Texas Water Development Board

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TO: Board Members

THROUGH: Jeff Walker, Executive Administrator

FROM: Carmen Cernosek, Senior Advisory and Director, Governmental Relations
Kathleen Ligon, Senior Policy Analyst, Governmental Relations

DATE: November 19, 2018

SUBJECT: Legislative Priorities Report for the 86th Texas Legislative Session

ACTION REQUESTED

Consider approving the 86th Session Legislative Priorities Report.

BACKGROUND

Texas Water Code §6.156 requires that the Board make a biennial report to the governor and members of the legislature that includes a statement of the Board's activities and recommendations for necessary and desirable legislation.

KEY ISSUES

The proposed TWDB Legislative Priorities report includes an executive summary and recap of recent TWDB activities in addition to the following six legislative recommendations:

1. Flood Recommendations
2. Recreation of the Strategic Mapping Account
3. Extension of House Bill (HB) 30 Brackish Resources Aquifers Characterization System (BRACS) deadline
4. Clean Water State Revolving Fund Statutory Update
5. Clean Up of Water Conservation Plan Requirements for Financial Assistance Applicants
6. Removal of Obsolete and Duplicative Requirements

Flood recommendations are also included in the 2018 State Flood Assessment report.

Our Mission

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

Board Members

Peter M. Lake, Chairman | Kathleen Jackson, Board Member | Brooke T. Paup, Board Member

Jeff Walker, Executive Administrator

In conjunction with these legislative priorities, the report also includes narrative summaries of the TWDB's Exceptional Item Requests included in the agency's Legislative Appropriations Request for Fiscal Years 2020–2021. These requests include:

1. Flood Technical Package ($4,448,000)
2. Groundwater Funding Package ($3,000,000)
3. Strategic Mapping Program ($3,000,000)
4. Data Center Consolidation ($488,964)
5. Centralized Accounting and Payroll/Personnel System (CAPPS) Implementation ($588,063)

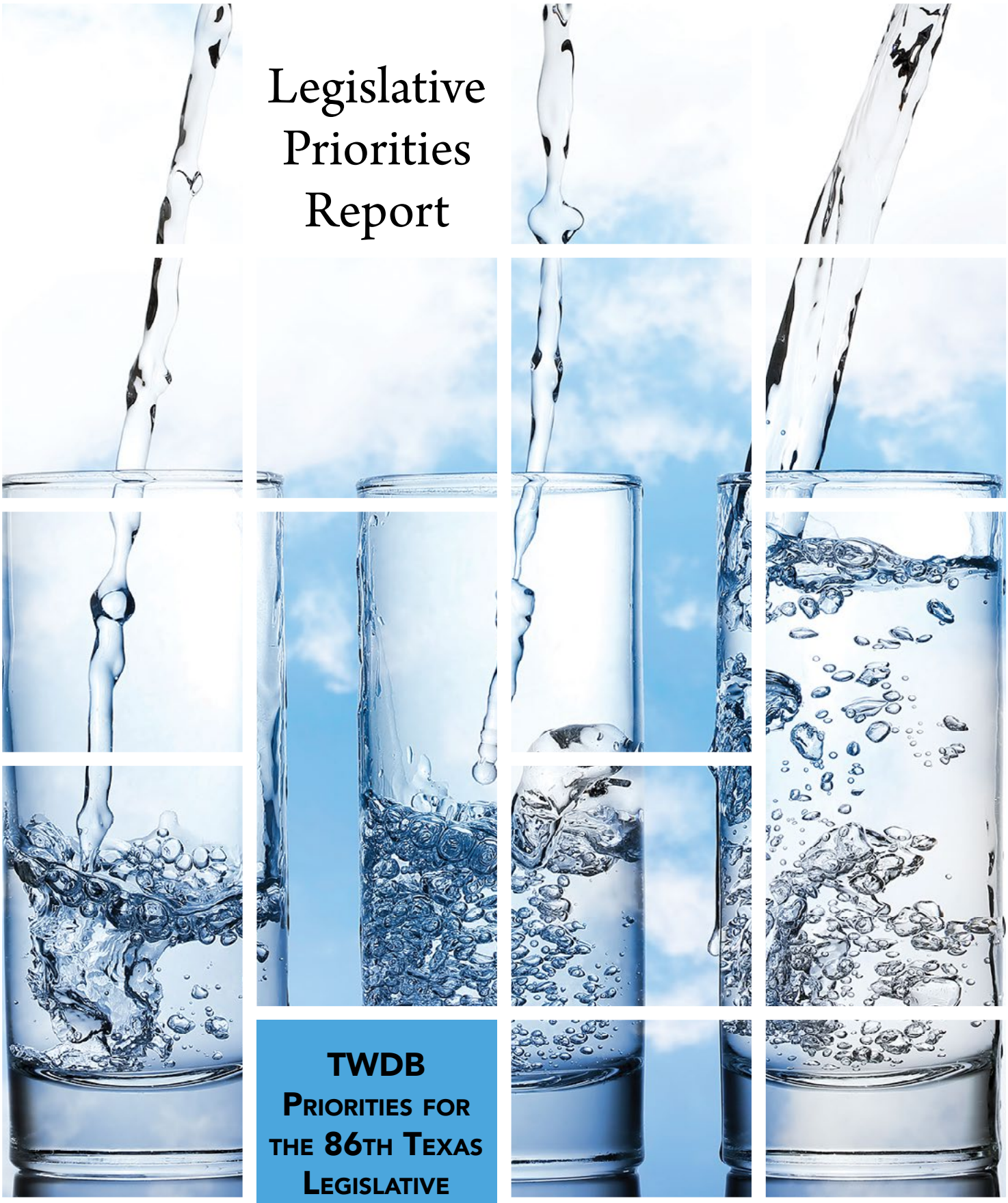
RECOMMENDATION

In order to meet statutory requirements, the Executive Administrator recommends approval of this item.

Attachment:

Legislative Priorities Report
86th Legislative Session

Legislative Priorities Report



TWDB Priorities for the 86th Texas Legislative Session

Texas Water Development Board

Legislative Priorities

86th Texas Legislative Session

Peter M. Lake, Chairman
Kathleen Jackson, Member
Brooke T. Paup, Member

Jeff Walker, Executive Administrator

January 2019

Texas Water Development Board
www.twdb.texas.gov

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Round Rock, Texas.

Executive Summary

The mission of the Texas Water Development Board (TWDB) is to provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.

To further our mission, the TWDB collects, analyzes, and distributes water and geographic data that helps businesses, citizens, local governments, and water providers make informed decisions on their water resources. The agency coordinates regional water planning and prepares the state water plan to show Texans what actions are needed to achieve water security in times of drought. The TWDB also administers cost-effective financial assistance programs for water supply; wastewater treatment, distribution, and collection; flood mitigation; and agricultural water conservation projects.

Since its creation in 1957, the TWDB has been charged with addressing the state's water needs through planning and financial assistance. Local communities carry out the responsibility for providing water to their residents; however, the TWDB has a leadership and support role through guiding, enabling, and supporting the conservation and responsible development of the state's water resources. And since the transfer of the administration of the National Flood Insurance Program in Texas to the TWDB in 2007, the agency has taken on greater flood-related responsibilities, including supporting Texans in preparing for and responding to flood events.

Section 6.156 of the Texas Water Code requires that the TWDB provide to the governor and members of the legislature a biennial report that includes a statement of agency activities and recommendations for necessary and desirable legislation. This report includes the following six legislative recommendations, in priority order, that further our agency mission and goals outlined in the TWDB's *Strategic Plan, 2019–2023*:

1. Flood Recommendations
2. Recreation of the Strategic Mapping Account
3. Extension of House Bill (HB) 30 Brackish Resources Aquifers Characterization System (BRACS) Deadline
4. Clean Water State Revolving Fund Statutory Update
5. Clean Up of Water Conservation Plan Requirements for Financial Assistance Applicants
6. Removal of Obsolete and Duplicative Requirements

In conjunction with the TWDB's legislative priorities, this report also includes narrative summaries of the TWDB's Exceptional Item Requests included in the agency's *Legislative Appropriations Request* for Fiscal Years 2020–2021. These requests include, in priority order:

1. Flood Technical Package ($4,448,000)
2. Groundwater Funding Package ($3,000,000)
3. Strategic Mapping Program ($3,000,000)
4. Data Center Consolidation ($488,964)
5. Centralized Accounting and Payroll/Personnel System (CAPPS) Implementation ($588,063)

Agency Activities

The following sections highlight recent accomplishments and initiatives that the TWDB intends to pursue in the next five years, as outlined in the TWDB's *Strategic Plan, 2019–2023*.

State Water Plan Implementation

The 2017 State Water Plan, which projects that Texas' population will increase more than 70 percent by 2070, recommends more than 5,500 water management strategies crafted to conserve existing water supplies and create additional supplies to ensure that the needs of this growing population are addressed. The capital costs associated with implementing the 2017 State Water Plan are predicted to reach $62.7 billion by 2070, with water providers estimating they will need about $36.2 billion of that amount in state assistance. Of the $62.7 billion, approximately $35 billion will support strategies associated with municipal water suppliers or wholesale water providers.

The TWDB's State Water Implementation Fund for Texas (SWIFT) and other financial assistance programs help finance the strategies recommended in the state water plan. As of fall 2018, the TWDB has committed almost $8.2 billion for 54 state water plan projects in Texas through the SWIFT program.[1] Projects include transmission pipelines, canal linings, capacity expansions, leak detection systems, water meter replacements, reservoirs, and other strategies that will help ensure Texans have sustainable and reliable water supplies for decades to come.

Bond sales through the State Water Implementation Revenue Fund for Texas have achieved the highest AAA/AAA bond ratings for all five issuances, maximizing savings to program participants and the communities they serve. The TWDB estimates project sponsors in the first five rounds of funding will save more than $845 million in financing costs. The estimated total savings, based on the TWDB's cost of funds, may be even greater for communities whose credit ratings are lower than utilized benchmarks.

[1] *The SWIFT program includes two funds, the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT). Revenue bonds for the program are issued through SWIRFT.*

Flood Initiatives

The TWDB is continuing to place a high priority on enhancing the abilities of communities to plan for and respond to flood emergencies. Since receiving new funding after the Central Texas floods of 2015, the TWDB has invested in a variety of programs to increase data collection, data dissemination, and studies to support improved flood forecasting and warning systems throughout Texas. Initial efforts included installing new flood gages in underserved areas, "flood hardening" of existing gages, and aggregating data into web resources, including creating TexasFlood.org, a new website. The website showcases a map with streamgage data from around the state and allows users to subscribe to gages in their area to receive texts when a location is in flood stage. The TWDB is continuing to work with the U.S. Geological Survey, the National Weather Service, and other streamgage owners to improve this first-ever comprehensive reporting site for river levels across Texas.

Other efforts have included enhancing the TexMesonet.org, the TWDB's website that reports climatic information from weather stations and weather networks around the state. TexMesonet aggregates data from multiple sources and compiles it into one online location, with a focus on filling in gaps where data is not currently being collected. This information helps the National Weather Service make flood predictions and provides valuable data to first responders and citizens.

Following the historic flooding from Hurricane Harvey in 2017, the TWDB made modifications to its existing emergency programs under the Drinking Water State Revolving Fund (DWSRF) and the Clean Water State Revolving Fund (CWSRF) to expedite funding for recovery and resiliency projects. Through the DWSRF Urgent Need program and the CWSRF Emergency Relief program, the TWDB is providing set-aside funds for principal forgiveness and low-interest loans for projects that have been impacted by a disaster, including additional set asides and subsidies for disadvantaged, small, and rural communities. The TWDB will also continue to administer other state and federal grant programs for flood mitigation and perform outreach related to these programs.

Finally, the TWDB has developed the *State Flood Assessment* in recognition that the next important step to reduce the impacts of flood hazards is a thorough

The TWDB administers financial assistance for water, wastewater, flood mitigation, and agricultural water conservation projects.

understanding of existing programs, risks, and needs for mitigation measures across the state. Incorporating broad input from a variety of stakeholders, the assessment provides information and policy recommendations for use in furthering comprehensive flood management in Texas. The final *State Flood Assessment* report will be delivered to the 86th Texas Legislature in December 2018.

Communication Initiatives

In January 2017, the TWDB hosted the first-ever *Water for Texas* conference. Approximately 550 registered guests attended general sessions as well as breakout sessions in four concurrent technical tracks: Emergency Management and Flood; Science, Technology, and Conservation; Policy and Law; and Planning and Infrastructure Financing. The conference was widely regarded as a great success, with 76 percent of post-conference survey respondents rating its overall quality as "excellent" and more than 84 percent of respondents reporting that they plan to attend the next conference.

The agency will host its second *Water for Texas* conference in January 2019. Panels, workshops, and exhibits will examine the state's past, present, and future water narrative. Topics will include the following:

- Texas water policy—past and present
- *State Flood Assessment* overview
- Drought and flood resiliency projects
- Conservation and innovative water supply solutions
- Water communications—successes and challenges

In addition to the conference and other outreach efforts, the agency has continuously expanded its communications platforms to reach a greater number of stakeholders as well as the general public, particularly through social media. For state fiscal year 2017, agency social media activities had more than 2.5 million impressions. During the *Water for Texas 2017* conference awards banquet, the conference hashtag was the top trending hashtag on Twitter. And the award-winning *#Txwindmills* and *#Txwater towers* Instagram campaign, a partnership with the Texas Parks and Wildlife Department and Texas Historical Commission, reached a broad audience over the summer months. The TWDB continued the campaign for the third year in summer 2018.

Outcomes of the 85th Legislative Session

Along with general government legislation, the agency has worked to implement the following TWDB-related legislation from the 85th Legislative Session:

- HB 544, relating to the use of the rural water assistance fund
- HB 1573, relating to personnel requirements for water loss auditors
- HB 1648, relating to the designation of a water conservation coordinator by a retail public water utility to implement a water conservation plan
- HB 2215, relating to the adoption of desired future conditions for aquifers in groundwater management areas and the consideration of those conditions in the regional water planning process
- SB 1289, relating to the purchase of iron and steel products made in the United States for certain governmental entity projects
- SB 1511, relating to the state and regional water planning process and the funding of projects included in the state water plan
- SB 1538, relating to the permissible uses of the floodplain management account

The TWDB is placing a high priority on current and future flood-related initiatives.

Recommendations to the 86th Texas Legislature

1. General Flood Recommendations

The legislature should pursue proactive statewide flood mitigation by first developing foundational flood risk management policies and goals that will support three key pillars of investment: (1) improved and updated flood mapping and modeling; (2) coordinated watershed-based planning; and (3) mitigation efforts, such as policy enhancements, increased technical assistance, and financial assistance for project implementation.

Background

Preliminary findings from the 2018 *State Flood Assessment*—an overview of flood-related roles and responsibilities, an estimation of flood mitigation costs, and a synopsis of stakeholder views on the future of flood planning in Texas—support the need for three key pillars of state investment: (1) mapping and science, (2) planning, and (3) structural and non-structural mitigation. Stakeholders involved in the assessment identified the need for additional resources directed toward floodplain management and mitigation. They also expressed a need for expanded educational outreach and technical assistance opportunities throughout the state. These priorities emerged from myriad suggestions and reflect areas of broad consensus among stakeholders. The recommendation to invest in the three pillars will be guided by foundational flood risk management policies and goals supported by the 2018 *State Flood Assessment* and is based on these underlying core principles:

a. Up-to-date data, science, and technical tools are necessary to inform decision making by local, regional, and state leadership.

b. Planning should be conducted at a watershed level with the common, minimum aim of addressing flood risk management policies and goals, using the best technical tools available, according to a standardized state framework.

c. Financial assistance should be provided to those mitigation projects that meet the statewide flood risk mitigation goals and that (1) will have

no harmful effects on upstream or downstream neighbors and (2) are the product of a planning process based on a standardized state framework.

Specific Flood Recommendations and Further Background

Develop a statewide flood risk management policy
The legislature should develop a state flood risk management policy and goals by which to guide state-funded investments in flood mapping, planning, and mitigation. These policies and goals will

- *provide the foundation upon which the other flood recommendations will rest;*
- *serve as a statewide minimum threshold for addressing flood risks that may, however, be exceeded by local entities using their own resources to further reduce local flood risks;*
- *largely determine the framework, scope, and nature of the work tasks that must be performed as part of any state or regional flood planning process, irrespective of the format or stakeholder membership of such a planning process, and;*
- *guide the responsible stewardship of any future investments by the state in flood mitigation.*

The legislature should identify specific flood risk reduction goals and an acceptable level of risk that will remain even after the state goals are fully met. Absolute protection against all potential flood hazards is not possible and state resources to protect against or mitigate flood risk are limited. So Texas must decide both to what end and to what degree it is willing to invest state resources to reduce certain flood risks. An achievable statewide risk reduction goal might be, for example, to focus on ensuring the protection of all lives at risk from up to a 0.2 percent annual chance event (often called the "500-year flood"), or the goal might be to minimize loss of property and lives at risk from a 1 percent annual chance event (the "100-year flood").

These goals, once established, will provide a foundation for the three pillars of state investment as outlined below.

(1) Mapping
The legislature should provide additional financial investment in modeling, mapping, and flood-related science to ensure that Texas better understands flood risk and is better prepared when flooding events occur. The legislature should set a goal of developing or updating flood risk maps across the state, using current data and technology standards, by 2030.

Much of Texas is either unmapped or uses out-of-date flood insurance rate maps, leading to widespread misunderstanding about true flood risks. Mapping is the first step in identifying and communicating the full spectrum of flood risk. However, FEMA's insurance maps show the boundary of inundation for a specific annual chance flood event—often misinterpreted as the line between "safe" and "not safe." These maps are narrowly focused on one level of flood risk; may not reflect flood potential based on the most current topographic, land use, or rainfall data; and effectively limit the picture of flood risk.

Above and beyond mapping, sound science and data are the core elements of effective planning and flood mitigation. Through support from the Office of the Governor and the Texas Legislature, the TWDB has implemented new initiatives in recent years to better prepare the state for flood events. To continue expanding these efforts and to improve data collection, mapping, and monitoring of conditions across the state, the agency has requested an additional $4.45 million in appropriations from the 86th Texas Legislature. The requested funding represents a small step toward the goal of ensuring that Texas is better informed and prepared when flooding events occur, but a more significant investment will be needed to ensure that all areas of the state have accurate flood models and associated flood risk maps.

(2) Planning
The legislature should invest in coordinated, watershed-based flood planning to meet state flood risk management policies and goals. The format and structure of a flood planning process should be largely determined by state flood risk policies and goals and should rely on the best available science.

Although local planning efforts already take place across the state, there is not a unified, coordinated process to assess risk and plan for the state's flood risk goals. Instead, planning and project implementation occurs based on varying risk acceptance levels and in a piecemeal fashion. Implementing flood mitigation without a coherent approach or sound scientific data, proper

mapping, and coordinated planning may be ineffective or, worse, may intensify flood impacts in upstream or downstream communities.

The foundation of a standardized planning framework should be flood risk management policies and goals as accomplished through a stakeholder-driven process. A state flood planning process would require clearly establishing

- the defined roles for local, state, regional, and federal entities in flood planning;
- a common vocabulary of terms;
- the purpose, scope, scale, time frame, and priorities of state flood risk planning and mitigation;
- an appropriate state flood planning benchmark;
- planning principles, processes, products, and responsibilities; and
- a methodology for estimating costs and, as necessary, determining cost-benefit ratios.

(3) Mitigation Assistance

The legislature should develop a long-term, affordable and sustainable method to provide financial assistance and other incentives for developing and updating flood maps, statewide flood planning, and implementing flood mitigation projects that are recommended to meet state flood risk management goals. Additional financial investment is needed to support training and educating floodplain administrators, elected officials, emergency responders, and others involved in flood-related issues and to provide technical assistance to local governments seeking state and federal funding for projects.

Prior to any formalized statewide or regional flood planning process, the legislature should establish a near-term funding option to allow communities' access to local match funding to support future mitigation activities or to respond quickly to federal funding opportunities following disaster events.

Significant investment is required to mitigate flooding in Texas. Though the responsibility to prepare for and mitigate flood impacts is primarily local, most communities do not have the economic resources required to accomplish their goals. Statewide flood mitigation costs over the next 10 years are estimated to be more than $31.5 billion; however, that estimate is derived from limited stakeholder data and not based on any common, statewide flood risk mitigation goal. Due to shortfalls in local funding, communities may need approximately $18 to $27 billion in financial assistance. (These estimates account only for mitigation costs based on stakeholder input. They do not account for projects associated with Hurricane Harvey recovery, other large federal projects such as the Coastal Spine or third reservoir being discussed for the Houston area, or rehabilitation of high hazard dams within the state.)

It is imperative that any financial assistance or other incentive provided by the state for flood mitigation implementation should be conditioned on a requirement that projects will have no harmful effects on upstream or downstream neighbors and are recommended to meet state flood risk mitigation goals as part of a state flood planning process.

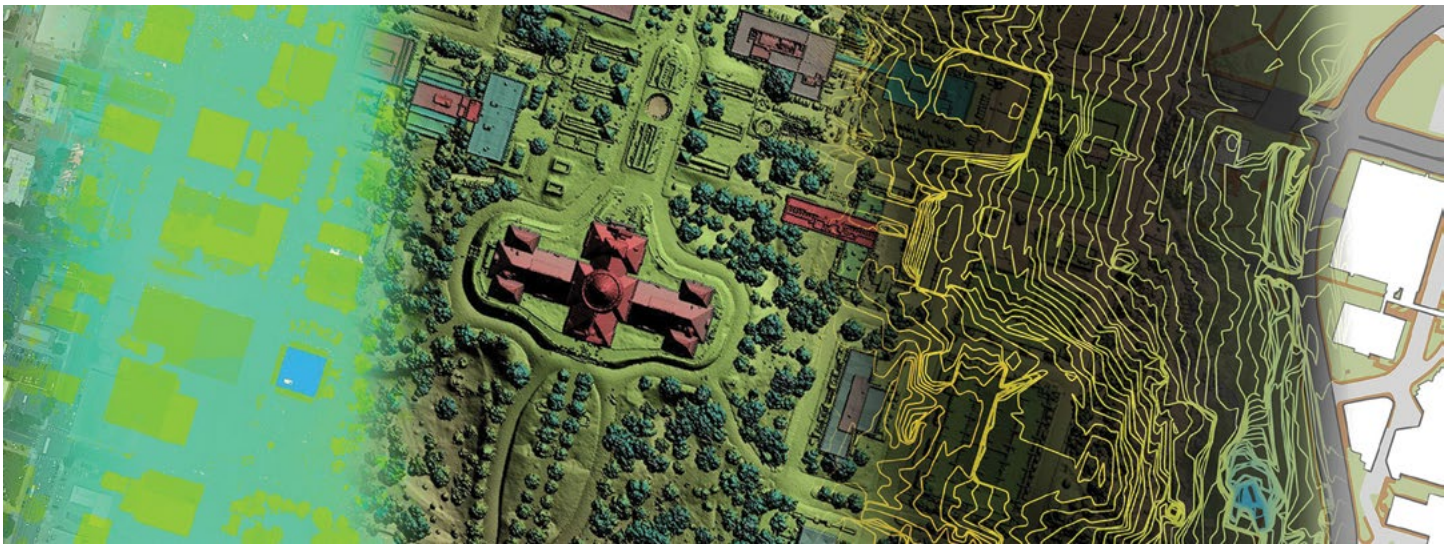
2. Recreation of the Strategic Mapping Account

The legislature should recreate the Strategic Mapping Account as a general revenue-dedicated (GR-D) account exempt from the funds consolidation process and appropriate the unexpended balance for future biennia.

The 80th Texas Legislature passed statutory language creating the Strategic Mapping Account, but the account was not included from exemption in the funds consolidation bill from that session. As a result, the account was not truly created as a dedicated GR-D fund. If recreated, the account would allow for the collection of agency and grant funding, combined with Strategic Mapping general revenue funding, for statewide and regional geospatial data purchases. By exempting the account from the funds consolidation process, the state has greater flexibility to leverage funds for cost-sharing geospatial acquisition projects.

Background

The Strategic Mapping Program or "StratMap" was originally established in 1997 to develop consistent statewide digital data layers. The program acquires, stores, and distributes digital geospatial information to all state agencies and makes it available online for use by local, regional, and federal governments, academia, private industry, and the public. Data collected through



The Strategic Mapping Program acquires digital geospatial information that can be used to produce maps with many layers, such as this photo of the Texas capitol. It includes aerial photography, 3D LiDAR elevation models, contour lines, and building outlines.

the program serves many purposes, including routing emergency calls, assessing the effects of natural disasters, mapping roadways and construction projects, determining reservoir water levels, and monitoring numerous ecological and air quality conditions. It also supports emergency management activities by developing critical geographic information for first responders.

StratMap maintains comprehensive data standard specifications to ensure consistent, high-quality data products across the state. StratMap staff at the Texas Natural Resources Information System (TNRIS), a division of the TWDB, works with 70 partners across the state on cost-share initiatives to provide the best value data products.

The Strategic Mapping Account was created in the general revenue fund during the 80th session to facilitate implementing StratMap and other TNRIS programs. The account was also intended to provide grants to political subdivisions of the state for projects related to the development, use, and dissemination of digital geospatial information. Since the account was not exempt from the funds consolidation process that session, it was not created and, therefore, has never been used for its intended purpose.

If recreated with a cross-biennial transfer allowance, the StratMap Program would have greater flexibility in collecting geographic data, some of which have seasonal data collection limitations. For example, aerial imagery is often collected during the winter or "leaf-off" season to allow for better mapping of structures that may be obscured by tree foliage during the growing season. The ability to transfer funds across biennia would also be beneficial because the development and production of geospatial data is a labor-intensive process that can take up to 18 months to complete and frequently cannot be done within a single biennium.

Statutory Change: Recreation of the Strategic Mapping Account in Funds Consolidation Bill

3. Extension of HB 30 Brackish Resources Aquifers Characterization System (BRACS) Deadline

The legislature should extend the 2022 deadline from HB 30, 84th session, to 2032 to identify and designate brackish groundwater production zones in brackish aquifers that meet HB 30 criteria.

This extension is requested because the TWDB is currently not able to meet the deadlines established in HB 30 to complete the identification and designation of brackish groundwater production zones due to inadequate funding and the limited availability of contractors capable of assisting with these important studies. We estimate that a 10-year extension would be necessary to finish mapping the brackish aquifers in the state that meet HB 30 criteria, with all the zones identified and designated by 2032. The TWDB will subsequently continue mapping the remaining brackish aquifers in the state that do not meet HB 30 criteria.

The TWDB has requested additional funding of $2 million in its 2020–2021 *Legislative Appropriations Request*. If additional funding is appropriated, the TWDB could finish the work prior to 2032 (but still later than 2022), with the end date depending on the amount and timing of appropriations and availability of contractors. The TWDB estimates that $2 million in appropriations in each of the next four biennia is necessary to complete the required HB 30 work by approximately 2026.

Background

Texas has an abundance of brackish groundwater, estimated at more than 2.7 billion acre-feet. Brackish groundwater, containing dissolved minerals in the range of 1,000 to 10,000 milligrams per liter, is an important source of potential new water supply for Texas communities, which can help reduce demand on fresh water resources. In the 2017 State Water Plan, 8 of the state's 16 regional water planning groups included brackish groundwater desalination as a recommended water management strategy. In total, these include 78 recommended water management strategies that will help meet the water supply needs in these regions. If the recommended strategies are implemented, desalination of brackish groundwater will produce about 111,000 acre-feet per year of additional water supply by 2070. This constitutes about 1.3 percent of all recommended water management strategies in the 2017 State Water Plan.

Since 2009, the TWDB has administered the Brackish Resources Aquifers Characterization System (BRACS) program to thoroughly characterize brackish aquifers. The goal of the program is to map and characterize the brackish aquifers of the state in greater detail using existing geophysical well logs and available aquifer data.

HB 30 required that the TWDB include these designations in the agency's biennial progress report to the legislature on the implementation of seawater or brackish groundwater desalination activities. The bill included deadlines, as follows:

1. *Not later than December 1, 2016, an identification and designation of brackish groundwater production zones for*
    1. *the portion of the Carrizo-Wilcox, Gulf Coast Aquifer, Blaine Aquifer and Rustler Aquifer.* (This has been completed.)
2. *Not later than December 1, 2022, an identification and designation of brackish groundwater production zones for all other areas of the state.*

Statutory Change: Section 4, Chapter 990 (HB 30), Acts of the 84th Legislature, Regular Session, 2015

4. Clean Water State Revolving Fund Statutory Update

The legislature should enact statutory provisions to reflect changes in federal law regarding the Clean Water State Revolving Fund (CWSRF), including a maximum loan term of up to 30 years.

The legislature should change the relevant sections of the Texas Water Code to reflect the changes made by the federal Water Resources Reform and Development Act of 2014 (WRRDA). WRRDA amended the Federal Water Pollution Control Act, and these changes have a direct impact on the CWSRF. WRRDA expanded the types of projects and activities eligible under the Texas CWSRF program. In addition, it allowed direct loan terms of up to 30 years, provided the term does not exceed the useful life of the project.

Federal changes to the CWSRF have expanded the types of projects eligible for assistance.

Background

The Texas Water Code, in Sections 15.601(a) and 15.603(a), refers to providing financial assistance only to political subdivisions for construction of treatment works and to persons for nonpoint source pollution control and abatement projects. In addition, Section 15.604(a) states that financial assistance may be provided to persons for nonpoint source pollution control and abatement projects. However, WRRDA allowed financial assistance to both political subdivisions and persons for many new activities, including storm water or subsurface drainage water projects, watershed projects, reusing or recycling wastewater projects, and technical assistance to owners and operators of small and medium publicly owned treatment works. The Water Code should be amended to reference all the projects and activities that may be funded under the CWSRF, which would include new projects eligible for assistance, along with the projects currently listed in the Texas Water Code.

The Texas Water Code, in Chapter 15, Section 15.604(a), currently includes the prior language from the Federal Water Pollution Control Act that the term of a CWSRF loan may not exceed 20 years. WRRDA increased the term from 20 years to the lesser of 30 years or the projected useful life of the project. WRRDA also changed the language related to the loan amortization.

Statutory Change: Chapter 15 (Subchapter J) of the Texas Water Code

5. Clean Up of Water Conservation Plan Requirements for Financial Assistance Applicants

The legislature should enact statutory changes so that there is a single, consistent requirement for water conservation plans for all applicants for TWDB financial assistance.

The requirement that each applicant adopt or implement a water conservation plan is located in various sections of statutes applicable to each TWDB financial assistance program, and these requirements are not all consistent with one another. For example, in the SWIFT program, the current water conservation requirement language references a section of the Texas Water Code that only applies to surface water rights. Therefore, water conservation plans are only required for applicants that hold a surface water right, even though the legislature most likely intended to require such plans for all applicants, including those implementing projects with other sources of water, such as groundwater.

To ensure consistency and clarity for our borrowers, we recommend locating this statutory requirement in one section that is applicable to all relevant TWDB financial assistance programs. One consistent water conservation plan requirement for all programs would eliminate discrepancies and apply the requirement to both surface water and groundwater projects for all programs, including SWIFT.

Statutory Change: Add language to Water Code 16.402, Water Conservation Plan Review; amend Texas Water Code §§ 15.435 and 15.607; and repeal other related water conservation plan provisions in §§ 15.106(b)-(f); 15.975(b); 15.995(e); 16.136(4); 17.125(b), (b-1), (c)-(f); 17.277(b)-(f); 17.857(b)-(d); 17.927(c).

6. Removal of Obsolete and Duplicative Requirements

a. The legislature should remove the statutory requirement for the Water Conservation Study conducted jointly between the TWDB and the Texas State Soil and Water Conservation Board.

b. The legislature should remove the requirement to meet annually with the board of the Texas Department of Agriculture to assess the agencies' progress in meeting needs of colonia residents and to receive updates and recommendations from the Colonia Initiatives Advisory Committee. The legislature should also remove the requirement for the Colonia Funding Report jointly prepared by the TWDB and the Texas Department of Agriculture.

c. The legislature should remove the statutory requirement for the TWDB report that evaluates best management practices in water conservation plans.

Water Conservation Study

The requirement for the joint Water Conservation Study between the TWDB and the Texas State Soil and Water

Conservation Board was included in SB 312, 77th session, which implemented the Sunset Advisory Commission's recommendations resulting from their evaluation of the TWDB. The study (as a supplement to the state water plan that is submitted by the TWDB to the legislature every five years) must include an assessment of water conservation issues, a discussion of future conservation needs, an assessment of changes needed to statutory authority to more effectively promote conservation, and other information required by statute.

Since the passage of SB 312 in 2001, the legislature created the Water Conservation Advisory Council in 2007 with powers and duties including monitoring water conservation trends and the implementation of conservation strategies. The Council, composed of 23 members representing various stakeholder interests, must also submit a report prior to each legislative session on progress made in water conservation and recommendations for legislation to advance water conservation.

Since much of the Water Conservation Study duplicates the efforts of the Water Conservation Advisory Council, the TWDB recommends removing the requirement for the joint TWDB and Texas State Soil and Water Conservation Board report. The Council's report covers similar issues and is submitted to the legislature more frequently than the study report. Furthermore, the Council is composed of a broad range of municipal and agricultural stakeholders and includes representatives of the TWDB and the Texas State Soil and Water Conservation Board as voting members.

Statutory Change: Chapter 16 (Subchapter B) Texas Water Code

Annual Meeting on Colonias with the Department of Agriculture Board

SB 312, 77th Legislature, required that the TWDB meet annually with the board of the Texas Department of Housing and Community Affairs, or the successor agency that administers the federal program that addresses the infrastructure needs of colonias, to assess the agencies' progress in meeting the needs of colonia residents and to receive an update and recommendations from the Colonia Initiatives Advisory Committee. This joint meeting was one of several requirements mandated by the legislature to track the progress of state-funded projects benefiting colonias that involved several state agencies.

The Colonias Self-Help Program, the primary focus of the joint board meetings, and the Colonia Initiatives Advisory Committee, are both no longer active. And currently, the TWDB, Texas Department of Agriculture, and 11 other state and federal agencies meet regularly as the Texas Water Infrastructure Coordination Committee to share a broad range of information on funding eligibility and technical assistance for water and wastewater infrastructure projects. Since this committee covers issues related to colonias, the joint TWDB and Texas Department of Agriculture meeting is no longer necessary.

This joint report requirement is also obsolete because both programs have changed over time in such a way that the report does not provide a useful or comprehensive snapshot of agency activities. The report focuses on coordination in border counties, but the Economically Distressed Areas Program (EDAP) is no longer limited to border counties. The existing EDAP Quarterly Report prepared by the TWDB is a better source of information that meets the legislative intent of the original appropriations rider.

Statutory Change: Chapter 6 (Subchapter C) Texas Water Code; 85th Session General Appropriations Act, Article VI, TWDB Rider 8

Water Conservation Best Management Practices Report

HB 3605, 83rd session, required that when reviewing applications for financial assistance, the TWDB evaluate an applicant's water conservation plan for compliance with the TWDB's best management practices. In addition to a report to the applicant detailing the results of the evaluation, the bill further required that the TWDB submit to the legislature a written summary of the results of these evaluations no later than January 1 of each odd-numbered year.

By the end of fiscal year 2019, the information included in this report will be posted annually on the TWDB's website so it is recommended that the report requirement be removed. The online information will meet the bill's legislative intent and will be in a more accessible format for both the legislature and the general public.

Statutory Change: Chapter 17 (Subchapter D) Texas Water Code

Legislative Appropriations Request Exceptional Item and Rider Requests

Exceptional Item Requests

The TWDB is requesting five exceptional items for the 2020–21 biennium for a total of $11,525,027.

1. Flood Technical Package ($4,448,000)

Description / justification: Flood, like drought, remains a threat to communities throughout the state—some of which are still recovering from the significant and deadly floods of 2015 and 2016 and Hurricane Harvey in 2017. The TWDB is placing a high priority on current and future flood-related initiatives. Funding of the Flood Technical Package will enable the TWDB to further its efforts and make advancements in floodplain mapping, hydraulic river and coastal modeling, flood monitoring, and the distribution of critical flood-related data and information. These initiatives will benefit citizens, emergency responders, local decision makers, and flood forecasters and help ensure that Texas is better equipped and prepared when flooding events occur.

External/internal factors: This exceptional item allows the agency to leverage funding to support technical initiatives such as acquiring LiDAR and weather data for floodplain mapping and river modeling; modeling of floodplain inundation, rainfall runoff, and coastal storm surge; developing a centralized web resource for flood-related information and water data; and estimating reservoir flood pool capacity, among others. The requested funding would build on the agency's ongoing flood science efforts and expand the agency's ability to provide data, technical tools, and critical information to communities, enabling them to better prepare for and recover from flooding events.

Without this item, the agency's ability to gather and disseminate data and information that improve the state's ability to mitigate flooding is limited.

2. Groundwater Funding Package ($3,000,000)

Description / justification: Groundwater is a major source of water in Texas and understanding where it's located and how much can be used is an important initiative of the TWDB. This exceptional item includes funding for two objectives. The first is to accelerate the mapping and characterization of brackish aquifers, which may lead to the designation of brackish groundwater production zones in areas of the state with moderate to high availability. Those zones may provide additional water supplies and reduce the use of fresh groundwater. The second objective is to update the Groundwater Availability Models (GAMs) from outdated, unsupported software and code to current best practice standards. Both objectives develop and refine critical inputs for the state water planning process and for managing groundwater resources. Without this funding, the agency will not be able to make progress toward meeting the statutory deadlines for identifying possible brackish groundwater production zones, and the state will lack information on this significant water source that could help communities meet their needs. Additionally, the GAMs will become more dated with the risk of becoming obsolete, limiting the state's accurate understanding of available water resources.

External/internal factors: With this exceptional item and funding, the agency could continue efforts to meet statutory deadlines by accelerating the progress of

Texas has an estimated 2.7 billion acre-feet of brackish groundwater.

designating brackish groundwater production zones and addressing existing limitations and deficiencies with groundwater availability models—two agency initiatives that provide essential tools and information to address evolving water planning needs. Without this exceptional item and funding, the agency would not be able to make progress toward meeting the statutory deadlines, and the GAMs will become more dated with the risk of becoming obsolete.

The state benefit of funding the Groundwater Funding Package includes the following:

- Provides a statewide perspective in locating and modeling fresh and brackish groundwater supplies to ensure statewide policy makers have valid and reliable data
- Improves accuracy of water planning because the best available tools will be developed with the most advanced technologies
- Establishes and improves technical tools, standards, and methodologies to inform groundwater management decisions that local municipalities, industry, and stakeholders rely on as evidenced by the number of requests for TWDB models and datasets
- Migrates GAMs to current technologies offering improved and robust functionality
- Mitigates the risk of using archaic tools or outdated data and scientific techniques for purposes of determining groundwater availability over a 50-year horizon.

3. Strategic Mapping Program ($3,000,000)

Description / justification: Orthoimagery, or digital aerial photography, is valuable geographic information that allows the state of Texas to map and monitor current ground conditions. Among its many uses, the information is used to route emergency calls, assess the effects of natural disasters, map roadways and construction projects, determine reservoir water levels, and monitor numerous ecological and air quality conditions. The Strategic Mapping Program acquires, stores, and distributes to all state agencies digital geospatial information as well as making it available to the public. It also supports emergency management activities by developing critical geographic information for first responders. Access to up-to-date, quality geographic data and information helps drive decisions that affect natural resources management and economic development and greatly improves efficiency in emergency management planning and mitigation throughout Texas. Funding for this program will enable the TWDB to acquire new geographic data and help build other valuable data products such as land parcel data, address point data, and a 3D-building database for the state.

External/internal factors: This exceptional item includes funding for the Strategic Mapping (StratMap) Project. The objective is to request reinstatement of an annual budget to purchase geospatial data for the StratMap Program. StratMap was established in 1997 by Senate Bill 1 to develop consistent statewide digital data layers on behalf of Texas state agencies and its citizens. The Texas Water Code section 16.017 (b) states that the *executive administrator shall operate as part of the Texas Natural Resources Information System a strategic mapping program to acquire, store, and distribute digital, geospatial information*. Its primary goal has been to acquire and improve digital geographic data for statewide mapping applications. The state benefits of funding the StratMap Program include the following:

- Acquiring new geographic data such as orthoimagery through cost-share initiatives on behalf of

the state and the public in accordance with statute

- Coordinating new statewide geographic base map data, including orthoimagery, to align data specifications and standards to benefit all users
- Establishing a base dataset from which other geographic data are mapped or digitized. These can include road centerlines, streams, agricultural plots, public lands, building footprints, etc.
- Re-acquiring orthoimagery and other data products within suitable timeframes to assess current conditions and monitor change that has occurred from one acquisition to the next
- Supporting orthoimagery in the public domain through mapping at state, regional, and local government agencies in Texas, educational institutions, and for public use

4. Data Center Consolidation ($488,964)

Description / justification: The TWDB has been a participant in the state's Data Center Services (DCS) program since its inception. The TWDB was also approved to participate in the Texas Pilot Cloud Program in fiscal year 2012 and has maintained virtual private clouds in the Amazon web services environment since that time. With the recent implementation of the DCS Hybrid Cloud Services Program, the TWDB is asking for an increase in DCS funding in the fiscal year 2020–2021 biennium in anticipation of the expenses needed for the agency to migrate servers from its current Amazon web environment to the DCS Hybrid Cloud environment. This would include the buildout of a virtual private cloud and virtual servers, as well as base security, patching, and backup services.

External/internal factors: Ensuring the continued stability and functionality of critical agency systems, data, and processes is imperative throughout the cloud server migration process. Lack of additional DCS funding to ensure a smooth and successful migration into the DCS Hybrid Cloud Services environment would create a level of risk that would prevent us from moving forward with this migration.

5. CAPPS Implementation ($588,063)

Description / justification: The TWDB has been selected by the Comptroller of Public Accounts to implement CAPPS-Human Resources in fiscal year 2021, with the system slated to replace the current Uniform Statewide Payroll System. Agency human resources systems are vital to providing ongoing support of the TWDB's mission. The agency's current Human Resources Information System, Clockwise timekeeping system, and Labor Distribution System are known internal agency systems to be affected when the TWDB converts to the CAPPS-Human Resources system. While the basic cost of the implementation will be covered by the Comptroller, the TWDB is seeking additional funding to cover temporary staffing resources needed to support agency standard functions as well as to provide some direct deployment-related support. Temporary staffing resources will be needed in both the Human Resources and Information Technology program areas.

External/internal factors: Ensuring the continued stability, validity, and functionality of critical agency programs, operations, and data is of greatest importance to the TWDB throughout the CAPPS transition. Lack of additional funding to support the agency's transition would strain agency resources and potentially jeopardize the integrity of the agency's programs.

Legislative Appropriations Rider Request: Amend the Agricultural Grant Fund Rider to Allow the TWDB Additional Flexibility in Awarding Grants

The General Appropriations Act currently limits the TWDB's ability to fund grant projects to a maximum of $600,000 per fiscal year, regardless of the actual balance of funds available in the Agricultural Water Conservation Fund. The change would allow the TWDB to use any unobligated and unexpended balances in the fund.

> Appropriation: Agricultural Water Conservation Fund. Amounts appropriated above include ~~$600,000~~ balances in Strategy A.3.1, Water Conservation Education and Assistance, out of the Agricultural Water Conservation Fund No. 358 in each fiscal year of the ~~2018-19 biennium~~ the 2020–2021 biennium, for use pursuant to §50-d of Article III of the Texas Constitution and Water Code, Chapter 17, Subchapter J. In addition to amounts appropriated above, all amounts necessary to administer and disburse funds for loans and grants through the agricultural water conservation program.

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