

# SUNSET ADVISORY COMMISSION

## FINAL REPORT

*Texas Water  
Development Board*

July 2011



# *Sunset Advisory Commission*



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In 1977, the Texas Legislature created the Sunset Advisory Commission to identify and eliminate waste, duplication, and inefficiency in government agencies. The 12-member Commission is a legislative body that reviews the policies and programs of more than 130 government agencies every 12 years. The Commission questions the need for each agency, looks for potential duplication of other public services or programs, and considers new and innovative changes to improve each agency’s operations and activities. The Commission seeks public input through hearings on every agency under Sunset review and recommends actions on each agency to the full Legislature. In most cases, agencies under Sunset review are automatically abolished unless legislation is enacted to continue them.

*Texas Water Development Board*

SUNSET FINAL REPORT  
JULY 2011

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This document is intended to compile all recommendations and action taken by the Sunset Advisory Commission for an agency under Sunset review. The following explains how the document is expanded and reissued to include responses from agency staff and the public.

- *Sunset Staff Report, October 2010* – Contains all Sunset staff recommendations on an agency, including both statutory and management changes, developed after extensive evaluation of the agency.
  - *Hearing Material, November 2010* – Summarizes all responses from agency staff and the public to Sunset staff recommendations, as well as new policy issues raised for consideration by the Sunset Commission at its public hearing.
  - *Decision Material, December 2010* – Includes additional responses, testimony, or new policy issues raised during and after the public hearing for consideration by the Sunset Commission at its decision meeting.
  - *Commission Decisions, December 2010* – Contains the decisions of the Sunset Commission on staff recommendations and new policy issues. Statutory changes adopted by the Commission are presented to the Legislature in the agency's Sunset bill.
  - *Final Report, July 2011* – Summarizes action taken by the Legislature on Sunset Commission recommendations and new provisions added by the Legislature to the agency's Sunset bill.
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# *Summary*

# Summary

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The Texas Water Development Board (Board) is not accustomed to being square in the eye of controversy. Since its creation through constitutional amendment in 1957 to issue water development bonds, the Board has enjoyed its position of providing funding for water projects and infrastructure. With the expansion of its water planning responsibilities in 1997, the Board has won over fans for its regional water planning process that involves local governments and stakeholders in a bottom-up approach that avoids rigid state control. Controversies related to the intractable nature of water issues have always surrounded the agency. Now, however, they threaten the Board's fundamental ability to support the development of the State's water resources on several fronts.

First, the Board's remaining bond authority may be exhausted as soon as the end of fiscal year 2011. Misunderstandings over the historical treatment of the Board's debt at the end of the last legislative session thwarted the agency's previous attempt to secure additional authority. Due to current economic conditions, many entities are unable to access the market on their own, creating an increased demand for financing through the Board's programs. Without additional bond authority, the Board will be unable to fulfill its constitutional mission to provide financial assistance through loans to political subdivisions to meet water and wastewater infrastructure needs.

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*Several threats exist to the development of the State's water resources.*

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Second, evolving processes associated with groundwater affect the Board's ability to effectively conduct statewide water planning and ultimately affect the management of this vital resource. Much of this controversy surrounds a joint planning process in which groundwater districts join together to make decisions about the future condition of aquifers they manage. The idea behind joint planning is to get local groundwater districts to work cooperatively, using acceptable scientific information, to guide decisions about an aquifer's desired future condition. While the joint planning process and groundwater districts, as distinct elements apart from the Board, are per se outside the scope of the current Sunset review, they were evaluated for the impact they can have on the Board's operations.

Specifically, as a framework for groundwater planning separate from the Board's regional water planning process, joint planning may affect the Board's ability to effectively conduct statewide water planning. In developing desired future conditions, no formal avenues exist for regional water planning groups to provide input regarding how groundwater availability affects future water needs or planning strategies. In addition, the Board's process for questioning the reasonableness of a desired future condition decision does not provide for a complete administrative process that ensures the basic elements of due process for those affected by these decisions and ultimately risks making the entire exercise meaningless.



The fragmentation of the current petition processes for questioning desired future conditions between the Board and the Texas Commission on Environmental Commission (TCEQ) raises questions about the separation of functions between the two agencies. The Board, in its technical assistance role, provides support for water planning of both surface water and groundwater, while the regulation of surface water and groundwater lies with TCEQ and groundwater conservation districts, respectively. A unified petition process would continue this same principle, keeping technical assistance for planning in place at the Board, while placing processes with regulatory underpinnings with the State's environmental regulatory agency.

Finally, other issues threaten the Board's ability to live up to its water development name. This report includes provisions to improve the Board's water planning efforts by better accounting for the implementation of water projects and to standardize the reporting of water conservation efforts. However, the report does not address more contentious policy issues regarding the extent to which the Board should be involved in ensuring sufficient water supplies for the State. The Board lacks authority and tools to accurately account for water use in key high-demand sectors, such as agriculture and industry. The Board also lacks means to actively develop water supplies, such as through the acquisition and protection of land for future development of surface water supplies. The Board continues to recommend unique reservoir sites and stream segments to the Legislature for statutory designation, but, ultimately, it lacks a mechanism to acquire such sites and associated mitigation areas to secure assets needed to meet future water needs.

This report also does not address continuation of the agency because the Board is not subject to abolishment under the Sunset Act. The following material summarizes Sunset staff recommendations on the Texas Water Development Board.

## Issues and Recommendations

### Issue 1

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#### ***The Board's Remaining Development Fund Bond Authority Is Insufficient to Fulfill Its Constitutional Responsibility.***

The Board was created in 1957 through constitutional amendment to provide financial assistance for water and wastewater projects throughout the state. However, because of increased demand for its financing programs, the Board's largest constitutional bond authority, Development Fund, will be insufficient to sustain the Board's responsibilities as soon as the end of this biennium. Without additional authority, the Board may not be able to meet the State's water and wastewater needs and the State will lose federal funds.

Authorizing the Board to issue additional bonds through an ongoing, evergreen bond authority will allow the Board to fulfill its constitutional mission while simplifying its bond authorization process by avoiding repeated and costly constitutional amendments. Further, specifying that the Board's bonds must be self-supporting until, and unless, the Legislature appropriates debt service would clarify the impact the bonds will have on the constitutional debt limit, allowing the State to more effectively manage its total debt.

## Key Recommendations

- Authorize the Board to issue Development Fund general obligation bonds on a continuing basis, in amounts such that the aggregate principal amount outstanding at any time does not exceed \$6 billion.
- Clarify that the Board's Development Fund general obligation bonds are not considered State debt payable from general revenue for purposes of calculating the constitutional debt limit until the Legislature appropriates debt service to the Board and the Board issues the debt.

## Issue 2

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### ***The Lack of Coordination Among Separate Water Planning Processes Impedes the Board's Statewide Water Planning.***

The separation between the regional water planning process and the development of desired future conditions (DFCs) for aquifers hurts the Board's ability to conduct statewide water planning, as regional water planning groups have no formal input in the amount of groundwater supplies available for meeting future water demands. Because groundwater management areas (GMAs) only include representatives of groundwater districts, decisions on groundwater availability are not fully vetted to determine impacts on water planning strategies and on the State's ability to meet future water needs. The inclusion of regional water planning groups on GMAs would ensure broader representation and formal input into the effects of the DFC on groundwater availability for water planning purposes, and provide the Board a more effective process for state water planning.

Specifying a point in time at which a DFC will be used in the water planning process could provide GMAs certainty that an adopted DFC would be used in the next round of water planning. Additionally, strengthened public notice requirements would ensure reasonable opportunity for stakeholders notice and comment regarding a proposed DFC.

## Key Recommendations

- Require the Board to certify that each groundwater management area include a voting representative from each regional water planning group whose boundaries overlap the area.
- Require regional water planning groups to use the desired future conditions in place at the time of adoption of the Board's State Water Plan in the next water planning cycle.
- Strengthen the public notice requirements for groundwater management area meetings and adoption of desired future conditions and require proof of notice be included in submission of conditions to the Board.

## Issue 3

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### ***The State's Processes to Petition an Aquifer's Desired Future Conditions Are Fundamentally Flawed.***

Processes for questioning desired future conditions (DFCs) at the Board and Texas Commission on Environmental Quality (TCEQ) lack standard components of administrative processes designed to ensure clear resolution, fairness, and due process for those who may be harmed. The Board struggles to make a determination of reasonableness strictly for planning purposes, as DFCs, ostensibly established

for groundwater planning purposes, ultimately serve a regulatory purpose to manage groundwater. Establishing the Board as the regulatory authority for judging the reasonableness of DFCs would cause unnecessary duplication and potentially cause further fragmentation with TCEQ, which already has significant authority over groundwater districts and the implementation of DFCs.

Unifying the DFC petition process and establishing it as a contested case hearing at the State Office of Administrative Hearings, similar to existing groundwater processes for priority groundwater management areas (PGMAs), would allow for a standard, more objective petition process. Full contested case hearings include elements of procedural due process, where they do not exist currently, and allow for substantial evidence review of the record, rather than the possibility of full de novo review. The Board would provide technical expertise to supplement any hydrogeologic knowledge needed in decision making, as it does already in PGMA cases.

### **Key Recommendation**

- Transfer the process to petition the reasonableness of a desired future condition from the Board to TCEQ, and modify TCEQ's existing petition process to unify elements relating to reasonableness and implementation of desired future conditions.

## **Issue 4**

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### ***Structural and Technical Barriers Prevent the Board From Providing Effective Leadership in Geographic Information Systems.***

The Texas Natural Resources Information System (TNRIS), housed within the Board, is responsible for acquisition of statewide data sets used to develop and disseminate geographic data products. However, the data center services contract administered by the Department of Information Resources (DIR) constrains TNRIS' ability to timely disseminate key geographic data sets, especially during an emergency. A full exemption from the data center services contract would provide TNRIS with flexibility to more effectively distribute geographic data and provide leadership on statewide geographic information system (GIS) matters. In addition, the Texas Geographic Information Council does not provide effective leadership or coordination in advancing the use of GIS, and its separate functions are no longer needed.

### **Key Recommendations**

- The Board should request a full exemption for TNRIS from the data center services contract at DIR.
- Clarify TNRIS' duties regarding coordinating and advancing GIS initiatives and require the Board to report TNRIS' progress and new GIS initiatives to the Legislature.
- Abolish the Texas Geographic Information Council.

## Issue 5

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### ***The Board Lacks Data to Determine Whether Implementation of Conservation and Other Water Management Strategies Is Meeting the State's Future Water Needs.***

As the State wraps up its third water planning cycle, opportunities exist for evaluating the State's progress in meeting future water needs. Compiling and tracking implementation of strategies or projects as part of the State Water Plan could answer questions about the extent to which the water planning process has facilitated meeting future water demands. Additionally, a lack of uniform reporting requirements for measuring municipal water conservation, through gallons per capita daily (GPCD) figures, prevents the State from effectively gauging progress of water conservation methods. Developing uniform requirements will help explain variation in water use across areas and may help the Board develop new ways to incentivize conservation efforts.

#### **Key Recommendations**

- As part of the State Water Plan, require the Board to evaluate the State's progress in meeting its water needs.
- Require the Board and TCEQ, in consultation with the Water Conservation Advisory Council, to develop uniform, detailed gallons per capita daily reporting requirements.

## Issue 6

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### ***The Board's Statute Does Not Reflect Standard Language Typically Applied Across-the-Board During Sunset Reviews.***

The Sunset Commission adopts across-the-board recommendations as standards for state agencies to reflect criteria in the Sunset Act designed to ensure open, responsive, and effective government. Updating the Board's complaint information requirements and requiring the Board to develop and implement a policy to encourage alternative procedures for rulemaking and dispute resolution would bring the Board's statute in line with current standards.

#### **Key Recommendation**

- Apply standard Sunset across-the-board requirements to the Texas Water Development Board.

## Fiscal Implication Summary

When fully implemented, the recommendations in this report would result in over \$2.6 million in savings to the General Revenue Fund over the next two years. The specific fiscal impact of each of these recommendations is summarized below.

- **Issue 1** – A constitutional amendment to allow the Board to issue additional bond authority would not have an immediate fiscal impact to state general revenue, beyond the State's one-time \$109,907 publication cost for placing the constitutional amendment on the ballot. Because the bond authority would be limited to self-supporting debt unless the Legislature appropriates funds for debt service, the fiscal impact for debt service cannot be determined.

- **Issue 3** – Unifying the petition process for desired future conditions would not have a significant cost to the State, but a precise fiscal impact cannot be fully determined at this time because the number of petitions or length of the hearings cannot be accurately estimated. A contested case hearing for a DFC petition would likely cost about \$7,000 per case. The \$66,000 salary of the full-time employee funded to aid in the Board’s petition process would be transferred from the Board to TCEQ to offset its increased costs associated with contested case hearings.
- **Issue 4** – Exempting TNRIS from the data center services contract would save the State about \$2.7 million in general revenue over the next biennium, due primarily to a reduction in geographic data storage costs.

## ***Summary of Legislative Action***

### ***S.B. 660 Hinojosa (Ritter)***

### ***S.J.R. 4 Hinojosa, Fraser, Hegar (Ritter)***

Senate Bill 660 contains the Sunset Commission's recommendations for clarifying matters regarding the Board's bond issuance, strengthening the process for developing desired future conditions (DFCs) for the State's aquifers, and improving aspects of the State's water planning process. The bill does not address continuation of the agency because the Board is not subject to abolishment under the Sunset Act. The bill also does not contain the Sunset Commission's recommendation to remove the Board's process for judging the reasonableness of a DFC, leaving the current Board process in place. Senate Joint Resolution 4 contains a Sunset Commission recommendation to provide additional bond authority to the Board so it may continue its financial assistance programs. The list below summarizes the major provisions of S.B. 660 and S.J.R. 4, and more detailed discussion is located in each issue.

#### **Sunset Provisions**

1. Authorize the Board to issue additional Development Fund bond authority to fulfill its constitutional responsibility.
2. Clarify the treatment of the Board's Development Fund general obligation bonds, and mitigate default risk across the Board's financial assistance programs.
3. Coordinate the process for establishing desired future conditions with the regional water planning process.
4. Strengthen the process for developing desired future conditions of aquifers.
5. Clarify the duties of the Texas Natural Resources Information System and abolish the Texas Geographic Information Council.
6. Require the Board to obtain and evaluate data to determine whether implementation of conservation and other water management strategies is meeting the State's future water needs.
7. Apply standard Sunset across-the-board requirements to the Texas Water Development Board.

#### **Provisions Added by Legislature**

None added.

#### **Fiscal Implication Summary**

Senate Bill 660 will not have a significant fiscal impact to the State. Senate Joint Resolution 4 will not have a significant fiscal impact to the State, other than the publication cost for placing the constitutional amendment on the ballot. The cost to the State for publication is \$105,495.



*Agency at a Glance*  
(October 2010)



# Agency at a Glance

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The Texas Water Development Board was created in 1957 through a state constitutional amendment that authorized the Board to issue general obligation water development bonds through loans to political subdivisions.<sup>1</sup> Since the 1960s, the Board has assumed increased responsibility for ensuring sufficient water supplies for the state through its roles in water planning and in providing technical assistance and water-related data. The Board's mission is to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas. To accomplish its goals for addressing the State's water needs, the Board performs the following activities.

- Provides financial assistance in the form of loans and grants through state and federal programs to Texas communities for the construction of water supply, wastewater treatment, flood control, and agricultural water conservation projects.
- Supports the development of regional water plans and prepares the State Water Plan for the development of the State's water resources.
- Collects, analyzes, and disseminates water-related data, conducts studies on surface water and groundwater resources, and develops and maintains surface water and groundwater availability models to support planning, conservation, and development of surface water and groundwater for Texas.

## Key Facts

- **Texas Water Development Board.** The Board's policy body consists of six members appointed by the Governor such that each member is from a different section of the state. Members serve staggered six-year terms and the Governor designates the chairman of the Board. The table, *Texas Water Development Board*, identifies current Board members.
- **Staff.** In fiscal year 2009, the Board employed 329 staff, the majority of whom are located in Austin. Twenty-two staff, mostly project inspectors, are spread among the Board's five field offices in El Paso, Harlingen, Houston, Mesquite, and San Antonio.
- **Funding.** In fiscal year 2009, the Board operated on revenues of \$93.4 million. This amount is more than its 2009 appropriation largely because the Board received additional federal funds for the Severe Repetitive Loss Program for flood control structures. As illustrated in the pie chart on the following page, *Revenue by Method of Finance*, federal funds represent the largest portion of the agency's expenditures, or 43 percent, of its operating budget, followed by General Revenue, representing 40 percent. The pie chart on the following page, *Expenditures by Strategy*, details the Board's actual expenditures for fiscal year 2009. The Board spent 44 percent of its appropriation on water resources planning.

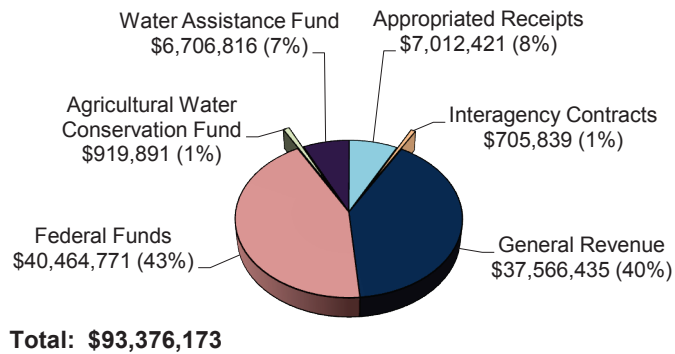
**Texas Water Development Board**

Member	City	Term Expires
James E. Herring, Chair	Amarillo	2009
Jack Hunt, Vice Chair	Houston	2009
Thomas Weir Labatt III	San Antonio	2011
Lewis H. McMahan	Dallas	2011
Edward G. Vaughan	Boerne	2013
Joe M. Crutcher	Palestine	2013

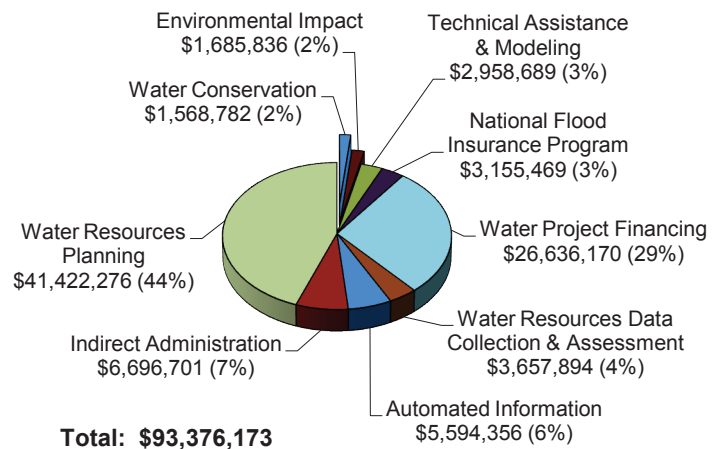
**Program Proceeds.** The Board also receives program proceeds that are not appropriated by the Legislature. Program proceeds totaled \$1.6 billion for fiscal year 2009, with debt issuance proceeds representing \$1.1 billion, or 68 percent of the total, with the remainder comprising principal loan payments, interest and investment income, and federal grants. Program proceeds are used in addition to appropriated amounts for loans and grants to political subdivisions to finance water-related infrastructure.

**Debt Service Appropriations.** The Board received a separate appropriation of \$71 million in fiscal year 2009 to pay debt service on not self-supporting general obligation water bonds. This appropriation funded projects from the Economically Distressed Areas Program, State Participation Program, Water Infrastructure Fund, and Agricultural Water Conservation Loan Program. Since 1957, the Board has been constitutionally authorized to issue \$5 billion in general obligation bonds.

**Revenue by Method of Finance  
FY 2009**

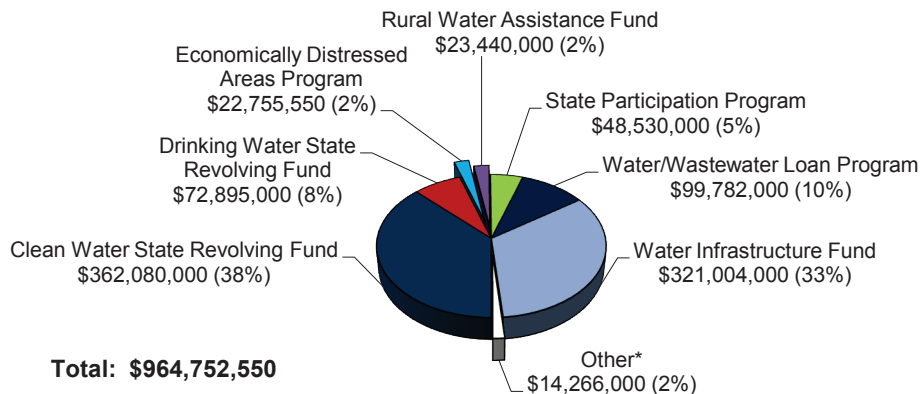


**Expenditures by Strategy  
FY 2009**



- Financial Assistance.** The Board administers about a dozen state and federal financial assistance programs that provide funding in the form of loans and grants for the planning, acquisition, design, and construction of water and wastewater infrastructure projects, such as wastewater treatment plants and raw water pipelines. Eligible borrowers include political subdivisions, water supply corporations, and privately owned water systems. In fiscal year 2009, the Board committed \$965 million in financial assistance to 78 entities, funding 83 projects. The Board also provides grant funding to various entities for environmental research, flood protection, innovative water technologies, and water conservation efforts. The pie chart on the following page, *Commitments by Program*, shows the Board's total commitments in fiscal year 2009 by each financial assistance program.

### Commitments by Program FY 2009



\* Includes the Colonia Self Help Program, Colonia Wastewater Treatment Assistance Program, and Water Assistance Fund.

- **Water Planning.** In 1997, the Legislature established the regional water planning process as a local, grassroots approach to develop water management strategies to meet the State's future water needs. The Board incorporates plans from 16 regional water planning areas into a single comprehensive State Water Plan every five years. The Board is currently reviewing and approving regional plans for the preparation and completion of the 2012 State Water Plan. The 2007 State Water Plan indicates Texas will need an additional 8.8 million acre-feet of water to meet estimated water demands in 2060.
- **Texas Natural Resources Information System (TNRIS).** The Board houses and supports TNRIS, a centralized clearinghouse for geographic data, including natural resource, census, socioeconomic, and emergency management-related data. Through its Strategic Mapping Program, TNRIS produces and maintains large-scale, standardized digital base maps documenting land features, such as soils, elevation, geology, and hydrography, to assist users of geographic data, emergency responders, and the public. Through TNRIS, the Board also administers a state master purchasing contract for acquiring high priority imagery and data sets to coordinate data acquisition across state government, as well as federal, regional, and local governing organizations.
- **Groundwater.** The Board provides technical assistance and data, such as water level and quality information, as well as develops and runs groundwater availability models for groundwater conservation districts (districts), regional water planning groups, municipalities, well owners, and the public. The Board maintains groundwater models for all nine major aquifers and 11 of the 21 minor aquifers in the state. The Board maintains a database with information on more than 134,000 water wells across the state, and responded to 2,739 inquiries about groundwater in fiscal year 2009. The Board also accepts desired future conditions established by districts for each relevant aquifer in each of the State's 16 groundwater management areas.
- **Surface Water.** The Board collects and analyzes data used to determine the instream flow and freshwater inflow needs to support ecologically healthy streams, rivers, bays, and estuaries through processes for developing environmental flow recommendations. The Board currently funds data collection for 24 water quality monitoring stations, 12 tide-gauging stations, 91 stream gauges and 58 lake level monitoring stations. The Board also models surface water data and performs

hydrographic surveys for use in water planning and management. To date, the Board has completed 131 hydrographic surveys, including 95 of the 175 major reservoirs in the state, to determine total volume and sedimentation of Texas reservoirs.

- **Conservation.** The Board promotes conservation of water resources, primarily in municipal and agricultural sectors, through technical assistance and public awareness programs, like the Water I.Q. program. In fiscal year 2009, the Board had Water I.Q. usage agreements with 33 entities. The Board also provides assistance to the Water Conservation Advisory Council, which is administratively attached to the Board.

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<sup>1</sup> Texas Constitution, art. III, sec. 49-c.

*Issues*

# Issue 1

## ***The Board's Remaining Development Fund Bond Authority Is Insufficient to Fulfill Its Constitutional Responsibility.***

### **Background**

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In 1957, Texas voters approved a constitutional amendment to create an agency, now the Texas Water Development Board, to provide financial assistance to political subdivisions to aid in “the conservation and development of the water resources of this state.”<sup>1</sup> The Board has three separate constitutional bond authorities that support water development, economically distressed areas, and agricultural water conservation, respectively.<sup>2</sup> Each bond authority is approved by Texas voters for one-time use, meaning once issued, the authority is exhausted. The Board’s largest bond authority, Development Fund, funds four programs – Water/Wastewater Loan Program, Water Infrastructure Fund, State Participation Program, and Rural Water Assistance Fund – as well as provides state match funds for the Board’s Clean Water and Drinking Water State Revolving Funds (SRFs).<sup>3</sup> The textbox, *Financial Assistance Programs Supported by Water Development Fund Authority*, details each of these programs.

#### ***Financial Assistance Programs Supported by Water Development Fund Authority***

**Water/Wastewater Loan Program:** Provides loans for the planning, design, and construction of water supply, wastewater, and flood control projects.

**Water Infrastructure Fund:** Provides loans for the planning, design, and construction of state water plan projects. Projects must be consistent with recommended water management strategies in the most recent regional water plan or state water plan.

**State Participation Program:** Allows the Board to assume a temporary ownership interest in a regional water or wastewater project when the local sponsors are unable to assume debt for the optimally sized facility.

**Rural Water Assistance Fund:** Provides small rural utilities low interest rate loans to fund planning, design, and construction of water-related infrastructure and enhancement projects.

**State Revolving Funds:** Provides loans for the planning, design, and construction of wastewater treatment facilities (Clean Water SRF) or projects for public drinking water systems that facilitate compliance with drinking water regulations specified in the federal Safe Drinking Water Act (Drinking Water SRF).

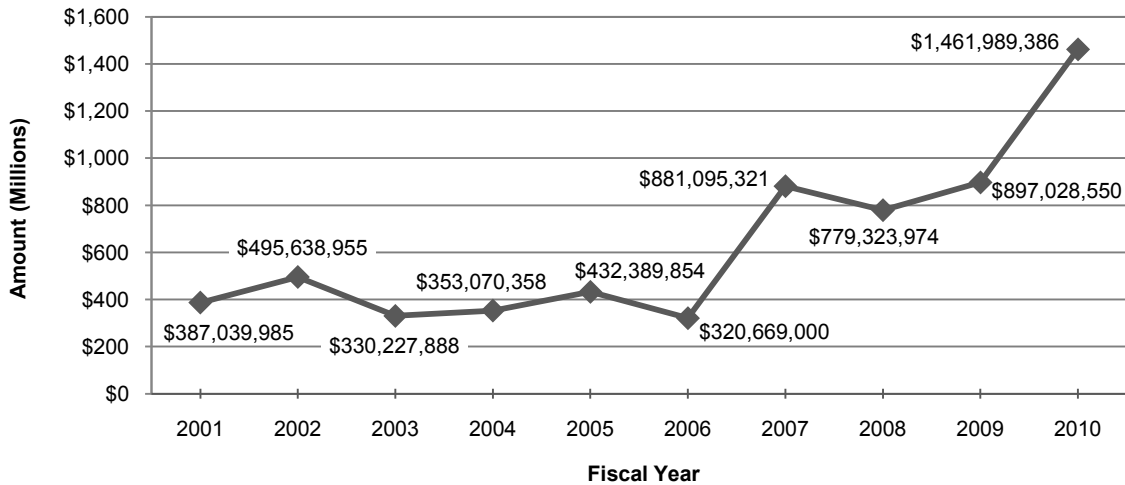
### **Findings**

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**Demand for the Board’s financial assistance has increased to the extent the Board’s bond authority will be insufficient as early as the end of this biennium.**

The addition of new funding mechanisms, such as the Water Infrastructure Fund, to facilitate state water plan implementation, coupled with declining market conditions, has dramatically increased demand for the Board’s financial assistance. With additional water plan funds received in 2007, the Board more than quadrupled the financial commitments it provided from 2006 to 2010. In fiscal year 2010, the Board committed approximately \$1.5 billion in loans and grants to 92 different entities across all programs. The graph on the following page, *Total Commitments*, depicts the Board’s increased total financial commitments over the past 10 fiscal years.

**Total Commitments, FYs 2001 – 2010**



**Development Fund Authority**

<b>Total Constitutional Authority</b>	<b>\$4,256,523,431</b>
Issued as of 8/26/2010	\$3,145,021,757
Projected Issuance through FY 2011	
• Water Infrastructure Fund & State Participation	\$384,065,311
• Water/Wastewater Loan Program	\$236,155,000
• State Revolving Fund Match*	\$225,000,000
<b>Total</b>	<b>\$3,990,242,068</b>
<b>Remaining Authority 8/31/2011</b>	<b>\$266,281,363</b>

\* Includes projections through fiscal year 2015 to ensure the Board has sufficient match funds to receive the federal capitalization grant.

The Board currently has approximately \$1.1 billion in Development Fund authority remaining and estimates it will have only \$266.3 million at the end of fiscal year 2011. Given the increased demand for financial assistance, the Board’s remaining authority will not sustain it into the next biennium. The chart, *Development Fund Authority*, shows the Board’s total receipt and projected use of its Development Fund bond authority.

**Without additional bond authority, the Board will not meet the State’s water and wastewater needs.**

- **Cost-effective Financing.** Without the Board’s cost-effective programs, some entities will not be able to finance vital water and wastewater projects. As the State’s main financier of water and wastewater infrastructure, the Board provides cities, counties, districts, river authorities, and other local entities the best deal available to finance projects. These projects not only provide sustainable and affordable water, but resolve public health and environmental concerns resulting from failing sewer or septic systems or untreated or unsafe drinking water. Given the current economic downturn, political subdivisions have no assurance they will be able to obtain financing through the market at a cost-effective rate. Without the Board’s assistance, some entities may pare down or completely forego water or wastewater projects, at the expense of water quality and public health, because projects are not economically feasible. The Board’s



flexible financing assists all sizes and types of entities in funding vital water and wastewater projects across the State, from Tarrant Regional Water District serving approximately 4.4 million people to the Town of Buffalo Gap that serves a portion of its 463 residents.

- **Assistance for Disadvantaged Entities.** For disadvantaged entities, the Board serves as the lender of last resort. The Board's financial assistance is especially vital for disadvantaged entities that, without the Board, are unable to access the market. The Board provides a variety of financing options, including zero percent interest rates, deferred payment schedules, and/or short- and long-term loans, allowing disadvantaged communities to receive a tailored financing package that will meet their needs.
- **Maintenance of Federal Funding.** The State will lose federal funds for its two revolving funds if the Board does not have bonds for the required match to receive the federal capitalization grants. The Clean Water and Drinking Water SRF programs both require a 20 percent state match, for which the Board uses its Development Fund authority. State match funds totaled \$18.3 million in fiscal year 2010 and are projected to total \$225 million over the next five fiscal years, due to potential increases in the federal capitalization grant. Without the required match funds, the Board cannot even apply for the capitalization grant.
- **Implementation of State Water Plan Projects.** Without additional Development Fund authority, the Board will likely be unable to facilitate implementation of state water plan projects, preventing it from completing one of its key functions. Since inception of the regional water planning process, the Board has committed \$1.6 billion towards recommended water plan strategies. The State's 16 regional water planning groups estimate the cost to implement all 4,500 strategies and projects in the 2007 State Water Plan totals approximately \$30 billion. While many of these costs will be funded through conventional financing mechanisms, such as the open bond market, in 2008, regional water planning groups estimated \$17.1 billion of those needs will require financial assistance from the Board.

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*Without additional bond authority, the State will lose federal funds.*

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### **The Board has a history of responsibly managing its loan portfolio.**

The Board effectively manages its \$5.1 billion loan portfolio using sound management policies, as evidenced by the following.

- The Board has had no defaults in the history of its Water/Wastewater Loan Program or SRF programs and only \$125,332 in write offs across all programs.
- Since 1998, the Board's total savings generated from refundings is \$143.1 million.<sup>4</sup> Refundings allow the Board to call bonds and reissue them at lower interest rates. From fiscal year 2006 to 2010, the Board's general revenue savings from refundings totaled approximately \$9 million.<sup>5</sup>

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*Over the past five years, the Board saved \$9 million in general revenue from refundings.*

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- The Board received interest rates consistent with a AAA rating on its general obligation bonds even before the State received its recent credit rating upgrade. The Board’s Clean Water SRF revenue bonds also maintain a AAA rating. The Board’s real interest rates vary by program, but averaged 3.71 percent in 2010 and have remained below 5 percent since 2002.
- The Board maintains low issuance costs. As the chart, *Average Issuance Costs*, depicts, the Board’s bond issuance costs are comparable to those of the Texas Public Finance Authority (TPFA), which issues a similar number of bonds, and was lower than the statewide average in fiscal years 2007 and 2009.<sup>6</sup>
- In July 2010, the Board reclassified \$139.8 million of State Participation program debt from not self-supporting to self-supporting debt. Because of the program’s deferred repayment structure, it is supported temporarily by general revenue until borrowers begin making repayments to the Board. This reclassification means the debt no longer requires payment from the State’s General Revenue Fund and does not count toward the State’s constitutional debt limit.

**Average Issuance Costs\***

	FY 07	FY 08	FY 09
TWDB	\$4.10	\$6.57	\$6.34
TPFA	\$5.91	\$4.46	\$5.99
Statewide Average	\$5.52	\$4.95	\$7.86

\* Issuance costs are per \$1,000 of bonds issued in amounts greater than \$100 million.

**Opportunities exist to simplify the Board’s bond authorization process and mitigate default risk across all financial assistance programs.**

Since the Board’s creation, Texas voters approved every addition to the Board’s bond authority when given the opportunity. The chart, *Approved Development Fund Constitutional Bond Authority*, shows all the Board’s bond

**Approved Development Fund Constitutional Bond Authority**

Date of Constitutional Amendment	Amount
1957	\$200,000,000
1962	\$200,000,000
1971	\$200,000,000
1985	\$980,000,000
1987	\$400,000,000
1989	\$250,000,000
2001*	\$2,026,523,431
<b>Total</b>	<b>\$4,256,523,431</b>

\* Includes restored authorization following the retirement of a contract.

authority receipts to date. Last Session, however, the joint resolution for a constitutional amendment to obtain a \$6 billion ongoing bond authority, known as evergreen authority, did not pass the Legislature and did not make it on the ballot. Unlike one-time authority the Board typically receives, the evergreen bond authority would allow the Board to issue bonds on a continuing basis as long as its total outstanding debt at any given time does not exceed \$6 billion. This cap would help the State responsibly manage its debt while still providing adequate funding for water and wastewater projects. The evergreen authority would also keep the Board from having to repeatedly seek constitutional amendments, which is time consuming and costly to add to the ballot.

In comparison, voters approved a constitutional amendment in November 2009, providing the Veterans' Land Board a \$4 billion evergreen bond authority. The Veterans' Land Board provides Texas veterans long-term, low interest rate loans for purchasing raw land, homes, and funding home improvements. At the end of fiscal year 2009, the Veterans' Land Board's outstanding debt totaled \$1.89 billion.

Opportunities also exist to clarify statutory authority allowing the Board to effectively mitigate default risk across all of its financial assistance programs. While the Board has statutory authority to request the Attorney General to take legal action to enforce specific bond document and loan agreement terms for its largest programs, this authority is inconsistent across all its programs. For example, in its Rural Water Assistance Fund program, the Board lacks clear statutory authority to compel a water supply corporation to perform the compliance activities outlined in bond and loan agreements, such as regular payments, reserve fund requirements, and audits. Explicit and consistent statutory authority to request Attorney General action would provide the Board with a more complete set of judicial remedies to protect the State's investment.

**Classification of the Board's bonds for treatment under the State's constitutional debt limit needs clarification.**

The Board's Development Fund debt has both self-supporting and not self-supporting components. In calculating the constitutional debt limit, the Constitution allows for bonds "reasonably expected to be paid from other revenue sources and that are not expected to create a general revenue draw" to be excluded from the calculation until "any portion of the bonds or agreements, subsequently requires use of the state's general revenue for payment."<sup>7</sup> As such, self-supporting debt is not factored into the constitutional debt limit. However, during consideration of the Board's bond authority last session, and given that State debt is approaching this limit, misunderstandings arose over how the Board's debt authority has previously been classified.

Historically, the Legislature has excluded the Board's Development Fund debt from the constitutional debt limit calculation at the time of voter authorization, because without debt service appropriations from the Legislature, only self-supporting debt may be issued. Both the Bond Review Board and the Legislative Budget Board consider the Board's Development Fund bonds self-supporting until, and unless, the Legislature appropriates funds for debt service, at which point they become not self-supporting and are included in the constitutional debt limit calculation. Statutory clarification could eliminate confusion over historic treatment of the Board's bond authority for purposes of calculating the debt limit.

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*Evergreen bond authority would save the State money by keeping the Board from having to repeatedly seek constitutional amendments.*

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*The Legislature has always excluded the Board's Development Fund bond authority from the constitutional debt limit calculations.*

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## Recommendations

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### ***Constitutional Amendment***

- 1.1 Authorize the Board to issue Development Fund general obligation bonds, at its discretion, on a continuing basis, in amounts such that the aggregate principal amount outstanding at any time does not exceed \$6 billion.**

This recommendation would allow the Board to issue additional general obligation bonds for one or more accounts of the Development Fund up to \$6 billion. This recommendation would require the Legislature to pass a joint resolution containing this evergreen authority and Texas voters to approve an amendment to the State Constitution.

### ***Change in Statute***

- 1.2 Clarify that the Board's Development Fund general obligation bonds are not considered state debt payable from general revenue for purposes of calculating the constitutional debt limit until the Legislature appropriates debt service to the Board and the Board issues the debt.**

This recommendation would clarify current practice whereby the Board's Development Fund bonds would be treated as state debt repayable with state general revenues only if the Legislature appropriates debt service to the Board, and, at the time of issuance, the bond resolution states that the bonds are to be repaid with state general revenues. This recommendation would require the Board, when requesting the Bond Review Board's approval of bond issues, to certify the debt service on the bonds is expected to be paid from either the state's general revenues or another revenue source. This recommendation would also require the Bond Review Board, during its approval of the Board's bond issues, to confirm that the Legislature appropriated debt service to support the issuance of any not self-supporting debt.

- 1.3 Authorize the Board to request the Attorney General take legal action to compel a recipient of any of the Board's financial assistance programs to cure or prevent default in payment.**

This recommendation would ensure the Board has full statutory authority across all funding programs to request the Attorney General compel borrowers to perform specific duties legally required of them in documents such as bond ordinances and loan and grant agreements. This recommendation would provide the Board consistent statutory authority across all the Board's financial assistance programs and all types of borrowing entities, including certain water supply corporations.

## Fiscal Implication Summary

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No immediate fiscal impact to state general revenue is anticipated, except for the State's one-time \$109,907 publication cost for placing the constitutional amendment on the ballot.<sup>8</sup> Because the bond authority would be limited to self-supporting debt unless the Legislature appropriates funds for debt service, the fiscal impact to the General Revenue Fund for debt service cannot be determined. Evergreen authority would save the State future publication costs for additional constitutional amendments, as the Board would issue bonds on an ongoing, instead of one-time, basis capped at \$6 billion.

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<sup>1</sup> Texas Constitution, art. III, sec. 49-c.

<sup>2</sup> Texas Constitution, art. III, secs. 49-d-8, 49-d-10, and 50-d.

<sup>3</sup> The term Development Fund, for purposes of this issue, is synonymous with Development Fund II. Development Fund II, Texas Constitution, art. III, sec. 49-d-8, was created by constitutional amendment in 1997 to maximize the Board's use of existing funds and allow more efficient operation of its bond programs. Development Fund II essentially replaced Development Fund and now serves all purposes previously served by Development Fund.

<sup>4</sup> Texas Water Development Board, *Summary of Savings from Refunding Transactions FY 1998 thru FY 2010*, (Austin, Texas, 2010).

<sup>5</sup> Texas Water Development Board, *Not Self-Supporting Debt Savings*, (Austin, Texas, 2010).

<sup>6</sup> Texas Bond Review Board, *Annual Report*, Fiscal Years 2007-2009 (Austin, TX). Online. Available: [www.brb.state.tx.us/agency/publications.aspx](http://www.brb.state.tx.us/agency/publications.aspx). Accessed: August 9, 2010.

<sup>7</sup> Texas Constitution, art. III, sec. 49-j(b).

<sup>8</sup> Texas Secretary of State, Legislative Appropriations Request, 2012-2013 (Austin, Texas, August 2010), p. 9. Online. Available: [www.sos.state.tx.us/about/lar/forms/3A-StrategyRequest.pdf](http://www.sos.state.tx.us/about/lar/forms/3A-StrategyRequest.pdf). Accessed: August 30, 2010.



# ***Responses to Issue 1***

## **Overall Agency Response to Issue 1**

The Board concurs with the statements under Background and with each of the Findings.  
(J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### **Recommendation 1.1**

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*Authorize the Board to issue Development Fund general obligation bonds, at its discretion, on a continuing basis, in amounts such that the aggregate principal amount outstanding at any time does not exceed \$6 billion.*

#### **Agency Response to 1.1**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

#### **For 1.1**

Carole Batterton, Executive Director – Water Environment Association of Texas, Austin

#### **Against 1.1**

None received.

#### **Modification**

1. Authorize the Board to issue additional bonding authority, but instead of evergreen authority, require the Board to return to the Legislature for additional bond authority, as needed. (Jennifer Walker – Sierra Club, Lone Star Chapter, Austin)

### **Recommendation 1.2**

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*Clarify that the Board's Development Fund general obligation bonds are not considered state debt payable from general revenue for purposes of calculating the constitutional debt limit until the Legislature appropriates debt service to the Board and the Board issues the debt.*

#### **Agency Response to 1.2**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

## **Affected Agency Response to 1.2**

For clarity, Texas Bond Review Board staff recommends inserting the clause “authorized but unissued” in Recommendation 1.2. Staff also recommends deleting “and the Board issues the debt” because it is inconsistent with the methodology staff has utilized to calculate the constitutional debt limit for the past 17 years. Staff includes authorized but unissued Water Development Fund Debt in the CDL at the time the Legislature appropriates debt service rather than delaying until the Board issues the debt. Bond Review Board staff otherwise concurs with Recommendation 1.2 that will memorialize staff’s calculation process and remove any possible ambiguities and assure comparability with prior years.

### **Texas Bond Review Board Modification**

2. Clarify that the Bond Review Board would continue its historical practice of calculating the constitutional debt limit using authorized but unissued Development Fund general obligation debt when the Legislature appropriates debt service.

(Robert C. Kline, Executive Director – Texas Bond Review Board)

**Staff Comment:** The modification suggested by the Texas Bond Review Board is consistent with Sunset staff’s intent in Recommendation 1.2.

### **For 1.2**

Carole Batterton, Executive Director – Water Environment Association of Texas, Austin

### **Against 1.2**

None received.

## **Recommendation 1.3**

*Authorize the Board to request the Attorney General take legal action to compel a recipient of any of the Board’s financial assistance programs to cure or prevent default in payment.*

### **Agency Response to 1.3**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### **For 1.3**

Carole Batterton, Executive Director – Water Environment Association of Texas, Austin

### **Against 1.3**

None received.

## ***Commission Decision***

Adopted Recommendations 1.1 through 1.3 and Modification 2.

## ***Legislative Action***

Senate Joint Resolution 4 proposes a constitutional amendment to authorize the Board to issue Development Fund general obligation bonds on a continuing basis, such that the aggregate principal amount outstanding at any time does not exceed \$6 billion. The constitutional amendment will be placed on the ballot and submitted to voters on November 8, 2011. (Recommendation 1.1)

Senate Bill 660 clarifies current practice whereby the Board's Development Fund bonds that have been authorized, but not issued, are not considered state debt payable from the General Revenue Fund for purposes of calculating the constitutional debt limit, unless the Legislature appropriates funds for debt service on the bonds. The bill clarifies the role of the Bond Review Board in approving bond issues, and provides a process for reclassification of bonds payable from General Revenue if the bonds are backed by payment from another source, or if the Board demonstrates that the bonds no longer require payment from General Revenue. (Recommendation 1.2 with Modification 2)

Senate Bill 660 also authorizes the Board to request that the Attorney General take legal action, including receivership, to compel a financial assistance program recipient to cure a default in payment, a breach of terms of a financing agreement, or other failure to perform an obligation. The bill ensures the Board has full statutory authority across all funding programs to request the Attorney General compel borrowers to perform specific duties legally required of them in documents such as bond covenants and loan and grant agreements. (Recommendation 1.3)





# Issue 2

## ***The Lack of Coordination Among Separate Water Planning Processes Impedes the Board's Statewide Water Planning.***

### **Background**

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The Board's ability to oversee statewide water planning to meet long-term water needs depends on sufficiently accounting for available groundwater supplies. In 2003, groundwater accounted for 59 percent of total water used by Texans.<sup>1</sup> Groundwater is also a vital source for maintaining surface water flows in many parts of the state. The State has two separate water planning entities based on similar, bottom-up processes. An overview of each planning process is provided below. These water planning processes also depend on a daunting array of acronyms that complicate the simple description and easy understanding of these matters. The textbox, *Acronyms for Water Planning*, lists and defines key terms related to the water planning processes for groundwater.

#### ***Acronyms for Water Planning***

**RWPG** (Regional Water Planning Group) – A planning group consisting of approximately 20 members representing a variety of interests who design strategies for both surface water and groundwater to meet future water demands in each regional planning area.

**District** (Groundwater Conservation District) – A local unit of government typically authorized by the Legislature and approved at the local level to manage and protect groundwater.

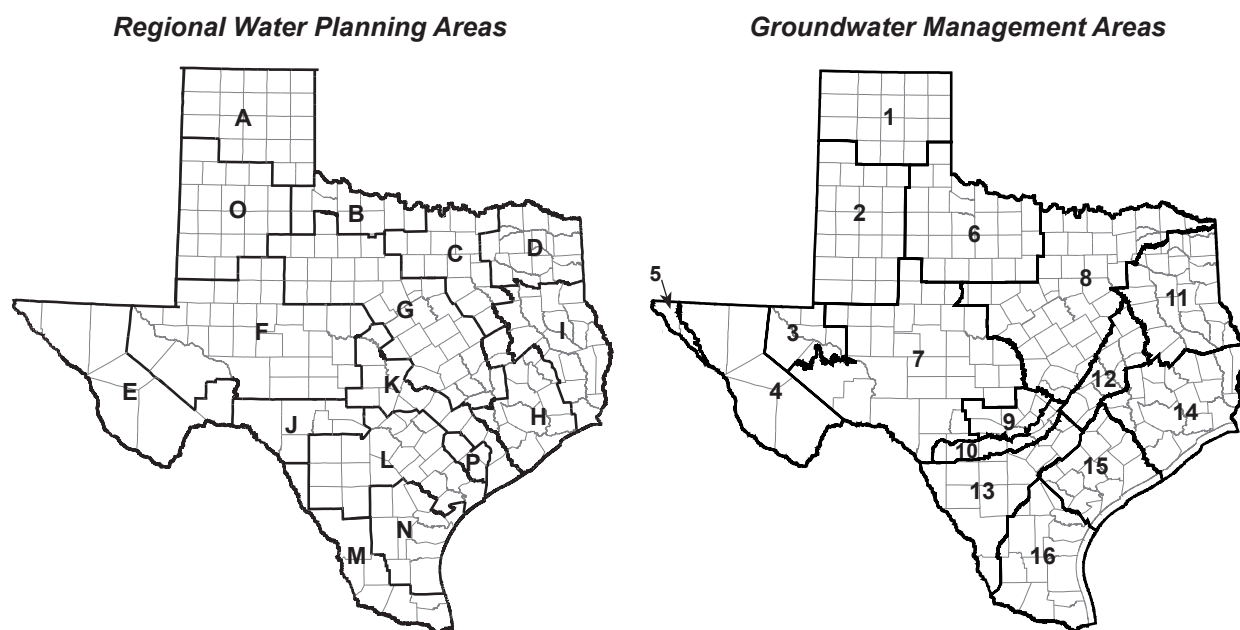
**GMA** (Groundwater Management Area) – An area of the state, generally conforming to major aquifer boundaries, used to manage groundwater. Each GMA is made up of local districts that jointly plan for groundwater use across the area.

**DFC** (Desired Future Condition) – A policy decision on the quantified condition of an aquifer at a certain future time decided collectively by all the districts in each groundwater management area.

**MAG** (Managed Available Groundwater) – The amount of groundwater that may be permitted for beneficial use while still managing each aquifer in accordance with the DFC. The MAG is calculated by the Board and reported to districts for regulatory and planning purposes and to regional water planning groups for planning purposes.

- **Water Planning.** Statute requires the Board to develop and implement a state water plan to make sure that sufficient water is available at a reasonable cost to ensure public health, safety and welfare.<sup>2</sup> The Board oversees a regional water planning process across 16 areas of the state, ultimately approving the resulting regional plans, which provide the basis for the Board's comprehensive State Water Plan. The Board designated regional water planning areas based on factors such as river basin and aquifer delineations, as well as water utility development patterns, political boundaries, socioeconomic characteristics, and public comment.<sup>3</sup> Regional water planning groups (RWPGs) develop planning strategies to ensure available surface water and groundwater supplies meet water demands over a 50-year horizon. The map on the following page, *Regional Water Planning Areas*, illustrates the boundaries of each regional water planning area.

- Joint Planning.** The State has 98 groundwater conservation districts (districts) that regulate the spacing and production of groundwater through permits and are the State's preferred method of groundwater management.<sup>4</sup> To promote joint planning of groundwater use, the Board designated boundaries for 16 groundwater management areas (GMAs) based on major aquifer boundaries to facilitate the most suitable management of groundwater in an area.<sup>5</sup> GMAs are not actual entities, but rather a collective group of districts within each area. Because GMAs serve a different purpose than regional water planning areas, their boundaries do not coincide. The map, *Groundwater Management Areas*, illustrates the boundaries of each groundwater management area. Because some major aquifers traverse the state, some aquifers have multiple GMAs.



The map on pages 22 and 23, shows each regional water planning area, groundwater management area, and groundwater conservation district, as well as the two subsidence districts in the state.

- Desired Future Conditions.** In 2005, the Legislature required districts in each groundwater management area to jointly plan for desired future conditions (DFCs) of each relevant aquifer in the area.<sup>6</sup> The DFC is a quantified condition of the aquifer at a certain future point in time. The following examples are ways to express an aquifer's desired future condition.
  - Water levels do not decline more than 100 feet in 50 years.
  - Spring flow is not allowed to fall below 10 cubic feet per second in times during the drought of record for perpetuity.
  - Fifty percent of the water in storage will be available in 50 years.

Groundwater management areas may adopt a uniform, average DFC for an aquifer across the GMA, or designate separate DFCs for each subdivision of an aquifer, geologic strata within the GMA, or geographic area overlying an aquifer.

The joint planning process is meant to encourage districts to collaboratively plan for groundwater use across the State's major aquifers. The joint planning process to establish DFCs is an independent process from the regional water planning process. Statute requires DFCs for each relevant aquifer in a groundwater management area to have been adopted by September 1, 2010.<sup>7</sup>

Based on the DFC, the Board calculates the managed available groundwater number (MAG), which is the amount of groundwater that may be permitted each year while still achieving the DFC. This number guides the water planning process and district permitting decisions, which ultimately affect the groundwater available to landowners, permit holders, water planning groups, and neighboring districts.

- **Differences in Purpose and Scope.** Both groundwater management areas and regional water planning groups have made policy decisions to determine availability of groundwater to meet future needs through a regional, grassroots approach to reflect their own local priorities. However, important differences exist in each entity's purpose and scope. Regional water planning groups plan to meet all future water needs using surface water and groundwater, while GMAs plan for future aquifer conditions through regulation of groundwater by districts.

Regional water planning groups, through broad stakeholder representation, offer valuable perspectives on water needs and supplies as a whole. Many districts, for their part, offer a wealth of hydrogeologic knowledge about the conditions of their aquifers, especially given the accumulation of such information and technical assistance from the Board through the DFC process. Districts may have insights not apparent to regional water planning groups regarding levels of pumping that can create adverse effects on the aquifer, such as curtailing spring flow or endangering wildlife species. Districts have provided groundwater availability numbers for many regional water planning groups for the current round of state water planning. However, differences between the two planning entities may affect future water planning efforts.

- **Groundwater Availability Numbers.** The source of groundwater availability numbers used in the water planning process and by districts across the state has changed over time. When the Legislature created the regional water planning process in 1997, the groundwater availability numbers in district management plans had to be consistent with groundwater availability numbers in regional water plans. Senate Bill 2 (2001) required regional water planning groups to consider districts' groundwater availability data when establishing their groundwater availability numbers. If these numbers conflicted, statute provided for a process in which the Board would resolve the conflict and allowed a district to appeal this decision in district court.<sup>8</sup>

In 2005, the Legislature required regional water planning groups to use the managed available groundwater number resulting from the DFC in the water planning process as the amount of groundwater available to meet future water needs.<sup>9</sup> The DFC, and the managed available groundwater derived from the DFC, serve as a planning tool for both districts and regional water planning groups. The 2016 regional water plans and the 2017 State Water Plan will use DFCs as the basis for groundwater availability for all regions for the first time. Because districts must issue permits for groundwater up to the managed available groundwater number, the DFC also serves in a regulatory capacity for districts.<sup>10</sup>

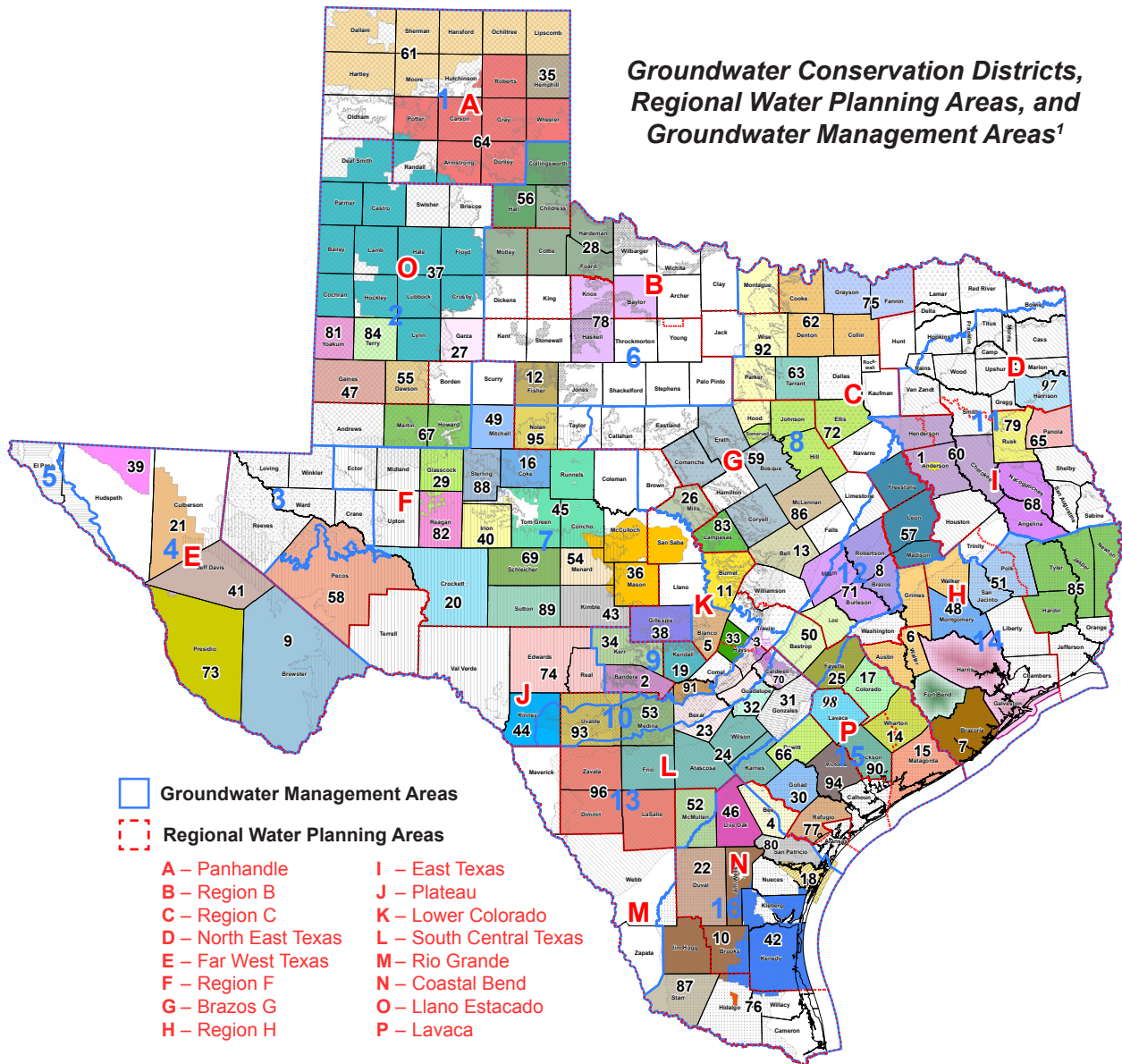
## Groundwater Conservation Districts

- |  |  |   |
|--|--|---|
| <p> 1. Anderson County UWCD</p> <p> 2. Bandera County River Authority &amp; Groundwater District</p> <p> 3. Barton Springs / Edwards Aquifer CD</p> <p> 4. Bee GCD</p> <p> 5. Blanco-Pedernales GCD</p> <p> 6. Bluebonnet GCD</p> <p> 7. Brazoria County GCD</p> <p> 8. Brazos Valley GCD</p> <p> 9. Brewster County GCD</p> <p> 10. Brush County GCD</p> <p> 11. Central Texas GCD</p> <p> 12. Clear Fork GCD</p> <p> 13. Clearwater UWCD</p> <p> 14. Coastal Bend GCD</p> <p> 15. Coastal Plains GCD</p> <p> 16. Coke County UWCD</p> <p> 17. Colorado County GCD</p> <p> 18. Corpus Christi ASRCD</p> <p> 19. Cow Creek GCD</p> <p> 20. Crockett County GCD</p> <p> 21. Culberson County GCD</p> <p> 22. Duval County GCD</p> <p> 23. Edwards Aquifer Authority</p> <p> 24. Evergreen UWCD</p> <p> 25. Fayette County GCD</p> <p> 26. Fox Crossing Water District</p> <p> 27. Garza County UWCD</p> <p> 28. Gateway GCD</p> <p> 29. Glasscock GCD</p> <p> 30. Goliad County GCD</p> <p> 31. Gonzales County UWCD</p> <p> 32. Guadalupe County GCD</p> <p> 33. Hays Trinity GCD</p> <p> 34. Headwaters GCD</p> | <p> 35. Hemphill County UWCD</p> <p> 36. Hickory UWCD No. 1</p> <p> 37. High Plains UWCD No.1</p> <p> 38. Hill County UWCD</p> <p> 39. Hudspeth County UWCD No. 1</p> <p> 40. Irion County WCD</p> <p> 41. Jeff Davis County UWCD</p> <p> 42. Kenedy County GCD</p> <p> 43. Kimble County GCD</p> <p> 44. Kinney County GCD</p> <p> 45. Lipan-Kickapoo WCD</p> <p> 46. Live Oak UWCD</p> <p> 47. Llano Estacado UWCD</p> <p> 48. Lone Star GCD</p> <p> 49. Lone Wolf GCD</p> <p> 50. Lost Pines GCD</p> <p> 51. Lower Trinity GCD</p> <p> 52. McMullen GCD</p> <p> 53. Medina County GCD</p> <p> 54. Menard County UWD</p> <p> 55. Mesa UWCD</p> <p> 56. Mesquite GCD</p> <p> 57. Mid-East Texas GCD</p> <p> 58. Middle Pecos GCD</p> <p> 59. Middle Trinity GCD</p> <p> 60. Neches &amp; Trinity Valleys GCD</p> <p> 61. North Plains GCD</p> <p> 62. North Texas GCD</p> <p> 63. Northern Trinity GCD</p> <p> 64. Panhandle GCD</p> <p> 65. Panola County GCD</p> <p> 66. Pecan Valley GCD</p> <p> 67. Permian Basin UWCD</p> <p> 68. Pineywoods GCD</p> | <p> 69. Plateau UWC and Supply District</p> <p> 70. Plum Creek CD</p> <p> 71. Post Oak Savannah GCD</p> <p> 72. Prairelands GCD</p> <p> 73. Presidio County UWCD</p> <p> 74. Real-Edwards C and R District</p> <p> 75. Red River GCD</p> <p> 76. Red Sand GCD</p> <p> 77. Refugio GCD</p> <p> 78. Rolling Plains GCD</p> <p> 79. Rusk County GCD</p> <p> 80. San Patricio County GCD</p> <p> 81. Sandy Land UWCD</p> <p> 82. Santa Rita UWCD</p> <p> 83. Saratoga UWCD</p> <p> 84. South Plains UWCD</p> <p> 85. Southeast Texas GCD</p> <p> 86. Southern Trinity GCD</p> <p> 87. Starr County GCD</p> <p> 88. Stearing County UWCD</p> <p> 89. Sutton County UWCD</p> <p> 90. Texana GCD</p> <p> 91. Trinity Glen Rose GCD</p> <p> 92. Upper Trinity GCD</p> <p> 93. Uvalde County UWCD</p> <p> 94. Victoria County GCD</p> <p> 95. Wes-Tex GCD</p> <p> 96. Wintergarden GCD</p> <p> 97. Harrison County GCD*</p> <p> 98. Lavaca County GCD*</p> |
| <p><b>Subsidence Districts</b></p> <p> Fort Bend Subsidence District</p> <p> Harris-Galveston Subsidence District</p>  |  |   |

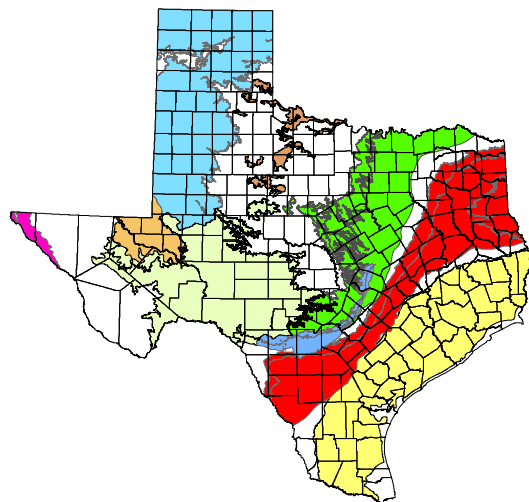
\* Confirmation Pending



## Groundwater Conservation Districts, Regional Water Planning Areas, and Groundwater Management Areas<sup>1</sup>



### Major Aquifers<sup>1</sup>



<sup>1</sup> Maps provided by the Texas Water Development Board.

## Findings

### The disconnect between regional water planning groups and the development of desired future conditions harms the Board's ability to successfully plan to meet the State's future water needs.

*GMA's make groundwater availability decisions independent of the water planning process.*

Having GMAs drive groundwater decisions independent of the water planning process risks sacrificing the broader perspective presented by stakeholders that has been key to successful water planning. As Appendix A illustrates, GMA boundaries do not align with regional water planning boundaries. Districts may informally reach out to RWPGs with overlapping jurisdictions; however, nothing ensures coordination takes place between the entities in determining the amount of available groundwater for planning the State's water needs.

Having districts in the GMA make decisions about groundwater availability for water planning ultimately substitutes the districts' narrow interests in groundwater resources for the broad perspective of all water needs and uses that is the hallmark of the regional – and state – water planning process facilitated by the Board. The effect is for nearly half the state that relies mostly on groundwater, GMAs make decisions that are not fully or formally vetted to determine whether they meet future water demands.

- Planning Group Composition.** The composition of GMAs includes one representative from each district in the area, but does not include regional water planning groups. The chart, *Number of Districts and RWPGs Within Each GMA*, shows the number of districts in each GMA compared to the

number of regional water planning groups that overlap with each GMA but do not have formal input in the DFC process.

**Number of Districts and RWPGs Within Each GMA**

GMA	Number of Districts	Number of RWPGs
1	4	1
2	7	2
3	1	1
4	5	1
5	0	1
6	4	5
7	20	5
8	12	6
9	9	3
10	9	3
11	6	4
12	5	4
13	9	3
14	6	3
15	13	4
16	10	2

In contrast, RWPGs include representatives from the public, counties, municipalities, industries, agricultural interests, environmental interests, small businesses, electric generating utilities, river authorities, water utilities, and water districts – including groundwater districts. The chart on the following page, *District Representation on RWPGs*, details the number of districts providing formal input on each RWPG. Some of the groundwater district representatives on these RWPGs may serve on a GMA, but this representation is not guaranteed and does not ensure that anything other than the districts' narrow groundwater interests are represented.

- **Impacts on Water Planning.**

The lack of RWPG participation in the DFC process potentially undermines the Board’s state – and regional – water planning process by tying the RWPGs’ hands on what planning options or decisions are available to them and within their control. Specifically, the DFC could disallow consideration and implementation of water planning projects to meet future growth in water demand because the available groundwater that results may not be sufficient for the project.

For example, if a new well field is included as a water management strategy in a regional water plan to meet an expected increase in population and water demand, and the DFC provides for less groundwater availability than in the previous water plan, enough groundwater may not be available for the project. This situation would prevent inclusion of the project strategy in the water plan and subsequent receipt of financial assistance from the Board. It could also prevent the project from receiving a permit from the district. Most importantly, the DFC could affect the amount of water that would be available to meet an area’s future water needs. Any process with the potential for such a significant impact to an area merits input from planning groups whose fundamental mission is developing strategies to meet future water demands.

**District Representation on RWPGs**

<b>RWPG</b>	<b>Number of District Representatives in Water District Slots</b>	<b>Actual Number of District Representatives on RWPGs</b>
A	2	3
B	1	1
C	0	1
D	0	0
E	2	2
F	1	4
G	2	4
H	0	4
I	1	4
J	4	5
K	3	5
L	1	5
M	0	0
N	1	4
O	2	3
P	0	2

**Timing of the adoption of desired future conditions could result in the use of out-of-date information for broader planning purposes.**

While one GMA submitted its DFCs in time for consideration in the current round of water planning, all regional water planning groups will use DFCs as the basis for groundwater availability in the next round of water planning. Regional water planning groups begin planning for the next regional water plan as soon as their current regional water plan is adopted for incorporation into the State Water Plan, if not sooner. The textbox, *Timeline of DFC Development and Regional Water Planning Processes*, illustrates the next round of water planning and DFC establishment. The timeline shows that DFCs, which must be readopted at least once every

***Timeline of DFC Development and Regional Water Planning Processes***

- 2010 *First Round of DFCs Adopted*
- 2012 State Water Plan Published
- 2012 RWPGs Begin Consideration of Water Availability for Next Round of Planning
- 2015 *Second Round of DFCs Adopted*
- 2015 Initially Prepared Regional Water Plans Due
- 2016 Regional Water Plans Adopted
- 2017 State Water Plan Published



five years, will not be established in time for consideration during the next round of regional water planning. In fact, the timeframes for completing DFCs always lag the regional water planning process such that groundwater availability numbers will be out of date for broader planning purposes. As a result, RWPGs will be making planning decisions based on managed available groundwater numbers that will likely change before the regional plans are even adopted. Without specifying a point in time at which a DFC will be used in the next round of water planning, GMAs lack certainty regarding the time by which a DFC would need to be readopted for use in the water planning process.

**Stakeholders may be unaware of the DFC process and the potential effects of DFCs on their groundwater resources.**

While some districts make great efforts to seek a broad range of stakeholder input, statute does not require districts to ensure key stakeholders, such as landowners, permit holders, cities, industries, local officials, or other members of the public are notified of GMA meetings. GMA meetings are subject to the open meeting requirements of the districts comprising the GMA.<sup>11</sup> However, statute only requires notice be posted at the county courthouse in each county within the district’s boundaries and at the offices of the district at least 72 hours before the meeting and, if the district includes more than four counties, in the Texas Register.<sup>12</sup> Even for those GMA meetings that must be posted in the Texas Register, locating the notice is difficult, as the notice is posted under the name of the district, and not under the GMA, making it hard to identify the GMA meeting.

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*GMA meeting notice requirements are not sufficient to obtain stakeholder input.*

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The Board has rejected DFCs from two GMAs for posting errors, and GMAs had to postpone adoption of DFCs because of posting errors six times. For GMA meetings at which DFCs were not intended to be adopted, the number of posting errors is unknown. Posting errors make it difficult for stakeholders to obtain notice of GMA meetings. While some districts take proactive steps to notify stakeholders through electronic means, stakeholder notification by districts is inconsistent and varies widely across districts, making it difficult even for informed stakeholders to determine meeting dates and times. As a result, widespread notice to affected parties, including stakeholders outside the boundaries of the GMA, cannot be assured and stakeholders may be unaware of how the DFC could affect their groundwater supply.

Statute also does not require public hearings on the proposed DFC to gather stakeholder input. While most GMAs proactively held at least one GMA-wide hearing, short timeframes for notice regarding such a technical subject matter make it difficult to ensure stakeholders have time to fully assess the implications of the DFC.

## Recommendations

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### ***Change in Statute***

#### **2.1 Require the Board to certify that each groundwater management area include a voting representative from each regional water planning group whose boundaries overlap the area.**

This recommendation would add representatives of each regional water planning group that overlaps with a groundwater management area as voting members of that groundwater management area. The Board, as a condition of accepting the DFC as administratively complete, would certify that a representative of each regional water planning group whose boundaries overlap the GMA is an eligible voting member of the GMA. The chart, *Number of Districts and RWPGs Within Each GMA*, on page 24 shows the specific number of regional planning groups that would send a voting member to each overlapping GMA under this recommendation. The chair of each regional water planning group would appoint a representative to serve as its voting member on the GMA where its boundaries overlap. The recommendation would prohibit members of a district's board of directors or general manager from serving as the regional planning group representative on the GMA to ensure stakeholder representation beyond districts.

#### **2.2 Require regional water planning groups to use the desired future conditions in place at the time of adoption of the Board's State Water Plan in the next water planning cycle.**

This recommendation would require DFCs adopted before the State Water Plan due date to be used by regional water planning groups in the subsequent water planning cycle. The recommendation would allow GMAs to make changes to their DFC, if they choose, by a certain date, with assurance that the new managed available groundwater number will be used in the next regional – and state – water plan adopted by the Board. As a result, DFCs adopted at any point before January 5, 2012 would be used in the water planning cycle resulting in the 2017 State Water Plan.

#### **2.3 Strengthen the public notice requirements for groundwater management area meetings and adoption of desired future conditions and require proof of notice be included in submission of conditions to the Board.**

This recommendation would require each GMA to provide uniform notice, instead of individual district-specific notices, posted in each district's office, the courthouse of each county wholly or partially in the GMA, the Texas Register, and each district's website, if they have a website, at least 10 days before the GMA meeting. Notice for any GMA meeting must include:

- the date, time, and location of the public meeting or hearing;
- a summary of the proposed action to be taken;
- names of each groundwater conservation district making up the GMA;
- the name, telephone number, and address of the person to whom questions or requests for additional information may be submitted; and
- information on how the public may submit comments.

Additionally, before a GMA adopts a DFC, this recommendation would require a 30-day public comment period, during which time each district would be required to conduct a public hearing on the proposed DFC in their district and make a copy of the proposed DFC and any supporting materials, such as groundwater availability model runs, available to the public in the district's office. Notice for the public hearing in each district would include the same elements as GMA meeting notices above, as well as the proposed DFC.

GMA meetings would be considered open meetings under Chapter 551 of the Texas Government Code. As a requirement for the Board to accept a DFC, this recommendation would mandate inclusion of proof of notice of the DFC adoption by the GMA. The Board could define additional methods for stakeholder notice in rule to ensure reasonable opportunity for notice to, and comment from, affected stakeholders, such as landowners, permit holders, local officials, and other members of the public.

## Fiscal Implication Summary

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Overall, the recommendations should have no significant fiscal impact. Modified posting requirements should not have a significant fiscal impact, as the requirements generally match current requirements for district and GMA meetings, except for posting notice on a district's website, which could be absorbed using each district's existing resources. Holding a 30-day public comment period and hearing should not result in additional costs as districts already post notices and hold district meetings, at which a district could hold a public hearing.

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1 Texas Water Development Board, *2007 State Water Plan* (Austin, Texas, 2007), p. 176.

2 Texas Water Code, sec. 16.051.

3 Texas Water Code, sec. 16.053(b).

4 Texas Water Code, sec. 36.0015.

5 Texas Water Code, sec. 35.004.

6 Texas House Bill 1763, 79th Legislature (2005).

7 Texas Water Code, sec. 36.108(d).

8 Texas Water Code, sec. 36.1072(g).

9 Texas Water Code, sec. 36.1071(b).

10 Texas Water Code, sec. 36.1132.

11 Texas Water Code, sec. 36.108(d-1)(2).

12 Texas Government Code, secs. 551.053 and 551.054.

# Responses to Issue 2

## Overall Agency Response to Issue 2

The Board has no disagreement with the statement of the Issue. The Board generally concurs with the findings under Issue 2. In addition, the Board wishes to state its appreciation for the precision of this Finding: “Stakeholders may be unaware of the DFC process and the potential effects of DFCs on their groundwater resources.” (Emphasis added). For reasons discussed more fully in Issue 3, the Board does not believe the DFC process has any effect on the rights of persons with legally defined interests in groundwater because, in the final analysis, under the process described in Section 36.108, Water Code, the Board makes no final determination of the desired future condition (as the Sunset Commission notes in Issue 3). (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

## Recommendation 2.1

*Require the Board to certify that each groundwater management area include a voting representative from each regional water planning group whose boundaries overlap the area.*

### Agency Response to 2.1

The Board concurs with this recommendation. The Board also notes that the recommendation may not go far enough and may prove to be ineffective in ensuring an adequate voice for regional water planning interests in the determination of desired future conditions, as noted by Vice Chairman Jack Hunt at the Board’s meeting on October 21, 2010. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### For 2.1

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo  
Steve Kosub, Water Resources Counsel – San Antonio Water System, San Antonio

### Against 2.1

Joe P. Cooper, Manager – Lost Pines Groundwater Conservation District, Bastrop  
Ronald G. Fieseler, P.G., Member – Executive Committee of Texas Alliance of Groundwater Districts  
Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin  
Stephen Salmon, President – Riverside and Landowners Protection Coalition, Inc., San Angelo  
James D. Sartwelle III, Public Policy Director – Texas Farm Bureau, Waco  
Lonnie Stewart – Live Oak Underground Water Conservation District

C. E. Williams, General Manager – Panhandle Groundwater Conservation District, White Deer

Gary Westbrook, General Manager – Post Oak Savannah Groundwater Conservation District, Milano

Group A – see page 69

### **Modifications**

1. Instead of adding a voting representative from each regional water planning group overlapping a groundwater management area to the groundwater management area, add a representative of each groundwater management area that overlaps with a regional water planning group as a voting member of that regional water planning group. (Senator Glenn Hegar, Chair – Sunset Advisory Commission)
2. Include a provision that a regional planning member who has a stake in a planned project within a groundwater district in the groundwater management area is prohibited from serving as a representative. (Greg Sengelmann, P.G., General Manager – Gonzales County Underground Water Conservation District, Gonzales)
3. In addition to Recommendation 2.1, add a voting representative on each regional water planning group from each groundwater management area whose boundaries overlap the regional water planning group. (Lee Kneupper, Bandera)
4. Provide for a non-voting, instead of a voting, member from each regional water planning group on each groundwater management area. (C. E. Williams, General Manager – Panhandle Groundwater Conservation District, White Deer)
5. Require the Board to certify that voting representatives from regional water planning groups have identified water user groups that currently or are anticipated to rely on groundwater supplies from the groundwater management area. (John T. Dupnik, P.G. – Barton Springs/Edwards Aquifer Conservation District, Austin)
6. Require individuals appointed to represent a regional water planning group for a particular groundwater management area reside within the groundwater management area. (John T. Dupnik, P.G. – Barton Springs/Edwards Aquifer Conservation District, Austin)

### **For Modification 2**

John T. Dupnik, P.G. – Barton Springs/Edwards Aquifer Conservation District, Austin

## **Recommendation 2.2**

*Require regional water planning groups to use the desired future conditions in place at the time of adoption of the Board's State Water Plan in the next water planning cycle.*

### **Agency Response to 2.2**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 2.2**

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo  
Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin  
C. E. Williams, General Manager – Panhandle Groundwater Conservation District, White Deer

**Against 2.2**

None received.

**Modification**

7. Move the deadline for the second round of DFC adoption up by one year to 9/1/14. (John T. Dupnik, P.G. – Barton Springs/Edwards Aquifer Conservation District, Austin)

**Recommendation 2.3**

*Strengthen the public notice requirements for groundwater management area meetings and adoption of desired future conditions and require proof of notice be included in submission of conditions to the Board.*

**Agency Response to 2.3**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 2.3**

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo

**Against 2.3**

Ronald G. Fieseler, P.G., Member – Executive Committee of Texas Alliance of Groundwater Districts

Lonnie Stewart – Live Oak Underground Water Conservation District

**Modifications**

8. Strengthen the public notice requirements for regional water planning group meetings. To improve the degree of public involvement in regional water planning group meetings, the TWDB could define additional methods for stakeholder notice in rule. (Lee Kneupper, Bandera)
9. Require groundwater conservation districts to provide a list of agenda items, rather than a summary of proposed action, in public notice of groundwater management area meetings, and require public hearings in groundwater conservation districts only on desired future conditions that are relevant to the groundwater conservation district. (Senator Glenn Hegar, Chair – Sunset Advisory Commission)



10. Modify Recommendation 2.3 to remove the provision authorizing the Board to adopt additional stakeholder notice requirements, require posting with the Office of the Secretary of State instead of the Texas Register, and provide for a public hearing in each groundwater management area instead of each groundwater conservation district. (Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin)
11. Modify Recommendation 2.3 to require posting with the Office of the Secretary of State, instead of the Texas Register. (Luana Buckner, Co-Chair – Texas Water Conservation Association Groundwater Subcommittee, Hondo)

**Staff Comment:** All open meeting postings filed with the Secretary of State are posted in the Texas Register. As such, requirements to post in the Texas Register, as proposed in Sunset Staff Recommendation 2.3, would require filing through the Office of the Secretary of State, as is currently required of groundwater conservation districts with four or more counties.

## **Modification to Issue 2**

12. Require all regional water planning groups, by rule, to use the same standard definitions as are included in TWDB guidelines for preparation of regional water plans. (Lee Kneupper, Bandera)

## ***Commission Decision***

Adopted Modification 1 in lieu of Recommendation 2.1 to instead add a representative of each groundwater management area as a voting member of each overlapping regional water planning group. As further amended, require that a representative of a groundwater management area represent a groundwater conservation district that overlaps with the regional water planning group.

Adopted Recommendation 2.2.

Adopted Recommendation 2.3 with Modification 9.

## ***Legislative Action***

Senate Bill 660 adds a representative of each groundwater management area that overlaps with a regional water planning group as a voting member of that regional water planning group. The groundwater management area representative must come from a groundwater conservation district that overlaps with the regional water planning group. (Modification 1)

The bill also requires regional water planning groups to use the DFCs in place at the time of adoption of the Board's State Water Plan in the subsequent regional water planning cycle. The provision allows groundwater management areas to make changes to their DFC, if they choose, by a certain date, with assurance that the new modeled available groundwater number will be used in the next regional – and state – water plan adopted by the Board. As a result, DFCs adopted at any point before January 5, 2012 will be used in the water planning cycle resulting in the 2017 State Water Plan. (Recommendation 2.2)

Public notice requirements in Recommendation 2.3 and Modification 9 were adopted in Senate Bill 660 as part of a comprehensive approach to strengthening the process for developing desired future conditions and are discussed as part of Issue 3.





# Issue 3

## *The State's Processes to Petition an Aquifer's Desired Future Conditions Are Fundamentally Flawed.*

### Background

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The joint planning process for determining desired future conditions of aquifers reflects the State's interest in providing a common approach to planning and managing groundwater based on local interests and objective science. The textbox in Issue 2, *Acronyms for Water Planning*, lists and defines key terms related to the joint planning process for groundwater. Although the concept of joint planning for groundwater use across groundwater conservation districts (districts) has existed as a voluntary measure for some time, joint planning has evolved as a method of groundwater management beginning with the Board establishing groundwater management areas (GMAs) to facilitate joint planning in 2003.<sup>1</sup> GMAs, which generally align with major aquifer boundaries, are made up of districts who come together for planning purposes.

- **Desired Future Conditions (DFCs).** In 2005, the Legislature passed House Bill 1763, requiring districts in each GMA to jointly plan for desired future conditions of each relevant aquifer and submit those conditions to the Board. The joint planning process allows districts to coordinate planned groundwater pumping, using data and models from the Board and other sources, to gauge effects on groundwater levels aquifer-wide and avoid adverse effects to the aquifer. Districts within each GMA send one voting representative to GMA meetings, and were required to adopt DFCs for each relevant aquifer in the GMA by September 1, 2010.<sup>2</sup> Both the Board and the Texas Commission on Environmental Quality (TCEQ) have processes to petition (appeal) desired future conditions: processes exist to petition the reasonableness of a DFC to the Board, and to petition other elements, mostly related to the implementation, of the DFC to TCEQ.
- **Role of the Board.** The Board provides technical assistance to districts to encourage scientifically based decision making regarding the amount of groundwater available for use. In districts lacking resources to obtain their own technical expertise, the Board may be the only source of assistance regarding highly complex hydrological and geological data, such as results of groundwater availability model runs. Without this assistance, a district may not be able to make informed decisions about the conditions of its aquifers.

A person with a legally defined interest in groundwater in the GMA, a regional water planning group (RWPG) in the GMA, or a district in or adjacent to the GMA may file a petition with the Board to appeal the approval of a DFC and seek a determination of its reasonableness.<sup>3</sup> Petitions must be filed with the Board within one year of the date of the DFC adoption. The DFC reasonableness petition process at the Board is outlined in the flow chart in Appendix B, *Board Process to Petition the Reasonableness of a DFC*. When petitioned, the Board holds hearings and evaluates the reasonableness of the DFC. If the Board finds a DFC to be reasonable, it concludes the process. If the Board finds a DFC is not reasonable, the Board makes a recommendation to the GMA, which must conduct a public hearing and decide whether to accept the Board's recommended changes.

- **Role of TCEQ.** TCEQ has a petition process to ensure districts appropriately engage in the joint planning process and manage groundwater to achieve their DFCs. A person with a legally defined interest in groundwater within the GMA may file a petition with TCEQ if districts refuse to engage

in joint planning, or if their efforts fail to result in adequate planning, including establishment of reasonable future desired conditions of an aquifer.<sup>4</sup> Petitions filed with TCEQ must also provide evidence of any of the following:

- a district has failed to adopt rules;
- district rules are not designed to achieve the DFC;
- groundwater is not adequately protected by district rules; or
- groundwater is not protected because a district fails to enforce its rules.<sup>5</sup>

TCEQ's petition process is outlined in the flow chart in Appendix B, *TCEQ Process to Petition a District's Management to the DFC*. TCEQ may take action against a district based on findings and recommendations from a five-member review panel appointed by TCEQ to hold hearings and gather evidence related to the petition. Appeals of Commission orders are filed and heard in district court in any of the counties in which the land is located.<sup>6,7</sup>

TCEQ also regulates groundwater quality, and can create districts through establishment of priority groundwater management areas (PGMAs). TCEQ also has regulatory authority over districts that do not timely submit a groundwater management plan or achieve the goals in that plan. In such cases, TCEQ may take enforcement action, including dissolving districts, to achieve adequate management of groundwater in an area.

- **Filed Petitions.** The Board has made determinations of reasonableness for petitions of two sets of DFCs. The Board found a petitioned DFC in GMA 9, in the Hill Country, not reasonable, but despite the Board's finding, the GMA voted not to change its DFC for part of the relevant area of the GMA.<sup>8</sup> The Board found the petitioned DFCs in GMA 1, in the Panhandle, reasonable, but the Board's determination is currently in litigation under another section of law. A petition has also been filed with TCEQ petitioning the same set of DFCs in GMA 1.

## Findings

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### **Desired future conditions can have significant impacts that justify the need for an administrative remedy.**

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*Desired future conditions serve as both a planning and regulatory mechanism.*

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Desired future conditions serve as both a planning and regulatory mechanism. Desired future conditions are joint decisions by locally run districts as to the planned condition of their aquifers in the future, which the Legislature requires to be used in the water planning process (as discussed in Issue 2). The process also has regulatory components on two levels. First, the DFC serves as a regulatory mechanism at a district level, as statute requires districts to issue permits up to the managed available groundwater determined by the DFC. Second, the process has quasi-regulatory hoops that GMAs must jump through at the state level. Statute requires action by GMAs to develop DFCs by certain time frames and provides appeal mechanisms for evaluating the reasonableness and implementation of these decisions.

Despite these regulatory underpinnings, the Board's process does not lead to a clear administrative conclusion as is common in other regulatory approaches. Without the ability to finally resolve petitions of the reasonableness of DFCs,

the State cannot ensure the fundamental fairness of the process – especially for those harmed to seek redress. Because of the link between DFCs and district permitting decisions, the DFC can directly affect the amount of groundwater available for use by landowners, current and potential permit holders, RWPGs, and other districts beyond the GMA. Those affected risk being deprived of basic due process protections for harm they may suffer as a result of the desired future condition. These protections are standard in other administrative processes.

As discussed in Issue 2, the DFC could also disallow consideration and implementation of water planning projects because the managed available groundwater that must be used for water planning purposes may not allow for sufficient available groundwater for the projects. The DFC could also prevent local entities from receiving Board financial assistance for planned water projects if the project strategy cannot be included in the next regional or state water plan.

**The Legislature already placed the State in the position of overseeing groundwater districts, including assessing the reasonableness and implementation of desired future conditions.**

The State protects groundwater through the creation and oversight of districts and the establishment of PGMAAs. The State, through TCEQ, exercises its oversight of districts through regulatory and enforcement powers that include dissolving a district or any other action to achieve comprehensive management of groundwater in an area. The Legislature also placed the State, through processes at the Board and TCEQ, in charge of assessing whether a DFC is reasonable and determining whether district implementation achieves a DFC, respectively. The State’s interest in DFCs is to try to ensure the overall integrity of joint planning process as a way to maintain local control of groundwater with an awareness of broader interests and concerns, beyond just the narrow interests of the districts and GMAs involved. By placing the Board and TCEQ in charge of procedures to ensure these broader interests and concerns are met, the Legislature has already established the State’s heightened interest in groundwater matters.

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*The State’s interest in DFCs is to ensure the overall integrity of the joint planning process.*

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**The petition process at the Board lacks standard components of administrative processes.**

Over the past 33 years, Sunset staff has reviewed numerous state agencies whose functions include administrative petition, or appeal, processes and identified standard features and best practices of those processes. The elements listed below do not match standard components of administrative processes in state government.

- **No Clear Definition of Eligible Petitioners.** Statute provides for a person with a legally defined interest in the groundwater of the GMA, a district in or adjacent to the GMA, or a regional water planning group for a region in the GMA, to file a petition with the Board appealing the

approval of the DFC.<sup>9</sup> However, because statute does not say what a “legally defined interest” is, eligibility to file a petition with the Board is unclear. In determining petitioner eligibility, the Board lacks a standard to delineate who gets to participate in the petition process. Moreover, the requirement for a petitioner to have a legally defined interest does not necessarily mean they are affected, or harmed, by the DFC in a way that merits petitioning the decision. The term may also exclude persons who might be affected by the DFC, but may not meet the vague definition of a legally defined interest.

- **No Statutory Guidance for Decisions.** The Board’s DFC petition process lacks statutory criteria for making a decision of reasonableness. The accompanying textbox lists the factors adopted by the Board through

**Board Rule Criteria for Determining the Reasonableness of a DFC**

- Whether the DFC is Physically Possible
- Socio-economic Impacts
- Environmental Impacts
- State Policy and Legislative Directives
- Impacts on Private Property
- Reasonable and Prudent Development of the State’s Resources
- Other Relevant Information

rule to evaluate the reasonableness of a DFC. These factors are not in statute and the agency was not specifically directed to adopt them in rule. They do not carry the same weight as specific legislative directives in judicial review, and as a result may not withstand judicial scrutiny. Additionally, districts have no guidance in setting DFCs in the first place. Consideration of such reasonableness factors by the GMA when first adopting DFCs, and documentation of the DFC’s impact on those factors, could promote a stakeholder process that results in a reasonable DFC that acknowledges and balances interests, improves decision making, and potentially reduces the number of petitions that may be filed.

- **No Contested Case Hearing.** While the Board’s current process promotes informality and flexibility by allowing any evidence to be submitted, it offers no opportunity for parties to review evidence or conduct cross-examination, elements generally afforded as a matter of procedural due process. The technical nature of the DFC process requires the ability to evaluate the credibility of expert witnesses, to be able to question imprecise science, and to provide contrary arguments to the evidence and testimony. Without a contested case hearing subject to rules of evidence, such protections are impossible. Additionally, without a contested case hearing, only a limited record exists for further court review under substantial evidence, which risks courts having to begin the case anew under a trial de novo standard.

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*An incomplete DFC petition process wastes the Board’s time and money and does not produce meaningful results.*

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- **No Final Resolution.** Under the current process, the Board makes a determination of reasonableness of the DFC, but it is merely a recommendation back to the GMA that is not final. While the GMA must hold a public hearing on the Board’s recommendation, it does not have to accept the Board’s recommendation or make any changes to its original DFC, even if the Board finds the DFC is not reasonable. The lack of a final resolution by the Board and the inability to enforce that

decision results in an incomplete process that potentially wastes the Board's time and resources, as the Board performs hearings that do not produce meaningful results.

- **No Clear Judicial Remedy.** Statute does not provide a clear judicial remedy for the Board's DFC petition process. Because of the regulatory implications of the DFC process at the district level, the lack of a clear avenue for appeal could result in denying petitioners' due process rights for the significant harm they can suffer from the loss of available groundwater. The Board is currently in litigation related to a petition appealing the DFC adopted by GMA 1, which the Board found to be reasonable. Because the Board's DFC petition process itself does not outline its own judicial remedy, this suit was instead filed under general provisions relating to a person being adversely affected by a Board decision.<sup>10</sup>

**Unlike at the Board, well-established regulatory functions and administrative processes relating to groundwater already exist at TCEQ.**

TCEQ is the regulatory entity for oversight of districts and protection of groundwater, including petitions related to joint planning and district management to achieve the DFC. Similarly, TCEQ is the only state entity with authority to initiate enforcement actions against districts, such as issuing administrative orders, dissolving a district board and calling for a new election, placing a district in receivership, dissolving the district entirely, or recommending to the Legislature other actions necessary to achieve comprehensive management in the district.<sup>11</sup> TCEQ may also take enforcement action against districts for certain Board requirements, such as failure to timely submit administratively complete groundwater management plans.<sup>12</sup> Beyond groundwater, TCEQ has well-established regulatory processes, including contested case hearings, for other elements of environmental regulation.

In comparison, the Board has no regulatory functions. Since the Legislature split the Texas Department of Water Resources into the Texas Water Development Board and Texas Water Commission (now TCEQ), the State has clearly separated functions between TCEQ as the regulatory arm and the Board as the financial assistance and planning arm for water.<sup>13</sup> This separation is in place to avoid conflicts of interest between the funding and planning of water projects and the permitting and regulation of those projects. The Board has never performed regulatory functions and lacks experience with regulatory mechanisms.

Establishing a full regulatory scheme at the Board would further fragment the regulation of groundwater. The Board provides valuable technical expertise that can be important to determinations of reasonableness and implementation of a DFC, but such technical expertise has historically supplemented regulatory decisions at TCEQ, such as in establishment of PGMA's.

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*The Board has no regulatory functions.*

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*The Board's technical expertise has historically supplemented regulatory decisions at TCEQ.*

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*Giving the Board regulatory authority would fragment the oversight of groundwater.*

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If the Board had final decision-making authority for the reasonableness of a DFC, any enforcement of the Board's decision would ultimately have to be pursued through TCEQ in an additional administrative hearing process. Giving the Board final decision making and authority for enforcing reasonableness of DFCs or giving the Board regulatory authority for the entire DFC planning and implementation petition process – including the existing DFC petition process at TCEQ – would fragment the oversight of groundwater between two agencies, an inefficient use of state resources. The only way to avoid duplication and keep the Board involved in the DFC petition process would be to move all groundwater oversight and regulation to the Board, separating it from all other water – and all other environmental – regulation.

**TCEQ's desired future condition petition process also lacks standard components of administrative processes.**

As discussed earlier, the elements listed below do not match standard components of administrative petition, or appeal, processes observed by Sunset staff across state government.

- **No Definition of Eligible Petitioners.** Statute provides only that a district or person with a legally defined interest in groundwater within the GMA may file a petition requesting an inquiry by TCEQ regarding a district's implementation of provisions related to the DFC. Unlike for the Board, however, regional water planning groups and adjacent districts are not specifically listed as eligible petitioners in TCEQ's process, suggesting that they would not be eligible to file a petition. Regional water planning groups and adjacent districts are directly affected by the DFC and its implementation, as both depend on resulting groundwater availability for either planning or regulatory purposes. Just like for the Board, statute does not say what a "legally defined interest" is or require the petitioner to be affected or harmed by the DFC.
- **Required Evidence is Unrelated to Petition Basis.** Statute provides that petitioners may request an inquiry by TCEQ based on a district's failure to engage in joint planning in establishing a DFC. However, evidence required for petitions does not relate to, nor support the basis for, the petitions. Petitioners are unable to file petitions related to a district's failure to engage in joint planning without also providing evidence of failures related to district rules, which are totally separate from engaging in joint planning.<sup>14</sup>

Additionally, neither the Board nor TCEQ has a requirement for when a district must adopt rules or update its management plan to implement the DFC. The lack of a deadline for rule adoption makes it unclear when a valid petition can be filed with TCEQ, as petitions must include evidence of district rule failures.

- **No Statutory Guidance for Decisions.** TCEQ's DFC petition process lacks sufficient statutory criteria or definitions to guide TCEQ

determinations of whether evidence supports a petition related to the DFC. The terms “adequate planning,” “reasonable future desired condition,” and when groundwater is “adequately protected” all lack statutory definitions or factors that an agency would use to determine these standards.<sup>15</sup> Without statutory guidance, TCEQ decisions may not withstand judicial scrutiny, as factors TCEQ may use in its decision making are not express legislative directives.

- **No Contested Case Hearing.** While TCEQ’s five-member review panel provides for public hearings and a report of findings and recommendations to TCEQ, it offers no opportunity for formal review of evidence or cross-examination, which, again, are elements generally included in procedural due process.

*No objective review.* Standard state administrative processes provide a forum for a recommendation for decision by an objective, disinterested party, usually an administrative law judge. A five-member panel that may potentially comprise board members or general managers of districts does not provide for an objective review of district rules or decisions.

*No contested case hearing experience.* If a five-member review panel is charged with conducting full contested case hearings, the members comprising the panel will not likely have experience in conducting a contested case hearing under the rules of evidence. As such, merely adding requirements for a contested case hearing, if conducted by a five-member review panel, may not work in practice.

*No formal transcript.* Under TCEQ’s petition process, statute provides for a disinterested recording secretary to document the proceedings of the hearings. However, without a formal transcript by a court reporter, as is commonly used in contested case hearings, the court record may not satisfy the needed documentation required for substantial evidence review.

As a result of not having a full contested case hearing, a case may not qualify for substantial evidence review of state administrative decisions. Without a contested case hearing, TCEQ’s petition process may be subject to appeal under a trial de novo standard, with no consideration given to the efforts or outcomes in the administrative process. Legitimate questions arise as to the merit of a non-contested case administrative process, given the lost time and resources if a decision is appealed and the case is tried anew.

- **Venue for Judicial Review.** Statute provides for appeals of TCEQ orders for DFC petitions to be in a district court of any of the counties where the land is located.<sup>16</sup> Most state contested case hearings are appealed to district court in Travis County; venues outside of Travis County are not common. Travis County district courts have considerable experience related to appeals of state administrative processes, and are generally regarded as objective venues for hearing state matters.

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*Without a contested case hearing, TCEQ’s process does not provide for review of evidence or cross-examination.*

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*TCEQ’s petition process appears to provide procedural advantages to districts.*

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- **Overall Process is Not Objective.** As currently structured by statute, TCEQ's process does not provide for an objective manner by which to evaluate a district's decision. Instead, the process appears to provide procedural advantages to districts. Notably, providing for a review panel that may potentially be made up of district board members or general managers to cast judgment on other district decisions allows for the panel to have an interest in the outcome of the case, as its decisions could be influenced by the panel's own practices. If a landowner were to appeal the Commission's decision, the venue is in a county where the land lies, where the district may have a hometown advantage.

## Recommendations

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### *Change in Statute*

#### **3.1 Require groundwater management areas to document consideration of factors or criteria that comprise a reasonable desired future condition and to submit that documentation to the Board.**

This recommendation would require districts in a GMA, in determining their DFC, to document the factors or criteria they considered that demonstrate the reasonableness of their DFC. Documentation would address any item identified by the agency responsible for defining a "reasonable" DFC. The Board would require that districts in a GMA include documentation of consideration of reasonableness factors and impacts of a DFC in writing for the submission of the DFC to be accepted as administratively complete. Districts could submit this documentation through such means as the DFC resolution.

#### **3.2 Transfer the process to petition the reasonableness of desired future conditions from the Board to TCEQ and modify TCEQ's existing petition process to unify elements relating to reasonableness and implementation of desired future conditions.**

This recommendation would eliminate the Board's petition process regarding the reasonableness of a DFC and move the process for determining the reasonableness of a DFC to TCEQ. TCEQ's existing DFC petition process would be amended as follows.

Affected persons may file a petition with TCEQ if the petition provides evidence of any of the following:

- failure of a district to engage in joint planning;
- the process fails to result in the establishment of reasonable desired future condition(s);
- failure of a district to adopt rules or update its management plan to implement the DFC within one year of the GMA's adoption of a DFC;
- the rules adopted by a district are not designed to achieve the DFC in the GMA;
- the groundwater in the groundwater management area is not adequately protected by the rules adopted by a district; or
- the groundwater in the groundwater management area is not adequately protected due to the failure of a district to enforce substantial compliance with its rules.

Affected person would be defined as a landowner in the GMA, a district in or adjacent to the GMA, a regional water planning group with a water management strategy in the GMA, a permit holder or permit applicant in the GMA, any holder of groundwater rights in the GMA, or any other affected person, as defined by TCEQ in rule. TCEQ would define what constitutes a reasonable DFC and adequate protection of groundwater, by rule, in a way that balances water demands with any adverse effects to the aquifer. TCEQ should consider any work completed on defining factors to determine a reasonable DFC, such as criteria in Board rule, as noted in the textbox on page 32, and the recommendations of other groups.

The TCEQ Executive Director shall administratively review the petition to ensure that evidence was submitted to support the petition and the petition is administratively complete. Not later than the 60th day after the petition is filed, the Executive Director shall either dismiss the petition if the Executive Director finds that no evidence was submitted to support the petition as required by statute, refer the petition for a contested case hearing at the State Office of Administrative Hearings (SOAH), or refer the petition to the Commission for decision. In all petition cases, the burden of proof is on the petitioner.

If, within the initial 60-day review of the petition, the Executive Director finds that a technical analysis is needed related to the hydrogeology of the area or matters within the Board's expertise, the Executive Director may request a study from the Board. If the Executive Director refers the petition to the Commission for decision, the Commission may request such a study from the Board.

In conducting the technical analysis, the Board shall consider any relevant information provided in the petition, as well as any groundwater availability models or other published studies or information the Board considers relevant. The study must be completed and delivered to TCEQ on or before the 120th day following the date of the request. If the matter has been referred to SOAH, the study shall also be delivered to SOAH for admission into the evidentiary record for consideration at the hearing. The relevant Board staff shall be available as an expert witness during the hearing if requested by any party or the administrative law judge.

The hearing shall be conducted by an administrative law judge as a contested case under the Administrative Procedure Act at SOAH. The Commission or Executive Director shall provide notice of the hearing to the petitioner and each district and regional water planning group in the GMA under procedures prescribed in rule. Evidentiary hearings shall be held at a location in the GMA. If the administrative law judge considers further information necessary, the judge may request such information from any source. The Board is not a party to these appeals. The Executive Director, on a case-by-case basis, shall determine whether to participate as a party to appeals, based on criteria TCEQ determines in rule. If the petition is referred by the Executive Director to the Commission, the Commission, on a case-by-case basis, shall determine whether the Executive Director will participate as a party.

After receiving the administrative law judge's findings of fact and conclusions of law, including recommended changes to the DFC if it is found not reasonable, the Commission shall issue an order stating its findings and conclusions, and may take other action against a district, as provided in law. Appeals of Commission decisions shall be filed in district court in Travis County under substantial evidence review.

The chart on the following pages, *Major Elements of a Unified DFC Petition Process*, compares each element of the DFC process proposed by Sunset staff with TCEQ's current process, with comments to further explain the recommendation.

**Major Elements of a Unified DFC Petition Process**

<b>Element</b>	<b>TCEQ's Current Process</b>	<b>Sunset Proposed Process</b>	<b>Comments</b>
Who Can File a Petition	A district or person with a legally defined interest in the groundwater within the GMA (§36.108(f), Texas Water Code).	An affected person, defined as a landowner in the GMA, a district in or adjacent to the GMA, a regional water planning group with a water management strategy in the GMA, a permit holder or permit applicant in the GMA, any holder of groundwater rights in the GMA, or any other affected person, as defined by TCEQ in rule.	Proposed language changes the eligible petitioners to a standard term with a specific definition, as the term "legally defined interest" lacks a statutory definition. The listed eligible petitioners generally tracks entities listed in current statute (§36.108(l)) and Board rule. The proposed language also requires petitioners to be affected by the DFC.
<b>Basis for Filing Petitions</b>	<b>A petition may be filed with TCEQ requesting an inquiry if:</b>	<b>A petition may be filed with TCEQ requesting an inquiry upon evidence of any of the following:</b>	
Engaging in Joint Planning	A district or districts refused to join in the planning process (§36.108(f)); or	A district or districts fail to engage in joint planning;	Allows for a petition to be filed without having to challenge the district for not having adopted rules, as the current process requires evidence that is not related to the petition basis.
Reasonableness of DFC	The process failed to result in adequate planning, including the establishment of reasonable future desired conditions (§36.108(f)); [Note: The petition process for determining reasonableness of DFCs rests with the Board as laid out in §36.108(l)-(n).] <i>In addition, a petition must provide evidence of any of the following:</i>	The process fails to result in establishment of reasonable DFCs; [Note: §36.108(l)-(n) would be repealed.]	Removes the Board's process for determining reasonableness of DFCs. TCEQ, as part of its existing DFC petition process, would accept petitions for the reasonableness of DFCs just as it would accept petitions for any other element related to the DFC. TCEQ would need to adopt rules to define a "reasonable" DFC. The provision for adequate planning is removed because it would be covered under a petition related to reasonableness of a DFC.
District Rule Adoption	A district in the GMA has failed to adopt rules (§36.108(f)(1));	A district in the GMA has failed to adopt rules or update its management plan to implement the DFC within one year of the GMA's adoption of the DFC;	Adds a timeframe for a district to adopt rules and update its management plan to implement DFCs. With no deadline for such rules, the validity of petitions at TCEQ is unclear.
Rules to Achieve DFC	Rules adopted by a district are not designed to achieve the DFC (§36.108(f)(2));	Same.	
Rules to Protect Groundwater in the GMA	Groundwater in a GMA is not adequately protected by district rules (§36.108(f)(3)); or	Same.	TCEQ would need to adopt rules to define what constitutes "adequately protected" groundwater.

**Major Elements of a Unified DFC Petition Process**

<b>Element</b>	<b>TCEQ's Current Process</b>	<b>Sunset Proposed Process</b>	<b>Comments</b>
Enforcement of Rules	Groundwater in the GMA is not adequately protected due to failure of a district to enforce substantial compliance with its rules (§36.108(f)(4)).	Same.	
<b>Processing the Petition</b>			
Time Period for TCEQ Review	The Commission shall review the petition not later than 90 days after the date the petition is filed (§36.108(g)).	The Executive Director shall administratively review the petition not later than 60 days after the date the petition is filed.	Timeframe reduced to 60 days because of removal of the requirement to appoint a review panel and because the petition review is administrative.
Dismissal	The Commission shall dismiss the petition if it finds that the evidence is not adequate to show the conditions alleged in the petition exist (§36.108 (g)(1)).	The Commission or Executive Director shall dismiss the petition if it finds that no evidence was submitted to support the petition.	Clarifies that dismissal of a petition is based on an administrative, rather than substantive, review of the petition.
Technical Assistance	No equivalent provision.	If, within TCEQ's 60-day review period, the Commission or Executive Director finds the need for a technical analysis of the hydrogeology of the area or other matters within the Board's expertise, the Commission or Executive Director may request a study from the Board. The Board must consider any relevant information provided by the petition, groundwater availability models, published studies, or any other information deemed relevant, and must submit a completed study to TCEQ and SOAH for inclusion in the court record within 120 days of the request. The Board shall serve as an expert witness if called by any party or the administrative law judge (ALJ).	Process for the Board to provide technical expertise is similar to its role in priority groundwater management area (PGMA) cases at TCEQ and the State Office of Administrative Hearings (SOAH). The Board would provide an analysis of hydrogeology related to the area, and TCEQ and SOAH would use this analysis, for example, to supplement evaluation of the subjective factors associated with the reasonableness or adequate protection of groundwater standards, according to TCEQ's definitions of these terms. As in PGMA cases, the Board would serve as an expert witness or provide additional information, as needed.
<b>Hearing Process</b>			
Who Conducts the Hearing	If the Commission does not dismiss the petition, it shall appoint a five-member review panel that may consist of directors or general managers of districts outside the GMA, with no more than two members from any one district. The Commission may appoint a disinterested person, who may be a Commission employee, to serve as a	If the Commission or Executive Director does not dismiss the petition, it shall refer the petition for a contested case hearing at SOAH. The hearing is to be conducted by an ALJ under APA, with TCEQ providing notice of the hearing to each district and regional water planning group in the GMA. The Board is not a party to the appeal. The Executive Director or the Commission, on a	The Sunset proposal is based on the PGMA process, which SOAH also conducts for TCEQ. Having an ALJ conduct hearings, instead of a review panel, provides for a recommendation for decision by an objective, disinterested party with experience in contested case hearings and applying rules of evidence. The Executive Director would not always need

**Major Elements of a Unified DFC Petition Process**

<b>Element</b>	<b>TCEQ's Current Process</b>	<b>Sunset Proposed Process</b>	<b>Comments</b>
Who Conducts the Hearing (continued)	nonvoting recording secretary for the panel (§36.108 (g)(2) and (h)).	case-by-case basis, shall determine whether the Executive Director participates as a party to appeals based on criteria TCEQ determines by rule.	to be a party; the petitioner and districts in the GMA would likely be the parties in most cases. However, cases involving adequate protection of groundwater or other broad policy questions affecting TCEQ could warrant the Executive Director's participation as a party.
Type of Hearing	Within 120 days of appointment, the review panel shall review the petition and any evidence relevant to the petition and, in a public meeting, adopt a report to be submitted to the Commission. The Commission may direct the review panel to conduct the public meeting at a location in the GMA. The review panel may negotiate a settlement or resolve the dispute by any lawful means (§36.108(i)).	Evidentiary hearings are to be held at a location in the GMA. The ALJ may request information determined necessary from any source.	Evidentiary hearings at SOAH, similar to the PGMA process, rather than public meetings before panels of district directors and general managers provide a clear record under the rules of evidence, encompassing discovery, cross-examination, and other due process protections. Evidentiary hearings support judicial review based on substantial evidence of the record, rather than a full de novo review.
Findings and Action	The review panel's report shall include a summary of all evidence taken in any hearing on the petition; a list of findings and recommended actions for the Commission to take; and any other information the panel considers appropriate (§36.108(j)).  The Commission may take action to implement a review panel's recommendation, including taking action against a district under sec. §36.3011.	After receiving the ALJ's findings of fact and conclusions of law, including recommended changes to the DFC if it is found not reasonable, the Commission shall issue an order stating its findings and conclusions, and may take action under sec. §36.3011. If found not reasonable, districts in a GMA would be required to revise their DFC in accordance with Commission order and resubmit the DFC to the Board.	Modifies Commission action based on findings of fact and conclusions of law from an ALJ, rather than a summary of evidence from a five-member review panel, to reflect standard practices resulting from contested case hearings.
<b>Appeals</b>			
	Appeals of Commission orders shall be in district court of any of the counties in which the land is located (§36.309).	Appeals of Commission orders shall be filed in district court in Travis County under substantial evidence review.	Changes the judicial venue and specifies a level of review to match standard contested case hearings at the state level.



## ***Management Action***

### **3.3 TCEQ should promote mediation in desired future condition petition cases where appropriate.**

Under this recommendation, TCEQ should promote mediation as a means to resolve a petition in any DFC petition case it determines is an appropriate candidate for mediation. TCEQ should use procedures similar to those it currently uses in its other regulatory processes to make the parties aware of mediation options.

## **Fiscal Implication Summary**

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Recommendation 3.2, unifying the petition processes for DFC reasonableness and implementation, would not have a significant cost to the State. However, a precise fiscal impact cannot be fully determined at this time because the number of petitions or length of the hearings cannot be accurately estimated. Based on the process for deciding priority groundwater management area cases – the nearest and most similar type of contested case at TCEQ – which average approximately 50 hours of work for an administrative law judge at SOAH’s billing rate of \$100 per hour, a reasonable estimate of SOAH’s costs would be approximately \$5,000 per case. To conduct evidentiary hearings in the GMA, SOAH would also incur travel costs, depending on the location of the hearings.

TCEQ should not have significant costs associated with processing petitions, as it is already responsible for processing petitions for its own process. TCEQ could absorb the review of any additional petitions relating to the reasonableness of a DFC with existing resources, as the review would largely be administrative. TCEQ will have increased costs associated with being a party to any hearings, such as travel and compensating SOAH for its contested case hearings costs. However, TCEQ will have some minimal savings from no longer appointing and supporting five-member review panels to hear DFC petitions.

Because the Board would no longer accept petitions relating to the reasonableness of DFCs, it would no longer need the resources associated with the DFC petitions. No additional costs to the Board for its technical analyses would be needed, as costs for preparing the technical analyses could be absorbed with the Board’s current resources.

In summary, a reasonable estimate of a contested case hearing for a DFC petition would be \$7,000 per case, including SOAH costs for an administrative law judge and travel costs for both SOAH and TCEQ staff – assuming TCEQ was a party to the case. In 2007, the Legislature funded one full-time employee to assist with the Board’s DFC petitions, which took approximately 10 percent of the employee’s time. As such, the \$66,000 salary of the full-time employee would be transferred from the Board to TCEQ to offset its costs associated with the petition process.

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1 Texas Senate Bill 2, 79th Legislature (2005).

2 Texas Water Code, sec. 36.108(d).

3 Texas Water Code, sec. 36.108(l).

4 Texas Water Code, sec. 36.108(f).

5 Ibid.

6 Texas Water Code, sec. 36.309.

7 The term “Commission,” for purposes of this issue, refers to the policy body of the Texas Commission on Environmental Quality.

8 GMA 9 voted not to change the DFC for Bandera and Kendall Counties and rejected the Board’s recommended DFC for Kerr County by declaring the aquifer in Kerr County to be “not relevant.”

9 Texas Water Code, sec. 36.108(l).

10 Texas Water Code, sec. 6.241.

11 Texas Water Code, sec. 36.303.

12 Texas Water Code, sec. 36.301.

13 Texas Water Code, secs. 6.011 and 6.012.

14 Texas Water Code, sec. 36.108(f).

15 Texas Water Code, secs. 36.108(f) and (f)(4).

16 Texas Water Code, sec. 36.309.

# Responses to Issue 3

## Overall Agency Response to Issue 3

As a general matter, the Board agrees with the statement of Issue 3. The Board agrees with the Sunset Commission staff report's statement at page 32 that any determination that a desired future condition (DFC) is unreasonable "is merely a recommendation" and groundwater conservation districts in a groundwater management area (GMA) do "not have to accept the Board's recommendation or make any changes to its original DFC..."

The Board disagrees, at page 35, that "without a contested case hearing, only a limited record exists for further court review under substantial evidence" and that there is a risk of "courts having to begin the case anew under a trial de novo standard." The Board's position in the litigation referenced in the staff report is that a substantial evidence review is appropriate and is required, even in the absence of a contested hearing under Chapter 2001, Government Code. *Texas State Board of Examiners in Optometry v. Carp*, 388 S.W. 2d 409, 414-415 (Tex. 1965); *Gerst v. Nixon*, 411 S.W. 2d 350, 353-354 (Tex. 1966).

In point of fact, it is the position of the Board in this litigation that no judicial review is authorized for the Board's decisions in DFC appeals – a position that the Board believes to be consistent with the Finding: "No Clear Judicial Remedy" at page 33. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

## Recommendation 3.1

*Require groundwater management areas to document consideration of factors or criteria that comprise a reasonable desired future condition and to submit that documentation to the Board.*

### Agency Response to 3.1

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### For 3.1

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo

Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin

### Against 3.1

Ronald G. Fieseler, P.G., Member – Executive Committee of Texas Alliance of Groundwater Districts

Lonnie Stewart – Live Oak Underground Water Conservation District



## **Recommendation 3.2**

*Transfer the process to petition the reasonableness of desired future conditions from the Board to TCEQ and modify TCEQ's existing petition process to unify elements relating to reasonableness and implementation of desired future conditions.*

### **Agency Response to 3.2**

The Board concurs with this recommendation that the petition process should be transferred to an appropriate quasi-judicial forum. Consistent with the Sunset Commission's observation at page 35 that "[w]ithout statutory guidance,...decisions [on desired future conditions] may not withstand judicial scrutiny", it is the Board's position that factors that must be considered by groundwater conservation districts in establishing desired future conditions should be set forth in statute and include the criteria under current Board rules.

### **Agency Modification**

1. Specify in statute the factors that must be considered by groundwater conservation districts in establishing desired future conditions. These factors should include:
  - whether the DFC is physically possible;
  - socio-economic impacts;
  - environmental impacts;
  - state policy and legislative directives;
  - impacts on private property;
  - reasonable and prudent development of the State's resources; and
  - other relevant information.

(J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### **Affected Agency Response to 3.2**

The Texas Commission on Environmental Quality agrees with Recommendation 3.2 to transfer the process to petition the reasonableness of desired future conditions (DFCs) to TCEQ and modify the TCEQ's existing DFC implementation petition process.

### **Texas Commission on Environmental Quality Modifications**

2. Amend Chapter 36 of the Texas Water Code to define reasonable DFCs and to specify factors that groundwater conservation districts (GCDs) must consider and document during the development and adoption of DFCs.
3. Modify the definition of affected persons eligible to file a petition to exclude the reference to any other person as defined by TCEQ rule.

4. Amend Chapter 36 of the Texas Water Code to clarify which law governs the review of a petition that challenges the reasonableness of a DFC that was adopted prior to the effective date of the statutory change or agency rule adoption.

**Staff Comment:** Under the recommendation, current statutory processes would apply to any petitions filed with TCEQ before the effective date of the provision adopted by the Sunset Advisory Commission and passed by the Legislature.

5. Provide that a petition may be filed with TCEQ if a GCD fails to adopt rules or update its management plan to implement the DFC within one year from a GCD's receipt of the Board's managed available groundwater values, instead of one year from the adoption of the DFC by the GCDs in the Groundwater Management Area.

(Mark R. Vickery, P.G., Executive Director – Texas Commission on Environmental Quality)

### **Affected Agency Response to 3.2**

While the particular subject matter of the proposed Desired Future Conditions (DFC) hearings would be new, the State Office of Administrative Hearings currently holds hearings about Priority Groundwater Management Areas (PGMAs) referred to us from the Texas Commission on Environmental Quality (TCEQ). The PGMA hearings are somewhat similar in scope and subject matter to the DFC hearings. In addition, we have in the past held hearings referred from the Edwards Aquifer Authority and various underground water conservation districts. We believe that we could master the subject matter of the DFC hearings in short order. As for the mechanics of the DFC hearings themselves, those would not pose a problem for us. The contested case process is one of SOAH's core functions, and our Administrative Law Judges could apply a wealth of experience to the DFC hearing process. We have had for many years an excellent working relationship with TCEQ, and we would be glad to have the opportunity to continue that relationship with the DFC hearings. Other than these comments, we have no suggestions, disagreements, or modifications to offer about Issue 3. (Cathleen Parsley, Chief Administrative Law Judge – State Office of Administrative Hearings)

### **For 3.2**

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo

Steve Kosub, Water Resources Counsel – San Antonio Water System, San Antonio

### **Against 3.2**

Ronald G. Fieseler, P.G., Member – Executive Committee of Texas Alliance of Groundwater Districts

Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin

Stephen Salmon, President – Riverside and Landowners Protection Coalition, Inc., San Angelo

James D. Sartwelle III, Public Policy Director – Texas Farm Bureau, Waco

Lonnie Stewart – Live Oak Underground Water Conservation District

Bob Turner, Rancher – Voss

C. E. Williams, General Manager – Panhandle Groundwater Conservation District, White Deer

Gary Westbrook, General Manager – Post Oak Savannah Groundwater Conservation District, Milano

Group A – see page 69

### **Modifications**

6. The process to petition the reasonableness of a desired future condition (DFC) at the Texas Water Development Board (Texas Water Code sec. 36.108(l)-(n)) would be repealed.

The presiding officer or the presiding officer's designee of each groundwater conservation district wholly or partially in each groundwater management area would serve as a delegate and convene at least annually to conduct joint planning at a DFC Joint Planning Conference. Delegates at the DFC Joint Planning Conference would review the management plans and develop desired future conditions under 36.108 (c) and (d) respectively.

Delegates may appoint and convene non-voting advisory committees consisting of social, governmental, environmental, or economic segments within each groundwater management area to assist in the development of DFCs. Both the Board and TCEQ would make technical staff available to serve in a non-voting advisory capacity to the DFC Joint Planning Conference and advisory committees if requested.

Proposed DFC(s) would require support from two-thirds of all eligible voting delegates before being submitted to individual districts within the groundwater management area for consideration.

Each district would be required to consider all proposed DFC(s) relevant to the district during a public hearing, as required in Sunset staff Recommendation 2.3 or as modified, wherein the districts shall solicit public comment on the proposed DFC(s). Upon conclusion of the public hearing, districts would each prepare a report for consideration at the DFC Joint Planning Conference describing public comment received and proposing any revisions, including the basis for the revisions, to the proposed DFC.

The conference delegates would reconvene to review the reports from individual districts, and consider revisions to the proposed DFC. The delegates would issue a DFC report for the groundwater management area. The DFC report should identify each DFC, policy and technical justification for each DFC, other DFC options considered and reasons why they were not adopted, and discuss reasons why recommendations made by advisory committees and public comment received by the districts were or were not incorporated into the DFC.

As discussed in Sunset Staff Recommendation 3.1, the DFC report would also document consideration and impacts of the following criteria in establishing reasonable desired future conditions:

- aquifer uses and conditions within the management area, including uses or conditions that differ substantially from one geographic area to another;

- the water supply needs and water management strategies included in the adopted state water plan;
- whether the desired future conditions are physically possible;
- socioeconomic impacts reasonably expected to occur;
- environmental impacts, including spring flow and other interactions between groundwater and surface water;
- the impact on the interests and rights in private property, including ownership and rights of owners of the land and their lessees and assigns in groundwater as recognized under section 36.002;
- impact on subsidence; and
- any other information relevant to the specific desired future condition.

Upon issuance of the DFC report, each district within the groundwater management area would be required to adopt the relevant DFCs identified in the report by rule under procedures described under Texas Water Code sec. 36.101.

The Board would be prohibited from approving a district's management plan that has not adopted relevant DFCs and incorporated the DFC(s) into the management plan.

Appeals of district adoption of a DFC would be made to district court in the same manner as any challenge to a district rule under Texas Water Code, Chapter 36, Subchapter H, under substantial evidence review in any county in which the district lies.

A person affected by the DFC may file an inquiry with the Texas Commission on Environmental Quality under Texas Water Code, sec. 36.108(f) for any of the following:

- failure of a district to engage in joint planning, including failure to formally adopt a DFC;
- failure of a district to update its management plan and adopt rules to implement the DFC within two years of the GMA's adoption of a DFC;
- the rules adopted by a district are not designed to achieve the DFC in the GMA;
- the groundwater in the groundwater management area is not adequately protected by the rules adopted by a district; or
- the groundwater in the groundwater management area is not adequately protected due to the failure of a district to enforce substantial compliance with its rules.

Affected person would be defined as a landowner in the GMA, a district in or adjacent to the GMA, a regional water planning group with a water management strategy in the GMA, a permit holder or permit applicant in the GMA, any holder of groundwater rights in the GMA, or any other affected person, as defined by TCEQ in rule.

TCEQ may take action against a district, as specified under Texas Water Code sec. 36.3011, as modified to be consistent with changes to 36.108 in this modification.

**Note:** References to groundwater management area meetings in the Sunset staff report and statute also apply to the DFC Joint Planning Conference. (Senator Glenn Hegar, Chair – Sunset Advisory Commission)

7. Provide for a 12-month deadline after the desired future conditions are adopted for appeals related solely to reasonableness of desired future conditions. If an appeal relates to the implementation of the desired future condition through the management plan and rules process, provide for a 12-month deadline after the adoption of revisions to the management plan or rules, assuming those revisions have been timely made (within 12 months of adoption of the desired future conditions). Allow for appeals of a district's failure to enforce substantial compliance with its rules at any time. (Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo)
8. Specify in statute those factors adopted by the Texas Water Conservation Association Groundwater Subcommittee for consideration by groundwater conservation districts in establishing desired future conditions. (Luana Buckner, Co-Chair – Texas Water Conservation Association Groundwater Subcommittee, Hondo)

**Staff Comment:** Factors adopted by the Texas Water Conservation Association Groundwater Subcommittee are as follows:

- aquifer uses and conditions within the management area, including uses or conditions that differ substantially from one geographic area to another;
- the water supply needs and water management strategies included in the adopted state water plan;
- whether the desired future conditions are physically possible;
- socioeconomic impacts reasonably expected to occur;
- environmental impacts, including spring flow and other interactions between groundwater and surface water;
- the impact on the interests and rights in private property, including ownership and rights of owners of the land and their lessees and assigns in groundwater as recognized under section 36.002;
- impact on subsidence; and
- any other information relevant to the specific desired future condition.

### **Recommendation 3.3**

*TCEQ should promote mediation in desired future condition petition cases where appropriate.*

#### **Agency Response to 3.3**

This recommendation is not applicable to the Board. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

#### **Affected Agency Response to 3.3**

The Texas Commission on Environmental Quality agrees with Recommendation 3.3 to promote mediation in DFC petition cases. Mediation for DFC petition cases can be incorporated into the agency's existing robust Alternative Dispute Resolution Program. (Mark R. Vickery, P.G., Executive Director – Texas Commission on Environmental Quality)

#### **For 3.3**

Luana Buckner, Co-Chair – Texas Water Conservation Association Groundwater Subcommittee, Hondo

Marvin W. Jones, Attorney – Sprouse Shrader Smith on behalf of Mesa Water L.P., Amarillo

Mary K. Sahs, Outside Counsel – Kenedy County Groundwater Conservation District, Austin

#### **Against 3.3**

Ronald G. Fieseler, P.G., Member – Executive Committee of Texas Alliance of Groundwater Districts

#### **Modification**

9. Provide that mediation be promoted in desired future condition petition cases, regardless of whether the petition process occurs at TCEQ. (Luana Buckner, Co-Chair – Texas Water Conservation Association Groundwater Subcommittee, Hondo)

## ***Commission Decision***

Adopted Recommendation 3.1.

Adopted Modification 6 in lieu of Recommendation 3.2 to instead repeal the process for petitioning the reasonableness of a desired future condition at the Board and strengthen the process for groundwater conservation districts to adopt desired future conditions and provide for judicial review of those decisions. As further amended, add the following factor to the list of criteria to be considered by groundwater conservation districts in establishing a reasonable desired future condition.

- Hydrogeological conditions including, but not limited to, total estimated recoverable storage provided by the executive administrator, recharge, inflows, and discharge.

Adopted Recommendation 3.3.

## ***Legislative Action***

Senate Bill 660 adds requirements and guidelines, many of which were modified by the Legislature, for developing and adopting DFCs by groundwater conservation districts within each groundwater management area. Senate Bill 660 does not contain the Sunset Commission's recommendation to remove the Board's process for judging the reasonableness of a DFC because of disagreement about whether such a challenge should be through a rulemaking or adjudicatory process. Ultimately, the Legislature decided to leave the current Board process in place.

The bill requires representatives of each groundwater conservation district located wholly or partially in each groundwater management area to convene at least annually to conduct joint planning and to review proposals to adopt new or amend existing DFCs every five years. The bill strengthens the public notice and posting requirements for joint meetings in groundwater management areas and for district hearings before adopting desired future conditions.

The bill requires districts to consider the following factors in developing DFCs:

- aquifer uses or conditions within the management area, including conditions that differ substantially from one geographic area to another;
- water supply needs and water management strategies included in the State Water Plan;
- hydrological conditions, including for each aquifer in the management area the total estimated recoverable storage as provided by the executive administrator, and the average annual recharge, inflows, and discharge;
- other environmental impacts, including impacts on spring flow and other interactions between groundwater and surface water;
- impact on subsidence;
- socioeconomic impacts reasonably expected to occur;
- impact on the interests and rights in private property, including the ownership of groundwater;
- feasibility of achieving the desired future condition; and
- any other information relevant to the specific desired future conditions.

Districts must also balance the highest practicable level of groundwater production with the conservation, preservation, protection, recharge, and prevention of waste of groundwater and control of subsidence in the management area. Proposed DFCs require support from two-thirds of all districts in a management area before being submitted to individual districts for consideration. Before districts reconvene in a joint meeting to formally adopt a DFC, a public comment period of not less than 90 days must be provided, during which time each individual district must conduct a public hearing on any proposed DFC relevant to their district and make a copy of the proposed DFC and any supporting materials available to the public in the district's office. Each district must prepare a summary of relevant public comments and suggested revisions to proposed DFCs for consideration at the next joint planning meeting.



Districts in a management area must reconvene to review the summaries and comments from individual districts, and consider revisions to the proposed DFC. Upon final adoption of the DFCs at a joint meeting, the districts must prepare an explanatory report to:

- identify each DFC;
- provide the policy and technical justifications for each DFC;
- include documentation that the factors were considered by the districts and a discussion of how the adopted DFCs impact each factor;
- list other DFC options considered, if any, and the reasons why those options were not adopted; and
- discuss reasons why recommendations made by advisory committees and relevant public comments received by the districts were or were not incorporated into the DFC.

The bill requires individual districts to adopt relevant DFCs after they are adopted at a joint meeting. As a requirement for the Board to accept a DFC as administratively complete, the districts in a management area must submit a copy of the explanatory report and must provide proof of notice for the joint planning meeting.

Districts in a management area may appoint and convene non-voting advisory committees to assist in the development of DFCs. Both the Board and the Texas Commission on Environmental Quality (TCEQ) must make technical staff available to serve in a non-voting advisory capacity if requested.

Senate Bill 660 also modifies the petition process at TCEQ to change eligible petitioners from a legally defined interest to an affected person and defines affected person. The bill adds deadlines for districts to update district rules and management plans, and ensures the reasons for filing a petition with TCEQ correspond with the bases for the Commission to take action to ensure consistency. (Recommendation 2.3 with Modification 9, Recommendation 3.1, and Modification 6)

As a management recommendation not needing statutory change, Recommendation 3.3 did not result in legislative action.





# Issue 4

## ***Structural and Technical Barriers Prevent the Board From Providing Effective Leadership in Geographic Information Systems.***

### **Background**

The Texas Natural Resources Information System (TNRIS) is a division within the Board that serves Texas agencies and citizens as the centralized information clearinghouse and referral center for geographic information system (GIS) data, including natural resource, census, socioeconomic, and emergency management-related data.<sup>1</sup> The Legislature established TNRIS within the Board in 1968 in keeping with the Board's responsibilities to gather and disseminate water-related data and maps. Today, TNRIS is responsible for acquisition and quality assurance of key statewide data sets used to develop and disseminate geographic data products, such as the State's common digital base maps. Base maps are statewide digital data sets containing related features for a common theme, or layer. The textbox, *Statewide Digital Base Map Layers*, describes TNRIS' six base map layers that are used and enhanced by other agencies to accomplish a wide range of activities. Other types of data TNRIS maintains include floodplain maps, historical imagery, hazard models for emergency management, and aerial photography.

#### ***Statewide Digital Base Map Layers***

- ***Political Boundaries.*** The Texas Legislative Council uses this data to create maps of legislative and other districts and proposed redistricting plans.
- ***Transportation.*** The Texas Department of Transportation uses this data to map roadways that it oversees.
- ***Hydrography.*** The General Land Office uses hydrography maps to model the tides' effect on the flow of water into bays and estuaries to predict how oil spills may spread to aid in its response.
- ***Soils.*** The Texas Animal Health Commission uses this information in combination with land cover data to track the behavior of animal disease outbreaks, such as anthrax.
- ***Orthoimagery.*** The Texas Commission on Environmental Quality conducts ambient air monitoring using imagery and mapping to pinpoint emission sources to support permitting decisions, enforcement actions, and air quality studies.
- ***Elevation.*** The Texas Water Development Board uses this data to review flood studies and models that define 100-year flood zones which become part of Digital Flood Insurance Rate Maps.

TNRIS operates within two separate environments: development and production. Its development environment contains raw, unprocessed data, such as digital photography. In this environment, TNRIS stores and maintains the raw data and manipulates it to make it available for more widespread use. Through this process, TNRIS produces user-friendly maps and other data products that it makes available through its production environment. These products include the digital base map layers, as discussed above, and other maps that TNRIS makes available to the public on its website.

- ***Emergency Management.*** TNRIS also serves an emergency response role, providing access to the latest and most accurate data critical to emergency responders in managing a crisis.<sup>2</sup> In preparation for hurricanes, TNRIS adapts and distributes a variety of geographic data in a time-sensitive environment to emergency responders. For example, TNRIS receives and enhances the

quality of Federal Emergency Management Agency (FEMA) data and uses the data to run hazard models that identify hurricane impact zones and response resource locations, such as points of distribution for food, water, ice, and fuel. The model combines a range of geographic data, including census, critical infrastructure, and commercial and residential development data, with storm event impact parameters, including hurricane path, wind speed, and storm surge. TNRIS must quickly disseminate critical data to prevent delays in emergency response.

- **Data Center Services Contract.** Since 2006, the Department of Information Resources (DIR) has managed the delivery of consolidated data center services to 27 state agencies and one university through a seven-year contract with IBM, through its consortium of providers, called Team for Texas. The contract includes consolidation of server and mainframe computer processing, print/mail functions, disaster recovery, security, and data center facility management. DIR included the management of the Board's data center in the contract. In December 2009, DIR granted TNRIS a partial exemption from the contract for its data and product development environment activities. The magnitude of the data involved in this development environment made it essential for TNRIS to have quick access to be able to manipulate the raw data for more widespread use. It could not manipulate this data remotely, as required under the contract. The exemption to the contract, however, does not extend to TNRIS' hardware resources related to its production environment, the mechanism by which TNRIS disseminates information to the public.
- **Texas Geographic Information Council (TGIC).** The Legislature created the TNRIS Task Force in 1972 as an interagency council to help define the nature of the geographic data TNRIS would collect and to provide coordination between TNRIS and state agencies. By 1997, the Task Force evolved into what is now the Texas Geographic Information Council to provide strategic planning and coordination in the acquisition and use of geo-spatial data and related technologies, such as that used by TNRIS.<sup>3</sup> As co-sponsors of TGIC, the Board and DIR provide administrative support and hold permanent positions on TGIC's governing body, the Steering Committee. TGIC comprises 43 members with representation from state, local, and federal government, as well as regional organizations and institutions of higher education.

## Findings

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**Despite its partial exemption from the data center services contract, TNRIS still faces constraints on its ability to effectively execute its duties.**

- **Characteristics of TNRIS' GIS data make it inappropriate for the data center services contract.** DIR acknowledged TNRIS' unique and dynamic use of GIS data was not appropriate for the data center's static environment when it granted TNRIS an exemption of its development environment. However, TNRIS' production environment continues to be negatively impacted by data center constraints. Specifically, the Board's cost of storage and services to support these typically large GIS data files under the contract is expensive, ranging from \$1.42 to \$2.39 per gigabyte over the past two fiscal years. The competitive market can deliver more flexible pricing and services for GIS data storage. For example, TNRIS indicates the competitive market can offer a rate of \$0.40 per gigabyte to house and service the same storage capacity TNRIS currently receives

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*TNRIS' production environment continues to be negatively affected by data center constraints.*

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under the data center services contract. Because the Board cannot afford data center services' costs of storage, 66 percent of TNRIS' current volume of ready-to-use final data products is not actually being stored under data center services. This data represents a \$14.2 million investment in raw data costs, \$5.6 million of which comes from the State. This data is instead housed at TNRIS only on portable hard drives, available for physical pick up or delivery, but not available for on-demand electronic web downloads. Even within the data center services network, the current lack of capacity slows the movement of large GIS files, preventing TNRIS personnel from rapidly uploading new data products for immediate and widespread use.

- **The lack of administrative control over system-level operations jeopardizes the reliability of TNRIS' services during emergency events.** Because TNRIS does not control its production environment, it indicates it cannot effectively disseminate key geographic data, such as maps and models, to emergency responders through its website. The large size of GIS data transfers requires TNRIS to rapidly upload data for immediate internet access if the transfers are to be successful. Such data transfers are most efficiently performed by using portable hard drives as a tool to directly upload data to servers, rather than transferring data remotely. Storage of TNRIS data in any arrangement that does not allow for administrative control and access could potentially delay the communication of important geographic data needed in an emergency. At such time, the capacity to respond is time-sensitive and highly dependent on TNRIS personnel's ability to quickly accomplish GIS data uploads to its website for immediate access to provide the best available statewide data for managing the crisis.

Since entering into the contract, TNRIS has experienced a number of challenges that affect its emergency response operations. Specifically, during Hurricane Ike in 2008, the Board's servers, including TNRIS', were powered down just as the hurricane made landfall. Because TNRIS lacks administrative control over its servers, it could not quickly restore the servers, which delayed TNRIS in providing information in response to an emergency event. The textbox on the following page, *Elements of Data Consolidation Preventing Effective Emergency Response*, describes the challenges TNRIS indicates affect the Board's emergency response duties in general.

**The Texas Geographic Information Council is ineffective and does not provide leadership or coordination for advancing statewide GIS initiatives.**

TGIC does not take an active role in advising decision makers about the availability and use of GIS information, and does not effectively advance the use of GIS data and technology for the support of state government operations or to address state policy needs. Moreover, as the following material shows, TGIC's statutory responsibilities are either already performed by TNRIS or are no longer needed.

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*Sixty-six percent of the volume of TNRIS' final data products is not stored under data center services.*

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*TGIC's functions are either no longer needed or already performed by TNRIS.*

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### **Elements of Data Consolidation Preventing Effective Emergency Response**

- **Data Center Services Protocols** impose additional steps and paperwork that require third-party handling, causing administrative delays in the transfer of TNRIS data from disk to server, and distracts TNRIS personnel from emergency response activities.
- **Lack of Flexibility** through administrative control prevents TNRIS from scaling up additional resources to meet demands of the emergency event, such as allocating servers and storage as necessary to meet demand.
- **Loss of System Enhancement Capabilities** prevents TNRIS from completing real-time software and component upgrades essential to maintaining functioning systems during an event.
- **Lack of Consistent Backups** during normal operations has resulted in TNRIS maintaining redundant systems and data during emergency situations, defeating the purpose of data consolidation.
- **Uncertainty of Administrative Task Timing** prevents TNRIS from ensuring backups are in place ahead of security patches and updates, to prevent any disconnection of data transmission during an emergency as a result of the update.
- **Aging Hardware** as a result of delays in data center transformation, or transfer to the consolidated data centers, places TNRIS at risk of losing critical data, particularly during emergencies when demand for access increases.

- **Agency Guidance.** TGIC does not provide guidance to the Board regarding TNRIS' operations. Guidance to DIR on statewide GIS standards is also not needed because national and international standards exist to address the development, use, sharing, and dissemination of GIS data, as well as systems interoperability.<sup>4</sup>
- **Strategic Planning.** TGIC has only engaged in limited strategic planning efforts related to GIS, such as a Base Map Plan in 2007 addressing acquisition of more statewide digital base map layers. However, TNRIS, which houses the base maps as a part of its Strategic Mapping Program, already coordinates and prioritizes base map layer acquisition and is the more appropriate entity to report on updates and progress related to base map activity.
- **Data Acquisition.** TNRIS coordinates GIS acquisition without TGIC's guidance through the Board's administration of the High Priority Imagery and Data Sets (HPIDS) state master purchasing contract for geographic data. Before this contract, no GIS purchasing controls existed to prevent redundant data acquisitions across the state. Since the Council on Competitive Government awarded the contract to the Board, TGIC's guidance is no longer necessary.
- **Data Use.** While TGIC provides a forum for exchanging information on the use of GIS and promoting coordination of actual GIS data, this function is also accomplished through the Board's sponsorship of its annual GIS forum, as well as coordination of the HPIDS contract.

Statutorily intended to be a high-level decision-making body, TGIC has had limited executive involvement, and functions more as a user group guided by its co-sponsors, rather than objectively weighing GIS policy issues to effectively guide the work of its sponsoring agencies. A charter that governs

TGIC's structure and activity has not delivered either organizational or operational improvements. In recognition of its challenges, TGIC began considering changes to its structure in 2008. However, two years later, TGIC still has not implemented any changes. The textbox, *TGIC Organizational and Operational Challenges*, further details problems plaguing TGIC's effectiveness in executing its responsibilities.

#### **TGIC Organizational and Operational Challenges**

- Forty-three member agencies make decision making, establishing a quorum, and voting difficult.
- Agency co-sponsorship by the Board and DIR provides competing visions for leading statewide GIS efforts.
- TGIC failed to meet its charter requirements for Steering Committee elections every two years, holding no elections in 2010.
- TGIC has no minutes from full council meetings.
- Neither the full Council nor its committees meet regularly or achieve meeting guidelines in its charter.
  - Charter requires the full Council to meet quarterly. However, the full Council has met only once since October 27, 2009.
  - Charter requires the Steering Committee to meet monthly, yet only two Steering Committee meetings have taken place in 2010.
  - The Technical Advisory Committee has not met since February 7, 2008.

#### **TNRIS lacks clear statutory direction to coordinate and advance GIS initiatives.**

While statute clearly establishes TNRIS as the State's centralized clearinghouse and referral center for geographic data, it does not clearly outline TNRIS' other responsibilities. The addition of significant functions and funding, detailed in the textbox, *TNRIS Initiatives*, has informally made TNRIS the State's leader in coordinating and acquiring geographic data. Stakeholders, such as state, local, and federal agencies, rely on and benefit from TNRIS' coordination of partnerships for the use and acquisition of GIS data, contributing to significant cost savings of \$1.9 million for the State since 2009. Despite this high-level recognition of TNRIS, it is still not clearly established as the State's leader on GIS matters.

#### **TNRIS Initiatives**

**Strategic Mapping Program** (StratMap) – The Legislature, through Senate Bill 1 (1997), provided \$10 million to create a statewide compilation of digital base map layers, including political boundaries, transportation, hydrography, soils, orthoimagery, and elevation.

**Geospatial Emergency Management Support System** (GEMSS) – In recognition of the Board's role providing geographic data during emergencies, FEMA awarded the Board a grant to create a dedicated repository of comprehensive information about hurricanes impacting the Texas coast.

**High Priority Imagery and Data Sets** (HPIDS) – The Council on Competitive Government awarded the Board administration of the state master purchasing contract for high priority imagery and data sets, such as Light Detection And Ranging (LiDAR) elevation data and orthoimagery, or aerial photographs.



The lack of a clear leader for GIS in the state can create missed opportunities to more effectively incorporate GIS technology into state government. GIS technology is widely used, but other opportunities for the use of GIS data and technology could be realized to make state government more accessible to the public.

## Recommendations

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### ***Management Action***

#### **4.1 The Board should request a full exemption for TNRIS from the data center services contract at DIR to accommodate its statutory emergency management responsibilities.**

The Board should pursue a full TNRIS exemption from the data center services contract at DIR to allow both TNRIS' development and production environments to operate outside the contract. The Board's other data center resources, such as email and accounting systems and geographic data outside of TNRIS, would remain in the contract.

### ***Change in Statute***

#### **4.2 Clarify TNRIS' duties regarding coordinating and advancing GIS initiatives.**

In accordance with TNRIS' existing role as the centralized clearinghouse and referral center for state geographic data, this recommendation would designate the Director of TNRIS as the State Geographic Information Officer, reporting to the Board's Executive Administrator, responsible for:

- coordinating the acquisition and use of high priority imagery and data sets;
- establishing, supporting, and/or disseminating authoritative statewide geographic data sets;
- supporting geographic data needs of emergency management responders during emergencies;
- monitoring trends in geographic information technology; and
- supporting public access to state geographic data and resources.

#### **4.3 Require the Board, in consultation with stakeholders, to report TNRIS' progress in executing its responsibilities and to propose new initiatives for geographic data to the Legislature.**

The Board shall, in consultation with stakeholders, submit a report at least once every five years to the Governor, Lieutenant Governor, and Speaker of the House of Representatives with recommendations related to:

- statewide geographic data acquisition needs and priorities, including updates on the progress in maintaining the statewide digital base maps;
- policy initiatives to address the acquisition, use, storage, and sharing of geographic data across state government;



- funding needs to acquire data, implement technologies, or pursue statewide policy initiatives related to geographic data; and
- opportunities for new initiatives to improve the efficiency, effectiveness, or accessibility of state government operations through the use of geographic data.

In fulfilling this requirement, the Board may establish advisory committees, as needed, to accomplish its functions or to obtain input from state agencies in preparing its report to the Legislature. In designating the membership of any advisory committees, the Board must consider inclusion of the major users of geographic data in state government. Advisory committees should include liaisons from other interests, such as federal or local agencies, and the state information technology agency.

#### 4.4 Abolish the Texas Geographic Information Council.

This recommendation would remove TGIC and its related functions from statute, as its functions are either no longer needed or already performed by the Board through TNRIS. This recommendation does not eliminate any of the Executive Administrator’s statutory duties related to TNRIS operations and other duties related to geographic data. However, performing these duties will no longer require guidance from TGIC. Abolishing TGIC should not preclude DIR, or any other agency, from pursuing GIS initiatives, but they should coordinate those initiatives with TNRIS and other state agencies that may benefit from those efforts. This recommendation would create minimal savings from reduced staff time and report production.

## Fiscal Implication Summary

Exempting TNRIS from the data center services contract would enable the Board to store all of its desired production data and still realize approximately \$2.7 million in savings in general revenue over the next two years, due primarily to a reduction in data storage costs. The chart, *TNRIS Data Center Services Cost Comparisons*, compares TNRIS’ anticipated data center services costs with TNRIS’ estimated costs to store the data in house as a result of a full data center services exemption. These costs include services related to test and production servers, network, software licenses, backup service, and storage. Costs represented under a full TNRIS exemption reflect larger storage capacity to meet TNRIS’ full storage needs. TNRIS would not need additional full-time employees or resources to store and service its data in house.

***TNRIS Data Center Services Cost Comparisons<sup>a</sup>***

	<b>Data Center Services</b>	<b>TNRIS In House</b>	<b>Savings</b>
<b>FY 2012</b>	\$1,855,924	\$921,044 <sup>b</sup>	\$934,880
<b>FY 2013</b>	\$2,060,870	\$268,705	\$1,792,165
<b>Two-year Total</b>	<b>\$3,916,794</b>	<b>\$1,189,749</b>	<b>\$2,727,045</b>

<sup>a</sup> This table reflects a two-year time period because the current data center services contract with IBM only extends through 2013.

<sup>b</sup> This figure includes TNRIS’ anticipated costs of \$512,245 which include an initial investment in necessary hardware upgrades it indicates are not currently allowed under the data center services contract. The figure also includes DIR’s estimated penalties of \$408,799 in outstanding liability payments for amortized transformation expenses.

The two-year savings estimate includes DIR's estimated costs of \$408,799 in fiscal year 2012 in outstanding liability payments for amortized transformation expenses based on the life of the contract. DIR is unable to estimate costs related to redistributing the lost volume from removing TNRIS from the contract among participating agencies, or costs related to returning the Board's assets, such as TNRIS' hardware, software, and associated software maintenance agreements, until the Board, DIR, and service provider staff can agree on a separation plan. Although TNRIS costs represent approximately 59 percent of the Board's data center services costs, the Board estimates its costs represent only 1.3 percent of the total data center services contract.<sup>5</sup> As a result, removing the remaining portion of TNRIS from the data center services contract should not significantly impact other agencies in the contract or the estimated \$2.7 million in savings.

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1 Texas Water Code, sec. 16.021.

2 Texas Water Code, sec. 16.021(a)(3).

3 Texas Water Code, secs. 16.021(c) – (e).

4 Open Geospatial Consortium, Inc, [www.opengeospatial.org/standards](http://www.opengeospatial.org/standards). Accessed: September 1, 2010; The Federal Geographic Data Committee, [www.fgdc.gov/standards](http://www.fgdc.gov/standards). Accessed: September 1, 2010.

5 Texas Water Development Board, *Data Center Services Update* (Austin, Texas, May 2010).

# Responses to Issue 4

## Overall Agency Response to Issue 4

The Board concurs with the statements under Background and with each of the Findings.

### Agency Modification

1. Statutorily exempt the Texas Water Development Board from the Data Center Services (DCS) consolidation mandate.

(J. Kevin Ward, Executive Administrator – Texas Water Development Board)

*Staff Comment:* This modification to Issue 4 would need to be adopted in addition to Recommendation 4.1 to obtain more immediate action regarding an exemption for TNRIS.

## Recommendation 4.1

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*The Board should request a full exemption for TNRIS from the data center services contract at DIR to accommodate its statutory emergency management responsibilities.*

### **Agency Response to 4.1**

The Board concurs but notes that a request for exemption of the entire agency, including the Texas Natural Resources Information System, already has been filed with the Department of Information Resources and the request has been denied.

As the Board notes in the discussion of the Agency Modification to Issue 4, as shown above, any exemption of the entire agency from the Data Center Services contract should be statutory.  
(J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### **For 4.1**

Bruce Barr, Analyst – Texas Association of Counties and Chair – Texas Geographic Information Council, Austin

### **Against 4.1**

None received.

## Recommendation 4.2

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*Clarify TNRIS' duties regarding coordinating and advancing GIS initiatives.*

### **Agency Response to 4.2**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 4.2**

None received.

**Against 4.2**

None received.

**Recommendation 4.3** \_\_\_\_\_

*Require the Board, in consultation with stakeholders, to report TNRIS' progress in executing its responsibilities and to propose new initiatives for geographic data to the Legislature.*

**Agency Response to 4.3**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 4.3**

None received.

**Against 4.3**

None received.

**Recommendation 4.4** \_\_\_\_\_

*Abolish the Texas Geographic Information Council.*

**Agency Response to 4.4**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 4.4**

None received.

**Against 4.4**

Bruce Barr, Analyst – Texas Association of Counties and Chair – Texas Geographic Information Council, Austin

***Commission Decision***

Adopted Recommendations 4.1 through 4.4.

## ***Legislative Action***

As a management recommendation not needing statutory change, Recommendation 4.1 did not result in legislative action.

Senate Bill 660 provides for the Board's Executive Administrator to designate the Director of the Texas Natural Resources Information System (TNRIS) as the State Geographic Information Officer and sets forth the Officer's duties regarding coordinating and advancing geographic information systems initiatives. (Recommendation 4.2) The bill requires the Board to submit a report at least once every five years to the Governor, Lieutenant Governor, and Speaker of the House of Representatives regarding geographic data needs and initiatives. (Recommendation 4.3) The bill also abolishes the Texas Geographic Information Council, as its functions are either no longer needed or already performed by the Board through TNRIS. (Recommendation 4.4)



# Issue 5

## ***The Board Lacks Data to Determine Whether Implementation of Conservation and Other Water Management Strategies Is Meeting the State's Future Water Needs.***

### **Background**

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In 1997, the Legislature established a bottom-up, regional process to plan for the State's future water needs.<sup>1</sup> The Board designated 16 regional water planning groups (RWPGs) responsible for developing a water plan to meet the region's estimated future water demand over a 50-year horizon. The Board compiles the regional plans into a single, comprehensive State Water Plan every five years outlining the State's total water supplies and demands. Regional water plans include a variety of water management strategies to develop new, or maximize existing, water supplies to meet future water needs of each city, water utility, county, and other water user groups. Examples of water management strategies include:

- implementing water conservation and drought management;
- developing new surface water and groundwater supplies;
- expanding and improving management of existing water supplies, such as optimizing reservoir systems or moving water from one area to another;
- increasing water reuse; and
- implementing innovative water initiatives such as desalination and aquifer storage and recovery.

Statute requires RWPGs, as part of their regional water plans, to recommend conservation strategies when applicable to the region.<sup>2</sup> Water conservation strategies can be an environmentally friendly and cost-effective way to manage existing water supplies, as conservation programs may eliminate the need for expensive and potentially environmentally damaging water infrastructure projects such as new reservoirs and pipelines. Water conservation strategies include social and technological approaches to reduce residential, commercial, and institutional water use, as well as irrigation and land management systems to reduce agriculture water use. Specifically for municipal water conservation strategies, RWPGs focus on reductions in water use per person. These gallons per capita daily figures (GPCD), as they are commonly known, are used for planning purposes to describe populations' water use.

In an effort to promote water conservation and to reduce the need for expensive infrastructure, statute requires certain entities to submit water conservation plans every five years to either the Board or the Texas Commission on Environmental Quality (TCEQ). The Board uses conservation plans to ensure its financial assistance applicants have strategies for reducing water consumption and improving water use efficiency, and TCEQ uses the plans during the water right application process to ensure applicants have and use plans to conserve appropriated water. In 2007, the Legislature required any entity submitting a conservation plan to either state agency to also begin submitting an annual report to the Board on progress implementing its conservation plan. To keep entities from having to produce two different documents, both agencies allow conservation plans submitted to one agency to be accepted by the other. The chart on the following page, *Water Conservation Plan Submittal*, outlines which entities submit conservation plans and subsequent reporting documents to the Board and TCEQ.



### Water Conservation Plan Submittal

Entity	Water Conservation Plan & Annual Progress Report to the Board	Water Conservation Plan & Five-year Implementation Report to TCEQ
All Board financial assistance applicants	✓	
Select water rights applicants and permit holders*	✓	✓
Retail public water suppliers providing service to 3,300 or more connections	✓	

\* Includes all new water rights applicants; municipal, industrial/mining, and other non-agricultural water right holders of 1,000 acre-feet of water per year or more; and agricultural water right holders of 10,000 acre-feet of water per year or more.

## Findings

### **The Board lacks comprehensive data for assessing the extent to which water planning efforts help facilitate meeting the State’s future water supply needs.**

Since the beginning of the state water planning process in 1997, the Board has worked diligently to establish and support the regional framework for anticipating water needs and developing strategies for meeting those needs. Because the Board was in the early stages of getting regional planning efforts operational and because of the long-term nature of the planning, it has not needed to track the implementation of water management strategies. In addition, it has not been specifically charged with doing so. As the Board completes the third round of planning and more water strategies are implemented, however, the Board has a greater need to see how strategy implementation affects the overall water planning process and whether the State is on track to meet future water demands.

Some individual RWPGs have information on the implementation status of certain water management strategies in their region. For example, Region C’s 2011 Initially Prepared Plan includes a section outlining water suppliers’ progress in implementing strategies from its 2006 Regional Plan. However, not all regions provide such implementation information, and what they do provide is not comprehensive of all recommended strategies represented across regional water plans for the Board to compile and include in the State Water Plan. The Board does track state water plan projects receiving its financial assistance, but has not assessed the impact of those projects, or others not receiving Board financial assistance, in meeting the water needs outlined in the State Water Plan. Without a compilation of all implementation data, the State misses the opportunity to evaluate whether newly developed water supply projects, conservation efforts, and other strategies are actually meeting future water needs.

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*As the Board completes its third round of regional water planning, it should evaluate whether the State is on track to meet future water demands.*

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**The Board lacks sufficient methods to measure implementation of water conservation strategies.**

In the 2007 State Water Plan, conservation strategies generated the largest portion, 23 percent or approximately two million acre-feet, of water required to meet the State’s anticipated needs in 2060. While measuring conservation is acknowledged to be difficult and occurs inconsistently across the state, without specific metrics to measure all types of conservation, the Board cannot determine whether the implementation of conservation strategies affects water use and planning for future water needs.

Among water conservation strategies, municipal conservation strategies, which focus on reducing residential, commercial, and institutional water use, make up nearly one-third of all recommended conservation strategies in the 2007 State Plan. Calculating GPCD is the generally accepted method for measuring and comparing populations’ water use. However, each local entity has its own unique method for calculating and reporting GPCD and the Board lacks uniform calculation methods for consistent municipal conservation data reporting. One entity’s GPCD figure may combine residential, commercial, and industrial water use while another’s may reflect only residential water use, making it difficult to compare water use. Without uniform reporting methods to explain variation in water use, the State cannot effectively gauge progress of water conservation efforts. For example, South Padre Island, Texas has a high GPCD figure – 666 in 2007 – relative to comparably sized Combes, Texas, which used an average 70 GPCD in 2007. Tourist locations, such as South Padre, tend to have higher GPCD figures because they have a substantial transient population that uses water, but does not count as part of the base population. An accurate comparison of whether a tourist city has more successful conservation efforts than a non-tourist city should include an examination of the residential GPCD figures separate from commercial figures.

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*Each local entity has a unique method for calculating and reporting GPCD.*

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Water conservation plan annual reports submitted to the Board and implementation reports submitted to TCEQ provide a useful mechanism to assist in tracking implementation of municipal conservation efforts, through reporting of GPCD data. However, without uniform GPCD calculations, these reporting mechanisms do not accurately reflect actual conservation efforts or water use. The first round of annual reports was due to the Board in May 2010, so Board staff have not yet had the opportunity to evaluate implementation data over time.

**Interest in strengthening reporting requirements regarding municipal water use and conservation efforts has grown in recent years.**

In 2007, the Legislature established the Water Conservation Advisory Council (preceded by the Water Conservation Implementation Task Force) to monitor the development and implementation of the State’s water

conservation efforts.<sup>3</sup> The Council is composed of 23 Board-appointed members, all representing different interests, and reports directly to the Legislature. Appendix C lays out the Council's representation and current membership. The Council's 2008 report made seven recommendations to the Legislature outlined in the textbox, *2008 Water Conservation Advisory Council Recommendations*, regarding water conservation implementation and measurement, specifically focusing on GPCD methodologies.<sup>4</sup> The Council is considering similar recommendations regarding detailed methods for measuring municipal conservation in its upcoming 2010 report, as well as developing metrics needed to track conservation efforts in water use categories less influenced by population, such as agriculture and industrial water use.

### **2008 Water Conservation Advisory Council Recommendations**

The Council made specific recommendations related to developing the following topics.

- Methodology, metrics, and standards for water conservation implementation measurement and reporting.
- Specific guidelines for how GPCD should be determined and how it should be applied to population-dependent water use only.
- Reporting guidelines for improved data collection.
- Expanded data collection efforts, including all water providers and water use categories.
- A pilot project for water use reporting.
- A pilot project for determining population figures appropriate for certain water use metrics.
- Necessary resources for the Council to sufficiently develop and implement tools to monitor implementation of water conservation strategies recommended in the regional water plans.

Several of the RWPGs' 2011 Initially Prepared Plans support the Council's efforts to improve data collection and recommend the Legislature continue supporting the Council's work. While the Legislature has not formally adopted any of the Council's recommendations, several may help the Board measure water conservation and quantify implementation efforts.

## **Recommendations**

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### ***Change in Statute***

#### **5.1 As part of the State Water Plan, require the Board to evaluate the State's progress in meeting its water needs.**

This recommendation would require the Board to evaluate the State's progress in meeting future water needs through such means as tracking water management strategies and/or projects implemented since the last State Water Plan and report this information to the Legislature as part of the Board's State Water Plan. The Board would work with RWPGs to obtain implementation data and should include a summary of progress toward meeting the State's water needs as part of all future State Water Plans. Additionally, the Board should continue its analysis of how many implemented state water plan projects received its financial assistance, and include that analysis in the State Water Plan.

**5.2 Require the Board and TCEQ, in consultation with the Water Conservation Advisory Council, to develop uniform, detailed gallons per capita daily reporting requirements.**

This recommendation would require the Board and TCEQ to work with the Water Conservation Advisory Council to develop uniform GPCD reporting requirements outlining how entities calculate and report municipal water use. The agencies should incorporate the uniform methodologies into their existing annual report and five-year implementation report requirements.

Because the Board and TCEQ would only be developing reporting methodologies to include as part of their current processes, no fiscal impact to the State is anticipated. While some larger entities that submit water conservation plans currently have advanced billing systems capable of reporting detailed GPCD data immediately, smaller entities and those with fewer resources may not have such advanced capabilities. As such, the Board and TCEQ should, at a minimum, require entities to report the most detailed level of data currently available and consider phasing in more detailed reporting as capabilities improve and billing systems evolve.

***Management Action***

**5.3 As additional tools and data evolve, the Board should continue exploring ways to develop metrics for additional water use sectors and incentivize water conservation efforts.**

The Board should continue working with the Advisory Council to develop metrics to track implementation and reporting of water conservation strategies for water use sectors beyond municipal use to optimize water planning across the state. Additionally, as the Council makes new recommendations, data collection capabilities evolve, and entities' reporting systems improve, the Board should continue exploring ways to incentivize conservation efforts. For example, in the future, the Board could consider restructuring its financial assistance incentives and/or adding new incentives based on trend data from the water conservation plans and corresponding annual reports.

**Fiscal Implication Summary**

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These recommendations should have no significant fiscal impact, as they can be accomplished within current processes and existing resources.

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1 Texas Senate Bill 1, 75th Legislature (1997).

2 Texas Water Code, sec. 16.053(e).

3 Texas Senate Bill 3, 80th Legislature (2007).

4 Water Conservation Advisory Council, *A Report on Progress of Water Conservation in Texas* (Austin, Texas, December 2008), pp. 6-8. Online. Available: [www.savetexaswater.org/documents/WCAC\\_report.pdf](http://www.savetexaswater.org/documents/WCAC_report.pdf).



# Responses to Issue 5

## Overall Agency Response to Issue 5

The Board concurs with the statements under Background and with each of the Findings. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### Recommendation 5.1

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*As part of the State Water Plan, require the Board to evaluate the State's progress in meeting its water needs.*

#### Agency Response to 5.1

The Board concurs with this recommendation, to the extent that water plan projects continue to be funded. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

*Staff Comment:* The recommendation would require the Board to track implementation of all water projects, not just those funded by the Board.

#### For 5.1

None received.

#### Against 5.1

None received.

### Recommendation 5.2

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*Require the Board and TCEQ, in consultation with the Water Conservation Advisory Council, to develop uniform, detailed gallons per capita daily reporting requirements.*

#### Agency Response to 5.2

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

#### Affected Agency Response to 5.2

The Texas Commission on Environmental Quality agrees with the recommendation to develop uniform, detailed gallons per capita daily reporting requirements. The Water Conservation Advisory Council, in conjunction with the TCEQ and the TWDB, has already begun to develop a methodology to better calculate gallons per capita daily (gpcd) for water providers and user groups. The TCEQ will continue its participation with this group and its work on developing a better methodology to calculate gpcd. (Mark R. Vickery, P.G., Executive Director – Texas Commission on Environmental Quality)

**For 5.2**

Steve Kosub, Water Resources Counsel – San Antonio Water System, San Antonio

**Against 5.2**

None received.

**Recommendation 5.3**

*As additional tools and data evolve, the Board should continue exploring ways to develop metrics for additional water use sectors and incentivize water conservation efforts.*

**Agency Response to 5.3**

The Board concurs with this recommendation. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**For 5.3**

Steve Kosub, Water Resources Counsel – San Antonio Water System, San Antonio

**Against 5.3**

None received.

## ***Commission Decision***

Adopted Recommendation 5.1.

Adopted Recommendation 5.2, regarding uniform reporting of gallons per capita daily water use, with the following modifications.

- The Board and TCEQ should not require reporting of water use information that is more detailed than an entity's billing system is capable of producing.
- Clarify that water use reporting applies only to entities required to submit municipal water use data to the Board or TCEQ. The recommendation is not intended to require metering of individual water wells.

Adopted Recommendation 5.3.

## ***Legislative Action***

Senate Bill 660 requires the Board, as part of the State Water Plan, to evaluate the State's progress in meeting its water needs by evaluating the extent to which water management strategies and projects implemented since the last State Water Plan have affected that progress. Additionally, the Board must continue its analysis of how many implemented State Water Plan projects received its financial assistance, and include that analysis in the State Water Plan. (Recommendation 5.1)



The Legislature modified a Sunset provision requiring the Board and TCEQ, in consultation with the Water Conservation Advisory Council, to develop consistent methodologies and guidance for municipalities and water utilities to use in calculating water use in water conservation plans and water conservation-related reports. The bill requires a methodology for classifying water users within sectors and for calculating residential municipal water use in gallons per capita per day. The bill also requires a method of calculating water use in industrial, agricultural, commercial, and institutional sectors, in addition to the municipal sector. Additionally, the bill requires the Board to submit a report to the Legislature each odd-numbered year relating to statewide water usage in the sectors and data collection programs. The bill specifies that data in these water conservation reports is not the only factor considered by TCEQ in determining the highest practicable level of water conservation and efficiency achievable for purposes of granting an application for an interbasin transfer. (Recommendation 5.2)

As a management recommendation not needing statutory change, Recommendation 5.3 did not result in legislative action.



# Issue 6

## ***The Board's Statute Does Not Reflect Standard Language Typically Applied Across-the-Board During Sunset Reviews.***

### **Background**

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The Sunset Commission adopts across-the-board (ATB) recommendations as standards for state agencies, reflecting criteria in the Sunset Act designed to ensure open, responsive, and effective government. The Sunset Commission applies ATBs to every state agency reviewed, unless a clear reason to exempt the agency is identified. Some Sunset ATBs address policy issues related to an agency's policymaking body, such as requiring public membership on boards or allowing the Governor to designate the chair of a board. Other Sunset ATBs require agencies to set consistent policies in areas such as how to handle complaints and how to ensure public input.

### **Finding**

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#### **Two across-the-board recommendations are not fully reflected in the Board's statute.**

- **Complaints.** The Board's statute contains outdated language regarding complaint information requirements, which is limited to written complaints and only provides that procedures for complaint investigations and resolutions be made available to the person filing the complaint. While not a regulatory agency, the Board receives several types of complaints within its jurisdiction to resolve, such as complaints against employees or regarding its processes. The Board's statutory complaint provisions should be updated to current standards.
- **Alternative Dispute Resolution.** The Board's governing statute does not include a standard provision relating to alternative rulemaking and dispute resolution that the Sunset Commission routinely applies to agencies under review. Without this provision, the agency could miss ways to improve rulemaking and dispute resolution through more open, inclusive, and conciliatory processes designed to solve problems by building consensus rather than through contested proceedings.

### **Recommendation**

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#### ***Change in Statute***

##### **6.1 Apply standard Sunset across-the-board requirements to the Texas Water Development Board.**

The recommendation would update the Board's complaint information requirements to clarify that the Board must maintain complaint information on all complaints, not just written complaints, and must provide information on its complaint procedures to the public.

The recommendation would also ensure that the Board develops and implements a policy to encourage alternative procedures for rulemaking and dispute resolution, conforming to the extent possible, to model guidelines by the State Office of Administrative Hearings. The agency would also coordinate implementation of the policy, provide training as needed, and collect data concerning the effectiveness of these procedures. Because the recommendation only requires the agency to develop a policy for this alternative approach to solving problems, it would not require additional staffing or other expenses.

## **Fiscal Implication Summary**

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This recommendation would not result in additional costs to the State.

# Responses to Issue 6

## Overall Agency Response to Issue 6

The Board does not disagree with the statements under Background or with the Findings, given that the Sunset Commission staff's discussion and findings recognize that many of the current, standard "across-the-board" requirements are appropriate to regulatory agencies and, accordingly, ill-suited to the Texas Water Development Board. (As noted at page 33, "[s]ince the Legislature split the Texas Department of Water Resources into the Texas Water Development Board and the Texas Water Commission (now TCEQ), the State has clearly separated functions between TCEQ as the regulatory arm and the Board as the financial assistance and planning arm for water.") (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

**Staff Comment:** While the Board does not have regulatory functions, across-the-board recommendations included in Recommendation 6.1 are applicable to the Board, as noted in the Issue.

## Recommendation 6.1

*Apply standard Sunset across-the-board requirements to the Texas Water Development Board.*

### Agency Response to 6.1

The Board concurs with this recommendation, with appreciation that the Sunset Commission staff report clarifies that the across-the-board requirement for alternative dispute resolution training and process is intended to be applied only to internal functions of the agency, such as personnel matters, consistent with current practice, and will not be interpreted to authorize contests to Board decisions on financial assistance applications. (J. Kevin Ward, Executive Administrator – Texas Water Development Board)

### For 6.1

None received.

### Against 6.1

None received.

## Commission Decision

Adopted Recommendation 6.1.

## ***Legislative Action***

Senate Bill 660 updates the Board's complaint information requirements to clarify that the Board must maintain complaint information on all complaints, not just written complaints, and must provide information on its complaint procedures to the public. The bill also ensures the Board develops and implements a policy to encourage alternative procedures for rulemaking and dispute resolution. (Recommendation 6.1)

*New Issues*



# New Issues

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The following issues were raised in addition to the issues in the staff report. These issues are numbered sequentially to follow the staff's recommendations.

7. Abolish the Water Conservation Advisory Council. Any statutory functions of, or references to, the Council would be removed from statute. This recommendation would provide an estimated savings of two full-time employees and \$83,040 in general revenue. Members of the Water Conservation Advisory Council are listed in Appendix C of the Sunset Staff Report. (Senator Glenn Hegar, Chair – Sunset Advisory Commission)
8. Re-evaluate the selection process of the regional water planning groups and make sure there are enough voices from the conservation-minded public interest to balance those of the development-minded commercial interest as we develop the comprehensive state water plan. (Mary Ellen Summerlin, Board Member – Headwaters Groundwater Conservation District, Kerrville)
9. Increase funding for the improvement of the groundwater availability models the DFC/MAG process depends on. (Mary Ellen Summerlin, Board Member – Headwaters Groundwater Conservation District, Kerrville)
10. The Board should perform review of underground water models used to permit the transporter projects, or as a minimum, perform a review upon petition of impacted landowners. (Ted Boriack, Gonzales County)
11. Prohibit the Board from financing projects that:
  - would deprive a landowner access to his own water or allow him to produce his own water at the same rate as any other landowner;
  - have members or officers that have engaged in threats against a local conservation district board members or threats against an applicant for a water well permit; or
  - are involved in contested case hearings or including such projects in the Board's plans or models.(Ted Boriack, Gonzales County)
12. Require the Board, in coordination with TCEQ, to review the results of contested case hearings to insure that the outcome is in compliance with environmental regulations, the Constitution, and the Water Code. (Ted Boriack, Gonzales County)
13. Require the Board to have a safeguard mechanism to enable landowners to enforce protection of landowners detrimentally impacted by underground water well projects such as by disciplinary action and/or removal of local underground water conservation boards or board members. (Ted Boriack, Gonzales County)
14. Require the Board to declare an interregional conflict between Region C and Region D water plans. (Nancy Clements, Cass County)

15. Prohibit regional water plans that cause an obvious overdraft condition within other approved regional water plans from qualifying as a recommended strategy or from consideration for financing by the Board. (Joe P. Cooper, Manager – Lost Pines Groundwater Conservation District, Bastrop)

16. Require the Board to ensure project applicants secure the right to use water necessary for a project before the Board funds construction of projects requiring an interbasin transfer. (Judy Graci)

**Staff Comment:** The Board certifies that all applicants have the right to use the water necessary for the project before it funds *construction* of projects, but requires only a reasonable expectation that the applicant will secure the water right before funding the *planning* of projects.

17. To avoid any apparent conflicts of interest, require the Board to obtain an independent engineering peer review to examine cost estimates and water supply alternatives for water management strategies costing over \$100 million. (Judy Graci)

18. Prohibit the Board from financing additional reservoirs and instead use its bond authority to fund water infrastructure needs, such as water and sewer lines. (Sharon and David Nabors, Paris)

## ***Commission Decision***

The Commission did not adopt any new issues.

## ***Legislative Action***

No action needed.

*Provisions Added by  
Legislature*

# *Provisions Added by Legislature*

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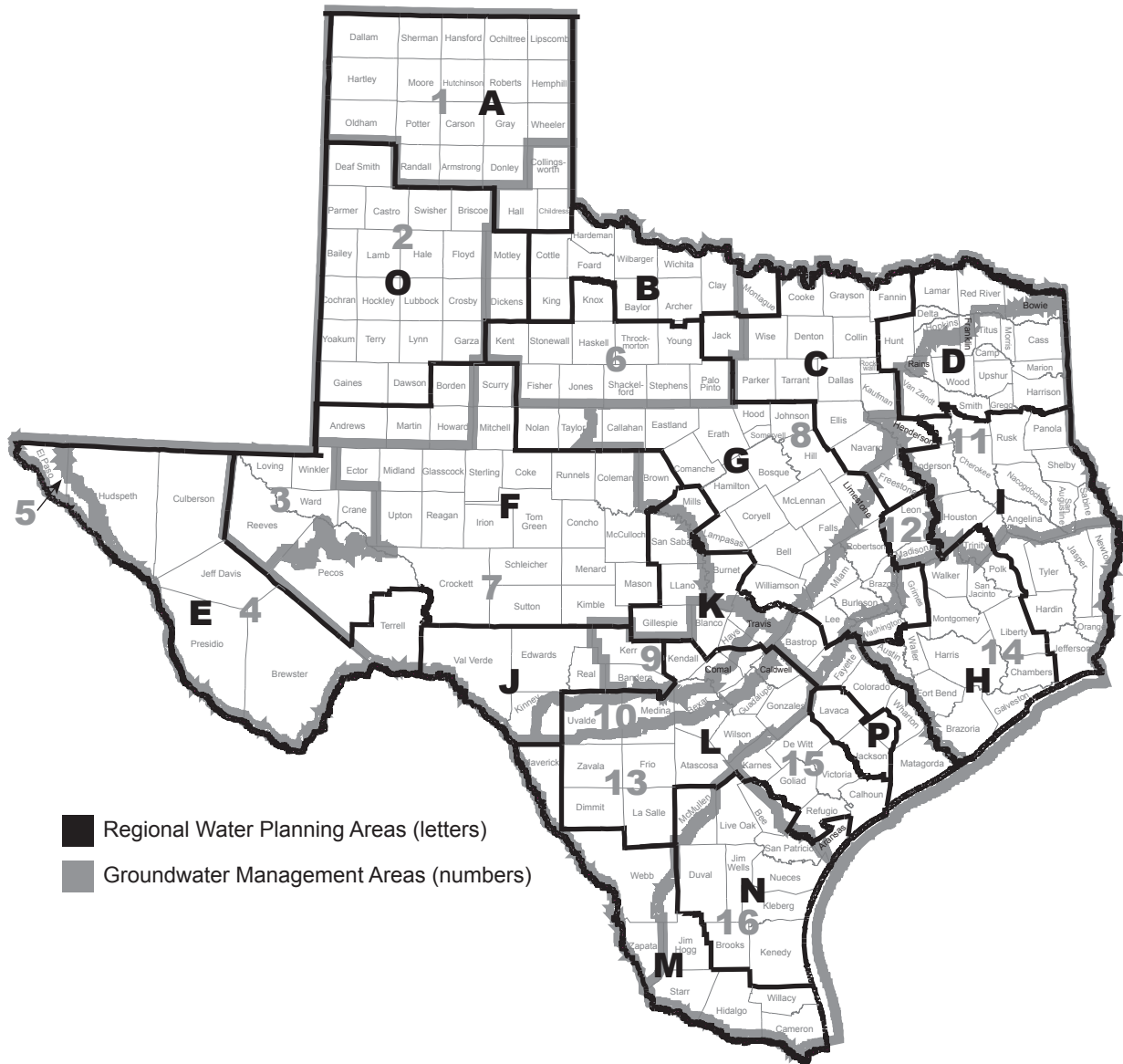
None added.



# *Appendices*

# Appendix A

## Groundwater Management and Regional Water Planning Areas



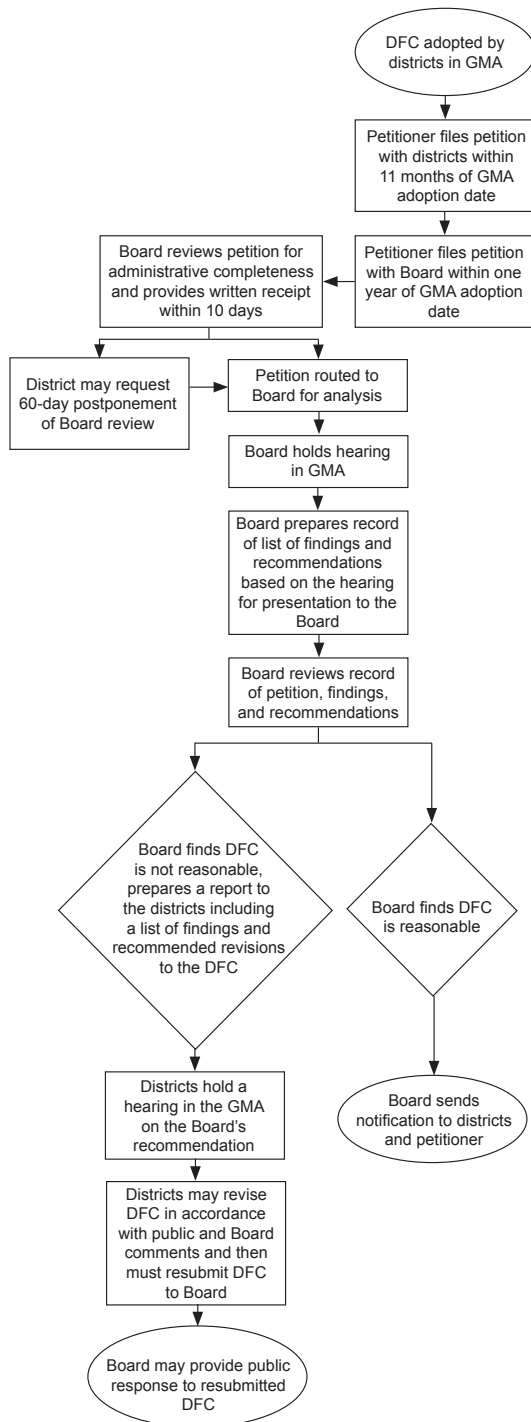




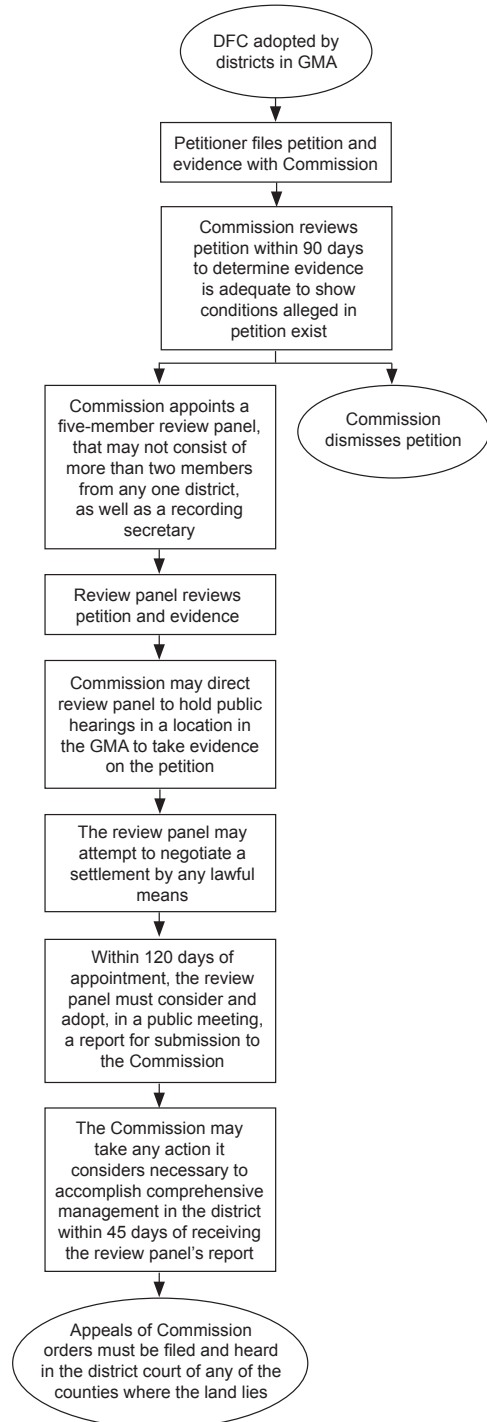
# Appendix B

## Petition Processes for Desired Future Conditions

### Board Process to Petition the Reasonableness of a DFC



### TCEQ Process to Petition a District's Management to the DFC





# Appendix C

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## Water Conservation Advisory Council Membership

<b>Interest Group</b>	<b>Member</b>	<b>Term Expires</b>
Agricultural Groups	Wilson Scaling	2013
Electric Generation	Gary Spicer	2015
Environmental Groups	Ken Kramer	2015
Federal Agencies	Steven Bednarz	2011
Groundwater Conservation Districts	Luana Buckner	2013
Higher Education	Vivien Allen	2015
Institutional Water Users	H.W. Bill Hoffman	2013
Irrigation Districts	Wayne Halbert	2013
Landscape Irrigation and Horticulture	Kelly Hall	2011
Mining and Recovery of Minerals	Gene Montgomery	2013
Municipal Utility Districts	Donna Howe	2011
Municipalities	Karen Guz	2011
Professional Organization Focused on Water Conservation	Carole Baker	2013
Refining and Chemical Manufacturing	Karl Fennessey	2011
Regional Water Planning Groups	C.E. Williams	2015
River Authorities	James Parks	2015
Rural Water Users	Janet Adams	2015
Texas Commission on Environmental Quality	Scott Swanson	2011
Texas Department of Agriculture	Gary Walker	2011
Texas Parks and Wildlife Department	Cindy Loeffler	2015
Texas State Soil and Water Conservation Board	Richard Egg	2013
Texas Water Development Board	Robert Mace	2011
Water Control and Improvement Districts	James Oliver	2013



# Appendix D

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## Staff Review Activities

During the review of the Texas Water Development Board, Sunset staff engaged in the following activities that are standard to all Sunset reviews. Sunset staff worked extensively with agency personnel; attended Board meetings; met with staff from key legislative offices; conducted interviews and solicited written comments from interest groups and the public; reviewed agency documents and reports, state statutes, legislative reports, previous legislation, and literature; researched the organization and functions of similar state agencies in other states; and performed background and comparative research using the Internet.

In addition, Sunset staff also performed the following activities unique to this agency.

- Interviewed staff from the Texas Commission on Environmental Quality, Texas Bond Review Board, Department of Information Resources, Texas Department of Transportation, U.S. Geological Survey, Texas Parks and Wildlife Department, Texas Department of Rural Affairs, Office of the Attorney General, State Office of Administrative Hearings, Council on Competitive Government, and Office of the Secretary of State.
- Attended meetings of the Texas Geographic Information Council, Water Conservation Advisory Council, Taskforce on Uniform Model Subdivision Rules, Colonia Interagency Workgroup, and the Board's Design-Build Focus Group.
- Monitored interim legislative committee meetings.
- Toured Board-funded water supply and wastewater projects and economically distressed areas of the Rio Grande Valley.
- Attended a bay and basin expert science team meeting and a groundwater conservation district meeting.
- Attended meetings and interviewed representatives of regional water planning groups and groundwater management areas.
- Toured a regional water system project receiving Board funding and attended a construction progress meeting.





# Group A

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Sunset received a form letter opposing staff Recommendations 2.1 and 3.2 from the following people:

Janet Adams	Jessica Collard	Ed Greer
Finis Allen	Frank Commiato	Melvin Grones
Wyllis Ament	Margaret Conner	Eric Hargrove
Jeff Ammons	Brian Cummins	John Hensley, Jr.
Juanita Anders	Chris Dahl	Gery Herod
Stephen Bauer	Darwin Davis	Rob Hinnant
Santanna Bay	Joy Davis	Ken Hodges
Thomas Behrens	Tommy Davis	Jimmy Holleman
Charles Benton	Janene Day	Derald Horn
Christine Bessent	Gary Drapela	Slade Hornick
April Biggs	Weldon Drapela	Bettie House
James Blackburn	Les Duncan	Billie Huddleston
Thomas Boehme	Dave Edmiston	Jane Huddleston
Ernest Boemer	Tommy Elliott	Brenda Jacobs
Allen Boger	J. Warren Evans	David Jeffus
James Boyd	Gene Franks	John Jones
Lindsey Lee Bradford	Donald Fuchs	Allen Kaminsmki
Jimmie Bray	Kathy Fuller	Clifton Kessler
L.R. Broadway	Chrystal Gardner	Bonnie Kessler
David Bryson	Janella Garrett	Erna Kittoe
Donna Buschow	Justin Garrett	Tommy Kutscherousky, Jr.
Rodney Butler	Dietrich Gembler III	Suzanne Lammert
Darren Callaway, Sr.	Donald Graham	Kenneth Land
Pete Case	Tony Greaves	Carol Lee
Harold Chesnut	Daryl Green	Robert Lee

Brek Letsinger	Jim Revel	Bernie Thiel
John Lieb	Hugh Robeson	Gaylon Tidwell
Paul Looney, Jr.	Herman Rose	Billy Tiller
Milton Lowak	Brett Rosser	John Traweek
Gene Martin	Jerry Rountree	Robert Turner
Marty McKinzie	Bill Schmidt	Marv Ulbricht
Bob Measles	Rodney Schronk	Mary Van Horn
Bob Meharg	Edmund Schuster	David Waggoner
Raymond Meyer	Raphe Shipman	David Wagner
J.D. Mican, CPA	Michael Skalicky	Larry Waits
Julian Minter	Shirley Smelley	Curtis Walker, Jr.
Ronnie Moore	Charles Smith	Randy Walls
Ronnie Muennink	Don Smith	Rick Wegwerth
David Mundine	Hobert Smith	Walter Ross Werlla
Stephen Munz	Jodie Smith Goff	J.D. White
Jim Nance	Kirmon Smith	Bob Wickman
Vincent Neuhaus	Patricia Snook	Bill Wight
Brent Neuhaus	Sam Snyder	Dana Wilde
Dianne Paben	James Sommerfeld	Douglas Wilde
Thomas Paben	J.T. Springer	Renaë Willberg
Tommy Paben	Rex Spruill	Dale Williams
Barbara Parker	Darren Stallwitz	Charlie Wilson
Thomas Petross	Jess Staples	William Wilson
Ray Joy Pfannstiel	John Stephens	Neill Woodward
Jerry Priddy	Patricia Stephens	Bill Wootan
John Raeke	Walter Stevens	Ricky Yantis
Randy Reavis	Ralph Stiegler, Jr.	
Kathy Reavis	Landon Stone	
Bob Reed	Janette Story	

# SUNSET STAFF REVIEW OF THE TEXAS WATER DEVELOPMENT BOARD

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**REPORT PREPARED BY:**

*Sarah Kirkle, Project Manager*

*Emily Johnson*

*Faye Rencher*

*Janet Wood*

*Joe Walraven, Project Supervisor*

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*Ken Levine*

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