City of Dallas Cedar Crest recycled water pipeline: benefiting 1,260,000 customers

Colorado River Municipal Water District water reclamation facility: benefiting 473,000 customers

City of Lubbock Lake Alan Henry raw water pipeline: benefiting 233,606 customers

Projects shown received TWDB financial assistance.
Contents

Executive Summary ................................................................................................................................. 1
Outcomes of the 82nd Legislative Session ............................................................................................... 2
Priorities and Exceptional Items for the 83rd Legislative Session .......................................................... 3
Legislative Priorities ................................................................................................................................... 5
  Financing the State Water Plan .............................................................................................................. 6
  Petitions Concerning the Reasonableness of Desired Future Conditions ............................................. 7
  Annual Water Loss Audits ..................................................................................................................... 8
  Site Acquisition for Reservoirs Recommended in Regional and State Water Plans and Reservoir Site and Stream Segment Designation .................................................................................. 10
  Interbasin Transfers .............................................................................................................................. 13
  Executive Administrator’s Salary ........................................................................................................... 14
Legislative Appropriations Request Exceptional Items ............................................................................ 17
  Portfolio Protection ............................................................................................................................... 18
  Alternative Water Supplies .................................................................................................................... 19
  Regional Planning ................................................................................................................................. 21
  State Water Plan Financing ................................................................................................................... 22
  Economically Distressed Areas Program ............................................................................................... 23
Central Harris County Regional Water Authority surface water supply system: benefiting 26,000 customers

City of Eagle Pass water treatment plant: benefiting 40,000 customers

San Antonio Water System brackish groundwater desalination: benefiting 1,349,041 customers

Projects shown received TWDB financial assistance.
The Texas Water Development Board (TWDB) is the state’s water planning and water project financing agency. The TWDB’s primary responsibilities are threefold: administering cost-effective financial programs for constructing water supply, wastewater treatment, flood control, and agricultural water conservation projects; collecting and disseminating water-related data; and developing the state’s water resources by assisting with regional planning and preparing the State Water Plan.

Since 1957, the TWDB has been charged with addressing the state’s water needs. In 1997, forty years after the agency was formed, the 75th Legislature passed Senate Bill 1, which established a regional water planning process. As a result of that legislation, regional water planning groups were formed, and they, along with state organizations and political subdivisions, assumed increased responsibility for ensuring the state has sufficient water supplies. The TWDB has both leadership and support roles in guiding and enabling responsible development of the state’s water resources. In staying true to the agency’s vision, the agency is responsible for “sustainable and affordable water for Texas.”

Today, Texas has one of the fastest growing populations and economies in the nation. According to TWDB projections, the number of people living in Texas will increase 82 percent between the years 2010 and 2060, growing from 25.4 million to 46.3 million people. Most growth is expected to occur in the Lower Rio Grande Valley and in the large urban areas surrounding Dallas-Fort Worth, Houston, San Antonio, and Austin. Rapid growth, in conjunction with the state’s ongoing battle with severe drought conditions, makes managing current water supplies and planning for future water supplies a crucial endeavor.

Section 6.156 of the Texas Water Code requires the TWDB to provide a biennial report to the governor and members of the legislature. The Legislative Priorities Report must include a statement of agency activities and recommendations for necessary and desirable legislation. Working toward implementing the agency’s vision statement, the TWDB examined water management policies and funding issues in order to make recommendations to the 83rd Legislature.

This report includes recommendations regarding the State Water Plan, the petition process for desired future conditions, annual water loss audits, state funding for acquiring designated reservoir sites identified in regional water plans, and inter-basin transfers.

In conjunction with its legislative priorities, these additional requests are presented in the report:

- The TWDB’s request to increase the executive administrator’s salary to a level commensurate with the responsibilities entrusted to the position
- Summaries of the TWDB’s Exceptional Item Requests included in the agency’s Legislative Appropriations Request for Fiscal Years 2014–2015
Outcomes of the 82nd Legislative Session

The 82nd Legislature convened on January 11, 2011, and continued its focus on funding state-wide planning and implementation efforts. Significant progress was made toward this effort. The legislature approved Senate Joint Resolution 4, which ultimately went before the voters in November as Proposition 2; voters approved bonding authority that will allow TWDB to have not more than $6 billion in bonds outstanding at any one time. TWDB will use this bonding authority to fund projects that are self-supporting and therefore do not require general revenue from the state. The legislature, at any time, may appropriate monies and direct the TWDB to issue bonds that are non-self supporting, but the agency cannot act on its own regarding non-self supporting bonds. Since the 80th session, the issuance of $1.67 billion in self-supporting bonds has been authorized to fund infrastructure projects for new water supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>Bill No.</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codification of TWDB’s current bonding practices</td>
<td>SB 660</td>
<td>Effective Sept. 1, 2011</td>
</tr>
<tr>
<td>Require yearly water audits for entities receiving TWDB financial assistance</td>
<td>HB 3090</td>
<td>Effective Sept. 1, 2011</td>
</tr>
<tr>
<td>TWDB development of rainwater harvesting training tools for county employees</td>
<td>HB 3391</td>
<td>Effective Sept. 1, 2011</td>
</tr>
<tr>
<td>Require gallons per capita per day reporting methodology be established</td>
<td>SB 181</td>
<td>Effective June 17, 2011</td>
</tr>
<tr>
<td>Landowner’s vested ownership interest in groundwater defined</td>
<td>SB 332</td>
<td>Effective Sept. 1, 2011</td>
</tr>
<tr>
<td>Rural Water Assistance Fund statute changes</td>
<td>SB 360</td>
<td>Effective Sept. 1, 2011</td>
</tr>
<tr>
<td>TWC Chapter 36 uniformity language change for groundwater conservation district management plans</td>
<td>SB 727</td>
<td>Effective April 29, 2011</td>
</tr>
<tr>
<td>Allen’s Creek Reservoir’s construction deadline extended from 2018 to 2025</td>
<td>SB 1132</td>
<td>Effective Sept. 1, 2011</td>
</tr>
</tbody>
</table>
Priorities and Exceptional Items for the 83rd Legislative Session

**Legislative Priorities**

- Financing the State Water Plan
- Petitions Concerning the Reasonableness of Desired Future Conditions
- Annual Water Loss Audits
- Site Acquisition for Reservoirs Recommended in Regional and State Water Plans and Reservoir Site and Stream Segment Designation
- Interbasin Transfers
- Executive Administrator’s Salary

**Legislative Appropriations Request Exceptional Items**

- Portfolio Protection
- Regional Planning
- Alternative Water Supplies
- State Water Plan Financing
- Economically Distressed Areas Program
This page is intentionally left blank.
LEGISLATIVE PRIORITIES
Financing the State Water Plan

Recommendation
The legislature should develop a long-term, affordable, and sustainable method to provide financing assistance for the implementation of State Water Plan projects.

In serious drought conditions, Texas does not and will not have enough water to meet the needs of its people, its businesses, and its agricultural enterprises.

—2012 State Water Plan

Background
The estimated total capital cost of the 2012 State Water Plan, representing the capital costs of all water management strategies recommended in the 2011 regional water plans, is $53 billion. Based on surveys conducted as part of the planning process, water providers will need nearly $27 billion in state financial assistance to implement strategies for municipal water user groups.

In response to the 2007 State Water Plan, the legislature has authorized $1.67 billion to provide funding for State Water Plan projects through three of the TWDB’s financial assistance programs. To date, TWDB has provided over $974,487,000 in low-interest loans and grants to implement 35 projects through 44 loans or grants across the state. Once fully implemented, these projects will supply over 1.5 million acre-feet of water to millions of Texans. In 2011, the 82nd Texas Legislature authorized adding funding to finance approximately $100 million in State Water Plan projects. These funds are available during state fiscal years 2012 and 2013. TWDB has also provided over $530 million in funding to implement water management strategies recommended in the 2007 State Water Plan through other loan programs not specifically targeting State Water Plan projects.

The number of fully implemented projects today, 65, shows a significant increase from the 21 projects that the 2007 State Water Plan reported had been implemented from the 2002 State Water Plan. The implementation of many of these projects would not have been possible without the funding provided by the Texas Legislature through TWDB’s financial programs.

A long-term, affordable, and sustainable method of financing the State Water Plan is needed to increase implementation of the State Water Plan and to fund the Plan.
Petitions Concerning the Reasonableness of Desired Future Conditions

Recommendation
The legislature should amend Texas Water Code Chapter 36 to repeal the petition process concerning the reasonableness of desired future conditions or modify the process to provide a judicial remedy exclusive of the TWDB except for the agency’s technical review and comment. The TWDB is not a regulatory body and is, therefore, not equipped to deal with a regulatory-like process.

Background
Current statute allows a petition to be filed with the TWDB challenging the reasonableness of a desired future condition. A person with a legally defined interest in a groundwater management area, a groundwater conservation district in or adjacent to a groundwater management area, or a regional water planning group with territory in a groundwater management area can file the petition.

If the Board finds that a desired future condition is not reasonable, they recommend changes to the desired future condition. The groundwater conservation districts in the groundwater management area then have three options: adopt the Board’s recommendation, retain the original desired future condition, or adopt another desired future condition. These options allow districts to retain the same desired future condition that existed before a petition was filed.

In its July 2011 report (Issue 3: The State’s Processes to Petition an Aquifer’s Desired Future Conditions Are Fundamentally Flawed), the Sunset Advisory Commission recommended that the legislature repeal the petition process with TWDB and transfer it to district court. The legislature considered the petition process during the 82nd Session, but the process remained unchanged.

Changes in statute and administrative rules
Texas Water Code § 36.1083; 31 TAC, Chap. 356, Subchapter D

Major aquifers of Texas
**Annual Water Loss Audits**

**Recommendation**
The legislature should require annual water loss audits from retail public water suppliers that serve 3,300 or more connections. This would involve approximately 335 utilities, and these utilities are already required to provide annual reports on their water conservation plans.

**Background**
According to Section 16.0121(b) of the Texas Water Code, every five years all Texas retail public water suppliers, approximately 3,500 entities, shall perform and file with TWDB a water loss audit computing the water supplier’s most recent annual system water loss. The first audit report was required for the year 2005, the second scheduled report was for the year 2010, and the next scheduled report is due in May 2016 for the year 2015.

TWDB’s Legislative Priorities Report to the 81st Texas Legislature in 2009 recommended the following:

> “Require an annual water loss audit from retail public water suppliers who are TWDB loan recipients, have surface water permits from the Texas Commission on Environmental Quality (TCEQ), and serve 3,300 or more connections. The audit should be submitted to the TWDB and include evidence that the water loss audit data was provided to the entity’s governing body. All other retail public water suppliers should continue to be required to complete and submit a water loss audit once every five years.”

Legislation was not approved to implement this recommendation during that session.

In 2011, the 82nd Texas Legislature passed House Bill 3090, which requires all current recipients of TWDB financial assistance to conduct and submit annual water loss audits. The first of these reports are due May 1, 2013.

Additionally, the 2012 State Water Plan includes the following recommendation:

> “ISSUE 5: WATER LOSS—The legislature should require all retail public utilities to conduct water loss audits on an annual basis, rather than every five years.”

TWDB maintains its support for the concept that all retail public water suppliers should conduct annual water loss audits. However, because the next scheduled required water loss audit for all retail public water suppliers is due for the year 2015, it is not currently necessary to require the approximately 3,200 utilities with fewer than 3,300 connections to submit annual audits to TWDB.

Continued ▶
Recent data indicate that the level of reporting required for the current and the proposed annual water loss audits would include data from retail public water suppliers that provide between 70 and 80 percent of the current total municipal water use in Texas. Completing annual water loss audits would allow these retail public water suppliers to

- Identify any areas of their system operations that need further analyses to reduce water losses
- Track their progress in reducing water loss
- Establish water loss programs and long-term goals
- Delay or eliminate the need for new water supply where significant water losses are identified and corrected

Information in the annual water loss audits would

- Allow TWDB staff to identify those utilities with higher reported water losses and offer technical assistance in addressing those losses
- Serve as input to regional water planning and for conservation outreach and assistance programs
- Be used by the Water Conservation Advisory Council in future studies to assess progress of water conservation in Texas

**Changes in statute**

The proposed policy would necessitate changes in Texas Water Code §16.0121 (b) and (b-1) to include the additional annual water loss audits.
Site Acquisition for Reservoirs Recommended in Regional and State Water Plans and Reservoir Site and Stream Segment Designation

Recommendations

- The legislature should acquire reservoir sites designated by the 80th Legislature as unique for construction of a reservoir, thereby supporting implementation of 50-year water supply strategies included in the 2012 State Water Plan and protecting sites that may be needed beyond the 50-year planning horizon.

- The legislature should appropriate monies for acquiring the state’s legislatively designated reservoir sites that have not been purchased or have not received a commitment for purchase. These sites are essential to meet the state’s water supply needs within the next 50 years and beyond.

- The legislature should designate the three additional sites of unique value for the construction of reservoirs recommended in the 2011 regional water plans (Turkey Peak Reservoir, Millers Creek Reservoir Augmentation, and Coryell County Reservoir) for protection.

- The legislature should designate the nine river or stream segments of unique ecological value recommended in the 2011 regional water plans (Pecan Bayou, Black Cypress Creek, Black Cypress Bayou, Alamito Creek, Nueces River, Frio River, Sabinal River, Comal River, and San Marcos River) for protection.

The cost of acquiring the remaining reservoir sites designated as unique is estimated to be $566 million, based on 2012 State Water Plan data. The advantages of acquiring these designated sites are as follows:

- Provides certainty to project sponsors that recommended reservoirs could be constructed on designated sites for future water supplies
- Provides protection from actions by federal agencies that could prohibit the development of reservoirs
- Ensures that these sites would be available to meet future water supply needs
- Demonstrates the state’s commitment to provide sufficient water supply for Texas citizens to ensure public health, safety, and welfare and to further economic development
- Allows the state to lease sites, prior to reservoir construction, to existing landowners or others for land use activities, such as crops and livestock, wildlife, or recreation, thereby also generating income for the state through lease revenue

Although prior legislative designation helps preserve reservoir sites, purchasing future sites would add additional protection, including much better protection from actions by federal agencies that could preempt major water supply projects through various unilateral actions. If the state owned the sites, it would be unlikely that a federal agency could take an action related to those sites. An example is the U.S. Fish and Wildlife Service’s establishment of the Neches River National Wildlife Refuge at the location of a proposed reservoir—a federal action that prohibited the City of Dallas from developing a planned water supply, Lake Fastrill Reservoir, to meet its future water supply needs.

**Background**

A primary role of the TWDB is to develop, maintain, and update the State Water Plan in cooperation with other state agencies and numerous regional, local, and private interests across the state. Reservoirs have remained a vital part of the State Water Plan since its inception and are an integral part of providing the state’s existing water supplies.

Continued ➤
Because demands are continuing to grow for reliable surface water supplies for municipal, industrial, steam-electric power generation, and other purposes, reservoir projects remain important water management strategies for many areas of the state. Recognizing the importance of reservoirs, the 80th Legislature designated the 19 reservoir sites recommended in the 2007 State Water Plan as sites of unique value for the construction of a reservoir (Senate Bill 3, Section 4.01, codified at Texas Water Code § 16.051 [g-1]). At the same time, the legislature made provisions for options to lease sites acquired for construction. The designation of these reservoirs as sites of unique value provides that a state agency or political subdivision of the state “may not obtain a fee title or an easement that will significantly prevent the construction of a reservoir on a site designated by the legislature.” The designation terminates September 1, 2015, unless the proposed project sponsor votes to make necessary expenditures for constructing the reservoir or files required applications for federal or state permits for reservoir construction. A total of 22 sites have been designated as unique by the legislature, three of those designations occurring prior to 2007.

Capital costs and ultimately the cost of water to the end user would be reduced by purchasing sites now, as land values are likely to increase over time, and the cost of compensating landowners for acquisition of land and easements could escalate.

If the major reservoir sites recommended for construction in the 2012 State Water Plan are not developed, the state will be short 1.5 million acre-feet of water in 2060, about 16.7 percent of the total water management strategies recommended in the plan. Without additional water supplies, the state faces a total water deficit of 8.3 million acre-feet by 2060. Progress must be made to develop this critical water supply and protect the state’s economy and the public’s health, safety, and welfare in times of drought. Failure to meet the state’s water supply needs in drought conditions could cost Texas businesses and workers approximately $12 billion today and up to $116 billion in 2060.

**Changes in statute**

Texas Water Code, Section 16.051
Interbasin Transfers

Recommendation
The legislature should enact statutory provisions that eliminate unreasonable restrictions on the voluntary transfer of surface water from one basin to another.

Background
Since adoption of the 2007 State Water Plan, the Board has affirmed its belief that interbasin transfers of surface water have been an important, efficient, and effective means of meeting the diverse water supply needs of an ever-increasing population in Texas. These interbasin transfers are, or will be, used to meet a wide variety of water demands, including municipal, industrial, stream-electric power generation, and irrigated agriculture demands.

Both the historical and current importance of interbasin transfers across the state are illustrated by the interbasin transfer of water from Lake Meredith in the Canadian River Basin to 11 cities in the Canadian, Brazos, and Colorado river basins on the High Plains of Texas. Since the original delivery of water from Lake Meredith in 1968, by the Canadian River Municipal Water Authority, this project has served as the primary source of water supply for Amarillo, Brownfield, Borger, Lamesa, Levelland, Lubbock, O’Donnell, Pampa, Plainview, Slaton, and Tahoka. Without this project, local groundwater supplies from the Ogallala Aquifer, in many cases already severely depleted, would not have been able to meet the increasing municipal and manufacturing demands of the region.

Senate Bill 1 (75th Legislative Session) amended the Water Code to include significantly expanded requirements for obtaining an interbasin transfer authorization. Since the amendments made to the Code in 1997, the amount of interbasin transfer authorizations issued has dropped significantly. According to the Texas Commission on Environmental Quality data, only two interbasin transfer authorizations that were subject to those provisions have been granted since the passage of Senate Bill 1 in 1997.

Changes in statute
Texas Water Code, Section 11.085
Executive Administrator’s Salary

Recommendation

• The legislature should enable the Board to set a competitive salary for its executive administrator within the current categorized range for Group 5 agencies.

• The legislature should set the TWDB’s executive administrator’s salary at $192,600, thereby allowing TWDB’s governing Board to have the flexibility of setting the executive administrator’s salary within the Group 5 salary range not to exceed $192,600.

Background

The executive administrator position is responsible for the management and oversight of complex and multidisciplinary natural resources, engineering, and financial programs. Each program area presents its own unique opportunities and challenges for TWDB leadership. The responsibilities assigned to the TWDB are at the center of ensuring that Texas has viable options now and in the future for water resources development. A key component of this position is the ability to oversee the management of the TWDB portfolios. The loan portfolio as of August 31, 2012, was $5.3 billion, and the debt portfolio was approximately $3 billion. The executive administrator must be able to make sound financial decisions in the best interest of the portfolio and the agency, while complying with state and federal requirements. The Development Fund general obligation bond authority for the TWDB was recently increased to an amount not to exceed $6 billion at any time, providing a revolving authority. It is incumbent on the TWDB to manage within the debt authority provided, while monitoring loan recipients to ensure sufficient loan payment schedules and repayment of the bonds issued. This requires extensive monitoring and management, especially in the current economic environment. The credit rating of the State of Texas is dependent on prudent management of this debt portfolio.

The community impact of the TWDB’s financial programs has proved to be greatly beneficial and cost effective:

• In Fiscal Year 2011, the TWDB made more than $530 million in financial assistance commitments.

• TWDB saved Texas communities financing costs through its low interest financial assistance programs.

• Fitch, Inc., Moody’s Investors Service, Inc., and Standard & Poor’s Rating Services, a Standard & Poor’s Financial Services LLC, business, have rated the TWDB General Obligation Bonds “AAA,” “Aaa,” and “AA+,” and TWDB state revolving fund revenue bonds are rated “AAA,” “Aaa,” and “AAA,” respectively.

• The TWDB actively manages debt and refunded more than $1.9 billion in principal of bonds over the past 14 years, for a net present value cumulative savings of $175.8 million (9 percent).

Continued ▶
The passage of Proposition 2 in November 2011 provides the TWDB with additional bond authority not to exceed $6 billion at any time, well exceeding the previous one-time authority of $4.23 billion. This increased financial responsibility, coupled with a volatile financial market and increasing regulatory environment, requires the TWDB to be especially vigilant with the management of its funds and investment portfolio. Recruiting and retaining a qualified executive administrator is vital to protecting the financial health of the TWDB’s loan portfolio and the statutory, regulatory, and contractual integrity of its financial assistance programs.

While financially managing a large portfolio, the executive administrator also oversees the state’s water planning efforts, groundwater science, and multiple constituencies representing a wide range of the Texas population.

The executive administrator’s salary has been legislatively capped at $135,000 since September of 2007. Over the past three biennia, the Board has requested to increase the executive administrator’s salary without success.

**Changes in statute and administrative rules**

**General Appropriations Act**

---

Based on planning surveys, water providers will need nearly $27 billion in state financial assistance to implement strategies for municipal water user groups.

—2012 State Water Plan
This page is intentionally left blank.
LEGISLATIVE APPROPRIATIONS REQUEST EXCEPTIONAL ITEMS
Portfolio Protection

Description and justification

The TWDB is requesting funding for five staff at a biennial cost of $679,400 to provide ongoing monitoring and management of the bond and loan portfolios in response to fluctuating financial market conditions, fiscal and budgetary pressures at the state and local levels, and severe drought conditions.

With borrowers experiencing increased fiscal stress, TWDB has identified more borrower compliance and risk factors that require increased staff time to assist entities in resolving the identified issues. While decreased interest earnings have created revenue pressures for borrowers, they are appropriately reviewing their status and taking advantage of bond refundings to lower their costs. While TWDB applauds good fiscal management by borrowers, this is creating a historic increase in the number and amounts of prepayments to TWDB. Each prepayment requires individual diligence and resolution as required under IRS regulations, and as appropriate to ensure responsible management of the TWDB debt portfolio.

As the market and financial institutions adjust to increased regulation, TWDB must adjust to interact, reconcile, and accommodate the regulations and provide additional information required. Examples of increased requests and requirements include debt issuance and refunding requirements, paying agent debt confirmation, and debt service reconciliation with the TWDB custodian and the Depository Trust Corporation.

TWDB continues to receive applications for loan funding to address ongoing water-related needs. TWDB’s ability to provide ongoing financing was supported by the passage of a constitutional amendment in 2011, which provides additional general obligation bond authority not to exceed $6 billion at any time (Section 49-d-11 of Article III of the Texas Constitution). As TWDB is aware, along with the ability to issue state debt also comes the fiduciary responsibility for the state’s financial resources.

External/internal factors

The dynamic market will continue to present challenges, requiring constant and diligent review of the TWDB’s loan and debt portfolio. Along with the challenges market and economic conditions present, TWDB continues to monitor prepayments to take advantage of market opportunities related to repayment and refunding debt.
Description and justification
In the coming years, the state’s demand for water is projected to exceed supply from conventional surface water and groundwater sources. The state will need to identify new cost-effective sources of water to meet the needs. Toward this end, 13 regional water planning groups have recommended non-conventional water management strategies, such as water reuse, desalination, and aquifer storage and recovery, to meet, at least partly, the needs. However, implementing non-conventional strategies is challenging for a number of reasons, including insufficient data, experience, and awareness about a strategy. The present request will address some of these challenges and will be used to directly assist in the implementation of non-conventional strategies.

What actions are needed today to ensure that these new supplies will be readily available when needed? While non-conventional water management strategies can provide timely and cost-effective water supplies in most regions of the state, implementing them is challenging. The actions needed today include collecting and disseminating data and information in a timely manner to potential users; demonstrating the technical feasibility and cost-effectiveness of new technologies; and developing an effective outreach program. Specifically, we will use the requested funding to collect aquifer data, model the brackish aquifers, fund water reuse and desalination demonstration projects statewide, and prepare technical briefings and workshops for the public.

How can the state effectively help utilities consider and adopt cost-effective reuse, desalination, and aquifer storage and recovery water management strategies? By providing them with crucial data and information they will need to make an informed decision about the strategy and by providing technical, financial, and educational assistance to implement the strategy.

Continued ➤
**External/internal factors**

The drought of 2011 brought into sharp focus the state’s reliance on conventional water supplies. It also increased awareness for the need to diversify the state’s water portfolio. Stakeholder testimony before House Natural Resources Committee interim hearings overwhelmingly indicated the need to develop non-conventional water supplies and storage mechanisms such as desalination, water reuse, and aquifer storage and recovery. Furthermore, 13 regional water planning groups have recommended these non-conventional water management strategies to meet, at least partly, some of their needs.

Non-conventional water management strategies can provide timely and cost-effective water supplies in most areas of the state. However, before these strategies gain widespread acceptance, they present serious challenges that must be overcome (for example, lack of data, shortage of technical experience, and an understanding and acceptance of the technologies).

Funding is needed to continue and accelerate our brackish aquifer mapping program so that data can be collected and distributed in a timely manner to utilities and water planning managers. Likewise, funding will be needed to continue the brackish groundwater desalination and water reuse demonstration projects that inform the public about new, practical, and cost-effective technologies. Education and outreach activities, which are an integral part of our programs, need to be strengthened to convey the message and disseminate information.
Regional Planning

Description and justification

TWDB is requesting funding to restore general revenue previously appropriated for regional water planning grants and groundwater availability models (GAMs) but redirected to cover the increased costs for the Data Center Consolidation contract during the 2012–13 biennium.

Groundwater is Texas’s primary source of water, providing 59 percent of all the water used in the state. Groundwater users, managers, and planners must answer a critical question: How much groundwater is available for use? With the advent of regional water planning in 1997, the explosive growth of groundwater conservation districts, and the focus of joint planning in groundwater management areas on desired future conditions, the need for data, analysis, and the development and enhancement of groundwater availability models becomes even more critical.

Regional water planning grants provide regional water planning groups with the necessary financial resources to successfully complete the development of their 2016 Regional Water Plans. The 2016 cycle of regional water planning will require significant effort by the regional water planning groups to determine new 50-year population and water demand projections for municipal water user groups based on the 2010 U.S. Census; develop recommendations for drought response triggers and alternative emergency drought response solutions; incorporate new groundwater availability numbers from the Groundwater Management Area Desired Future Conditions process; and evaluate and recommend additional water management strategies to respond to new demand projections and water availability.

External/internal factors

If general revenue is not restored, GAM development and improvement would be delayed. Previous budget reductions have already greatly hindered TWDB’s ability to develop and update GAMs; further reductions will continue to impact the quality of the state’s modeling tools.

The U.S. Census data collected in 2010 must be incorporated into the municipal population and water demand projections for regional and state water supply planning. Financial resources are needed to process the information to provide both 50-year population projections and water demands for approximately 3,000 individual water user groups. The extreme Texas drought of 2011 increased the awareness and need for regional water planning groups to establish recommended triggers for water providers, consider implementation of their drought contingency plans, and recommend alternative emergency solutions to water supply issues that occur during extreme drought events. The regional water planning groups have also been estimating groundwater availability to meet future demands. However, changes to law (House Bill 1763, 79th Legislative Session) established a new process regional water planning groups must use to determine modeled available groundwater (the amount of groundwater available to meet water supply demands). This will be fully incorporated into the planning process and will be a major change to past water plans.
State Water Plan Financing

Description and justification
This request is for debt service appropriations for $700 million in bonds for the Water Infrastructure Fund (WIF) and $200 million in bonds for the State Participation Program (SPP) for continued implementation of State Water Plan financing. Financing will support the planning, design, and construction of projects to meet the water supply needs of the citizens of Texas. The 2012 State Water Plan estimated $53 billion in capital costs is needed to design, construct, and/or implement the recommended water management strategies and projects. Municipal water providers are expected to need nearly $27 billion in state financial assistance to implement these strategies.

WIF, established in 2001 and initially funded in 2008, provides subsidized financing for projects to implement recommended water supply strategies in the State Water Plan. Appropriations are used to subsidize the interest rate the applicant receives, or using the WIF deferral option, allow applicants to defer payments on subsidized funding for up to 10 years on planning and permitting costs. This provides applicants the ability to defer financing costs until construction is complete and revenue can be generated.

WIF-funded projects have included raw water conveyance, wetland reuse, and construction of surface water treatment plants, new well fields, transmission lines and recycled water pipelines, and planning and development of new reservoirs.

The SPP facilitates the construction of optimally sized, regional water supply, wastewater, or flood control projects. Frequently, project sponsors lack a sufficient customer base to afford to build an optimally sized regional facility at the time of project implementation. To provide assistance, TWDB uses general obligation bond proceeds to purchase an ownership interest in the excess capacity of a project. Because the applicants’ repayments are initially deferred, the TWDB uses the appropriations to offset its debt service costs until the applicant is able to purchase TWDB’s ownership interest.

External/internal factors
According to the 2012 State Water Plan, if Texas does not implement new water supply projects or management strategies, then homes, businesses, and agricultural enterprises throughout the state are projected to need 8.3 million acre-feet of additional water supply by 2060. Economic losses from not meeting water supply needs could reduce income by approximately $11.9 billion if current drought conditions approach the drought of record, and as much as $115.7 billion by 2060, with more than a million lost jobs. Without affordable financing alternatives, some projects will not be able to proceed in a timely manner to meet expected needs.
Economically Distressed Areas Program

Description and justification
The Economically Distressed Areas Program (EDAP) was created in 1989 to provide affordable financial assistance for water and wastewater services where those services are inadequate to meet minimum standards. The program includes measures to prevent future substandard development through the required adoption and enforcement of Model Subdivision Rules by local government entities, as legally applicable. The EDAP has had $500 million in voter-approved general obligation bonds authorized and has been augmented with $300 million in Environmental Protection Agency (EPA) grants for the Colonia Wastewater Treatment Assistance Program (CWTAP).

The 79th Legislature expanded the EDAP program to include subdivisions in existence prior to June 2005 and changed the definition of an affected county. Ongoing financing needs have been identified for existing projects and through demand in other funding programs. The TWDB, through the EDAP and CWTAP programs, has invested in the pre-construction phases of multiple projects and anticipates applications will be submitted for future design and/or construction.

Legislative authorization is requested to issue up to $50 million in general obligation bonds in the Fiscal Year 2014–2015 biennium for EDAP projects and the corresponding legislative appropriations of approximately $6.0 million in the Fiscal Year 2014–2015 biennium for payment of debt service to support the bond issuance.

External/internal factors
If appropriations for program funds are not approved, projects in economically distressed areas would be delayed or not funded. Projects that previously received TWDB planning, acquisition, and design funding would not have EDAP grant/loan funding available to them to begin and complete construction.

El Paso County Tornillo Water Improvement District wastewater project
Gause Water Supply Corporation elevated storage tank: benefiting 927 customers

Projects shown received TWDB financial assistance.

Brushy Creek Regional Utility Authority water treatment plant: benefiting 192,354 customers