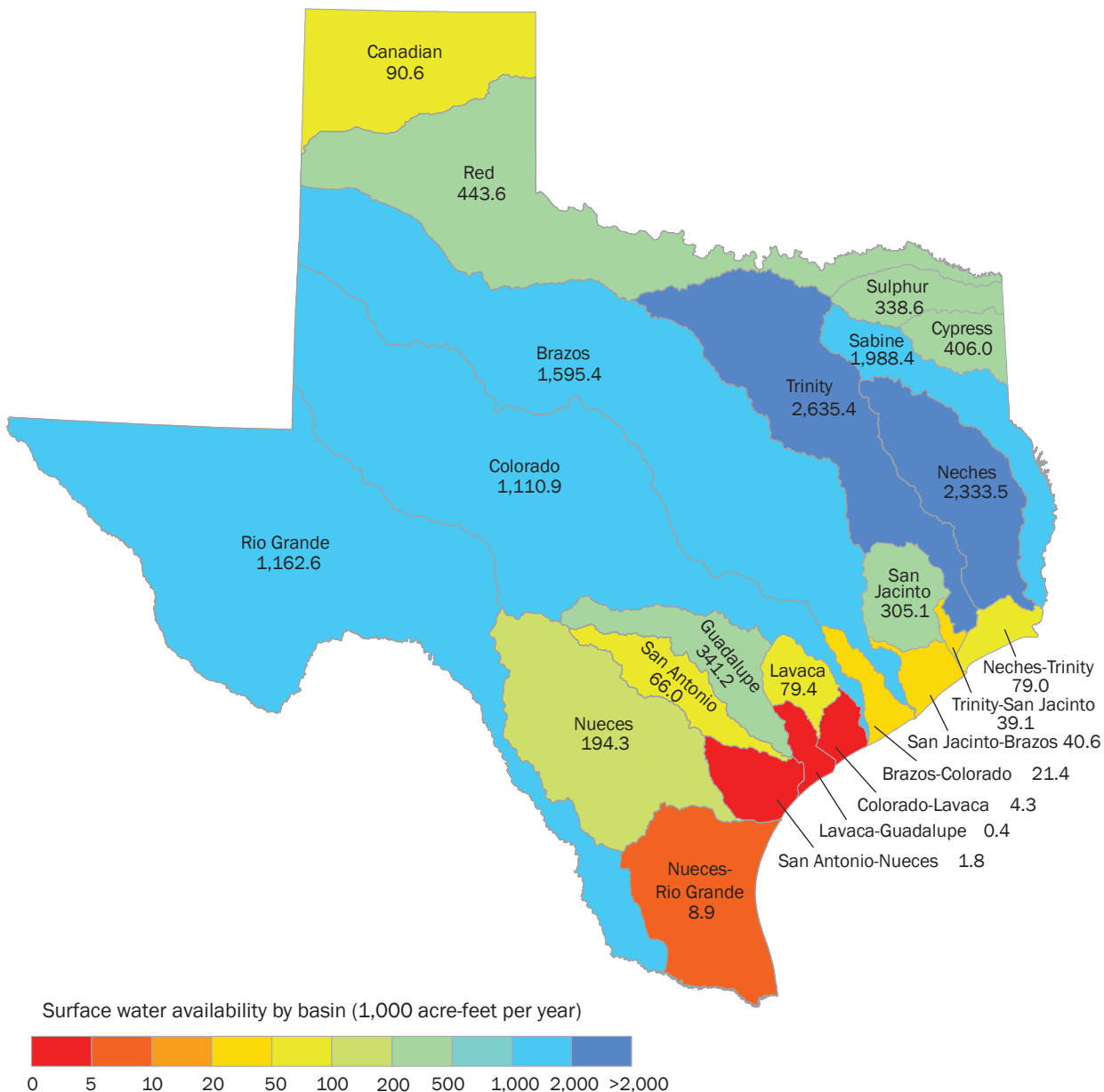


Figure 5. Surface water availability by river basin in 2010.

Water Conservation

The 78<sup>th</sup> Texas Legislature passed measures requiring a greater emphasis on conservation strategies in regional water plans and legislation that requires water utilities to conduct water loss surveys. It also established the Water Conservation Implementation Task Force, which was tasked with developing a report recommending water conservation initiatives. During the 80<sup>th</sup> Legislative Session, state legislators took several steps to expand water conservation, including educating Texans about the importance of this issue and creating an advisory council to deal with statewide issues around water conservation. In addition, the 80<sup>th</sup> Legislature passed a law requiring water utilities with more than 3,300 customers to submit water conservation plans to the Texas Commission on Environmental Quality. The legislature also authorized using TWDB's water assistance fund for grants for water conservation initiatives. The agricultural water conservation program has also been expanded to allow increased funding for grants and loans. These legislative changes, combined with an increasing awareness of water conservation, will likely result in an increased number of municipal water suppliers and other public subdivisions requesting technical and financial assistance and a greater demand from the general public (such as homeowners, farmers, and teachers) for technical information on water conservation measures and programs.

General Data Collection, Analysis, and Dissemination

As mentioned previously, data collection, analysis, and dissemination is an integral component of the agency's mission. Increased use of geographic information systems, and the demand for current data continues to drive the need for more sophisticated capabilities to collect and share key information on water resources, transportation, and other critical infrastructure. Partnerships with local governments are particularly critical for ensuring continuous improvement of these datasets because local entities are the most knowledgeable about changes in their jurisdictions. More outreach and communication with local entities would maintain the currency of

these critical datasets and enhance the effective and efficient use of the state's limited mapping dollars.

Technological Developments

The TWDB relies on information technology to enhance customer service; disseminate comprehensive water planning, financial, and natural resource data; and streamline internal program operations. The agency emphasizes Internet technology usage, internal network and infrastructure upgrades, and enhanced business applications. The ability of the TWDB to collect, manage, and disseminate the most relevant water resource data has a direct impact on the ability of agency stakeholders to make effective decisions regarding economic development, infrastructure investment, water and natural resource management, and public health and safety.

The focus of technology operations within the agency has been to provide additional information over the Internet in easily accessible formats, increase the amount of information collected in electronic form, expand geospatial technologies, provide increased opportunities for customer feedback, and ensure that data collected is effectively managed and secured.

The TWDB has a major investment and stake in successfully developing and implementing geographic information systems (GIS) technology. Geospatial tools are integrated into the agency's water information portal, making it easier for customers to access and understand the extensive information maintained at the TWDB. Agency staff has continued to develop GIS functionality to support the TWDB, state agencies, local and regional governments, and public.

Impact of Anticipated Technological Advances

Technology trends for greater broadband access and enhanced electronic services will be the principal drivers for technology in the near term, including 1) greater adoption of broadband access and expansion of wireless network capacity, 2) expanded

implementation of service-oriented architectures emphasizing Web access and presentation, 3) deployment of advanced data collection technologies driving the cost effectiveness of higher-resolution information and the demand for real-time data, 4) continued trend for lower costs associated with network storage systems, and 5) more support for online collaboration and communication tools.

The need for greater Web-centric applications will drive more advanced Web architecture and system design. Greater productivity tools to meet audit and reporting requirements will be essential to support agency decision making, and stronger integration of technical databases with business applications will streamline agency operations.

Integration of real-time data services will foster better modeling and monitoring capabilities. Lower costs for developing mapping and imaging data, combined with greater resolutions and precision, will drive the adoption of greater volumes of data, requiring advanced technologies to make these data available to an expanded user base. Agency employees' expectations for access, as well as customer service needs, will require more integration of agency operations with external data providers.

Degree of Agency Automation

Information continues to be added to the agency Web site regarding agency initiatives, operations and events, educational opportunities and curriculum, agency publications, and current water trends. Broadcasting of agency Board meetings over the Internet will provide the public near real-time access to agency business throughout the state.

Anticipated Need for Automation

Changes and improvements in the TWDB's ability to respond to customer demands and maintain a high quality of service depend to a great extent upon continued technological advances and the agency's ability to adopt innovations. Likewise, as the currency and relevance of information available through the Internet and wireless electronic devices increases, so do the expectations and demands that customers place on government to respond. The TWDB will continue to adopt relevant technological advances

and improve services. The Agency anticipates these changes over the next planning period:

- Improved customer service through more interactive data collection and dissemination. More detailed information about the agency's financial assistance programs and application process will better assist political subdivisions in exploring, qualifying, and obtaining loans and grants. Ongoing Web site improvements related to navigation, organization, and search capabilities will be implemented.
- Improved archiving, storage, and dissemination of agency data will be achieved through the expansion of an existing electronic document management system. Vital records on water infrastructure projects, financial data, contract information, groundwater resources, and personnel will be digitized and preserved. Paperless processes for agency operations will be pursued wherever feasible.
- Agency program operations will be supported through better integration of agency databases and business applications. Enterprise-wide assessments of data sources and outputs will drive enhancements, migration of legacy applications, and implementation of standardized Web-based tools. Business processes and rules will be captured and documented for use in a more robust component-based architectural model.
- Dissemination of critical geographic data held by the TWDB and Texas Natural Resources Information System (TNRIS) will be improved through the deployment of Web-based map services. Online applications for viewing, downloading, and modeling this data will be deployed to enhance support for state agencies, as well as local governments and the public. Centralized services will be created and published to streamline Web-based application development by other entities and reduce the need for state agencies to duplicate data and applications built by TNRIS.
- Improvements in disaster recovery, data redundancy, and fail-safe applications will be implemented to increase support for emergency

- response operations.
- Continued investment in security protocols and network administration tools will be a high priority to ensure the integrity and protection of agency data while supporting open access to public information.

Economic Variables

Demographic and Economic Growth

Demographic and economic growth is a fundamental driver for the agency's various programs. With growth comes a greater demand for the state's natural resources, including water, and unlike some commodities, creating new water supplies is a capital-intensive effort that can take many years of planning and development.

Texas is one the nation's fastest growing states. From 1950 to 2006, population in the state grew from about 8 million to nearly 23 million. According to TWDB projections, the number of people living in Texas will reach 33 million by 2030 and nearly 46 million by 2060. Most growth is expected to occur in the Rio Grande region and in large urban areas surrounding Dallas-Fort Worth, Houston, San Antonio, and Austin.

Not only is population rapidly growing, but Texas also has one of the world's most robust and largest economies. With an annual gross state product (GSP) valued at \$1,160 billion, the state's economy is bigger than that of either India or South Korea, and over the next 30 years the GSP is forecast to double. On a national level, the U.S. economy has slowed in recent years due to a number of factors, most notably rising energy and commodity costs and the significant downturn in real estate markets. However, Texas has remained relatively insulated from the slowdown even though the state's economy has somewhat cooled. Home prices are now dropping in many states, but in many areas of Texas they are rising and maintaining their value; due to sustained job growth and affordable homes, Texas will likely be able to skirt the nation's larger economic woes. As a result, demands for water for our cities and key economic sectors in Texas will continue to grow.

Many important industries in the state rely heavily on water. For example, agriculture, which consumes about 60 percent of available water, remains a primary consumer, as do many manufacturers such as petrochemical refineries and food processors. New industries have also flourished in Texas in recent years, particularly computer manufacturers and biotechnology, both of which require large quantities of high-quality water. Another critical component of the state's economy is the energy sector. Energy and water are connected in many ways. Power generation requires substantial amounts of water to disperse excess created during the thermoelectric generation processes that accounts for over 95 percent of Texas' electricity. As Texas grows, electricity use will rise, and, thus, demands for cooling water will grow as well. Finding ways to balance the water needs of the energy sector with those of agriculture, industry, cities, rural areas, and the environment will become increasingly challenging, and TWDB data, research, and planning will be instrumental in this effort.

Rapid growth combined with Texas' susceptibility to drought makes water supply a crucial issue. One of the most pressing concerns of policy makers is whether existing water supplies will sustain economic and demographic growth and provide ample water during times of drought. Inadequate water supplies would likely curtail economic activity in business and industries heavily reliant on water. Unreliable water supplies would not only have an immediate and real impact on business and industry, but they might also bias corporate decision makers against plant expansion or plant location in Texas. Thus, ensuring that Texas communities have abundant and dependable water supplies is crucial for the state's economic security. In this regard, regional and state water planning becomes even more critical.

Interest Rates

Water service providers use various debt instruments to fund water and wastewater projects. Conventional debt instruments used for long-term financing include general obligation bonds, revenue bonds, certificates of obligation, and government financial assistance programs, including those of the TWDB. Market interest rates are critical to service providers

seeking capital funding, and changes in these rates can affect demand for TWDB financial assistance programs.

The TWDB finances loans from proceeds derived from issuing general obligation and revenue bond issues, and the market interest rates available on the open market, particularly municipal bonds, can affect the demand for the TWDB loans. In general, higher rates on the market can increase demand for the TWDB loans and vice versa. However, it is important to stress that a myriad of social, political, cultural, and economic factors affect the demand for TWDB assistance, and market interest rates are only one factor. Since 2002, the market rate for municipal bonds has averaged around 4.5 percent (20-Year Municipal Bond Index), with a standard deviation of 0.22 percent, and it is unlikely that this will change in the near term. Thus, the TWDB does not expect market rates to have a significant effect on demand for our financial assistance programs over the next few years.

Impact of Future Economic Conditions

Although market interests will likely have a minimal impact on the agency's financial programs, other economic factors could have an effect. In particular, energy and commodity prices have risen sharply in recent years driven by strong development in emerging economies— primarily China and India whose growth is more energy- and commodity-intensive than that of more developed economies. The prospect of a continued relatively strong expansion in these economies suggests that demand growth for energy and commodities will remain solid, even as global growth is slowing. In sum, the factors underlying the relative price shifts for energy and commodities appear to be fundamental in nature. Thus, much, if not most, of recent price increases are likely to prove durable if global growth forecasts of the International Monetary Fund are reasonably accurate.

For local and regional water providers in Texas, this means that the costs of implementing and operating water management strategies with large capital and construction costs will continue to rise in the near term as prices for energy and commodities

such as steel, cement, and metals inflate. This makes planning projects more difficult and obtaining the lowest possible interest rates to finance debt service even more critical. TWDB financial programs will likely become more attractive to potential customers as construction and energy costs continue to rise in the near term. For example, the Tarrant Regional Water Provider reported that capital costs for water management strategies identified for the Region C water planning area, which includes the Dallas-Fort Worth metropolitan area, are roughly 34 percent higher today than they were when originally estimated for the 2006 Region C Regional Water Plan. Using the TWDB's Water Infrastructure Fund, the district expects to save \$4 million over the life of the project.

Impact of Federal Statutes and Regulations

Current and Historical Role

The TWDB's presence in federal initiatives continues to grow, and the agency has become more proactive in working with federal agencies, the Texas congressional delegation, and congressional committees on a wide range of issues. Currently, the TWDB's federal efforts are focused on obtaining federal assistance in implementing water management strategies in the state water plan. In addition, the TWDB continues to identify opportunities to strengthen and protect key programs, such as the Clean Water State Revolving Fund and Drinking Water State Revolving Fund. The TWDB often participates in discussions related to water resources policy, law, processes, and appropriations at the federal level. Congressional committees frequently invite TWDB testimony on water-related issues, with particular interest in the state's perspective and experiences. The pace of TWDB's interaction continues to accelerate, and the depth and breadth of the issues considered increasingly affects TWDB business.

Most recently, the agency has worked closely with the Texas Water Conservation Association and its members to educate the Texas congressional

delegation on the importance and benefits of the Water Resources Development Act. In conjunction with these efforts, the TWDB and the U.S. Army Corps of Engineers (USACE) have formed a working partnership, primarily borne out of the mutual interest to enact the Water Resources Development Act with provisions to strengthen the Corps' ability to support Texas in water resources management and development.

The TWDB/USACE partnership is credited with presenting priority issues for the Water Resources Development Act to Congress, which resulted in successfully including numerous provisions authorized in the recently passed Water Resources Development Act of 2007, including the \$40 million Texas Environmental Infrastructure Program (to be discussed in more detail below) and other provisions that benefit the state. USACE leadership holds up the TWDB/USACE partnership as its model for an effective and efficient state-federal interface.

All levels of both organizations participate in the TWDB/USACE partnership, from executive leadership, directors, and managers to front-line staff. The strength of the TWDB/USACE partnership has attracted and retained the attention of Assistant Secretary of the Army (Civil Works) John Paul Woodley, who is engaged in these issues and participates in partnership meetings. Secretary Woodley's direct involvement in the partnership provides direct access to decision making related to USACE policy and budgeting.

At the program and project level, the TWDB/USACE partnership convenes with quarterly meetings across the state to discuss issues and take action to facilitate the implementation of water management strategies in the 2007 State Water Plan and to enhance TWDB efforts in water data and science. The TWDB/USACE partnership, particularly the progress being made through the quarterly meetings, is a high priority for USACE leadership. As such, USACE executive leadership provides input and resources necessary to support the quarterly meetings and produce positive outcomes and tangible accomplishments.

Perhaps the most important aspect of the TWDB/USACE collaboration is the Texas Environmental

Infrastructure Program (TEIP), which was included in the recently passed Water Resources Development Act of 2007. This \$40 million program provides for direct USACE assistance to support implementation of water management strategies in the 2007 State Water Plan. The TWDB is currently working with the Texas congressional delegation and local entities to request federal appropriations under TEIP.

Financial assistance is just one part of the solution to implementing water management strategies in Texas. The federal regulatory function also has a direct impact on local entities' abilities to move projects forward. The USACE backlog of permit actions has grown dramatically over the past several years.

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into the waters of the United States, including wetlands. Activities in U.S. waters regulated under this program include fill for development, water resource projects, infrastructure development and mining projects. Section 404 requires a permit before a project may proceed (for example, dredged or fill material may be discharged into waters of the United States), unless the activity is exempt from Section 404 regulation (such as certain farming and forestry activities). USACE administers the permitting program, with review by the U.S. Environmental Protection Agency.

Some rough estimates indicate that the number of permit applications awaiting action in the territory covered by the USACE Southwestern Division has grown from about 800 one year ago to somewhere near 3,000 at the present time. Meanwhile, respective regulatory staffing has decreased. In addition, as a result of a recent Supreme Court decision related to the definition and regulation of "waters of the U.S." (commonly referred to as the Rapanos-Carabell case), greater uncertainty in how to act on permit applications was introduced into the USACE process for regulating impacts to wetlands.

In perhaps over-simplified terms, although the Rapanos-Carabell decision reduced the geographic extent of wetlands regulated as a "water of the U.S." under the Clean Water Act, the documentation standards required to support regulatory decisions

has become much more stringent. As a result, under USACE interpretations, it appears that the number of pending jurisdictional determinations (the process of identifying jurisdictional waters of the U.S., wetlands in this case) has increased quite significantly because of the length of time necessary to complete the court-imposed documentation standards for each “water of the U.S.” Thus, not only has the number of permit applications pending action increased, but these pending applications likely require much more effort to reach a decision point for approval because of the considerable increase in the number of jurisdictional determinations required in each application.

The TWDB is working closely with USACE and the Texas congressional delegation to relieve the backlog of regulatory actions in Texas. The TWDB will advocate for greater federal funding for the USACE regulatory function, as well as for supplemental funding from the state to expedite water resources regulatory decisions and improve federal-state-local coordination on regulatory issues. Meanwhile, the TWDB continues to work with USACE to better understand the current regulatory situation and develop actions to reduce the amount of time to process permits.

The TWDB also contributes expertise and support on other federal policy and funding issues, such as the need for adequate funding for streamgaging in Texas, the importance of allowing the use of state bonds to cover the match requirement under the State Revolving Funds, and the need for appropriations language to allow the TWDB to use fee revenue generated from State Revolving Fund loans. The following list provides an overview of the depth and breadth of the TWDB’s reach on federal issues:

- desalination research
- financial and technical assistance for desalination projects
- disposal of brackish groundwater desalination concentrate
- reauthorization of the Clean Water Act, particularly legislation to make changes to the State Revolving Fund
- potential provisions for the Farm Bill
- legislative proposals to change operation or

- treatment of financing programs or bond issuance
- exemption for water and wastewater projects from the private activity volume cap
- regional water research activities
- Safe Drinking Water Act regulations, including activities related to arsenic and standards for naturally occurring contaminants
- floodplain management initiatives
- additional mapping initiatives partnering with the Federal Emergency Management Agency, U.S. Department of Agriculture, and the U.S. Geological Survey (USGS)

In addition to TWDB-exclusive efforts on federal issues, TWDB also contributes to the national dialogue on water-related issues through membership in key water resources organizations, including the Western States Water Council, Council of Infrastructure Financing Authorities, and the Interstate Council on Water Policy.

Impact to Agency and Service Populations

For the past four years, the TWDB has partnered with the Texas Water Conservation Association to hold Texas Water Day on Capitol Hill in Washington, D.C. In just two years, the event has garnered the attention of the Texas congressional delegation, federal agencies, and other states. In 2008, approximately 80 Texas water professionals visited congressional and committee offices to educate them on priority statewide water issues. The level of awareness and support of water-related issues has risen significantly since the first Texas Water Day event in 2005.

The TWDB plans to continue to participate in this event and sees it as a key component of the agency’s federal strategy. As the agency moves forward on federal issues, the TWDB will develop and strengthen relationships with other states in order to broaden our reach on Capitol Hill. The TWDB will also continue to strengthen partnerships with federal agencies, with a commitment to supporting stakeholders as they make progress in implementing the water management strategies in the state water plan.

Keeping in mind the fiscal realities at the federal

level, the TWDB has developed a federal strategy that focuses on three themes:

IDENTIFYING KEY APPROPRIATIONS

The TWDB works with the congressional delegation, federal agencies, and customers to identify key funding needs that could possibly be addressed with federal funds. Then, the TWDB submits appropriations requests to select members of the delegation and works with the offices to provide information to support the requests.

INCREASING LEGISLATIVE INPUT

The TWDB monitors federal legislative activity to identify bills for which the agency can provide productive input. The TWDB's input ensures that Texas needs are addressed and helps to avoid unfunded mandates.

STRENGTHENING PARTNERSHIPS

To strengthen collaboration and cooperation, the TWDB maintains routine contact with federal agencies. Consequently, the agency is able to leverage financial and technical strengths with those of our partner agencies at the federal level. Currently, the TWDB is working with the USACE to expand Corps authority to provide assistance to state and local governments. The TWDB hopes to leverage USACE resources to help the state implement the water management strategies identified in the 2007 State Water Plan.

Other Legal Issues

Impact of Statutory Changes

The 80th Texas Legislature may be regarded as one of the very best and most successful sessions for water policy changes and increased funding to develop future water supplies for Texas. Historic actions on water conservation, environmental flows, and reservoir site designation and unprecedented funding to implement water management strategies in the 2007 State Water Plan are investments in the future of Texas' water supply. On the heels of the drought of the 1990s, the 80th Texas Legislature in 2007 made a

commitment to invest in the future of Texas by giving the TWDB funding to meet both the short- and long-term water needs of the state. Existing state financial assistance programs were infused with new capital to open the doors to a new evolution of loans and grants for water and wastewater infrastructure in Texas.

House Bill 1 included funding to implement seven of the TWDB's 14 original exceptional item requests and all five of the state water plan funding requests. House Bill 1 appropriated an additional \$30.6 million over and above the agency's \$78.0 million baseline request for agency programs and administration. House Bill 1 appropriated almost \$56 million over and above the agency's \$54.7 million baseline request to pay the debt service on general obligation bonds that will finance water and wastewater projects through existing agency programs—the Economically Distressed Areas Program (EDAP), the State Participation Program, and the Water Infrastructure Fund.

Proposition 16, which was approved by Texas voters on November 6, 2007, authorized the TWDB to issue up to \$250 million in additional general obligation bonds for EDAP. The agency will use bond proceeds to issue approximately \$87 million dollars during the next two years in grants and/or low-interest loans for water and/or wastewater projects in economically distressed communities all across Texas.

As of today, the TWDB has sufficient bonding authority to address water and wastewater needs for several years to come. However, based on the demand anticipated for new water supply project funding, additional bond authorization will be needed in the near future, perhaps as soon as the 81st Regular Session in 2009.

Senate Bill 3, the omnibus water bill designated by reference the unique reservoir sites listed in the 2007 State Water Plan and included provisions for protecting environmental flows, conserving water, expediting regional water planning amendments, promoting voluntary land stewardship, providing lease-back and mitigation protections for landowners impacted by potential reservoirs, designating river and stream segments of unique ecological value for protection, and creating a

water supply study commission involving Regions C and D water planning areas. House Bill 1, the General Appropriations Act, includes significant appropriation increases that are an investment in the future water supply, distribution, and delivery systems serving Texas communities.

As a result of the legislative investment in infrastructure financing, the TWDB has more than \$762 million available for loans and grants to implement water management strategies identified in the 2007 State Water Plan, approximately \$216 million available for loans and grants for water and wastewater infrastructure in economically distressed areas across the state, and \$600,000 in grant funding to address needs in colonia communities near the Texas-Mexico border. The State of Texas has now opened the doors of its bank and is encouraging customers to request financial assistance for the water and wastewater needs of its communities.

Interim Charges with Potential to Impact TWDB

Several legislative committees have interim committee charges studying issues that could result in recommendations for the 81st Regular Session in 2009 and either statutory or appropriation changes that could pose potential implications for the TWDB. Below are a list of those committees and several of the relevant interim charges:

HOUSE COMMITTEE ON NATURAL RESOURCES

Monitor ongoing efforts related to joint planning in groundwater management areas, including progress toward setting desired future conditions for aquifers. Examine and evaluate the process relating to an appeal challenging the approval of desired future conditions.

Monitor the implementation of legislation enacted by the 80th Legislature, including HB 3, HB 4, and SB 3; work in conjunction with legislatively created committees, such as the Environmental Flows Advisory Group, the Water Conservation Advisory Council, the Bexar Metropolitan Water District Oversight Committee, and the Joint Interim

Committee on State Water Funding.

Study issues related to the current efficacy of flood control devices in Texas, including the condition of aging infrastructure, liability issues, and the legal authority and financing needed to make repairs.

SENATE COMMITTEE ON INTERGOVERNMENTAL RELATIONS SUBCOMMITTEE ON FLOODING AND EVACUATION

Report on the implementation of SB 1436, which transferred the National Flood Insurance Program from the Texas Commission on Environmental Quality to the Texas Water Development Board. Make recommendations for improving the efficiency and effectiveness of the program.

SENATE COMMITTEE ON NATURAL RESOURCES

Study the safety of major dams, levees, and other flood control structures across Texas, and determine the appropriate responsible agency [Texas Commission on Environmental Quality, Texas Water Development Board, or the Governor's Office of Homeland Security] and the level of authority and funding needed to inventory, assess, repair or replace those with impairments. Develop liability and control standards for flood control structures and make recommendations to properly and safely manage these assets in the future.

Assess the environmental impact of new electric generation sources and technologies. Collect and evaluate data related to using and conserving water used in energy production. Examine the need to include electric generation facility water needs in regional water plans.

Inventory and analyze bodies of water with high salinity. Explore new technologies and approaches to reduce salinity in the state's surface and groundwater. Examine the need for state action to address salinity levels in surface waters of the state. Include an assessment of the following:

- brackish desalinization projects, including brine disposal options

- permitting of brackish water by groundwater districts
- the value and potential uses for brackish water
- the imposition of export fees for brackish as opposed to potable water

Monitor the implementation of House Bill 1763, 79th Legislative Session, including progress by groundwater conservation districts (GCDs) on joint planning within groundwater management areas and collaboration with entities within a groundwater management area, including areas not covered by a GCD. Study the impact of HB 1763 on the following:

- GCD creation within areas not covered by a GCD
- single or partial county GCDs
- consolidation with existing GCDs, and within priority groundwater management areas

Investigate issues related to groundwater use in areas of the state without a TWDB-defined aquifer, such as the Barnett Shale. Evaluate the impact of permitting the increase of the cap on export fees by GCDs.

OTHER COMMITTEES

In addition, there are several other committees whose deliberations could impact the statutory authority and appropriations levels of the TWDB, including the Environmental Flows Advisory Group, the Joint Committee on State Water Funding, the Water Conservation Advisory Council, the Study Commission on Region C Water Supply, and the Edwards Aquifer Recovery Implementation Plan.

Other Potential Changes to State Law Impacting the TWDB

COUNCIL ON COMPETITIVE GOVERNMENT

This council is reviewing key agencies that provide GIS data, including the TWDB. The purpose of the review is to devise a management system that addresses current redundancies and gaps in the state's GIS programs. Given the high cost of storing GIS information, the council is evaluating "innovative private sector approaches" to GIS information

management. The goals are increased savings and storage capacity from eliminating redundancies and increased speed and efficiencies from combining datasets.

GUITAR HOLDING COMPANY V. HUDSPETH COUNTY UNDERGROUND WATER CONSERVATION DISTRICT NO. 1

This case, currently pending in the Texas Supreme Court, challenges the District's interpretation of key sections in Water Code, chapter 36. The sections being challenged relate to permitting and its relationship to historic use; depending on the outcome, this case could impact TWDB's analysis of groundwater and groundwater management areas plans and desired future conditions.

E-RECORDS MANAGEMENT

This developing area is the subject of an Interim Charge to the House Committee on Government Reform; the charge relates to creating, maintaining, exchanging, and preserving electronic documents by the state. A Senate Interim Charge to the Committee on Government Organization relates to studying the costs and benefits of open document format for state-created documents. These charges could result in legislation aimed at uniformity and a new manner of creating documents across state agencies.

EMPLOYMENT LAW ISSUES

A state auditor's report and an interim charge to the Senate Committee on Government Organization both relate to requiring criminal background checks on applicants for state employees and certain licensed professionals. This could impact the costs of current hiring practices.

Self Evaluation and Opportunities for Improvement

Legal Services

Introduction

Legal services employees have a vantage point that provides them the ability to see the connections among funds management, fiscal, contracts, and program areas. Due to this bird's eye view of the agency, legal staff often has the opportunities to explain to other agency staff the impacts of their actions on other parts of the agency. Additionally, the emphasis on interconnectedness between various offices in the agency improves the quality of legal services because each action will be reviewed for its effects on related actions. Maintaining and retaining quality Legal Services staff is a critical component of providing information regarding interconnectedness.

The Legal Services division is also immensely affected by outside entities such as the Office of the Attorney General (OAG), Department of Information Resources (DIR), Comptroller of Public Accounts (CPA), and Texas State Library and Archives Commission (TSLAC), which regulate and control state agency actions in litigation, information technology, purchasing, and records retention. Currently, Legal Services is reviewing state agency requirements to ensure compliance with all applicable statutes and rules. One major issue currently at stake is electronic records retention and retrieval that may be needed for either a Public Information Act or litigation discovery request. The OAG, DIR, and TSLAC have developed recommended procedures based upon requirement in the Federal Rules of Civil Procedure; there is a consensus that state courts will soon have similar requirements. In order to improve agency efficiency, Legal Services is also revising loan templates so that all statutory requirements are met; these templates include resolutions, deeds of trust, loan agreements, bond ordinances, and other loan related documents. This division is also modifying its record maintenance and retention practices so that hard copy and electronic records are properly handled.

Legal Services staff interacts regularly with local governmental entities on particular transactions and

with other state agencies coordinating information related to joint concerns. There are several statutes that command TWDB to jointly adopt rules or procedures with TCEQ that this division is involved in on a recurring basis.

Key Obstacles

■ Fiscal

Because state agencies have limited budgets for continuing education and out of state travel, Legal Services staff has and will continue to take advantage of resources in other state agencies, including interagency meetings such as the State Agency Coordinating Committee, Legal Subcommittee; Public Information Act Council meetings, coordinated by the Comptroller; and other ad hoc task force entities like the Records Management Information Coordinating Committee. These groups can provide easy access to the latest legal requirements and discussions about implementation practices. Additionally, Legal Services employees should develop relationships with attorneys in-house at other state agencies, such as the Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, Department of State Health Services, Office of the Attorney General, Office of Rural and Community Affairs, whose work is related to TWDB programs. Similarly, TWDB attorneys should identify persons with specialized knowledge at other entities who can provide assistance on issues of first impression. Continuing legal education attendance is a good way to meet people from state agencies and other relevant entities, like river authorities and groundwater districts. Legal services employees should take the extra step in building relationships by regularly communicating with other entities' lawyers.

■ Human Resources

Legal Services staff discussed the recent Survey of Organizational Excellence and concurred that internal communication was the most significant hindrance to providing effective legal services.

Legal Services has several opportunities to improve operations and effectiveness. These opportunities are preparing forms and templates for loan transaction work, much of which is boilerplate; recording all

legal processes and procedures, including substantive notebooks for each loan program area; increasing the use of legal assistants for public information act requirements, litigation, legal's records management, and compliance with statutes and rules outside the Water Code.

The TWDB attorneys and legal staff must maintain the distinction between customers of the TWDB and Legal Services' clients. The clients are the employees of the TWDB, and the Legal Services staff needs to clarify their professional responsibilities with clients. Legal staff will strive to improve service to clients by learning more about their daily business practices, by becoming experts in relevant areas of law, and by offering to 'go the extra mile,' when the client has a special problem, issue, or project. Legal staff should share all research projects with clients. Lawyers shall have an open-door policy that encourages client inquiries.

Operations and Administration

Introduction

Operations and Administration provides the primary internal support for the agency and strives to provide professional and constructive support to all areas in the agency in order to ensure delivery of an effective and efficient system of services for the employees of the TWDB. Operations and Administration is always searching for innovative and effective ways to provide the employees and stakeholders of the TWDB with the highest quality customer service. The staff in this area works in coordination with all areas of the TWDB on numerous agency and statewide projects and initiatives and always strives for excellence.

Key Obstacles

■ Fiscal

Fiscal constraints for Operations and Administration hinder the entire agency's ability to carry out the mission and vision set out for us. In today's market, with limited state resources, staff is tasked with the immense responsibility of maintaining regular duties within budget. Gas prices have skyrocketed in recent months, potentially affecting the agency's ability to attend conferences and trade fairs to market our programs and services as travel funds, especially

out-of-state travel, are very limited, and no relief is in sight.

■ Human Resources

Establishing an effective officewide team as well as creating effective relationships within each division and making staff feel that they are an integral part of carrying out the mission of the agency has been a top priority of the office leadership. The need for increased communication efforts among the divisions in this area is always present.

With the addition of the Information Technology division, Operations and Administration faces a new challenge: effectively maintaining technical staff with expertise and knowledge to design and maintain the backbone of the agency's technology. This staff includes systems analysts, database administrators, information security, programmers, and GIS personnel. In addition to staffing recruitment and retention needs in Information Technology, new programs and expanded services have also created the need for additional specialized and certified staff in the Contracting and Purchasing division.

Succession planning is one of the priorities for Operations and Administration. In the next six to 10 years, many directors and key personnel will simultaneously be eligible for retirement, creating the potential for a massive knowledge gap. Operations and Administration continues to create career ladders for staff, urge employees to become more involved in discussions at the leadership level, and share knowledge and skills with fellow personnel.

Finance

Introduction

The staff in Finance has maintained an effective organization in meeting legal and audit requirements. The office has built and sustained relationships with the Comptroller, Legislative Budget Board, and State Auditor's Office staff to provide better working relationships with oversight agencies. In addition, staff is diligently working toward automating processes, including reporting, extracting data from the Comptroller's Office for use in reporting and research, reconciling internal and external financial systems, interfacing between internal financial

systems, and preparing budgets. In recent times, Finance staff and leadership have increased controls in financial systems to provide audit trails.

Debt and Portfolio Management staff continues to maintain strong loan portfolios through consistent review and assistance of loan recipients to prevent defaults. The staff completed the conversion/refunding of \$624 million in Development Fund I general obligation bonds to the newer Development Fund II program, which saved \$45.6 million, or 10.158 percent in net present value. In addition, staff began refunding Clean Water State Revolving Fund (CWSRF) Senior Lien Fixed Rate Bonds with CWSRF Variable Rate Subordinate Lien bonds for economic savings and to enhance the overall management of the fund.

Key Obstacles

■ Fiscal

The dynamic market will continue to present challenges as Finance maintains a portfolio in excess of \$3 billion in loans receivable and a debt portfolio in excess of \$2 billion, actively invests funds to provide security and liquidity while maximizing yield, and issues bonds to meet cash flow needs for loan programs.

■ Human Resources

Recent staff changes have provided increased technical expertise in portfolio analysis, financial systems, and accounting. Maintaining this expertise is necessary to continue to meet requirements, especially in light of the current financial markets.

Project Finance and Construction Assistance

Introduction

The mission and primary business functions of the office of Project Finance and Construction Assistance (PFCA) involve all aspects of making loans and granting financial assistance available to the TWDB customers.

To achieve its goals and objectives, PFCA relies on the efforts of its five divisions: Administration, Program Development, Project Development, Project Engineering and Review, and Inspection and Field

Support Services. 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
- Conducting financial, environmental, and engineering reviews for the different phases of a project
- Working with applicants throughout the financial assistance process to ensure that the applicant's schedules and expectations are met and that the application, closing, and construction of a project proceeds smoothly and in a timely manner
- Reviewing work processes, rules, and procedures and making improvements to ensure efficiency and effectiveness
- Providing project tracking and oversight
- Conducting inspections of TWDB-financed projects to ensure that each contract is constructed in accordance with the approved plans and specifications
- Providing annual and interim reports to the Environmental Protection Agency regarding federally funded programs
- Managing the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Intended Use Plan processes
- Developing and implementing new financial assistance programs

The two major federally funded programs that PFCA administers are the CWSRF and DWSRF. Funded by congressional appropriations through the Environmental Protection Agency (EPA), both the financial and programmatic aspects of these programs are annually reviewed by EPA staff. These two federal programs, in addition to the federally funded Colonias Wastewater Treatment Assistance Program (CWTAP), have been audited by the State Auditor's Office and reports have been issued with no significant findings.

The PFCA staff has earned a stellar reputation and has repeatedly received recognition as one of the premiere state revolving fund programs in the country. The PFCA maintains close working relationships with various state and federal funding and regulatory agencies in order to provide TWDB customers with a high level of customer service. Skilled coordination efforts by staff have led to expedited and successful project completion; often the continued coordination of funding and financial assistance programs is with other state agencies.

The 2007 State Water Plan resulted in the Texas Legislature appropriating \$762 million in programs intended to implement water management strategies needed for the state of Texas. These funds were made available through the Water Infrastructure Fund (WIF), State Participation Program, and the Economically Distressed Areas Program (EDAP) for water plan projects. The WIF, created in 2001 but not funded until last session, is designed to provide a mix of funding options, including market loans, below market loans, zero interest loans and grants. An additional provision allows for certain project elements, those key to obtaining environmental approval, to receive principal and interest payment deferrals for up to 10 years. The TWDB rules relating to these three programs were amended in order to provide the mechanism for efficient distribution of the new state water plan funds. Staff diligently works to ensure that all funds are allocated to eligible, participating communities in an expeditious manner.

The DWSRF regulations allow the state to use up to 30 percent of each grant allocation to provide loans to disadvantaged communities at reduced interest rates and requires 15 percent of each grant be allocated to small communities under 25,000 in population. The state legislature provides the required matching funds that permit the TWDB to allocate up to the maximum of 30 percent of each grant to assist these disadvantaged communities. Although the CWSRF regulations do not require a similar program, the TWDB determined that disadvantaged communities would benefit from a program similar to the DWSRF. The CWSRF small community disadvantaged program was established in 2004 using funds allocated by the state legislature.

Historically, the demand for both disadvantaged communities funding exceeds the annual amounts available. PFCA also administers the CWTAP and the EDAP, which provide financial assistance in the form of grants and loans for water-related projects to serve economically distressed areas.

Key Obstacles

■ Fiscal

The full realization of several state financial assistance programs depends upon sufficient General Revenue funds and staff resources. In the past, state loan programs have been affected by cuts to General Revenue, and any future continuation of funding cuts would result in a reducing the level of services provided on state loan and grant programs. These service reductions include frequency of monthly field inspections during construction, levels of technical assistance to economically disadvantaged political subdivisions, and loan/grant management oversight activities.

In order to fully implement the 2007 State Water Plan to meet the water needs of the state for the next 50 years, additional funding will be needed. Several other state-funded programs also rely upon additional program funding each biennium for water and wastewater projects. Unless additional General Revenue funds are received, projects will be delayed or financed from other sources, resulting in projects being scaled back to less than the most cost-effective size and scope, and some economically distressed areas will not receive basic water-related services. In addition, the DWSRF disadvantaged community program will not be able to continue without additional match funding from state General Revenue.

The 80th Legislature appropriated funds for the biennium to implement projects to require a series of funding commitments over multiple biennia. Both the WIF and the EDAP programs fund projects in various steps—either with planning-only funds or planning, acquisition, and design funding, both of which are required to be finished prior to consideration of construction funding. Should additional program funds not be available, these projects may never reach construction.

■ Human Resources

To manage effective, cost-efficient grant and loan programs for water-related infrastructure throughout Texas, PFCAs need to retain and recruit program specialists, engineers, environmental reviewers, project leads, and financial analysts. Additional staff will also be necessary as newly funded programs, such as those related to the state water plan and EDAP, mature and the number of projects being managed increases annually. This is especially important in programs that serve economically disadvantaged entities throughout the state. The recent marketing efforts over the last three years that resulted in increased volume in the State Revolving Fund programs will need to be supported by sufficient project oversight staff as the commitments are closed and construction is started.

PFCAs continue to work closely with EPA regional and headquarters staff to ensure that federal funds are implemented in accordance with all required federal regulations. Increased federal program reporting requirements by EPA will be addressed by the newly hired program specialists.

The PFCAs management structure put into place in April 2006 that created two new positions, an Associate Deputy Executive Administrator to handle day-to-day activities and an Assistant Administrator for Strategic Planning, Performance Measures, and Management Information Systems, has proven effective. Additional organizational changes were also identified in response to a need for additional project oversight and tracking. In March 2008, a newly created Project Oversight area was created, and four Project Lead positions were filled. This division will work closely with the Program Development division in order to provide a comprehensive approach to administering all the TWDB financial assistance programs. Additional program staff was also hired, and the increased staff and organizational changes will expedite projects, increase communications, and reduce some of the excessive workload on the various staff disciplines.

Water Resources Planning and Information

Introduction

Water Resources Planning and Information (WRPI) is a newly created area of the TWDB that combines the Water Resources Planning and Flood Mitigation Planning divisions with the Texas Natural Resources Information System (TNRIS). All three divisions continue to meet their statutory responsibilities by collecting, analyzing, and disseminating water-related data and providing other services necessary to aid in planning and managing the state's water resources. The area also provides statewide geographic data services and flood mitigation planning, including administration of federal assistance programs.

The Water Resources Planning division has continued to receive recognition as one of the leading water planning organizations in the nation. Since the inception of the regional planning process in Texas, the first priority of the Water Resources Planning division has been to support the development of the 16 regional water plans and prepare the state water plan every five years. A second priority is to continue to work with state, federal, and local partners to implement water management strategies recommended in the planning process.

The 80<sup>th</sup> Legislative Session named the TWDB as the state coordinator for the National Flood Insurance Program (NFIP). The Flood Mitigation Planning division serves as the liaison between the federal component of the NFIP and local communities, providing community assistance and training. The division also manages the state flood protection planning grant program and the federal Flood Mitigation Assistance and Severe Repetitive Loss programs. Historically, floods are one of the most frequently occurring, destructive, and costly natural hazards facing Texas. Funding assistance provided through the division has enabled communities to study and analyze flooding hazards within their jurisdiction and to develop technically feasible and cost-effective flood mitigation measures to address those hazards.

The TNRIS division of WRPI provides a centralized information system that incorporates all Texas natural resource data, socioeconomic data

related to natural resources, and related indices that are collected by state agencies or other entities. Texas is at the forefront of an effort to develop a national system of integrated information. As part of this effort, TNRIS has developed an example of an Integrated Drought Information System that has been supported at the national level to help advance the state-of-the-art public information and communication regarding drought conditions and effects.

Key Obstacles

■ Fiscal

Funding requests related to flood have continued to increase, with a four-fold increase in requests from 2006 to 2008. Priorities of the Flood Mitigation Planning division include increasing funding available to analyze and mitigate flood hazards, increasing the participation in the NFIP to include all communities with identified flood hazards, and providing detailed Flood Insurance Rate Maps for 90 percent of the counties with identified flood hazards.

Recently, university researchers have developed foundation technologies that are being evaluated for adoption within the TWDB, presenting a significant opportunity for building a unified approach to linking water sciences and planning for the benefit of the public.

If the state of Texas can increase its investment in these technologies and systems, TNRIS could

- reduce the cost of data and data storage and services;
- increase access for the public to a wider range of information about agency programs and capabilities;
- provide a platform for organizing and coordinating real-time data exchange for planning, science, engineering, and policy proposals;
- serve as the national model for integrated hydrologic information systems; and
- provide a means to measure the state's capacity for accurately understanding historical, current, and future conditions and an ability to analyze social, economic, and environmental options.

Fiscal obstacles for achieving these capabilities include a lack of efficient purchasing mechanisms, lack of intra-government protocols for data exchange, undefined technology services from mandated providers, and a lack of awareness of successes by select technology centers.

■ Human Resources

WRPI seeks to continuously improve the effective planning and management of the state's current and future water supplies by providing reliable, comprehensive, and current data regarding all aspects of historical and projected water use and availability in Texas. The division has recently begun a major initiative to significantly improve the collection and dissemination of water data by developing Internet applications that will greatly facilitate the availability and exchange of water resources data in Texas. To achieve this goal, WRPI needs to acquire and maintain employees with technical expertise to focus on developing, implementing, improving, and maintaining the TWDB's water resources planning data interfaces.

To achieve success in TNRIS, it is essential to adopt a statewide vision with a clear linkage to the benefits of reducing the cost of government, enhancing citizen awareness and participation, and providing decision makers with a clear understanding of these technologies. Already there are cooperative efforts between all levels of government. These initiatives need support to continue to establish the required capabilities and build on the technical success of the migration of research to institutional practices. Since data services will continue to depend heavily on creative and innovative partnerships, building and maintaining such partnerships is a top priority of TNRIS. This partnership model can bring fluid exchange among government agencies, and public-private partnerships can establish long-term, continuous updates and refinement of key geographic data. Human Resource obstacles that confront the ability to continue to meet these goals include the ability to maintain and promote a competitive work environment with parity in compensation for specialized technology personnel.

Water Science and Conservation

Introduction

Water Science and Conservation (WSC) continues to meet its statutory responsibilities, and the first strategic priority is to identify and secure the appropriate level of funding to support its numerous programs and projects mandated by the legislature. A second strategic priority is to strengthen our ability to assist local partners to implement water management strategies as laid out in the 2007 State Water Plan.

WSC has earned a reputation as one of the premier water science and conservation organizations in the nation. It leads the way on groundbreaking initiatives that will have lasting impacts on policy and decision making related to water resources issues. The TWDB's work on environmental flows and groundwater availability modeling is at the forefront of those sciences.

WSC has quickly become an incubator for water projects that demonstrate innovative technologies and practices. The TWDB has taken the lead in guiding the development of demonstration seawater desalination projects, with the goal of securing adequate water supplies to meet the state's growing need for water.

WSC is also responsible for launching two Agricultural Water Conservation Demonstration projects to assess the ability to increase agricultural water conservation through cost-effective increases in water use efficiency. The results of these demonstration projects will highlight the benefits of conservation technology and practices and provide the impetus for agricultural conservation efforts throughout Texas and the United States.

Key Obstacles

■ **Fiscal**

As a result of considerably increased interest in groundwater resources and management caused by House Bill 1763 of the 79th Legislature, the Groundwater division has an opportunity to expand the understanding of the state's groundwater resources and answer critical questions concerning groundwater availability. WSC staff needs to continue to search for the newest and best technologies and personal skill sets, and the agency must be

innovative and flexible enough to implement the new advancements.

Continuing support of groundwater availability models and data collection information for Texas groundwater resources is critical in meeting future needs and developing answers to important water resource policy issues. The need for more data has been highlighted by the Senate Select Committee on Water Policy, the Texas Groundwater Protection Committee, regional water planning groups, groundwater conservation districts, and other private and public interests. Budget cuts over the years have adversely affected the timeliness and production of groundwater availability models for the minor aquifers, damaged the agency's ability to hire and retain very specialized technical staff, and reduced staff and travel available for field studies in support of modeling efforts. As the TWDB's support of groundwater issues continues to grow, the need for adequate funding grows with it.

The legislature has mandated that the TWDB and other state agencies provide for the collection of instream flow data and analysis. The TPWD, TCEQ, and TWDB were directed to determine the appropriate methodologies for determining flow conditions in the state's rivers and streams to support a sound ecological environment. Instream flow studies for six specified sites are to be completed no later than the statutorily established deadline of December 31, 2010. Although progress has been made over the last few years, reduced appropriations have negatively impacted the instream flow program by effectively eliminating the possibility of installing site specific real-time streamflow monitoring stations, reducing the ability of staff to conduct necessary fieldwork, and decreasing the amount of compensation available to hire and retain qualified technical staff. The legislature authorized but did not fund a full-time employee position for the instream flow program, effectively leaving the agency with limited resources to meet our legislative mandates.

In response to legislative directives, the TWDB and TPWD jointly established and currently maintain a data collection and analytical study program focused on determining the effects of and needs for freshwater inflows to the state's bays and estuaries.

The TPWD and TCEQ jointly evaluate the findings so that TCEQ can appropriately assess the effects of issuing water permits within 200 river-miles of the coast. There are seven major and three minor bay and estuary systems distributed along approximately 370 miles of the Texas Gulf Coast. These estuarine (tidal) ecosystems cover over 2.6 million acres with open water bays, intertidal mudflats, and emergent marshes. The TWDB has completed modeling of all the major bays and estuaries of Texas. Freshwater optimization curves, which are used by the TCEQ to determine estuarine needs, are available now for all of the major estuaries. The freshwater inflow needs of the minor Texas estuaries (Brazos River Estuary, San Bernard River Estuary, and the Rio Grande Estuary) are currently under study. Since the state methodology was first developed and applied, many years of flow, salinity, harvest, and fisheries data for statistical analyses have been collected. Although the program has continued to move forward over the past two years, reduced appropriations have negatively impacted the bays and estuaries program just as it has impacted the instream flows program, making it difficult for it to meet its legislative mandate. Bays and estuaries program staff will support the Environmental Flows program created through passage of Senate Bill 3, Article 1, of the 80th Legislative Session.

The TWDB has been actively engaged in scientific research and education on desalination over the past several years and is continuing to move forward in our support for desalination research and pilot program implementation. Creation of pilot plants for testing the quality and range of variation of the raw water and the ability of different membranes to process the raw water is the necessary next step for the eventual production of potable water through desalination. The legislature appropriated funds for developing pilot projects, and in April 2006 the TWDB awarded grant funding in the amount of \$1.3 million to the Brownsville Public Utility Board to pursue pilot plant development for seawater desalination.

For Fiscal Years 2008–2009, the 80<sup>th</sup> Texas Legislature restored funding for the TWDB water conservation programs to the level before the

reductions of Fiscal Years 2006–2007. In addition, Senate Bill 3, Article 2, and House Bill 4 added several new programs, and these programs were provided additional funding and new staff positions. New programs include staff support for the newly created Water Conservation Advisory Council, implementation of a statewide water conservation public awareness program, requirement for all retail public water suppliers serving more than 3,300 connections to implement a water conservation plan with annual reports to the TWDB, and assigning priority for water conservation efforts to applications for TWDB loans for projects in the state water plan.

In addition to these new programs, WSC staff members continue to be involved in water conservation literature development and distribution, public education programs for several age levels, agricultural water conservation grant contract management, irrigation water use estimates, technical assistance for municipal systems for leak detection and water loss audits, development and review of conservation plans associated with TWDB loans, and other technical assistance related to agricultural, commercial, and municipal water conservation activities.

Though faced with significant challenges in carrying out its mission due to a reduction in available resources, coupled with an increase in responsibilities and tasks, one approach to addressing these challenges is to leverage state resources to the maximum extent possible.

To leverage our resources with federal resources, the TWDB monitors a variety of activities at the federal level and works closely with the Texas congressional delegation and federal agencies on all water-related issues and policy. Over the past biennium, the TWDB's involvement in federal issues has increased considerably, resulting in a greater presence on Capitol Hill and strengthened partnerships with federal agencies. As outlined in the aforementioned section on Federal Policy, unfortunately, as the TWDB increases our ability to secure federal funding and legislative provisions, the federal government is experiencing funding shortfalls equivalent to those at the state level. As a result of the shortfalls, Congress is reducing budgets, as well as

shifting certain tasks to state and local governments.

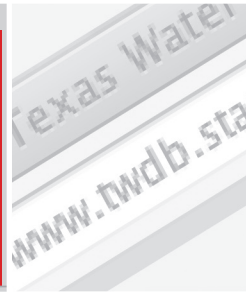
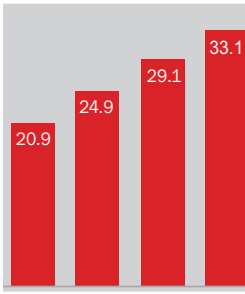
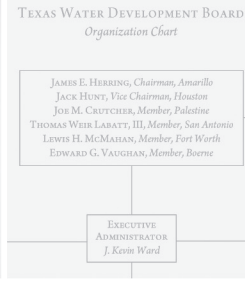
Using this approach, the State of Texas should be strategically positioned to benefit from all water-related initiatives at the federal level.

■ **Human Resources**

Because the TWDB recognizes the importance of strong customer service, agency leadership identified “Increasing Customer Satisfaction” as the primary strategic goal that will drive the agency’s ability to achieve our vision and mission. This goal involves a range of business activity from small actions performed at the level of customer and client interaction to larger initiatives, such as automating the financial assistance application process so that customers can apply for assistance via the Internet.

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Agency Goals



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

Objectives and Outcome Measures

Strategies and Output, Efficiency, and Explanatory Measures

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Agency Goals and Strategies

| Agency Goal 1 | Water Resources Planning |
|--|---|
| <p><i>Plan and guide the conservation, orderly and cost-effective development, and best management of the state's water resources for the benefit of all Texans.</i></p> | |
| First Objective | <p>Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects.</p> |
| <i>Outcome Measures</i> | <p>1. Percent of information available to adequately monitor the state's water supplies</p> |
| Strategy | <p>Collect, receive, analyze, process, and facilitate access to basic data and summary information concerning water necessary to support a sound ecological environment in the state's streams, rivers, bays, and estuaries</p> |
| <i>Output Measures</i> | <p>1. Number of bay, estuary, and instream study elements completed.</p> |
| Strategy | <p>Collect, receive, analyze, process, and facilitate access to basic data and summary information to support planning, conservation, and responsible development of surface water and groundwater for Texas and studies to determine the quantity and quality of water available and environmental flow needs.</p> |
| <i>Output Measures</i> | <p>1. Number of data units collected/processed by TWDB staff.</p> |
| Strategy | <p>Operate statewide program to provide training and to produce, maintain, and disseminate public domain geographic data in support of the state's water planning programs and related activities.</p> |
| <i>Output Measures</i> | <p>1. Number of person-hours in training classes and conferences sponsored by TNRIS.
2. Number of strategic mapping pool.</p> |
| <i>Explanatory Measures</i> | <p>1. Number of responses to requests for TNRIS-related information that are filled.</p> |
| Second Objective | <p>Conduct water planning and financial assistance activities to ensure adequate long-term water supplies, wastewater treatment, and flood protection.</p> |
| <i>Outcome Measures</i> | <p>1. Percent of key regional and statewide water planning activities completed.</p> |
| Strategy | <p>Conduct studies on surface water and groundwater resources; provide technical information and assistance to citizens, groundwater conservation districts, river authorities, water utilities, and regional water planning groups; and develop, maintain, and adapt surface water and groundwater availability models to support planning, conservation, and responsible development of water in Texas.</p> |
| <i>Output Measures</i> | <p>1. Number of responses to requests for water resources information that are filled.</p> |

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| Strategy | Assist in the development and implementation of regional and state water plans and of measures resulting in protection from floodwaters. Efforts include managing contracts and providing technical assistance to regional water planning groups and political subdivisions for 1) the preparation of regional water plans that are the foundation for the state water plan, 2) regional facility planning that initiates implementation of the state water plan, and 3) researching water resource problems and issues. |
| <i>Output Measures</i> | 1. Number of active grants for regional water, wastewater, flood, and research studies funded from the Research and Planning Fund. |

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| Third Objective | Provide eligible political subdivisions in Texas with technical and/or financial assistance for water conservation to support planning, conservation, and responsible development of water supplies to meet the future demands for water as identified in the regional and state water plans. |
| <i>Outcome Measures</i> | 1. Percent of communities receiving technical and/or financial assistance.
2. Percent of water saved with financial assistance. |

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| Strategy | Provide water conservation information, data, and other technical assistance and services to promote increased water use efficiency in Texas through statewide water conservation activities and as included in the regional and state water plans |
| <i>Output Measures</i> | 1. Number of responses to requests for water conservation information, literature, data, technical assistance, and educational activities provided by TWDB staff. |

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| Fourth Objective | Administer the National Flood Insurance Program (NFIP). |
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| Strategy | Perform community assistance pursuant to the NFIP. |
| <i>Output Measures</i> | 1. Number of communities assisted through Community Assistance Contacts and Community Assistance Visits. |

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| Agency Goal 2 | Water Project Financing |
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Provide cost-effective financing for the development of water supply for water quality protection and for other water-related projects.

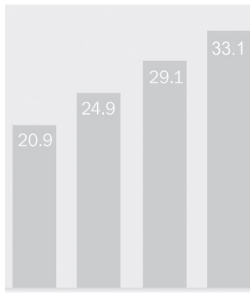
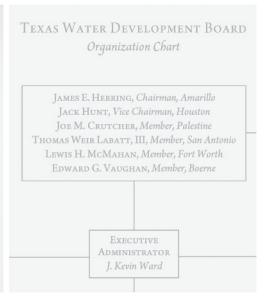
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|-------------------------|--|
| First Objective | Provide savings to Texas communities by making cost-effective financial assistance available for water supply, water quality protection, and other water-related infrastructure needs. |
| <i>Outcome Measures</i> | 1. Dollars committed as a percent of total financial assistance dollars.
2. Dollars saved from TWDB assistance. |

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|-----------------------------|---|
| Strategy | Provide financial assistance through state and federal programs to save money for Texas communities for water supply, water quality protection, and other water-related projects. |
| <i>Output Measures</i> | <ol style="list-style-type: none"> 1. Number of state participation projects receiving financial assistance. 2. Dollars committed to projects to implement the state water plan. 3. Number of commitments to state water plan projects. 4. Number of financial assistance commitments made. 5. Number of commitments to small, rural, or disadvantaged community projects. 6. Total dollars of financial assistance committed. 7. Total dollars committed to small, rural, or disadvantaged community projects through agency programs targeting such communities. 8. Number of communities with active financial assistance agreements. 9. Number of construction contracts managed. 10. Number of non-EDAP financial assistance agreements closed/executed. 11. Number of new or updated water or wastewater facility needs. |
| <i>Explanatory Measures</i> | <ol style="list-style-type: none"> 1. Number receiving water or wastewater services from regional systems. 2. Dollars saved on water and wastewater services from regional systems. 3. Dollars of financial assistance made available. |
| <i>Efficiency Measures</i> | <ol style="list-style-type: none"> 1. Administrative cost per active financial assistance agreement. 2. Efficiency financial assistance dollars managed per full-time equivalent. |
| Strategy | Provide economically distressed areas access and connections to adequate water supply and/or wastewater treatment systems and/or indoor plumbing improvements. |
| <i>Output Measures</i> | <ol style="list-style-type: none"> 1. Number of economically distressed areas project loans and grants closed. 2. Number of completed economically distressed areas projects. 3. Construction in progress for economically distressed areas projects. |
| <i>Explanatory Measures</i> | <ol style="list-style-type: none"> 1. Economically distressed area residents provided adequate water supplies or wastewater systems. |

| | |
|----------------------|--------------------------------|
| Agency Goal 3 | Indirect Administration |
| Strategy | Central Administration |
| Strategy | Information Resources |
| Strategy | Other Support Services |

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Technology Initiative Alignment



AGENCY GOAL 1

FIRST OBJECTIVE

Outcome Measure:

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Technology Initiative Alignment

| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|---|--------------------------|-----------------------------|---------|--|--------------------------|
| 1. Transformation and consolidation of agency data center operations into the State Data Center. | All Objectives | 1-1 | Planned | Replacement of outdated data center equipment; enhanced disaster recovery mechanism; foundation for future operational improvements. | |
| 2. Increase capabilities of existing system to incorporate automatic retrieval of files from Uniform Statewide Accounting System, Uniform Statewide Payroll/Personnel System, and State Property Accounting System from Comptroller of Public Accounts. | All Objectives | 1-2
1-4
4-4 | Planned | Operational efficiencies of time and productivity; improved service delivery; security improvements. | |
| 3. Increase capabilities of existing system to automate the requisition and purchase order process. | All Objectives | 1-2
1-4 | Planned | Operational efficiencies of time and productivity; improved service delivery. | |
| 4. Redevelop existing electronic payment system to meet current business requirements. | All Objectives | 1-4
2-1
5-1 | Current | Faster processing time with multiple options to provide citizens/ customers with requested capabilities. | |
| 5. Increase capabilities of existing Financial Information System to associate Municipal Advisory Council data with agency loans. | All Objectives | 1-2
1-4
4-2
4-4 | Current | Faster loan processing; automation of existing manual steps. | |

| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|--|--|------------------------------------|---------------|---|---------------------------------|
| 6. Develop an online system to meet current Human Resources business requirements. | All Objectives | 1-2
1-4
3-2 | Planned | Operational efficiencies of time and productivity; improved service delivery. | |
| 7. Increase capabilities of existing Legislative Tracking System to meet current business requirements. | All Objectives | 1-2
3-2 | Planned | Operational efficiencies of time and productivity; improved service delivery. | |
| 8. Increase capabilities of existing fund accounting system to be able to interface with Comptroller of Public Account system. | All Objectives | 1-2
4-2 | Planned | Operational efficiencies of time and productivity; improved service delivery. | |
| 9. Upgrade existing fund accounting system to current version. | All Objectives | 3-1 | Planned | Security improvements; foundation for future operational improvements. | |
| 10. Implement an automatic time sheet and labor management system with appropriate safeguards for privacy. | All Objectives | 1-2
3-2 | Planned | Reduce time to process time sheets; improve customer satisfaction; operational efficiencies of time and productivity. | |
| 11. Develop a near real-time export of regional water planning data and make it available for download. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 1-2
4-1 | Current | More informed decision-making to the state's 50-year state water plan. | |

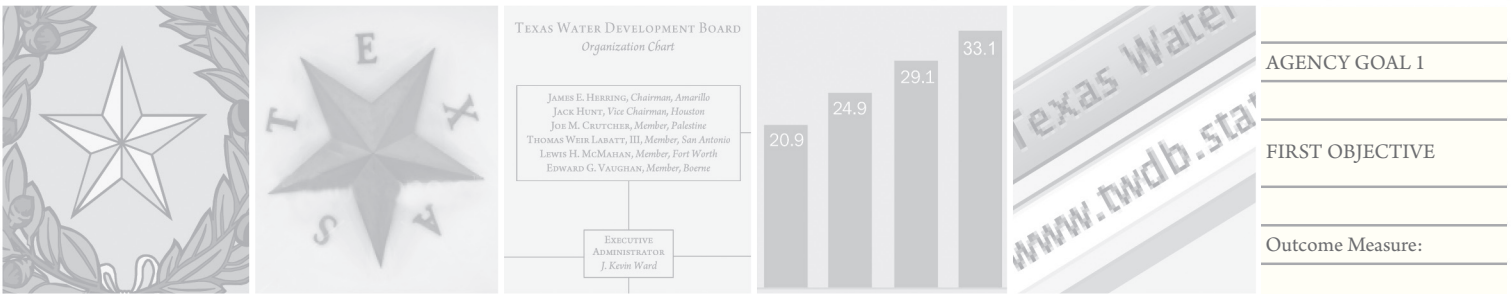
| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|--|--|------------------------------------|---------------|--|---------------------------------|
| 12. Redevelop existing Water Use Survey Data permitting system to conform to current agency technical standards and to meet current business requirements. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 3-2
4-1 | Current | Security improvements; more informed decision making on water use. | |
| 13. Develop an online feedback system to handle all citizen responses to support a Daily Reservoir Status application with appropriate safeguards for privacy. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 3-2
4-1 | Planned | Operational efficiencies of productivity; citizen satisfaction with service delivery quality; security improvements. | |
| 14. Increase capabilities of existing system to incorporate additional data for better planning of water resources projects. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 1-2
4-1 | Planned | Satisfies public's demand for additional water data. | |

| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|--|--|-----------------------------|---------|--|--------------------------|
| 15. Increase capabilities of existing Water Loss Audit application and redevelop application to conform to current agency technical standards and to meet current business requirements. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 3-2
1-2 | Current | Satisfies public's demand for additional water data; security improvements. | |
| 16. Enhance capabilities of existing system to allow for more accurate data to be captured. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 1-2
1-4
4-1 | Planned | Satisfies public's demand for more accurate water data; more accurate decision making of water usage and availability. | |
| 17. Redevelop the old groundwater monitoring system to conform to current agency technical standards and to meet current business requirements. | Objective 1.1: Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 5-1 | Planned | Security improvements; foundation for future operational improvements. | |

| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|--|--|------------------------------------|---------------|--|--|
| 18. Increase capabilities of existing major rivers system to meet current business requirements. | Objective 1.1:
Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. | 1-2
5-1 | Planned | Security improvements; foundation for future operational improvements; improves maintainability, consistency, and accessibility. | |
| 19. Increase the public's ability to access and analyze surface water data. | Objective 1.2:
Conduct water planning and financial assistance activities to ensure adequate long-term water supplies, wastewater treatment, and flood protection. | 1-2
4-1 | Planned | Satisfies public's demand for more openness in government. | Innovation: integration of basin data into existing geographic information systems environment. |
| 20. Develop an online application to capture survey information for the Conservation Advisory Council. | Objective 1.3:
Provide eligible political subdivisions in Texas with technical and/ or financial assistance for water conservation to support planning, conservation, and responsible development of water supplies to meet the future demands for water as identified in the regional and state water plans. | 1-2
1-4
4-1
4-2 | Planned | More informed decision making for water conservation. | |
| 21. Develop geographic base data capabilities to support floodplain mapping throughout the state. | Objective 1.4:
Administer the National Flood Insurance Program. | 1-2
1-4
4-1
4-2
5-1 | Planned | More informed decision-making capabilities of flood mapping, creating a foundation for future operational improvements. | Innovation: Online interactive mapping of floodplain status in support of public awareness and public decision makers. |

| Technology Initiative | Related Agency Objective | Related SSP Strategy/ (IES) | Status | Anticipated Benefit(s) | Best Practice, Benchmark |
|--|---|------------------------------------|---------------|--|--|
| 22. Develop an agency-wide loan, grant, and contract information management system to streamline customer's process for acquiring resources. | Objective 2.1: Provide savings to Texas communities by making cost-effective financial assistance available for water supply, water quality protection, and other water-related infrastructure needs. | 1-4
1-2
3-2
4-4
5-1 | Planned | Operational efficiencies of time and productivity; improved service delivery; security improvements. | Best Practice: Use EPA's Loan and Grant Tracking System. |
| 23. Review the State Revolving Fund loan process to improve the TWDB's marketing approach and reach core customers. | Objective 2.1: Provide savings to Texas communities by making cost-effective financial assistance available for water supply, water quality protection, and other water-related infrastructure needs. | 1-2
1-4
4-2
4-4 | Planned | Reduce time to process loans; improve customer satisfaction; reduce wait times. | Best Practice: Will require collaboration with TCEQ to modify their processes for a more streamlined loan process. |

Appendix



Description of Agency's Planning Process

Current Organizational Chart

Five Year Projections for Outcomes

Performance Measure Definitions

Implementing the Texas Transformation

Workforce Plan

Survey of Organizational Excellence Results and Utilization Plan

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Appendix A:

Description of Agency's Planning Process

Preparation for the 2009–2013 Strategic Plan began in the summer of 2007. Agency leadership meetings were held to discuss and review the current mission and vision statements, and at the October 2007 Board Work Session, the Board voted to uphold the current TWDB vision and mission statements.

The next step in the planning process was to assemble all stakeholder information and prepare it for the leadership's review. In the 2007–2011 strategic planning process, the TWDB refined the stakeholder meeting process to better facilitate the information gathering process. Each area used the knowledge garnered from these previous stakeholder forums to assist with information gathering for the current planning process.

Questions used in these meetings were structured to collect views on how well the TWDB is accomplishing its mission, identify priorities, and gather ideas on desired improvements. These are the five areas of focus based on the agency mission statement:

- Economic
- Political
- Technological
- Demographic
- Social

Various stakeholder meetings/questionnaires that were facilitated in preparation for the 2009–2013 Strategic Plan include:

- EPA Northbridge Focus Group on State Revolving Fund Marketing Initiative–February 2007
- Engineering Focus Sessions–July 2007
- Water Conservation Advisory Council–November 2007
- Regional Water Planning Consulting Firms–November 2007 to January 2008
- Texas Alliance of Groundwater Districts–December 2007

In addition, in December 2007, the TWDB held a water summit commemorating the 50<sup>th</sup> anniversary of the agency. During this summit, engineers, scientists, professors, municipalities, compact commissioners, river authorities, stakeholders, and citizens alike gathered together to talk water and what the major issues are in water's immediate and long term future.

In conjunction with the water summit, the agency conducted a targeted survey with strategic planning-related questions and questions on the overall effectiveness of the TWDB.

The information collected during the stakeholder process was analyzed and categorized based on each goal or initiative and the specific action required in order to accomplish each goal. The categorization of the stakeholder input focused on following recommended actions:

- Inclusion in the strategic plan
- Legislative Appropriations Request (LAR) exceptional item
- Need for budget structure change
- State legislation required
- Federal legislation required
- Rule change needed
- Procedural change needed
- Other action required
- No action required

The TWDB used this categorized stakeholder input to plan and coordinate the agency's legislative process development. This ensured that each stakeholder issue was addressed by the agency during its planning cycle. This input guided the TWDB's direction in developing the themes and challenges to be included in the Strategic Plan the 2010–2011 Legislative Appropriations Request, as well as laying the foundation for formulating the TWDB 2009 legislative priorities.

Subsequently, once all stakeholder information was assembled and disseminated to all offices, the

leadership of the organization began meeting on a weekly basis to continue the dialogue with regard to the agency's planning process. In these weekly meetings, the leadership worked to

- Identify strengths, weaknesses, opportunities, and threats;
- Dissect feedback from various stakeholder/customer workshops;
- Devise the External Assessment for each area based on stakeholder input;
- Formulate an Internal Action Plan for each area based on results from the Survey of Organizational Excellence;
- Prepare preliminary policy items for the 81st Legislative Session;

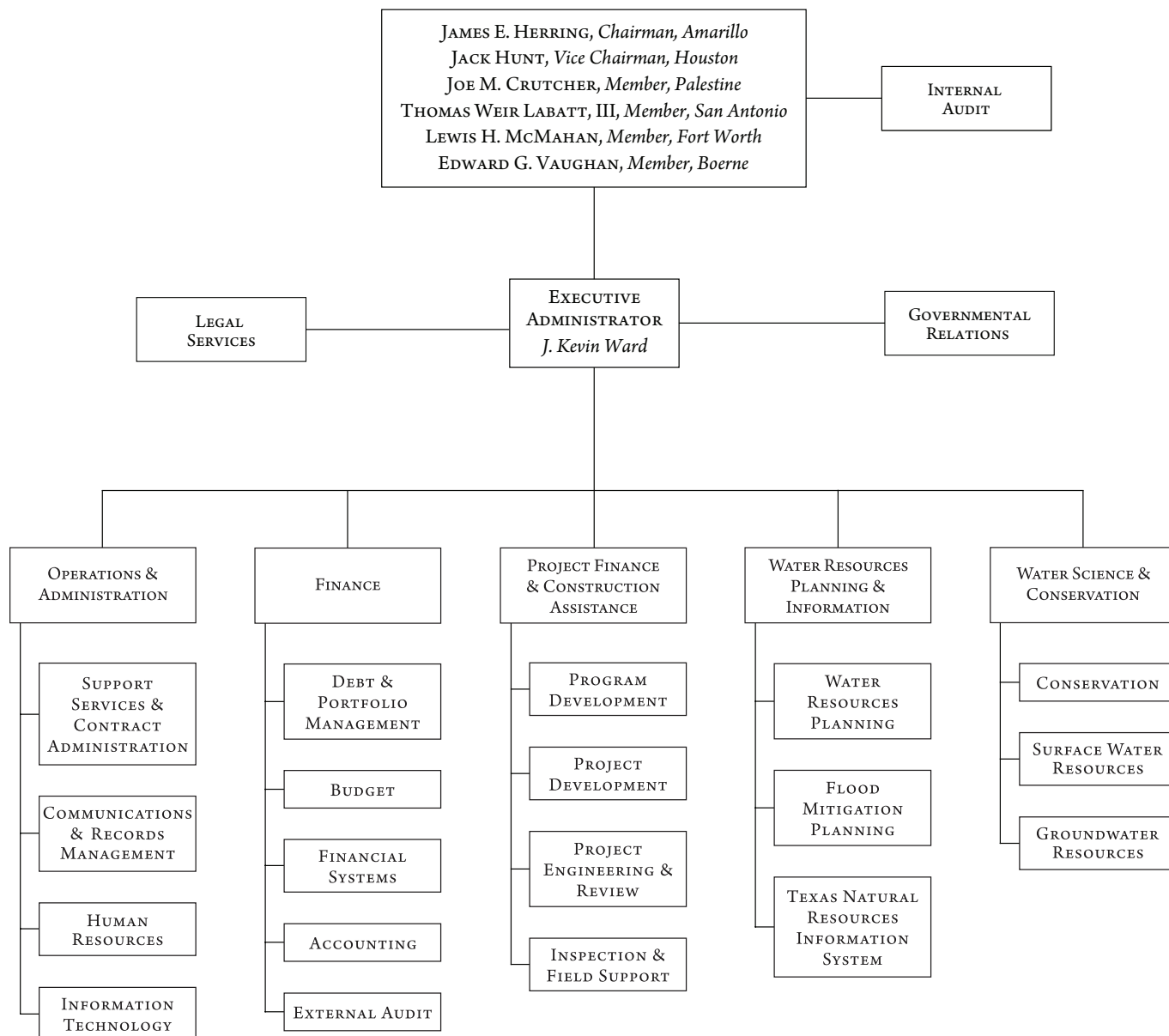
- Identify items for inclusion in the LAR;
- Identify all necessary changes to the agency's budget structure to align with the current mission of the agency; and
- Determine recommendations for key vs. non-key measures.

As an essential part of the preparation for the 2009-2013 Strategic Plan, the Board was briefed and approved all interim planning steps along the way. The Board also increased the standard number of work sessions during the planning phase to accommodate staff presenting items for briefing and/or consideration on a monthly basis.

Appendix B:

Current Organizational Chart

TEXAS WATER DEVELOPMENT BOARD Organization Chart



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Appendix C:

Five Year Projections for Outcomes

| Outcome | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|--------------|--------------|--------------|--------------|--------------|
| Percent of information available to adequately monitor the state's water supplies | 72.1% | 72.7% | 73.2% | 73.7% | 74.3% |
| Percent of key regional and statewide water planning activities completed | 90% | 90% | 90% | 90% | 90% |
| Percent of communities receiving technical and/or financial assistance | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% |
| Percent of water saved with financial assistance | 7.00% | 7.00% | 7.00% | 7.00% | 7.00% |
| Dollars committed as a percent of total financial assistance dollars | 79.8% | 79.3% | 78.6% | 78% | 77.2% |
| Dollars saved from TWDB assistance | \$61,320,542 | \$61,407,488 | \$54,948,956 | \$55,265,326 | \$55,182,776 |

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Appendix D:

Performance Measure Definitions

| AGENCY GOAL 1 WATER RESOURCES PLANNING | |
|--|---|
| FIRST OBJECTIVE | Operate statewide, water-related data collection, integration, dissemination, and evaluation programs that provide public access to adequate information to conduct planning of water resources projects. |
| Outcome Measure: | Percent of information available to adequately monitor the state's water supplies |
| <i>Short Definition:</i> | Percent of information available to adequately monitor the state's water supplies. |
| <i>Purpose/importance:</i> | This outcome reflects the percent of information available relative to the amount of information needed to adequately monitor the state's water supplies. The measure provides information concerning the adequacy of the state's water supply monitoring network aspects that are the TWDB's responsibility. |
| <i>Source/Collection:</i> | Information comes directly from TWDB monitoring programs for collection and analysis of groundwater, surface water, and environmental flow (bay, estuary, and instream) data, including data from cooperators, both paid, such as the USGS, and non-paid, such as groundwater conservation districts. Information is available when it has been collected by TWDB or other sources and processed by TWDB. |
| <i>Method of Calculation:</i> | Percent performance is calculated by dividing the amount of information available associated with adequately monitoring the state's water supplies from each TWDB monitoring program by the amount of information needed for each TWDB monitoring program to adequately monitor the state's groundwater and surface water supplies and multiplying by 100. These percentages are summed and their average is the reported measure. The amount of information needed for each TWDB monitoring program to monitor the state's water supplies adequately is contained in the Water Science and Conservation's Performance Measure Procedures document. The amount of information available associated with adequately monitoring the state's water supplies from each TWDB monitoring program is maintained by designated staff in spreadsheet form. |
| <i>Data Limitations:</i> | The TWDB does not have total control over either the amount or the time during which the information is received because this number reflects contributions from outside cooperators. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Actual performance higher than targeted reflects a greater amount of information available and is desirable. |

| STRATEGY | ENVIRONMENTAL IMPACT INFORMATION |
|-------------------------------|--|
| | |
| Output Measure: | Number of bay, estuary, and instream study elements completed |
| <i>Short Definition:</i> | Number of bay, estuary, and instream study elements completed. |
| <i>Purpose/importance:</i> | This measure shows the number of bay and estuary inflow and instream flow study elements completed annually as required by Texas Water Code Sections 16.058, 16.059, 11.1491, and 11.147. The measure also provides data on the progress of environmental flow needs studies necessary for planning, management, and availability modeling of the state's surface water as defined in Texas Water Code Section 11.021. |
| <i>Source/Collection:</i> | A study element is considered complete when designated staff has approved a study element. The number of study elements completed are maintained by designated staff in a spreadsheet according to the Water Science and Conservation's Performance Measure Procedures document. |
| <i>Method of Calculation:</i> | The number of study elements completed annually is calculated by adding the number of estuarine hydrographic surveys, hydrodynamic and salinity models, sediment analyses, nutrient analyses, fisheries analyses, freshwater inflow optimization analyses, water quality data collection and analysis, biological data collection and analysis, and verifications of needs for bays and estuaries to the number of instream flow study elements completed. The instream flow study elements are: study design, hydrologic and hydraulic evaluation, biological evaluation, physical processes evaluation, water quality evaluation, integration and interpretation, study report, and instream flow program support. |
| <i>Data Limitations:</i> | The number of study elements completed is dependent on the definition of study elements, which may be revised as necessary to fit the specific environment being studied. Verification of computed environmental flow needs information completed by cooperating agencies can be affected by other priorities in the joint interagency study program with the Texas Parks and Wildlife Department and the Texas Commission on Environmental Quality. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Actual performance higher than targeted would be desirable because it would provide needed information earlier in the process of regional and statewide water planning. |

| STRATEGY | WATER RESOURCES DATA |
|-------------------------------|--|
| | |
| Output Measure: | Number of data units collected/processed by TWDB staff |
| <i>Short Definition:</i> | Short Definition: Number of data units collected and/or processed by TWDB staff in support of monitoring, investigating, and defining the state's surface water and groundwater resources. |
| <i>Purpose/importance:</i> | Purpose/Importance: This information provides an indication of the availability of data (collected by the TWDB and made available to the public, the TWDB, private companies, and governmental entities) necessary to perform water supply planning. |
| <i>Source/Collection:</i> | Information comes directly from TWDB staff collecting data and from cooperators, both paid, such as the USGS, and non-paid, such as groundwater conservation districts. Data units consist of: number of semi-monthly reservoir level measurements; number of semi-monthly periods that streamflow measurements are taken from daily streamflow sites funded by the TWDB; number of semi-monthly periods that meteorological reports are provided to TWDB by cooperators from TWDB-maintained stations; number of one-hundred-surface-acre areas surveyed by the TWDB during reservoir surveys; number of groundwater level measurements collected from non-recorder wells; number of groundwater levels (six per month) collected from automatic recorder sites; and number of groundwater quality analyses collected from wells and springs. |
| <i>Method of Calculation:</i> | The number of data units is calculated quarterly and is maintained by designated staff in spreadsheets and databases according to the Water Science and Conservation's Performance Measures Procedures document. |
| <i>Data Limitations:</i> | The TWDB does not have total control over the amount nor the time during which the information is received because this number reflects contributions from outside cooperators. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Actual performance higher than targeted reflects a greater amount of information contributed by cooperators and is desirable. |

| | |
|-------------------------------|---|
| STRATEGY | AUTOMATED INFORMATION COLLECTION, MAINTENANCE AND DISSEMINATION |
| | |
| Output Measure: | Number of person-hours in training classes and conferences sponsored by TNRIS |
| <i>Short Definition:</i> | This measure reports the number of person-hours in classes and conferences sponsored by TNRIS. |
| <i>Purpose/importance:</i> | It quantifies the impact of TNRIS in providing technical training related to natural resource information and technology. |
| <i>Source/Collection:</i> | TNRIS training classes include workshops and short courses presented or sponsored by TNRIS. Outside experts may be hired by TNRIS on a consulting basis to provide instruction in the use of TNRIS-related facilities or technologies, or natural resource information. To be included, conferences must be sponsored or co-sponsored by TNRIS and relate to natural resource information and technologies. This measure is collected through registration records for each event to provide a total number of participants and the hours per event. |
| <i>Method of Calculation:</i> | The number of participants is then multiplied by the number of hours spent in each workshop, short course, training session, and conference to provide a total number of person-hours per event. |
| <i>Data Limitations:</i> | Measurement results are not subject to staff interpretation. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be reflected by higher than targeted results. |
| | |
| Output Measure: | Number of strategic mapping pool |
| <i>Short Definition:</i> | This measure records progress in maintaining the currency of the digital basemap for Texas, as defined by Texas Geographic Information Council (TGIC) in the Digital Texas 2004 report and initiated through the Texas Strategic Mapping (StratMap) Program created by the 75th Legislature in 1998. The digital base map consists of seven main layers or themes, augmented by fourteen additional layers. These layers can be classified in two categories: basemap vector layers and basemap raster themes (elevation, imagery). The modernization of the StratMap and basemap themes is accomplished by creating, updating, enhancing, or maintaining digital data layers. The measure is defined by counting the number of mapping units produced each quarter as a result of updates, maintenance, enhancement, and production of critical base map layers. |

| | |
|-------------------------------|--|
| <i>Purpose/importance:</i> | The measure is determined by the total number of current mapping units collected. Current mapping units are defined as updated, enhanced or new data at a scale of 1:24,000, or better, for one layer covering the area of one 7.5-minute USGS quadrangle. The Texas Geographic Information Council (TGIC) has identified these layers as requiring ongoing updates or maintenance to ensure that they will remain current. These themes are: transportation, political boundaries, elevation models and contours, watersheds, geographic names, parcel index, surface geology, street addresses, land use-land cover, and digital imagery. This measure is intended to ensure that the state receives, inventories, and integrates changes in these data themes as recorded by local, regional, state, and federal entities within Texas. Imagery and elevation models to update the digital data themes must also be received in a timely manner to ensure that the data remain useful for state and public planning purposes. |
| <i>Source/Collection:</i> | The measure information will be collected by the Texas Natural Resources Information System (TNRIS) division of the Texas Water Development Board (TWDB). Measure data will be stored and maintained within a database at TWDB. |
| <i>Method of Calculation:</i> | The measure is calculated as a total number of mapping units received, inventoried, and integrated into the existing basemap digital databases (both raster and vector) maintained by TNRIS. There are 4,376 quadrangle maps covering Texas. Total output for transportation and boundary update/maintenance is based on completing 4,376 mapping units per year. Output for digital imagery requires completion of 550 mapping units, covering 4,376 units over eight years. Annual output for all three data layers totals 9,302. |
| <i>Data Limitations:</i> | TWDB will be collecting updated transportation and boundary information from other entities of varied scale, quality, and format. Thus, data collected may not be standardized until processed by TWDB. Data updates may be submitted to TWDB at irregular intervals. TWDB will also be collecting data from a diverse group of data providers. Cooperation between these groups and TWDB is essential to ensure timely data updates and maintenance. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be to meet or exceed the targeted results. |
| | |
| Explanatory Measure: | Number of responses to requests for TNRIS-related information that are filled |
| <i>Short Definition:</i> | Report the number of requests from public or private entities for TNRIS-related information that are filled. |

| | |
|-------------------------------|--|
| <i>Purpose/importance:</i> | This measure reports the number of responses to requests from public or private entities for TNRIS-related information. This measure quantifies the role that TNRIS plays as the central repository and access for geo-spatial data utilized by governmental and private sector agencies in Texas. |
| <i>Source/Collection:</i> | <ul style="list-style-type: none"> • Quick Responses: Talled on a notepad and transferred to the Excel application to print monthly reports. • Self-Service: Consultants trained to use TNRIS archives have an access database that resides on the TWDB network. The consultants sign in and then provide a monthly paper summary of their data request. These are tallied by request, not by volume. • Data Delivery: A) Internet: The WebTrends Web tracking software counts data accesses on Web pages with downloadable data. TNRIS does not track “hits,” rather specific accesses to Web pages or sub-files. B) Sales: TNRIS accountant tracks the number of “orders” that have been placed into the accounting database for that month. This number only reflects actual transaction totals and does not reflect the total volume. • Professional Services: Included within the Data Delivery report but category is used periodically to identify products that can be packaged into a data delivery to minimize the use of Professional Services. |
| <i>Method of Calculation:</i> | <p>This measure is calculated by summing data gathered in the following categories:</p> <ul style="list-style-type: none"> • Self-Service requests: Data acquisitions by customers physically in the TNRIS office. • Quick Response requests: Requests that are answered quickly (approximately five minutes or less), refer the person to the correct location to obtain information, and do not require a product delivery. QRs may be provided verbally (in person or phone), through e-mails or faxes. • Data Delivery requests: Pre-packaged products delivered to a customer in the form of maps, digital data, handouts, and publications. DDs occur through the Internet, e-mails, over-the-counter, and faxes. Internet DDs are captured by a specialized counter that records the actual download of a computerized mapping or database file. • Professional Services requests: Compilations, searches, or analyses performed of available water resource data that is not pre-packaged. |
| <i>Data Limitations:</i> | A duplicate paper system may be utilized for self-service delivery or in the event the automated system is not available. Measurement results are not subject to staff interpretation. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be reflected by higher than targeted results. |

| | |
|-------------------------------|---|
| SECOND OBJECTIVE | Conduct water planning and financial assistance activities to ensure adequate long-term water supplies, wastewater treatment, and flood protection. |
| Outcome Measure: | Percent of key regional and statewide water planning activities completed |
| <i>Short Definition:</i> | Percent of key regional and statewide water planning activities completed within the five-year planning cycle. |
| <i>Purpose/importance:</i> | This outcome shows the percent of scheduled activities completed annually that are determined to be critical to the development of Regional and State Water Plans to meet future water supply needs in Texas. |
| <i>Source/Collection:</i> | <p>Measure annually assesses three activities that are consistently required each year throughout the cycle:</p> <ol style="list-style-type: none"> 1. Contract Management: Annual assessment is based on the number of total payment requests from the Planning Group Political Subdivisions (Contractors), which are paid within the contract specifications. 2. Project Management: Assessment is based on number of all scheduled Planning Group meetings that are supported by the presence and participation of a TWDB representative. 3. Database Management and Technical Assistance: Assessment based on the number of total requests for database information or assistance with database use that are fulfilled within the agreed period. |
| <i>Method of Calculation:</i> | <p>Annually, numbers of payment requests, database requests, and Planning Group meetings are collected. These numerical data are converted to a percentage for the activities as described above. The individual activities completed are aggregated and divided by number of activities to provide the annual assessment of completed activities.</p> <p>Example Inputs:
 FY 2003
 Contract management (58/64)
 Project management ((32/44)
 Database management (60/75)</p> $= (58+32+60)/(64+44+75)$ $= 150/183$ $= 82.0\%$ |
| <i>Data Limitations:</i> | No known data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |

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| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | To improve understanding and assessment of TWDB efforts throughout the regional and state water planning process. Higher than targeted performance indicates better progress and is desirable. |
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| STRATEGY | TECHNICAL ASSISTANCE AND MODELING |
| | |
| Output Measure: | Number of responses to requests for water resources information that are filled |
| <i>Short Definition:</i> | This measure reports the number of requests for groundwater information. |
| <i>Purpose/importance:</i> | This measure quantifies the role that the Groundwater Resources Division plays in the dissemination of valuable groundwater resource data to governmental and private concerns. |
| <i>Source/Collection:</i> | This measure is calculated by summing data requests in the following categories: <ul style="list-style-type: none"> • Quick Response requests: Requests for information that are answered quickly (approximately five minutes or less), refer the person to the correct location to obtain information, and do not require a product delivery. QRs may be provided verbally (in person or phone), through emails or faxes. • Data Delivery requests: Pre-packaged products delivered to a customer in the form of maps, digital data, handouts, and publications. DDs occur through the mail, email, over-the-counter, and fax. • Professional Services requests: Compilations, searches, or analyses performed of available water resource data that is not prepackaged. |
| <i>Method of Calculation:</i> | Requests, entered by staff, are collected and maintained in an electronic format. |
| <i>Data Limitations:</i> | Back-ups are run nightly on the Novell Network. The maximum data loss from a system failure or crash would be one day's worth of data. A duplicate paper system may be utilized for self-service delivery or in the event the automated system is not available. Measurement results are not subject to staff interpretation. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be reflected by higher than targeted results. |

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| STRATEGY | WATER RESOURCES PLANNING |
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| Output Measure: | Number of active grants for regional water, wastewater, flood, and research studies funded from the Research and Planning Fund |
| <i>Short Definition:</i> | Number of active grants for regional water, wastewater, flood, and research studies funded from the Research and Planning Fund. |
| <i>Purpose/importance:</i> | The number of active grants for studies is considered the number of studies funded from the Research and Planning Fund that require any management activity by TWDB staff and provides information on the workload associated with the grant program. A grant is active at the time of board action making a grant commitment until the contract retainer has been processed by designated staff in the Contract Administration Division. |
| <i>Source/Collection:</i> | Information for this measure is maintained by designated staff in a database according to the Office of Planning's Performance Measure Procedures document. |
| <i>Method of Calculation:</i> | This measure is calculated by adding the number of grant commitments made for studies during a particular fiscal year to the number of studies from previous fiscal years in progress at the beginning of each quarter. |
| <i>Data Limitations:</i> | No known data limitations. Measurement data is generated by TWDB staff through tracking of performance of grant studies as defined in the Office of Planning Performance Measures Procedures document. |
| <i>Calculation Type:</i> | Non-Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | A higher number is desired because this means that more grant money is being handed out. |

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| THIRD OBJECTIVE | Provide eligible political subdivisions in Texas with technical and/or financial assistance for water conservation to support planning, conservation, and responsible development of water supplies to meet the future demands for water as identified in the regional and state water plans. |
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| Outcome Measure: | Percent of communities receiving technical and/or financial assistance |
| <i>Short Definition:</i> | Percent of communities receiving technical and/or financial assistance for water planning and conservation. |
| <i>Purpose/importance:</i> | This outcome measures the number of communities that receive technical and/or financial assistance from the TWDB for water conservation and financial assistance for water, wastewater, or flood protection planning relative to the total estimated number of Texas communities eligible for assistance. This outcome provides information on the percent of Texas communities that the TWDB is able to assist with the referenced programs. |
| <i>Source/Collection:</i> | The total number of Texas communities eligible for assistance is contained in Water Science and Conservation's Performance Measure Procedures document. Records of the communities assisted during each fiscal year for each of the above program areas is maintained in a database by designated staff. Each community receiving assistance is assigned a common but unique identifier in each of the program databases. These databases are then analyzed annually to ensure that individual communities are not double-counted. A particular community is counted only once during each fiscal year regardless of the number of times that community receives technical or financial assistance from TWDB. |
| <i>Method of Calculation:</i> | The measure is calculated by dividing the combined number of communities and other entities that are provided with technical and/or financial assistance from TWDB related to water conservation and water, wastewater, and flood protection planning by the total number of Texas communities eligible for assistance and multiplying by 100. |
| <i>Data Limitations:</i> | Technical assistance may be provided to individuals or firms that do not indicate they are associated with an eligible community; and thus, that particular community is not identified and counted. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | A higher percentage of communities being assisted is desirable. |

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| Outcome Measure: | Percent of water saved with financial assistance |
| <i>Short Definition:</i> | Percent of annual water use saved by recipients of TWDB financial assistance. |
| <i>Purpose/importance:</i> | This outcome demonstrates the amount of water saved by recipients of TWDB financial assistance due to conservation efforts relative to the amount of water used by the recipients and provides information on the amount of water savings due to conservation efforts by those recipients. |
| <i>Source/Collection:</i> | The amount of water saved is the annual water savings in acre-feet resulting from: (1) improvements made with systems or equipment purchased with TWDB agricultural water conservation grants or loans or (2) implementation of water conservation programs required as a condition of receiving TWDB loans for water supply or water quality enhancement projects. Recipients of TWDB financial assistance are required by rule to submit an annual report that includes estimates of water savings. Reported water savings are entered into a database by designated staff. The percentage may be adjusted based on the professional judgment of staff to remove or account for abnormal weather conditions or information that may become available in the future for those percentages used after the entity no longer submits reports to the TWDB. Water savings will be calculated for as long as a financial repayment obligation exists to the TWDB. |
| <i>Method of Calculation:</i> | The measure is calculated by dividing the amounts of water reported as saved for recipients of financial assistance by the total amount of water used by the entities receiving the financial assistance and multiplying by 100. Savings will be entered into a database and the average of all entities will be calculated according to the Water Science and Conservation's Performance Measure Procedures document. |
| <i>Data Limitations:</i> | The entities' reporting of water savings may be inaccurate or incomplete. TWDB estimates for years after entities have stopped reporting may not include specific data for that entity in a particular year. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | A higher percentage of savings is desirable. |

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| STRATEGY | WATER CONSERVATION EDUCATION AND ASSISTANCE |
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| Output Measure: | Number of responses to requests for water conservation information, literature, data, technical assistance, and educational activities provided by TWDB staff |
| <i>Short Definition:</i> | This measure reports the number of requests from public and private entities and individuals for water conservation information, literature, data, technical assistance, and educational activities provided by TWDB staff. |
| <i>Purpose/importance:</i> | This measure is calculated by summing the number of responses to requests for information and assistance such as conservation information, literature, data, technical assistance, professional services, training, or equipment loans that is provided by TWDB Conservation staff. |
| <i>Source/Collection:</i> | This measure is calculated by summing data requests in the following categories: <ul style="list-style-type: none"> • Quick Response requests: Requests for information that are answered quickly (approximately five minutes or less), refer the person to the correct location to obtain information, and do not require a product delivery. QRs may be provided verbally (in person or phone) or through emails or faxes. • Data Delivery requests: Pre-packaged products delivered to a customer in the form of maps, digital data, handouts, and publications. DDs occur through the mail, email, over-the-counter, and fax. • Professional Services requests: Compilations, searches, or analyses performed of available water resource data that is not prepackaged. |
| <i>Method of Calculation:</i> | Requests, entered by staff, are collected and maintained in an electronic format. |
| <i>Data Limitations:</i> | Back-ups are run nightly on the Novell Network. The maximum data loss from a system failure or crash would be one day's worth of data. A duplicate paper system may be utilized for self-service delivery or in the event the automated system is not available. Measurement results are not subject to staff interpretation. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be reflected by higher than targeted results. |

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| FOURTH OBJECTIVE | Administer the National Flood Insurance Program (NFIP) |
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| STRATEGY | COMMUNITY ASSISTANCE PURSUANT TO NFIP |
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| Output Measure: | Number of communities assisted through community assistance contacts and community assistance visits |
| <i>Short Definition:</i> | This measure reports the number of community assistance contacts made and the number of community assistance visits conducted. Community Assistance Contacts provide an opportunity to establish or re-establish contact with an NFIP participating community for the purpose of determining if any problems or issues exist and to offer assistance if necessary. Community Assistance Contacts may include telephone or personal contact with a community. Community Assistance Visits are on-site assessments of a participating community's compliance with federal regulations, including a comprehensive assessment of the community's floodplain management program and its knowledge and understanding of the floodplain management requirements of the NFIP. |
| <i>Purpose/importance:</i> | The measure reflects the combined workload of agency staff associated with ensuring that communities that participate in the National Flood Insurance Program receive sufficient technical assistance and are compliant with federal floodplain management regulations. Failure to be compliant would result in the community being suspended from the program and its citizens losing the ability to obtain federal flood insurance. |
| <i>Source/Collection:</i> | The numbers of communities assisted through Community Assistance Contacts and Community Assistance Visits are entered by NFIP staff into the Federal Emergency Management Agency's Community Information System database after completion of a contact or visit. |
| <i>Method of Calculation:</i> | The number of communities assessed is tracked by NFIP staff. |
| <i>Data Limitations:</i> | No known data limitations. |
| <i>Calculation Type:</i> | Cumulative |
| <i>New Measure:</i> | Yes. |
| <i>Target Attainment:</i> | Desired performance would be reflected by meeting or exceeding targeted results. |

| AGENCY GOAL 2 WATER PROJECT FINANCING | |
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| FIRST OBJECTIVE | Provide savings to Texas communities by making cost-effective financial assistance available for water supply, water quality protection, and other water-related infrastructure needs. |
| Outcome Measure: | Dollars committed as a percent of total financial assistance dollars |
| <i>Short Definition:</i> | Total dollars committed as a percent of total financial assistance dollars available. |
| <i>Purpose/importance:</i> | This measure is intended to: demonstrate the TWDB's effort to make funds available for financing; measure our effectiveness in marketing and providing technical assistance; and measure our effectiveness at committing funds to cost-effective water related projects. |
| <i>Source/Collection:</i> | The source of the numerator ("Total dollars committed") will come from the Board's Financial Information System (FIS) or subsequent database system. The agency will look at historical periods for establishing the benchmark and at the actual commitment dollars for the budget reporting period, for the reporting period of record. Commitments are Board-approved dedications of funds for specific projects. |
| <i>Method of Calculation:</i> | The reporting period "total dollars committed" will be divided by the "total financial assistance dollars available" and expressed as a percentage. |
| <i>Data Limitations:</i> | The denominator is set at the time of the benchmark and should not change. However, if federal grants or state appropriations change during the year, then this could have effects on the target |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| Outcome Measure: | Dollars saved from TWDB assistance |
| <i>Short Definition:</i> | This measure indicates the projected interest savings to local governments resulting from TWDB financial assistance. |
| <i>Purpose/importance:</i> | This measure is important as it demonstrates the cost effectiveness of financial assistance provided to Texas communities. |
| <i>Source/Collection:</i> | A spreadsheet is used to calculate this measure. Current Year "Commitment Amounts" from the FIS or subsequent Board database system is the source of the numerator for the calculation. |

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| <i>Method of Calculation:</i> | For loans, using an estimated interest rate differential, calculate the difference in the interest cost for TWDB loans versus estimated market rates, commercial loan rates, or bond interest rates. Depending on the loan program, various differentials are assumed in order to reflect the level of savings estimated for the program. For grants, the savings are calculated by using the total estimated market or commercial loan principal and interest costs.
All TWDB loans and grant programs are included, except for General Research and Planning grants, Regional Water Planning grants, and Agricultural grants. The commitment dollar value used in this measure is not adjusted for commitment cancellations that occur when a loan is closed for less than the commitment amount, when a commitment expires without a closing, or when the TWDB formally cancels a commitment. Savings will be calculated as: $\text{Sum (Loans/type * Gross Int-saved Factor/type)} + \text{Sum (Grants/type)} + \text{Sum (Grants/type * GIFT)}$ |
| <i>Data Limitations:</i> | The gross dollar savings resulting from TWDB financial assistance can be limited by highly competitive interest rates. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| STRATEGY | STATE AND FEDERAL FINANCIAL ASSISTANCE PROGRAMS |
| | |
| Output Measure: | Number of state participation projects receiving financial assistance |
| <i>Short Definition:</i> | Measure indicates TWDB workload activity associated with state participation loans. State participation is when the state may purchase interest in a reservoir, water supply, or regional wastewater treatment project. The state's ownership interest will be purchased by the political subdivision over a specified period of time. |
| <i>Purpose/importance:</i> | This measure reflects the number of commitments provided to state participation projects and is important because it ensures the optimum development for areas of high growth where the existing customer base is not able to afford proper funding at that current time. |
| <i>Source/Collection:</i> | This information will come from FIS or a subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the number of state participation commitments. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target |

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| Output Measure: | Dollars committed to projects to implement the State Water Plan |
| <i>Short Definition:</i> | Sum of committed financial assistance (dollars) to projects identified in the State Water Plan (SWP) during the reporting period. Commitments are Board-approved dedications of funds for projects and are counted at the time of the Board action. |
| <i>Purpose/importance:</i> | This measure reflects the Board's commitment to the implementation of water management strategies in the SWP. This is important because it indicates progress on the implementation of the SWP, although only those funded through the Board, to prepare the state to meet future water needs and for drought. The breakout of the individual water management strategies in the Comment section of this measure will provide staff with an overview of which SWP strategies are being implemented. |
| <i>Source/Collection:</i> | Board financial assistance commitments to SWP projects will come from an internal PFCA or subsequent Board database system, which records project information provided by Water Resources Planning & Information (WRPI). Dollars of commitments will come from the FIS or subsequent Board database. |
| <i>Method of Calculation:</i> | The measure is calculated by summing the amount of financial assistance committed for the recording period and year to date. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The dollar amount committed is not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Number of commitments to State Water Plan projects |
| <i>Short Definition:</i> | Count of Board commitments of financial assistance to projects identified in the State Water Plan (SWP) during the reporting period. Commitments are Board-approved dedications of funds for projects and are counted at the time of the Board action. Board actions to increase the amount of grant and loan will also be counted as a commitment. |
| <i>Purpose/importance:</i> | This measure reflects the Board's commitment to the implementation of water management strategies in the SWP. This is important because it indicates progress on the implementation of the SWP to prepare the state to meet future water needs and for drought. The breakout of the individual water management strategies in the Comment section of this measure will provide staff with an overview of which SWP strategies are being implemented. |

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| <i>Source/Collection:</i> | The number of the Board's financial assistance commitments to SWP projects will come from an internal PFCA or subsequent Board database, which records project information provided by Water Resources Planning & Information (WRPI). |
| <i>Method of Calculation:</i> | Count the number of commitments made each month from the data supplied by the internal PFCA or subsequent Board database system. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The count is not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| Output Measure: | Number of financial assistance commitments made |
| <i>Short Definition:</i> | Provide financial assistance through SRF Programs and other Federal and State programs to save money for Texas communities for water supply, water quality protection, and other water-related projects. |
| <i>Purpose/importance:</i> | This data is important because it represents the number of cost-effective financial assistance commitments provided to communities by TWDB. |
| <i>Source/Collection:</i> | This information is provided in the FIS or subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the number of financial assistance commitments provided to communities. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The count is not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Number of commitments to small, rural, or disadvantaged community projects |
| <i>Short Definition:</i> | This is a count of the number of loan and grant financial assistance commitments the TWDB makes to small, rural, or disadvantaged community projects through one of the TWDB programs directed at small, rural, or disadvantaged communities. |
| <i>Purpose/importance:</i> | This measure is important because it represents the number of small, rural, and disadvantaged communities that receive cost-effective financial assistance commitments from the TWDB. |

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| <i>Source/Collection:</i> | The performance data will be based on Board commitments recorded in the database or subsequent Board database system. |
| <i>Method of Calculation:</i> | Query the FIS or subsequent Board database system to identify the commitments made during the reporting period. A commitment consists of a Board action on one project for funding from one program. Board actions to increase the amount of grant and loan will also be counted as a commitment. Rural is defined as a communities of less than 5,000 in population and in a county not included in a MSA. Small communities are those with populations of less than 5,000. This information is captured in population data from Water Resources Planning and Information (WRPI) and the IUPs. Disadvantaged is defined as those communities receiving funding from any of the programs identified in this measure. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The count is not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Total dollars of financial assistance committed |
| <i>Short Definition:</i> | This measure accounts for the total dollars in financial assistance provided to communities per reporting period. |
| <i>Purpose/importance:</i> | This measure represents a significant workload effort and is an important measure that assesses the TWDB's performance in providing financial assistance to communities. |
| <i>Source/Collection:</i> | This information is provided in the FIS or subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the dollar amount in financial assistance commitments provided to communities. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The count is not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |

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| Output Measure: | Total dollars committed to small, rural, or disadvantaged community projects through agency programs targeting such communities |
| <i>Short Definition:</i> | Sum of the dollar value of loan and grant financial assistance commitments the TWDB makes to small, rural, or disadvantaged community projects through one of the TWDB programs directed at small, rural, or disadvantaged communities. |
| <i>Purpose/importance:</i> | The performance data will be based on Board commitments recorded in the FIS or subsequent Board database system. |
| <i>Source/Collection:</i> | Query the FIS database or subsequent Board database system to identify and sum the dollar value of commitments made during the reporting period from TWDB programs. |
| <i>Method of Calculation:</i> | Query the FIS database to identify and sum the dollar value of commitments made during the reporting period from the programs listed in the source/ collection of data. A commitment consists of a Board action on one project for funding from one program. Dollars associated with Board actions to increase the amount of grant and loan will also be counted in the total. |
| <i>Data Limitations:</i> | Recipients may withdraw from the financial assistance commitments without taking any funds. The dollars are not adjusted for such withdrawals. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Number of communities with active financial assistance agreements |
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| <i>Short Definition:</i> | This measure accounts for the number of entities having commitments and/or active loan or grant agreements requiring financial compliance, monitoring, and day-to-day portfolio and contract administration. |
| <i>Purpose/importance:</i> | This measure will provide the TWDB and the legislature a gauge of how many communities the TWDB is interacting with each year. |
| <i>Source/Collection:</i> | This information is provided in the FIS or subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the number of communities that had active financial assistance agreements during the reporting period. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |

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| Output Measure: | Number of construction contracts managed |
| <i>Short Definition:</i> | Construction contracts in progress are construction contracts that result from non-EDAP financial assistance commitments approved by the TWDB that are in various stages of construction, from approval of plans and specifications through construction to completion, verified by final inspection. |
| <i>Purpose/importance:</i> | This measure demonstrates the staff effort required after a financial assistance commitment is made to ensure completion of projects. Once entities are granted commitments, there are a number of construction contracts that must be executed to complete a project. This measure is important because it enables the TWDB to track the progress of the construction contracts, which directly reflects the completeness of a project. |
| <i>Source/Collection:</i> | This information is provided in an internal PFCFA (Inspection & Field Support database IFS) or subsequent Board database system. |
| <i>Method of Calculation:</i> | This measure is calculated each quarter by totaling the number of construction contracts in progress. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Number of non-EDAP financial assistance agreements closed/executed |
| <i>Short Definition:</i> | This measure accounts for the number of non-EDAP financial assistance agreements closings processed per reporting period. |
| <i>Purpose/importance:</i> | This measure quantifies the amount of information input to the Facility Needs (FN) Section database system or subsequent Board database system. The database facilitates and aids FN participation in two federally mandated water-related infrastructure needs surveys: 1) the Clean Water (Act) Needs Survey, and 2) the (Safe) Drinking Water (Act) Needs Survey. Needs identified for Texas determine the state's allotment of federal funding for the Clean Water and Drinking Water State Revolving Fund Programs. |

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| <i>Source/Collection:</i> | Communities and other entities includes cities, water districts, municipal utility districts, water supply corporations, and other political subdivisions that manage or plan for water resources for which TWDB staff obtains current needs information regarding water, wastewater, and other water-related infrastructure. Update information is collected by: 1) direct contact with communities (e.g., site visits) by TWDB staff, 2) various secondary sources including Texas Commission on Environmental Quality (TCEQ) files and databases, 3) capital improvement planning documents obtained from public utilities, 4) TWDB-funded facility planning studies, and 5) direct mail surveys. A network database is maintained that includes facility needs data for Texas communities. A need is “identified” when a community/entity record is either established or updated in the database. |
| <i>Method of Calculation:</i> | This measure is calculated each quarter by totaling the number of construction contracts in progress. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Output Measure: | Number of new or updated water or wastewater facility needs |
| <i>Short Definition:</i> | This measure reports the number of updates to information on water-related facility needs for Texas communities and other entities. |
| <i>Purpose/importance:</i> | This measure quantifies the amount of information input to the Facility Needs (FN) Section database system or subsequent Board database system. The database facilitates and aids FN participation in two federally mandated water-related infrastructure needs surveys: 1) the Clean Water (Act) Needs Survey, and 2) the (Safe) Drinking Water (Act) Needs Survey. Needs identified for Texas determine the state’s allotment of federal funding for the Clean Water and Drinking Water State Revolving Fund Programs. |

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| <i>Source/Collection:</i> | Communities and other entities includes cities, water districts, municipal utility districts, water supply corporations, and other political subdivisions that manage or plan for water resources for which TWDB staff obtains current needs information regarding water, wastewater and other water-related infrastructure. Update information is collected by: 1) direct contact with communities (e.g., site visits) by TWDB staff, 2) various secondary sources including Texas Commission on Environmental Quality (TCEQ) files and databases, 3) capital improvement planning documents obtained from public utilities, 4) TWDB-funded facility planning studies, and 5) direct mail surveys. A network database is maintained that includes facility needs data for Texas communities. A need is “identified” when a community/entity record is either established or updated in the database. |
| <i>Method of Calculation:</i> | The calculation methodology is a simple sum of the number of facility database records that have been updated. |
| <i>Data Limitations:</i> | Back-ups are run nightly on the agency’s Unix database server. The maximum data loss from a system failure would be one day’s input. Measurement results are not subject to staff interpretation. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Desired performance would be reflected by higher than targeted results. |
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| Explanatory Measure: | Number receiving water or wastewater service from regional systems |
| <i>Short Definition:</i> | This measure indicates TWDB workload activity associated with providing communities with water or wastewater service through regional systems with state ownership investment. |
| <i>Purpose/importance:</i> | This measure identifies the number of communities benefiting from TWDB-funded state participation projects. |
| <i>Source/Collection:</i> | The information that is used to generate the quarterly performance for this measure is maintained in an internal PFCAs database or subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the number of communities that received state participation funds. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
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| Explanatory Measure: | Dollars saved on water and wastewater service from regional systems |

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| <i>Short Definition:</i> | This measure indicates dollars saved by regional project sponsors that received a TWDB financial assistance commitment for a state participation project. |
| <i>Purpose/importance:</i> | This measure demonstrates the dollars saved by entities receiving a state participation financial assistance commitment. This measure is important, as it provides a basis for comparing TWDB interest rates with commercial market interest rates. |
| <i>Source/Collection:</i> | The total dollar savings for regional systems with state ownership is determined based on historical trends. The total projected savings provided by the division director for the fiscal year are then entered into a spreadsheet and totaled. |
| <i>Method of Calculation:</i> | Savings are based on a rate differential and calculated when a commitment is made. Savings are calculated according to the market rate differential between the total projected repurchase cost and the projected market cost, using the commitment report. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| Explanatory Measure: | Dollars of financial assistance made available |
| <i>Short Definition:</i> | The sum of the dollars that are made available for each financial assistance program over the course of a fiscal year. Through Intended Use Plans, sustainable capacity models, and appropriations the agency will establish an amount of funds designated as available for funding. |
| <i>Purpose/importance:</i> | This measure is important because it establishes a base line of available resources from which the Board staff can develop projects and establish targets and goals for financial assistance commitments. While it may seem that the resources are not limited, except by bond authorization authority, there are, in fact, limits based upon certain program capacities, the amount of federal grants available, and the limitations or enhancements set by Appropriations Bill Riders. Therefore, this is an important benchmark to adequately measure the success achieved in committing funds while respecting the limitations of resources actually available while running sound and prudent programs of assurance to Texas communities. |

| | |
|-------------------------------|--|
| <i>Source/Collection:</i> | The source of this will be “total financial assistance dollars available” for the specific period for financial assistance commitments. This total will be derived from the sum of money identified as available in the Intended Use Plan for the Drinking Water State Revolving Fund Program, the sustainable capacity models for the Clean Water State Revolving Fund Program and State Loan Program (Development Fund II), program fund balances, pending bond issues, and Legislative Appropriations and/or debt issuance authorization for the other financial assistance programs. |
| <i>Method of Calculation:</i> | The total will be derived from the sum of money identified as from the various sources listed. |
| <i>Data Limitations:</i> | This amount available is set as the benchmark for evaluating our performance and should not change after the amounts available for each program are established. Revisions to capacity models made late in the fiscal year will change the benchmark. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| Efficiency Measure: | Administrative cost per active financial assistance agreement |
| <i>Short Definition:</i> | This measure indicates the total dollars spent per active financial assistance agreement. |
| <i>Purpose/importance:</i> | This measure demonstrates the average cost for each financial assistance agreement. |
| <i>Source/Collection:</i> | The financial assistance information is provided in the FIS or subsequent Board database system. The administration cost information is maintained in the agency’s MIP system or subsequent Board database system. |
| <i>Method of Calculation:</i> | Per reporting period, the total number of active financial assistance agreements is divided by the total administrative cost of the financial assistance programs. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Lower than target. |
| | |
| Efficiency Measure: | Financial assistance dollars managed per FTE |
| <i>Short Definition:</i> | This measure indicates the total dollars managed and administered by staff in the financial assistance programs. |
| <i>Purpose/importance:</i> | This measure demonstrates the average amount of funds that are managed by program staff. |

| | |
|-------------------------------|---|
| <i>Source/Collection:</i> | Data on the loan dollars managed is provided in the FIS or subsequent Board database system. The FTE information is maintained in the agency's USAS system. |
| <i>Method of Calculation:</i> | Data on the loan dollars managed is provided in a database system that was created by TWDB staff called the Financial Information System (FIS). Data on the amount of grant dollars managed are maintained in the agency's EVARE system. The FTE information is maintained in the agency's USAS system. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| STRATEGY | ECONOMICALLY DISTRESSED AREAS PROGRAM |
| | |
| Output Measure: | Number of economically distressed areas project loans and grants closed |
| <i>Short Definition:</i> | This measure indicates TWDB workload activity associated with economically distressed areas. The number of loans closed and grants executed, which are funded from the Economically Distressed Areas Program Account. |
| <i>Purpose/importance:</i> | This is a measure of major TWDB activity for the Economically Distressed Areas Program. |
| <i>Source/Collection:</i> | The information for loans and grants closed or subsequent Board database system. |
| <i>Method of Calculation:</i> | The measure is calculated each quarter by totaling the number of economically distressed areas loans closed and grants executed. |
| <i>Data Limitations:</i> | No limitations. |
| <i>Calculation Type:</i> | Cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| Output Measure: | Number of completed economically distressed areas projects |
| <i>Short Definition:</i> | This measure indicates the number of projects for which the TWDB has determined construction is substantially complete. |
| <i>Purpose/importance:</i> | This measure demonstrates the progress of the EDAP by counting the number of completed projects. |

| | |
|-------------------------------|---|
| <i>Source/Collection:</i> | The information that is used to generate the quarterly performance for this measure is maintained in a PFCA internal database or subsequent Board database system. The PFCA Inspection Field Offices monitor the progress of construction contracts for all of the entities that have a commitment with the TWDB. All contracts associated with economically distressed areas programs are included in this database. |
| <i>Method of Calculation:</i> | The measure is calculated by totaling the number of completed economically distressed areas construction projects contracts. |
| <i>Data Limitations:</i> | No limitations. |
| <i>Calculation Type:</i> | Although the measure is cumulative over time, it includes performance data carried over from previous fiscal years. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |
| | |
| Output Measure: | Construction in progress for economically distressed areas projects |
| <i>Short Definition:</i> | Construction contracts in progress are regarded as loan/grant commitments approved by the TWDB that are in various stages of construction, from approval of plans and specifications through construction to completion, verified by final inspection. |
| <i>Purpose/importance:</i> | This measure demonstrates the staff effort required after a financial assistance commitment is made to ensure completion of projects. |
| <i>Source/Collection:</i> | The information used to generate the quarterly performance for this measure is maintained in a PFCA internal database or subsequent Board database system. |
| <i>Method of Calculation:</i> | This measure is calculated by beginning with a baseline number of all contracts with approved plans and specifications, built without a final inspection at the beginning of each fiscal year. The measure for the first quarter is calculated by taking the beginning baseline number and adding all plans and specifications approved during the quarter. For the second, third, and fourth quarters, the measure is calculated by taking the number at the end of the previous quarter and adding the number of plans and specifications approved during the quarter and subtracting the number of final inspections conducted during the previous quarter. The fiscal year end number is calculated by taking the fourth quarter, which will then also become the baseline number for the first quarter of the following fiscal year. |
| <i>Data Limitations:</i> | No limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |

| | |
|-------------------------------|---|
| Explanatory Measure: | Economically distressed area residents provided adequate water supplies or wastewater systems |
| <i>Short Definition:</i> | This measure indicates the number of people who will be able to receive adequate water or wastewater service. |
| <i>Purpose/importance:</i> | This measure demonstrates the number of residents who may benefit from the EDAP and will have safe drinking water. |
| <i>Source/Collection:</i> | The number of residents that can be served by a completed construction project is reported in the EDAP monthly status report. When a project has been determined to be complete by running the query identified in Output Measure 02-01-02.03, the information is provided to the administrative technician that maintains the EDAP monthly report. Each month, projects are reported by phase of development at the end of the month. The advancement of a project from construction to completion also reflects the number of economically distressed areas and residents that can be served by the completed project. A running total is calculated in the Financial Summary, which is located at V:\share\status\Fundbrk2.xls - \$_Sum. |
| <i>Method of Calculation:</i> | The total number of economically distressed areas residents is calculated by adding the number of residents identified in the EDAP Monthly Status Report. |
| <i>Data Limitations:</i> | No data limitations. |
| <i>Calculation Type:</i> | Non-cumulative. |
| <i>New Measure:</i> | No. |
| <i>Target Attainment:</i> | Higher than target. |

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Appendix E:

Implementing the Texas Transformation

Managed Services

The Texas Water Development Board (TWDB) participates and uses various managed services offered by the Department of Information Resources. For example, the TWDB was selected to participate in the managed Texas Data Center Services initiative; the TWDB uses TexasOnline.com for credit card transactions; the TWDB is participating in the Comptroller of Public Accounts enterprise resource planning initiative; and the TWDB uses TEX-AN communications services.

Information and Communications Technology (ICT) Cooperative Contracts

The TWDB extensively uses DIR's Information and Communications Technology (ICT) Cooperative Contracts as much as possible. When the TWDB researches an item for purchase, the first place that is searched is DIR's Store to find a contract that includes TWDB's desired item. The TWDB then contacts the vendor and works with them to ensure the TWDB gets the best price available through state pricing and contracts.

State Enterprise Security Plan (SESP)

The TWDB has addressed Goal 1 of the SESP; Prevent Cyber Attacks and Incidents against Critical Infrastructure through implementation of an Intrusion Prevention System/Intrusion Detection System firewall and provide email filtering to prevent cyber attacks. Going forward, the TWDB needs to maintain an aggressive patch management program. Additionally, the TWDB encourages staff to attend security education and training.

The TWDB has addressed Goal 2 of the SESP, Reduce Vulnerability to Cyber Attacks and Other Disruptions through alert notifications from US-CERT and various national security organizations; information pertinent to TWDB's business environment is shared through emails and

newsletters. The TWDB is working to improve communication of vulnerabilities through creating an internal security Web page that will link to the various national security organizations' information. DIR's security policies templates were used in creating agency security policies and are maintained and kept current on an annual basis.

The TWDB has addressed Goal 3 of the SESP, Respond and Recover to Minimize the Impact of Successful Cyber Attacks and Disruptions, by having DIR Security perform Controlled Penetration Testing on an annual basis and through contracting with security vendors to perform vulnerability assessments and then create a remediation plan on issues identified.

Confidential data

The TWDB maintains Information Technology Security Policies that address handling and privacy of confidential information at the TWDB. Additionally, multiple layers of security play a significant role in TWDB's privacy practices. The TWDB maintains user access control lists to all sensitive information and destruction of hard drives prior to surplus is a standard practice. The TWDB organizational units that manage privacy functions include Human Resources, Finance, Information Technology, and Legal staff. Future plans for improvement include email encryption, improved portable device encryption, and utilization of virtual private environments.

Web Usability

The TWDB recently implemented a new search engine technology that drastically improved searching capabilities of TWDB's Web content. The TWDB is currently undergoing a Web site revitalization process which will improve Web page usability and accessibility.

Life Cycle Management

The TWDB recently implemented an email archiving application that makes global searching of emails records better. The TWDB is in the process of expanding its existing electronic documentation management system, which will improve life cycle management of agency data and information.

Interoperability

The TWDB continues to maintain and enhance its Water Information Integration and Dissemination application, which provides a means of sharing the agency's water data to the public. The TWDB continues to research better ways of sharing Geographic Information Systems data through collaborative efforts with industry leaders.

Software Platforms

The TWDB is in the process of standardizing its application development environment and architecture, has plans to migrate to a single database system, and has standardized on an Office Suite package and desktop operating system. For other commercial off the shelf software, the TWDB continues efforts towards maintaining a standardized environment.

As an agency participating in the data center services (DCS) program, the TWDB will consolidate operations to the state data centers in Austin and San Angelo in the next 18 – 24 months. The consolidation includes migration to the DCS standard software platforms and tools for greater consistency across the state. Additionally, the TWDB submits new infrastructure technology purchases through the DCS solution request process. The solution request process uses the DCS standard configurations and includes enterprise-level reviews of solutions to ensure alignment with the state's direction for data center services.

Environmental Resource Consumption

Energy efficiency is one of the criteria the TWDB uses when evaluating and acquiring technology equipment, and all computer purchases are acquired through existing DIR contracts. Additionally, as an agency participating in the data center services program, the TWDB will consolidate operations to the state data centers in Austin and San Angelo in the next 18 – 24 months. The state data centers use highly efficient energy management systems, including double-conversion technology for the uninterruptible power supply (UPS) direct current (DC) units and specialized lighting design that uses 23 percent less electricity than the state energy allowance. In addition to migrating operations to the more efficient environment, the TWDB will virtualize systems management by re-aggregating distributed systems into virtual systems, replace older, less efficient technology, and employ other emerging technology strategies to reduce the TWDB's technology footprint. The Technology Plan delivered as part of the Data Center Services contract describes the TWDB's consolidation and virtualization plans in detail.

Appendix F:

Workforce Plan

Overview of Operations

Agency Core and Mission

The TWDB is the state's water planning and water project financing agency. The TWDB's main responsibilities are threefold: collecting and disseminating water-related data; assisting with regional water planning and preparing the state water plan for the development of the state's water resources; and administering cost-effective financial programs for the construction of water supply, wastewater treatment, flood control and agricultural water conservation projects.

Since 1957, the TWDB has been charged with addressing the state's water needs. With the passage of Senate Bills 1 (75<sup>th</sup> Texas Legislature), 2 (76<sup>th</sup> Texas Legislature), and 3 (80<sup>th</sup> Texas Legislature), federal and state organizations, political subdivisions, and regional water planning groups (planning groups) have assumed increased responsibility for ensuring sufficient water supplies for the state. The TWDB has a leadership and support role through guiding, enabling, and supporting the responsible development of the state's water resources to ensure that sufficient water will be available at a reasonable cost while protecting the agricultural and natural resources of the state.

Agency Vision

Sustainable, affordable, quality water for Texans, our economy, and our environment.

Agency Mission

To provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

No anticipated changes in the agency's mission or vision are foreseen in the near future. Even with new statutory requirements from the legislature, the core of the agency will remain constant. The agency

leadership, however, has a different perspective regarding strategies. With each new program or mandate from the legislature, the executive leadership team assesses the need for new or changed agency strategies. For example, due to the legislative mandate that moved the NFIP program from TCEQ to TWDB after the 80<sup>th</sup> Legislative Session, the leadership is asking the LBB to approve the addition of a new strategy to our budget structure to account for this new program and all funds and responsibilities that come with it.

Business Functions and Area Missions

The following is an account of the core business functions and missions of each area in the agency.

EXECUTIVE ADMINISTRATION

Executive Administration houses the Executive Administrator of the TWDB, Legal Services, and Governmental Relations.

Legal Services is comprised of the agency's General Counsel, 5 staff attorneys, a legal assistant, and an executive assistant. The General Counsel represents the agency in all hearings and negotiations. Legal Services is responsible for posting and maintaining Board agendas and meeting minutes; they process all public information inquiries, review all contracts, Board resolutions, and provide sound legal advice and research to the agency.

The TWDB Governmental Relations team works with both state and federal governmental entities and representatives to help carry out the mission of the agency. Before each legislative session, the office compiles a Biennial Report to the Legislature that details where the Board is in regard to carrying out our mission and what tools we need to ensure our ability to move forward.

INTERNAL AUDIT

The division of Internal audit is a function required by Texas Internal Auditing Act (Chapter 2102) of Texas

Government Code. Internal auditors are governed by *Government Auditing Standards* and *Standards for Professional Practice of Internal Auditing* of the Institute of Internal Auditors. In the TWDB organizational structure, this function reports directly to the Board, and therefore is a non-partial, non-biased entity.

The objective of this division is to assist TWDB management and Board members in effectively discharging responsibilities. The mission of the Internal Audit division is to present to the management and the Audit Committee determinations of adequacy/effectiveness of internal controls, objective reports, recommendations, and consultations.

OPERATIONS AND ADMINISTRATION

Operations and Administration strives to provide professional and constructive support to all areas in the agency in order to ensure delivery of an effective and efficient system of services for the employees and stakeholders of the TWDB.

Additionally, Operations and Administration is responsible for all agency “special projects,” such as the recent Water Summit 2007, the Strategic Planning process, and the agency’s Performance Measures. Operations and Administration has five separate divisions: Administrative Services, Communications and Records Management, Support Services and Contract Administration, Human Resources, and Information Technology.

Administrative Services

Administrative Services provides daily clerical support to the Executive Administrator and the front reception for the agency, facilitates monthly Board Books for the regular Board meetings, administers all Board communication, and is responsible for all Board travel and logistics.

Communications and Records Management

Communications is the Agency’s direct contact with the media. The Communications Officer serves as the point of contact for media inquiries for the agency, provides media training for staff, and acts as agency contact for open records requests and general inquiries. The Web Administration, Graphics Support, and Publications division of Communications

maintains, repairs, and updates external and internal Web sites for the agency and edits and produces technical, legislative, and administrative reports, brochures, booklets, and other informational materials. The Records Management division within Communications processes all incoming mail for the Executive Administrator and for Project Finance and Construction Assistance; provides record management services on all TWDB loans, grants, and contracts; and assists Legal Services with open records requests.

Support Services and Contract Administration

The Support Services Division of Operations and Administration provides mail services, fleet management, and staff support and also provides facility support such as office space management, lease management, building safety, telecommunications, etc. The division also provides Board meeting coordination and Board member transportation during special events and at regular Board meetings. Within this division, Contract Administration provides agency-wide contract administration to include contract development, contract compliance, contract monitoring, and related payment authorization. Contracting also provides procurement functions to acquire materials, equipment, and services in accordance with state and federal rules and regulations.

Human Resources

The Human Resources Department is essential for facilitating the accomplishment of the TWDB’s mission by providing services and administering benefits that promote the security and well being of the TWDB’s most important resource—its employees. This division is committed to providing administrative services to the employees of the TWDB in the areas of human resources including employee benefits, salary administration, human resources development, personnel records, employment, and employee relations.

Information Technology (IT)

Information Technology serves as the information resources liaison between the Executive Management, Department of Information Resources,

Legislative Budget Board, and State Auditor's Office. IT oversees the implementation of new technology into the TWDB, ensures the agency's network is secure and reliable, manages the agency's Data Center Services contract, trains new employees on agency PC procedures, ensures technology standards are published and followed, and resolves user requests and reported computer problems. Within IT, there are various divisions that help support all functions of the agency. These staff members maintain over 50 agency systems, databases, and applications, manage the Water Information, Integration, and Dissemination Web portal, serve as the project manager for the systems integration process with EPA known as TxWISE (Texas Water Information System Expansion), maintain the Online Regional Water Planning Data Submission System (DB12), and create specialized maps requested frequently from the Texas Legislature and other various political entities and the public.

FINANCE

The mission of the Office of the Chief Financial Officer is to provide our customers with centralized, timely, meaningful, and quality financial services and to ensure fiscal integrity by investing and protecting the Board's assets. The primary responsibilities of the Office of Finance are to oversee day-to-day financial activities, provide support to the agency through the timely and accurate processing of payroll and financial transactions, formulate and monitor the agency budget, report financial and budget information, coordinate all activities related to issuance of bonds, invest funds in compliance with the Public Funds Investment Act, prepare cash flow and loan analyses and interest rate calculations, and provide financial stability reviews of borrowers. Finance comprises five areas: Accounting, Budget, Debt and Portfolio Management, External Audit, and Financial Systems.

Accounting

Accounting maintains the general ledger; prepares timely and accurate financial reports for internal and external recipients; processes all payments to vendors, loan recipients, grantees, and employees;

processes all receipts and loan repayments; and processes employee payroll.

Budget

Budget manages the development, preparation, and maintenance of the TWDB's operating budget and position control; prepares budget-related financial data and reports for the Board, staff, and oversight agencies; prepares the Legislative Appropriation Request; and prepares fiscal notes, briefing documents, and responses to budget-related issues during the legislative session.

Debt and Portfolio Management

Debt and Portfolio Management provides comprehensive financial analysis for the management of the TWDB's portfolio; issues bonds to obtain money at the most economical cost to the agency to fund loan and grant programs; prepares cash flow and loan analyses and interest rate calculations; and invests funds in compliance with the Public Funds Investment Act.

External Audit

The External Audit Division monitors the loan portfolio ensuring the prevention of loan defaults through financial stability reviews of its borrowers and monitors financial assistance program requirements to ensure finance-related and contractual compliance by borrowers and grantees.

Financial Systems

The division of Financial Systems directs and/or oversees the financial systems of the agency, provides security and system access for TWDB and oversight agency financial systems, and provides a single point of contact for financial systems.

PROJECT FINANCE AND CONSTRUCTION ASSISTANCE (PFCA)

Project Finance and Construction Assistance administers the TWDB's loan and grant financial assistance programs that provide for the construction of water-related infrastructure and other water quality improvements.

PFCA is responsible for the development of all

state and federal programs the agency offers to the citizens of Texas.

State programs include:

- State Participation Program
- Water Infrastructure Fund
- Colonia Self-Help Program
- TX Water Development Fund
- Economically Distressed Areas Program
- Rural Water Assistance Fund
- Agricultural Water Conservation Loan Program
- Groundwater District Loan Program

Federal programs include:

- Clean Water State Revolving Fund (SRF)
- Drinking Water SRF
- Colonia Wastewater Treatment Assistance Program
- Colonia Plumbing Loan Program

PFCA comprises five areas: PFCA Administration, Program Development, Project Development, Project Engineering and Review, and Inspection and Field Support.

Administration

Administration supports the office's mission and function by providing administrative support and strategic planning to assist staff with their duties.

Program Development

The Program Development Division has primary responsibility for leading the TWDB's financial program and policy development and management, facility needs assessment and projections, and financial assistance marketing efforts by monitoring and ensuring agency compliance with state and federal laws, policies, and standards for quality. The division is also responsible for the management of existing programs and development of new programs.

Project Development

Project Development has responsibility for the financial analysis aspects and project coordination oversight of applications requesting financial assistance from the TWDB programs. The Project

Leads serve as point-of-contact for all project-related issues from pre-application through the end of construction. In addition, this division coordinates loan closing activities associated with the financial applications.

Project Engineering and Review

Project Engineering & Review Division is responsible for processing the engineering and environmental aspects of the financial assistance applications and projects. This includes the engineering feasibility reports, environmental documents, water conservation plans, construction drawings and specifications, construction bidding and contract documents, and related documents.

Inspection and Field Support

Inspection and Field Support Division includes the TWDB's four field offices (Austin, Harlingen, Mesquite, and Houston) and two satellite offices (San Antonio and El Paso). The division provides on-site assistance to the project owners during the construction phase and information on construction status to the Project Engineering and Review Division and recipients.

WATER RESOURCES PLANNING AND INFORMATION

Water Resources Planning and Information supports the TWDB's mission by collecting, analyzing, and disseminating water-related data and by providing other services necessary to aid in planning and managing the state's water resources. It also provides statewide geographic data services and flood mitigation planning, including administration of federal assistance programs. The Water Resources Planning and Information office comprises three areas: Water Resources Planning, Flood Mitigation Planning, and Texas Natural Resources Information System (TNRIS).

Water Resources Planning

Water Resources Planning provides ongoing technical assistance and administrative support to 16 regional water planning groups to assist in updating regional water plans. The division manages grants to regional

water planning groups and political subdivisions to conduct regional water and wastewater facility planning feasibility studies. This division also provides economic and demographic technical support to regional and state water planning processes and develops water demand projections for municipal, manufacturing, mining, steam-electric power generation, irrigation, and livestock water users.

Flood Mitigation Planning

The Flood Mitigation Planning division manages state grants to political subdivisions to conduct flood protection planning studies and administers federal Flood Mitigation Assistance and Severe Repetitive Loss grant programs. This area is also responsible for the National Flood Insurance Program (NFIP) and conducts State Coordinating Agency functions for the NFIP, assists communities in enrolling in NFIP, conducts training related to floodplain management, and provides technical assistance and compliance reviews for participating communities with ordinance, floodplain management and other NFIP issues.

Texas Natural Resources Information System (TNRIS)

TNRIS was established to serve Texas agencies and citizens as a centralized clearinghouse and referral center for natural resource data, census data, data related to emergency management, and other socioeconomic data. TNRIS continues data maintenance and upgrades for the National Hydrography Dataset (NHD), transportation, political boundaries, and Digital Orthoimagery (DOQs). This division also increases participation of local and federal partners in the National Map of Texas and coordinates data production efforts among governmental entities. In addition, TNRIS administers Strat map and the Texas/Mexico Borderlands information system.

WATER SCIENCE AND CONSERVATION

Water Science and Conservation comprises the Conservation, Surface Water Resources, Groundwater Resources, and Innovative Water Technologies divisions.

Water Conservation

The TWDB's Water Conservation staff provides help to cities, utilities, and districts for establishing effective water-wise conservation programs. They loan out and provide training for leak detection and meter-testing equipment, assist with water audits, and provide water conservation brochures and educational materials for schools for free or minimal cost to utilities and government entities. This division also provides grants to political subdivisions to implement conservation programs and, by using either local districts or local lending institutions, provides loans for individual farmers to install more efficient irrigation equipment. The Conservation division provides irrigation water use estimates by county or regional planning groups and provides agricultural water conservation educational activities to agricultural trade shows and other related events.

Surface Water Resources

The Surface Water Resources division administers the Instream Flows program and works in cooperation with the TCEQ and the TPWD as mandated by the legislature. This division also administers the Bays and Estuaries program, the Lake Hydrographic Survey, and all state Surface Water Monitoring.

Groundwater Resources

The mission of the TWDB's Groundwater Resources division is to collect, interpret, and provide accurate, objective information on the groundwater resources of Texas. The Groundwater Resources division is responsible for all aspects of groundwater studies in the state. The division monitors water levels and quality in the state's aquifers, conducts regional-scale aquifer modeling, and houses and maintains water well records. This division also approves groundwater districts' management plans and provides groundwater information to citizens and lawmakers of the state.

Innovative Water Technologies

The Innovative Water Technologies division works to extend the state's water resources through desalination, rainwater harvesting, and water reuse. The mission of this division is to explore potential sources of water supply outside of the traditional

areas of surface water and groundwater that could be made available for use within the state.

Current Workforce Profile-Supply Analysis

Agency

FULL TIME EQUIVALENTS

As of March 2008, the agency had 279 full time equivalent employees (FTE), including part-time workers and contractors. 326.1 FTEs were appropriated for FY 08. The agency received a significant increase in FTEs in the last legislative

session and is currently working toward satisfying all vacant positions. Due to the specific nature and field location of many of these positions, recruitment has been a key element in obtaining qualified individuals to join our workforce.

MANAGEMENT TO STAFF RATIO

The management to staff ratio at the agency (as of the March 2008 MtoS Report) was 1:14.

GENDER/ RACE

Per the Equal Opportunity Report for January 1, 2007 to December 31, 2007, the state agency workforce comprised the following:

| | Total Employees | Caucasian Males | Caucasian Females | African Males | African Females | Hispanic Males | Hispanic Females | Total Males | Total Females |
|--------------------|-----------------|-----------------|-------------------|---------------|-----------------|----------------|------------------|-------------|---------------|
| Officials | 26 | 10 | 11 | 0 | 1 | 1 | 2 | 11 | 15 |
| Professionals | 262 | 125 | 60 | 8 | 9 | 20 | 21 | 167 | 95 |
| Para Professionals | 34 | 2 | 18 | 1 | 5 | 2 | 6 | 5 | 29 |
| Technicians | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Total | 323 | 138 | 89 | 9 | 15 | 23 | 29 | 184 | 139 |

The TWDB is dedicated to ensuring equality in the workforce. Because the Civil Rights Division (CRD) of the Texas Workforce Commission figures do not single out a professional profile comparable to that of the TWDB, it is difficult to compare the two figures for professionals. CRD figures for professionals represent a wide variety of professions, of which women are represented in various proportions depending on the nature of the profession. The profile of professional positions in the TWDB explains part of the shortage of women in the professional category; the TWDB employs many natural scientists and engineers. Women continue to enter the natural sciences and engineering fields in lower proportions than men. Initiatives by the federal government and non-profit organizations to encourage women to enter the natural science and engineering fields are increasing. As women

increasingly enter these fields, TWDB expects that it will be better able to approach the CRD figures.

TURNOVER RATE

According to the State Auditor's Office, the statewide turnover rate for full- and part-time, classified employees at state agencies in fiscal year 2007 was 17.4 percent, based on a total of 25,356 voluntary and involuntary separations. The 17.4 percent turnover rate is a 10.1 percent increase in the turnover rate compared to fiscal year 2006 (15.8 percent) and the highest turnover rate in the last five years. Excluding involuntary separations and retirements decreases the statewide turnover rate to 10.8 percent. This rate is often considered a true turnover rate because it reflects preventable turnover. Employee turnover can be both negative and positive. Negatives include the associated costs of turnover, such as training

and orientation of new employees, recruitment and selection of new employees, leave payout to departing employees, and lower productivity in the workplace during the time that a position is vacant and during the time that a new employee is learning the job.

Some turnover will always occur and is normal for any organization. Turnover can create positive outcomes for employers because they can replace low-performing employees with high-performing employees. There is often a financial benefit gained as a result of the difference in the salary paid to an experienced employee who separates from an agency

versus the salary paid to a new employee who takes the departing employee's position. However, when organizations start losing their high-performing, highly skilled, and experienced employees, turnover may begin to negatively affect the organizations' business operations. This holds true for many of the professional positions held in the agency. In the workforce plan, the agency will go into further details regarding how the salary schedule for professionals working for the state is causing us to be a training ground for employees to learn the necessary skills to succeed in the private sector.

| Employee Turnover TWDB during Fiscal Year 2007 | | | | | | | | |
|---|----------------------------------|------------------------------|--------------------------------|--------------------|---------------------------------|---------------------------------|--------------------------|----------------------------|
| Involuntary Separations | Involuntary Turnover Rate | Voluntary Separations | Voluntary Turnover Rate | Retirements | Retirement Turnover Rate | Average Annual Headcount | Total Separations | Total Turnover Rate |
| 8 | 2.9% | 29 | 10.6% | 10 | 3.7% | 273.75 | 47 | 17.2% |

| Employee Turnover Rate (as of June 2008) | | | | | | |
|---|-------------|------------|------------|------------|------------|------------|
| FY2007 State of Texas Annual Turnover Rate | | | | | 17.4* | |
| FY2007 TWDB Annual Turnover Rate | | | | | 17.2* | |
| FY2007 TWDB Total Number of Separations | | | | | 47 | |
| * information compiled from State Auditor's Office - Annual Report on Classified Employee Turnover for FY2007 | | | | | | |
| Separations include retirements and involuntary and voluntary separations. | | | | | | |
| TWDB Monthly Turnover Rate
<hr/> Monthly Number of Separations | Sept | Oct | Nov | Dec | Jan | Feb |
| | 1.91% | 1.15% | 1.53% | 1.15% | 0.36% | 2.92% |
| | 5 | 3 | 4 | 3 | 1 | 8 |
| | Mar | Apr | May | Jun | Jul | Aug |
| | 0.36% | 1.79% | 0.72% | 0.72% | NA | NA |
| 1 | 5 | 2 | 2 | NA | NA | |
| FY2008 TWDB Annual Turnover Rate | | | | | 12.6% | |
| FY2008 TWDB Total Number of Separations | | | | | 34 | |

NA=Not available

Executive Administration

Staff and workforce skills critical to the mission and goals of Executive Administration include, but are not limited to, the following:

- An Executive Administrator with extensive institutional knowledge of complex state and federal financial programs, knowledge of planning activities, managerial skills, and the ability to work with the Texas Legislature and bring their requests and visions to fruition;
- A General Counsel that possesses recognized legal expertise in water resources, including water rights, water resources planning, and the TWDB's financial programs;
- Staff attorneys with core skills through continuing education, institutional knowledge in planning and program activities, human resources, contracts, and open records matters;
- A Director of Internal Audit that is a Certified Public Accountant or Certified Internal Auditor with expertise in auditing standards and performance criteria, federal audit requirements, electronic data processing skills, and other areas that require extensive experience in governmental auditing; and
- Governmental Relations staff with the ability to maintain effective relationships with all levels of individuals and must also possess excellent project management skills and the ability to analyze, interpret, and react to information in a very efficient and effective manner.

Operations and Administration (O&A)

Staff and workforce skills critical to the mission and goals of Operations and Administration include, but are not limited to, the following:

- Human Resources personnel familiar with the State of Texas' rules, regulations, and benefits including recruitment, retention, compensation, classification, etc;
- Certified State of Texas Purchasers;
- Qualified Contract Administrator to effectively maintain all reporting requirements for the state and federal programs;
- Administrative Assistants with experience in TWDB office protocol, high quality customer

service, and Board mail-out procedures, as well as proficiency in Microsoft Office;

- Staff with performance measurement, strategic planning experience, and management system analysis skills to review and implement policies and procedures to increase efficiency and effectiveness of workload flow;
- Project Managers with experience in information technology resources and software application development methodologies;
- Business and Systems Analysts with strong facilitation and documentation skills;
- Software Engineers and Database Administrators with experience in standard software development techniques, Web development tools, and deployment of Web services;
- Network administration and security professionals with knowledge of local and areawide network administration, security protocols and threat protection, identity management, standard computer hardware, software support, and troubleshooting;
- Programmers with multiple level Web architect skills that can initiate the development, implementation, and maintenance of the internal and external Web resources, including updating Web content, monitoring Web resources and services, analysis of hardware and software, and evaluation of potential enhancements;
- Geospatial technologists with knowledge of geographic information systems and cartographic product development;
- Records management specialists with knowledge of the State Records Retention Schedule, Texas State Libraries and Archives Commission (TSLAC) rules and regulations, and working knowledge of electronic document management systems.

Operations and Administration staff must maintain knowledge and expertise in a fast-paced environment and also demonstrate the essential relationship development skills needed to communicate with customers, understand the critical business drivers for the agency, determine business case justifications and return on investments, and

foster solid partnerships among governmental entities at all levels.

Finance

Staff critical to the mission and goals of Finance include, but are not limited to, the following:

- Accountants familiar with governmental accounting, as well as bond debt accounting;
- Budget Analysts familiar with complex funding structures and state governmental budgeting practices; and
- Investment and Portfolio Analysts familiar with the state requirements for investments and with spreadsheet and database functions for preparing cash flow modeling.

These skill sets have remained constant; however, maintaining staff with these skill sets is a challenge. Retaining experienced and skilled staff is imperative to supporting the needs of the agency.

Project Finance Construction and Assistance (PFCA)

PFCA is anticipating a number of challenges in the near future. The newly funded Water Infrastructure Fund (WIF) program will require continued fine-tuning of procedures to fully implement the program as needs are identified. The large amount of state water plan funding through the various financial programs will also be supported by PFCA staff. Existing programs will also pose challenges, such as decreases in federal appropriations for the State Revolving Fund programs, balancing EPA's requests for information/reporting requirements with other workload requirements, potential project delays due to approval backlogs at the U.S. Corps of Engineers, and the challenges associated with the continued growth of the financial assets owned and managed by the TWDB.

Staff and workforce skills critical to the mission and goals of PFCA include, but are not limited to, the following:

- Financial Analysts with significant experience of TWDB financial assistance program experience;
- Engineers with significant TWDB financial assistance program experience;

- Environmental Resource Specialists with experience in TWDB financial assistance programs;
- Administrative Assistants with experience in TWDB financial assistance programs and Board mail-out procedures, in addition to proficiency in Microsoft Office;
- Division Directors with significant experience in TWDB financial assistance programs and policy development;
- Project Leads with significant experience of TWDB financial assistance program experience;
- Team Leads with significant experience in TWDB financial assistance programs and policy development;
- Field Inspectors with experience in conducting inspections on projects funded through the programs; and
- Staff with performance measurement, planning, and management system analysis skills to review and implement policies and procedures to increase efficiency and effectiveness of workload flow.

The increasing complexity and number of the TWDB's financing programs have been aggravated by the loss of several senior staff through retirement. Retiring staff are being replaced; however, retention and training continue to be an important need and challenge.

This office had been particularly impacted by General Revenue reductions made in fiscal years 2005, 2006, and 2007. The additional funding received in 2008–2009 for program administration has helped with several, but not all, of the financial assistance programs. Reduced services related to General Revenue funding and understaffing will continue with inadequate administrative dollars available.

Workforce skill needs should not change significantly in the future. However, the key to the successful management of the large number of complex financial assistance programs PFCA implements is maintaining a large enough pool of agency experience and institutional knowledge in each discipline. This situation requires that we have enough latitude in salary adjustments to be able

to retain skilled, experienced staff. The impacts of attrition can be managed, provided that PFCA continues to hire and retain new employees until they achieve a high level of proficiency and are ready to be promoted into managerial positions.

Water Resources Planning and Information (WRPI)

Staff and workforce skills critical to the mission and goals of Water Resources Planning and Information include, but are not limited to, the following:

- Geospatial technologists with knowledge of geographic information systems, geographic data models, remote sensing, Internet map services and cartographic product development;
- Certified Flood Managers to work with the NFIP program in conjunction with EPA, FEMA, and the TWDB;
- Division Directors with significant experience in TWDB water planning programs and policy development;
- Customer service specialists to support public assistance and access and dissemination of public data holdings;
- Economists with significant experience in TWDB water planning programs, statistics, population projections, and policy development;
- Administrative Assistants with experience in TWDB regional water planning programs, Board mail-out procedures, in addition to proficiency in Microsoft Office;
- Grant and contract management professionals to support joint partnership funding of agency technology initiatives, interagency contracts, and oversight of contract and consulting services;

Water Science and Conservation (WSC)

Staff and workforce skills critical to the mission and goals of Water Science and Conservation include, but are not limited to, the following:

- Hydrogeologists, hydrologists, and geologists knowledgeable about Texas water and geologic resources;
- Other environmental scientists and/or professionals knowledgeable about Texas environmental regulations, research issues, and

programs covering a wide spectrum of activities, such as conservation and biology;

- Licensed professional engineers with significant TWDB financial and technical assistance program experience;
- Individuals with solid contract management skills and the ability to maintain effective working relationships with their customers;
- Individuals who possess strong written and verbal communication skills;
- Administrative assistants with experience in TWDB programs and Board mail out procedures;
- Division directors with significant TWDB program and policy development expertise.

Retaining senior and highly skilled staff is of paramount importance in order for the office to provide program continuity while assimilating new technological advances in water modeling, planning, and research. This situation requires that the Office be given enough latitude in salary adjustments to be able to retain skilled, experienced workers and provide sufficient training to all staff.

Future Workforce Profile

Executive Administration

Executive Administration anticipates that it will need to retain staff with same/similar work skills that are currently present. Legal Services does not anticipate any workforce changes. Legal Services must have the ability to provide sound legal advice and opinions to Board members and staff on financing water resources issues, contracts, human resources activities, open meeting and open records, and ethics.

With the evolving new leaderships within the Texas Legislature, the Governmental Relations function must ensure that staff continues to have strong interpersonal skills. It is important that these individuals continue to be able to interact with individuals who represent the political and socioeconomic diversity of the State of Texas. Staff will need to continue to enhance their project management skills, legislative process knowledge, policy development skills, and their analytical skills as

the state water resource issues become more political and complex. These skills will be critical for the agency to continue to succeed in these very crucial, high profile activities.

Recently, the TWDB Board Members approved a recommendation by the peer review administrator for the Department of Internal Audit to hire an additional auditor at the Board. Currently, the posting for this position is up on the agency's Web site and Work In Texas, and staff are prepared for the interview and selection process.

Operations and Administration (O&A)

Critical functions that must be performed to achieve the Strategic Plan include customer service surveys (development, administration, and analysis of results); developing marketing strategies in response to identified customer needs, tracking and handling customer complaints; and conducting focus group research for feedback on agency issues.

Human Resources staff anticipate additional requests for technical compensation support, general support, and information distribution due to increased employees and employment opportunities at the agency. Future workforce needs include continuing to build strong overall HR knowledge, including HR certification; compensation skills, including compensation certification; the ability to administer organizational excellence surveys effectively (assisting with development, administration, and analysis); and skills in becoming a more effective change agent for the agency.

Important underlying reasons for potential changes affecting O&A's workforce are the rapidly changing technology industry and the area's efforts to facilitate data dissemination. The leadership will continue to assess current staffing resources to ensure that existing staff will be able to meet these future challenges. While current staffing levels are projected to essentially remain unchanged, the office workforce profile will continue to evolve, especially in light of the Data Center Consolidation effort being undertaken by all agencies as part of the Governor's initiative. The need for staff with diverse IT backgrounds, including strong Web-based programming, database management, Internet-based

GIS programming, network management, project/program management expertise, and strong contract management skills will increase with this evolution. Such skills can be acquired through training or focused recruiting and hiring activities when positions are available.

Contract Administration and Records Management will be greatly affected by the implementation of new technology, an electronic document management system, and these areas will face an extreme work load in addition to the ever-increasing burden that is inevitable as the agency continues to grow. Future needs in these areas are highly trained staff in records management with institutional knowledge of the state records retention schedule and procedures, and contracting and state-certified procurement specialists trained in the State of Texas' rules and regulations.

Staff will continue to meet the needs of customers with respect to O&A's mission, as well as perform critical functions necessary to accomplish the goals set out in the strategic plan.

Finance

As a support function, Finance is impacted by the activities of the agency, as well as the requirements of oversight agencies and the Legislature. These impacts can be both labor intensive, as well as technically demanding. Critical functions include the ability to provide sound accounting advice and opinions to Board members and staff and accurate and timely financial reporting, in addition to maintaining sound accounting records. Staff must also possess municipal bond knowledge, negotiation skills, portfolio management knowledge, advanced spreadsheet and database skills, and agency program knowledge. The breadth of knowledge required of the financial staff at TWDB requires a high level of staffing. The development and maintenance of staff in the financial areas is imperative.

Project Finance Construction and Assistance (PFCA)

PFCA is continually impacted by additional EPA reporting requirements relating to the State Revolving Fund programs. Similarly, the office is

impacted by the fact that the Legislature, while not in session, has ongoing committees that operate full time and have additional requests for information that must be met.

The passage of \$250 million in EDAP bonds by voters of Texas in November 2007 provided new funding to the program, now referred to as EDAP II or EDAP - Statewide. The closing out of the EDAP I program and implementation of the EDAP II program has required a workload analysis in order to determine the effects on current staff. The increased volume of State Revolving Fund loan commitments will need to have adequate staffing levels; however, the pace of the actual closings and, therefore, administrative fees, may fall behind. A continued workload analysis of this situation is necessary.

Additionally, the appropriations of state water plan funding through three financial assistance programs will continue to impact PFCA's current workforce. The additional program funding will not create demands for new skills but may require a level of effort that exceeds the current capacity. Automation will help in this effort through the proposed TXWISE program.

Water Resources Planning and Information (WRPI)

WRPI is constantly affected by the intense population growth of the state of Texas. With greater population growth, there is greater demand on the few knowledgeable regional water planners in the state. Additional training, travel budget, and expertise will be needed in the coming years to merely stay apprised of the ever-increasing need and demand for responsible development of water for Texans.

In regard to TNRIIS, the need for staff with diverse GIS and IT backgrounds, including strong Internet-based GIS programming and improved knowledge of business processes and relationships, will become more important along with external customer service. The overarching challenge for all of the GIS and IT professionals is to consistently strive for an understanding of the business needs within the agency and implement strong standards and protocols, process and procedures development, and best practices in project management, business

case development, software engineering, Web development, and customer service.

Water Science and Conservation (WSC)

Water Science and Conservation (WSC) is a multidisciplinary and highly interdependent organization largely made up of scientists and engineers. New programs and assignments brought about by recent legislative changes and the 2007 State Water Plan has resulted in demands for new skills and requires a level of effort that exceeds the previous capacity. The anticipated workload will require WSC to maintain and enhance its current level of skills and provide training of both new and existing staff to limit the negative impacts of staff turnover, which is increasingly pronounced due to competition for scientists and engineers from both the private sector for the environmental industry and the oil and gas industry. Staff will need to continue to expand their expertise in specific technical knowledge, project management skills, writing abilities, new technology knowledge, and verbal communication skills.

Gap Analysis

Executive Administration

At this time, Executive Administration does not anticipate any surplus or shortage of staff. If the economy turns, this area may face difficulties in finding qualified staff to work in certain professions. Furthermore, if the economy becomes more competitive, as expected, this Office will face greater challenges given the salary levels it can afford to pay staff.

The potential retirement of employees in the immediate future can have the effect of creating a shortage of expertise in the administration office operations and legal knowledge (water law, rule administration, and TWDB history).

Operations and Administration (O&A)

There is currently need for additional staff in the areas of Contracting, Purchasing, Records Management, and Information Technology.

In addition, the agency is at risk at the potential simultaneous retirement of multiple persons with

vast institutional knowledge, thus creating a shortage of expertise in the GIS fields, support services and facilities planning areas, information technology, and records management.

Finance

There is currently no significant shortage of Finance employees necessary to meet current program needs; however, this area will need to closely monitor turnover, as there could be a significant shortage of skills if no training is provided to fill in the knowledge gaps created by the retiring or departing staff.

If the economy picks up, this area also may face difficulties in finding qualified staff to work in certain professions. High level accountants are currently at a premium. Furthermore, if the economy becomes more competitive, as expected, this area will face greater challenges given the salary levels it can afford to pay staff.

Project Finance Construction and Assistance (PFCA)

During FY 2007–2008 PFCA had several new positions and vacancies that have been difficult to fill. In particular, it has been extremely difficult to fill engineering and environment review positions due to the competitive job market. The salary levels available to PFCA have made it unfeasible to compete with the market.

This area faces a significant risk if all current managerial and line staff retire upon their eligibility within the next five years. PFCA has a large number of senior staff that will be eligible for retirement. Succession planning is underway and will need to be expedited in order to fill all the gaps that may be pending. New staff will need to be hired as soon as possible and developed rapidly.

An issue unique to this office is the availability of General Revenue funding. If a shortfall continues to exist in this source of revenue, this area will be faced with a shortage of workers who perform work related to General Revenue funded projects. There may be a shortage of staff in some divisions over the next five years due to the increased workload associated with increased financial assistance opportunities, asset volume, and complexity. As in other areas, if the

economy picks up, this area may face difficulties in finding qualified staff to work in certain professions. Furthermore, if the economy becomes more competitive, this area will face greater challenges given the salary levels it can afford to pay staff. PFCA must continue to maintain its current level of skills and provide training of both new and existing staff to limit the negative impacts of staff turnover.

Water Resources Planning and Information (WRPI)

The pool of GIS professionals interested in state employment will continue to dwindle, and at the same time that the state is experiencing new growth in the IT sector, the State Auditor's Office reports that state government employees are still significantly behind in salary scale compared to the private sector. Specialty areas such as GIS are even more difficult to hire and retain, creating a much longer recruitment and hiring process. The quality and quantity of job applications for TWDB vacancies in these areas has dwindled remarkably, even when the agency has done extensive recruitment and advertising.

The same can be said for the NFIP personnel who must be certified in flood management. Finding qualified staff in the field areas throughout the state that meet with minimum qualifications for the job has been a challenge. With regard to the specialized positions that the agency has to offer, the leadership must begin to think outside the box in order to recruit and maintain qualified individuals.

Water Science and Conservation (WSC)

Although Water Science and Conservation (WSC) has done its best to maintain staffing levels, there are shortages for individuals with overall expertise in State of Texas water resources, hydrogeologists, groundwater modelers, surface water engineers, and surface water hydrologists. WSC is faced with hiring staff at entry to mid-level positions, providing these individuals with extensive training and development (internally and externally), only to see these scientists and engineers routinely recruited away by private enterprise who can afford to pay them 30 to 50 percent more than the state salary schedule allows. In effect, WSC serves as a training ground. The TWDB

is often unable to fill key positions at competitive salaries for two primary reasons: first is simply a matter of inadequate resources and pay scales that are competitive with private enterprise; second, due to the tremendous increase in the demand for water resources needed to sustain the Texas economy, the demand for water resource expertise in science and engineering is simply not being met by higher education. WSC will continue to face greater challenges given the limited resources and an inadequate production of scientists and engineers by higher education to meet the TWDB's needs. TWDB management are in the initial stages of meeting with higher education to identify potential strategies to increase the emphasis on applied science and engineering training at the college level needed to meet our needs.

Strategic Development

Strategic Development

The workplace has always consisted of many generations working at one time. However, today's age-diverse workforce is working past retirement age which has led to a generation gap of more than 40 years between the oldest and youngest workers. As a result, a one-size-fits-all approach is not appropriate in an age-diverse workforce that may have four generations of workers at one time. The TWDB must be prepared to work with the communication styles of each generation and determine what motivates each generation in order to bridge the generation gap. This is key in developing both succession planning and knowledge transfer for future generations. Furthermore, as society in general becomes more diverse, the TWDB workforce must mirror this diversity, thereby meeting both the needs and expectations of the population it serves. The TWDB must continue to work with universities and professional organizations to ensure

that we have a varied and diverse workforce. In addition to the diversity and composition of the future TWDB workforce, fair pay will continue to impact recruitment and retention. The TWDB and state agencies, in general, currently cannot compete with other organizations in terms of compensating its employees. Many existing staff continue to serve the agency because they value its mission or enjoy the work-life balance that may be lacking in a for-profit company or firm. The TWDB must continue to foster an environment that offers not only fair compensation but other incentives that attract and retain staff. Understanding the importance of the state's most precious resource is the first step in ensuring that TWDB continues its role in serving the water needs of Texas.

Leadership Development

In January 2008, the TWDB held its first in a series of leadership training conferences entitled, "The Next Generation of Leadership." The entire leadership team of the TWDB was required to attend, including the EA, Deputy Executive Administrators, General Counsel, Internal Auditor, all Directors, Managers, Team Leads, and HR staff. Each member of the seminar will attend courses held throughout the year that will cover many aspects of leadership including how to plan for succession, how to have a crucial confrontation, what FMLA means, what it means to be a leader, and how to communicate effectively with others. Currently, all leaders have completed the DiSC training to aide in the discovery of learning how to successfully communicate with all personalities. The agency understands that today's workforce is one of the most diverse that we have yet to face in ages and in values, and we must train our leaders of tomorrow how to maintain success. Our leadership and the consultants we work with understand the importance of these core responsibilities and are helping to transform our organization into one that values and molds its leaders.

Appendix G:

Survey of Organizational Excellence Results and Utilization Plan

Survey

In October of 2007, the TWDB again enlisted the help of the Survey of Organizational Excellence Group at the University of Texas at Austin to administer the agency's assessment.

The Survey Framework assesses, at its highest

level, five workplace dimensions capturing the total work environment. Each workplace dimension consists of survey constructs. The survey constructs are designed to profile organizational areas of strength and concern so that interventions are targeted appropriately.

SURVEY DIMENSIONS AND CONSTRUCTS:

| Dimension I
Work Group | Dimension II
Accommodations | Dimension III
Organizational
Features | Dimension IV
Information | Dimension V
Personal |
|---------------------------|--------------------------------|---|-----------------------------|-------------------------|
| Supervisor effectiveness | Fair Pay | Change oriented | Internal | Job satisfaction |
| Fairness | Physical environment | Goal oriented | Availability | Time and stress |
| Team effectiveness | Benefits | Holographic | External | Burnout |
| Diversity | Employment Development | Strategic | | Empowerment |
| | | Quality | | |

Results

Out of the 265 employees who were invited to take the survey, 176 employees responded. As a general rule, the survey says that rates higher than 50 percent suggest soundness, and rates lower than 30 percent may indicate serious problems. At 66 percent, our response rate is considered high.

Scores above 300 suggest that employees perceive the issue more positively than negatively, and scores of 400 or higher indicate areas of substantial strength. Conversely, scores below 300 are viewed more negatively by employees, and scores below 200 should be a significant source of concern for the organization and should receive immediate attention.

The following constructs are considered the relative strengths of the TWDB:

Strategic

Score: 386

The Strategic (Strategic Orientation) construct reflects employees' thinking about how the organization responds to external influences that should play a role in defining the organization's mission, vision, services, and products. Implied in this construct is the ability of the organization to seek out and work with relevant external entities.

Quality

Score: 381

The Quality construct focuses upon the degree to which quality principles, such as customer service and continuous improvement, are a part of the organizational culture. This Construct also addresses

the extent to which employees feel that they have the resources to deliver quality services.

External

Score: 369

The External Communication construct looks at how information flows into the organization from external sources, and conversely, how information flows from inside the organization to external constituents. It addresses the ability of organizational members to synthesize and apply external information to work performed by the organization.

Physical Environment

Score: 367

The Physical Environment construct captures employees' perceptions of the total work atmosphere and the degree to which employees believe that it is a "safe" working environment. This construct addresses the "feel" of the workplace as perceived by the employee.

Benefits

Score: 365

The Benefits construct provides a good indication of the role the benefit package plays in attracting and retaining employees in the organization. It reflects comparable benefits that employees feel exist with other organizations in the area.

The following constructs are considered to be areas of concern for the agency:

Fair Pay

Score: 258

The Fair Pay construct addresses perceptions of the overall compensation package offered by the organization. It describes how well the compensation package "holds up" when employees compare it to similar jobs in other organizations.

Internal

Score: 300

The Internal Communication construct captures the flow of communication within the organization from the top-down and bottom-up and across divisions

or departments. It addresses the extent to which communication exchanges are open and candid and move the organization toward goal achievement.

Team Effectiveness

Score: 318

The Team Effectiveness construct captures employees' perceptions of the people within the organization that they work with on a daily basis to accomplish their jobs (the work group or team). This construct gathers data about how effective employees think their work group is as well as the extent to which the organizational environment supports cooperation among employees.

Supervisor Effectiveness

Score: 322

The Supervisor Effectiveness construct provides insight into the nature of supervisory relationships in the organization, including the quality of communication, leadership, thoroughness and fairness that employees perceive exists between supervisors and them. This Construct helps organizational leaders determine the extent to which supervisory relationships are a positive element of the organization.

Change Oriented

Score: 326

The Change Oriented construct secures employees' perceptions of the organization's capability and readiness to change based on new information and ideas. It addresses the organization's aptitude to process information timely and act upon it effectively. This Construct also examines the organization's capacity to draw upon, develop, and utilize the strengths of all in the organization for improvement.

TWDB did not receive any scores lower than 258, and in fact, with the exception of fair pay, the TWDB did not score under 300.

Action Plans

Fair Pay

The TWDB recently began several HR initiatives that aim to provide a current framework for the agency's compensation roadblocks. The HR Division is performing an agency-wide parity review for all positions by office and classification. This parity review follows the implementation of the most recent Classification Audit by the State Auditor's office and will help ensure that all employees are classified and compensated at the accurate level in relation to their position responsibilities and experience level.

In addition, TWDB recently completed its pilot program and upgraded the online employee appraisal system, E-Appraisal by E-Halogen. This innovative system is currently being implemented agency-wide in an effort to provide easily manageable performance plans for staff. The goal of this project is that this system will aide in ensuring that appraisals are completed in a timely manner in order to ensure eligibility for merit raises, when available, and fair and equitable compensation for staff.

Internal Communication

In order to address the Internal Communication construct, the agency has begun several initiatives upon prompting of our staff. One such initiative is the Web site and IWeb revitalization. Currently, our Web administrator is working in conjunction with teams in each office to update and restructure both the agency's external and internal Web site. The goal of this revitalization is to have all employees know how and where to access information that is important to them and to also bring the face of the TWDB up to date with our water technologies.

In addition, agency-wide meetings are now being

held on a quarterly basis that provide an overview of the major issues the TWDB is working on for the quarter, i.e., the budget process, Legislative Appropriations Request (LAR), legislative policy items, strategic planning, etc.

The Office of Operations and Administration is also currently working on the implementation of an internal agency newsletter to serve as a forum for appealing, constructive information and announcements for all employees.

Change Oriented, Supervisor Effectiveness, and Team Effectiveness

In January 2008, the TWDB held our first in a series of leadership training conferences entitled, "The Next Generation of Leadership." The entire leadership team of the TWDB was required to attend, including the EA, Deputy Executive Administrators, General Counsel, Internal Auditor, all Directors, Managers, Team Leads, and the HR staff. Each member of the seminar will attend courses held throughout the year that will cover many aspects of leadership, including how to plan for succession, how to have a crucial confrontation, what FMLA means, what it means to be a leader, and how to effectively communicate with others. Currently, all leaders have completed the DiSC training to aide in the discovery of learning how to successfully communicate with all personalities. The agency understands that today's workforce is one of the most diverse that we have yet to face in ages and in values, and we must train our leaders of tomorrow how to maintain success. Our leadership and the consultants we work with understand the importance of these core responsibilities and are helping to transform our organization into one that values and molds its leaders.