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THE TEXAS WATER JOURNAL is an online, peer-reviewed journal devoted to the timely consideration of Texas water resources management, research, and policy issues. The journal provides in-depth analysis of Texas water resources management and policies from a multidisciplinary perspective that integrates science, engineering, law, planning, and other disciplines. It also provides updates on key state legislation and policy changes by Texas administrative agencies.

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Commentaries:
**Key Texas Senate and House water committee
chairmen discuss water issues of the 85th Legislature**

Editor-in-Chief's note: In every odd-numbered year, the Texas Legislature convenes in regular session for 140 days. With this in mind, the Texas Water Journal invited Senator Charles Perry, Chairman of the Senate Agriculture, Water & Rural Affairs Committee, and Representative Lyle Larson, Chairman of the House Natural Resources Committee, to discuss their priorities and visions for Texas water and the regular session of the 85th Texas Legislature. The opinions expressed in these commentaries are the opinions of the individuals and not the opinions of the Texas Water Journal or the Texas Water Resources Institute.

WATER PRIORITIES FOR THE 85TH LEGISLATIVE SESSION

By Senator Charles Perry, Texas Senate; Chairman, Senate Committee on Agriculture, Water & Rural Affairs

By 2070, the population of Texas is projected to reach 51 million, and the demand for water is expected to reach approximately 21.6 million acre-feet per year.¹ The existing supply of water that we can rely on in times of drought, however, is expected to fall to 13.6 million acre-feet during that same period.² It doesn't take a mathematician to see the dire circumstances we face in the coming decades. Meeting this need will not be easy; it will require effort and cooperation by all Texans, for many years to come. So the question is this: where do we begin?

When the Texas Legislature gaveled in at the beginning of this year, there were several issues weighing on our hearts and minds. Even in the short amount of time during the interim of the 84th Legislative Session, the state of Texas and our nation as a whole faced numerous challenges. The sustained growth of our state continues to provide new difficulties to address, but I am confident that my colleagues and I are prepared to do what is necessary for the good of Texas.

For the second session in a row, I am blessed to be selected by Lieutenant Governor Patrick to serve as the Chairman for the Senate Committee on Agriculture, Water & Rural Affairs. I cannot think of three more important topics to this state, and especially my constituents. In a state with approximately 168 million acres, more than 84% of the land area is considered rural.³ The agriculture industry provides more than \$80 billion to the Texas economy each year, evidenced by the fact that we are first in the nation in production of many agricultural commodities.⁴ In my district alone, we had more than \$3 billion in agricultural cash receipts per the 2012 census.⁵ However, the success of this major economic driver, all of the rural areas, and the entirety of our state hinges on the topic of water.

Crops cannot grow without water. Manufacturing processes cannot function without water. Most of our energy cannot be produced without water. Simply put, water is life; this is especially demonstrated throughout the Bible where water is used for the cleansing of one's soul and providing life-sustaining subsistence. With a resource this important, it is crucial to make sure we have a thorough understanding of our supply to manage the growing demand.

In 1904, the Texas Supreme Court decision in *Houston & Texas Central Railroad Company vs. W. A. East* labeled "underground waters" as "secret, occult, and concealed," so much so that "an attempt to administer any set of legal rules in respect to them would be involved in hopeless uncertainty, and would therefore be practically impossible."⁶ I will consider my tenure as Chairman of this committee a complete success if I can help shed a little more light into the "secret" and "occult" world that is water. This process begins with encouraging all of our regulatory bodies to promote the continued use of the best available science for monitoring and modeling data. I cannot stress enough the importance of having strong, scientifically sound data and research regarding our water resources in this state. As the Texas Supreme Court pointed out in the *East* case, administering legal rules for a resource that you don't adequately comprehend is practically impossible. One of the bills I have filed is Senate Bill 696, which requires the Texas Commission on Environmental Quality to obtain updated water availability models (WAMs) in several river basins. These WAMs are a crucial part of our surface water permitting process. Most of the current models are over a decade old. If there was a new drought of record in a river basin since the last time the models were updated—which many people believe has occurred in some basins—the WAMs would reflect that impact and provide the state with a clearer picture of the actual amount of water that may be available for permitting.

An important part of the drive for more prolific data also centers on the need to better understand our aquifers. Since groundwater accounts for approximately 60% of the annual water use in Texas, it is crucial to ensure a complete understanding of its structure, ability to recharge, and viability as a source of clean water.⁷ The geographic diversity of Texas lends itself to a complex network of aquifers that vary among numerous aspects. These variations often require their own unique set of regulations to manage the aquifer. For example, subsidence is a major factor along the Texas coast and drives regulatory decision making in their water districts. Other districts in the state, however, do not necessarily face the same problem—although they certainly have their own unique challenges and opportunities. We must allow our water districts enough ability to justifiably manage the unique aspects of their aquifers as needed for their specific constituencies. On the other hand,

¹ Texas Water Development Board, 2017 State Water Plan.

² *Id.*

³ Texas Department of Agriculture.

⁴ *Id.*

⁵ *Id.*

⁶ *Houston & Texas Central Railroad Company v. W. A. East*, 98 Tex. 146, (Texas 1904)

⁷ Texas Water Development Board, <https://www.twdb.texas.gov/groundwater/>

where there are multiple districts sharing jurisdiction over an aquifer that acts and reacts uniformly, it is incumbent upon those districts to manage that shared resource accordingly. Once again, all justifications for regulations of these water sources should be rooted in scientific data and beyond reproach.

One more priority I have this session, and have always had since I began my tenure in the Legislature, is to continue cutting down on frivolous litigation. In the water business, this means guaranteeing fairness and equitability when applying regulations, tightening the standards by which permit applications are reviewed, and ensuring that all stakeholders grasp the consequences of their actions ahead of time to aid in their decision making. One way I'm hoping to address this is through Senate Bill 862. This bill will ensure that all parties to a suit involving a groundwater conservation district know, prior to filing that suit, that they could be responsible for paying the costs associated with that legal proceeding if they are not the prevailing party. From a groundwater district perspective, the district must strive to implement defensible regulations. For potential litigants, they must be aware that arbitrary lawsuits in pursuit of easy money could actually result in a detrimental outcome.

Another bill that I have filed is Senate Bill 1009, which was crafted in coordination with the Texas Water Conservation Association. This bill seeks to tighten the groundwater permit application process by clarifying what can be considered in a permit review to determine if the application is administratively complete. Clarifications to ambiguous language in the water code, and all legal statutes, are a necessary part of getting in front of needless court proceedings.

The challenges we face regarding the future water needs in this state are only achievable if we have participation from everyone. The Texas Senate Committee on Agriculture, Water & Rural Affairs is generally scheduled to meet on Monday afternoons upon adjournment of the Senate. Having input from all stakeholders is a crucial part of the democratic process, and I truly value diverse opinions. Just as I place a high importance in having quality, plentiful data regarding our water resources, the same is true for legislation and that begins with feedback from the public. I cannot promise we will always see eye to eye on the issues, but I can guarantee that everyone's concerns will be heard and considered.

The good news is that Texas has been blessed with enough water resources to meet our future needs. Doing so will require a combination of a better understanding of our current supply, development of new and innovative technologies, conservation and protection against waste, and ensuring fairness in the application of all regulations. If we fail to meet this challenge, we only have ourselves to blame. Together, we can sustain this vital natural resource for the benefit of many future generations of Texans.

THE THIRST OF TEXAS TOMORROW IS OUR RESPONSIBILITY TODAY

By Representative Lyle Larson, Texas House of Representatives; Chairman, House Natural Resources Committee

If we fail to plan, we're planning to fail.

The State of Texas, along with local entities, including municipalities and groundwater districts, need to work together to ensure we have the water we need for future generations of Texans. The drought of 2011, the worst one-year drought in Texas history, resulted in towns literally running out of water. We can't accept this as a way of life in our great state.

Recently, my office tasked the Texas Water Development Board to model what our state's groundwater and surface water resources would look like if the drought of 2011 had endured for 2 to 5 years, as climatologists predict will happen in the next century based on tree ring analysis and data collected over the last 5 centuries. According to the Board's model, if 2011 conditions persisted, 70 of the state's 117 reservoirs would be dried up at the end of 5 years. Aggregate surface water storage would drop from 19.4 million acre feet at the end of 2011 to 4.9 million acre-feet at the end of 2015. The projected effect on groundwater resources is equally devastating, with median aquifer levels decreasing anywhere from 9% to 84% depending on the aquifer. This virtual model projects what Texas will experience sometime in the next century and should drive policymakers to take bold steps to prepare for the next drought as our predecessors did in response to the drought of the 1950s.

During the 85th Legislative Session, we intend to build on the policy successes of last session, when we passed meaningful legislation to drought-proof Texas. We have major challenges ahead of us when it comes to securing Texas' water future, but we're confident it can be done if we continue working together as Texans and resist the temptation to fight each other along arbitrary political boundaries.

One of the impediments we have in developing groundwater resources for our population centers is the parochial mindset inherent in the groundwater conservation districts that have been set up over the last two decades in Texas. While a majority of groundwater conservation districts understand the law and respect property rights, a few hold the view that their purpose is to block access to anyone outside of their immediate community from using groundwater for future water supplies. State law and recent case law indicates they are on the wrong side of the property rights dispute and we will pursue groundwater reforms to remove the ability for this type of discrimination to occur.

In the state water planning process, we fight each other fiercely along regional planning lines and the state has abdicated its role in facilitating a comprehensive statewide water plan. The balkanization of our state into regions has proven to be the biggest hindrance to building the large-scale regional projects

we need to serve rapidly growing areas. This session we will be advocating for better cooperation between the regions.

In addition, we will continue to work to promote the use of new technologies, such as aquifer storage and recovery (ASR), to bolster our water supply. Texas lost more than 94 million acre-feet of excess flood flows in 2015 alone. Instead of allowing this water to flow out into the Gulf of Mexico with no beneficial use, we need to capture it and store it for future times of need. Legislation that we passed last session includes a bill that removed regulatory impediments to developing ASR projects, and we have filed 2 pieces of legislation this session that will build upon that effort.

The first piece tasks the Texas Water Development Board with studying the geologic formations along the river basins to determine which aquifers are most conducive for underground storage. The second requires the Texas Commission on Environmental Quality to develop an excess flows credits program that will allow surface water permit holders to commit to harvesting and storing excess flows that are above base flow and environmental flow requirements and that would otherwise evaporate or flow into the ocean, so they can be given an additional percentage of the water they are entitled to, based on their existing permit.

Desalination is the new horizon for Texas water. Last session we passed legislation to identify areas of highly productive aquifers that hold brackish groundwater throughout the state that can enable brackish desalination. Identifying these highly productive brackish zones was an important step in determining where our future water supplies are. As San Antonio just completed the first phase of its brackish desalination plant in southern Bexar County, many cities will look to brackish water as a source to meet future growth demands. Going forward, we will continue to work with stakeholders on legislation that clearly defines how brackish groundwater should be regulated to ensure that this resource can be accessed and developed for future generations.

We will also continue to work to help foster the development of Texas's first seawater desalination plant along the coast. As countries such as Israel and Australia, as well as California, have embarked on investing in seawater desalination, the State of Texas needs to facilitate the development of 3 large-scale seawater desalination plants in Corpus Christi, the League City area, and Brownsville. Harvesting water from a virtually unlimited water supply like the Gulf of Mexico is necessary as droughts driven both by climate and by demography continue to cause increased pressure on existing resources.

We must continue to work with neighboring states to

bring new water to bear. Last session we passed legislation that created the Southwestern States Water Commission. The creation of this Commission is an attempt to take disputes with neighboring states out of the courtroom and, instead, facilitate a dialogue between the Southwestern states that share contiguous bodies of water to effectively solve the ongoing problem of allocating a scarce and precious resource. As we face prolonged droughts in this part of the country, the Commission will take the lead in developing regional strategies to address water shortages. Large-scale water projects such as the Toledo Bend Reservoir and Lake Texoma were realized only through cooperation by parties in both states. To this end, my office has been meeting with leaders in neighboring states about regional water issues and I believe we need to continue on this path to bring a cooperative spirit back to solve our region's challenges.

My office has also been active in participating in meetings with officials from the Mexican government, representatives of the International Boundary and Water Commission, and Governor Abbott's office in Austin to discuss our shared water resources and the 1944 water treaty between the United States and Mexico. We must hold Mexico accountable. We have a lot of work to do to ensure that Mexico complies with the 1944 water treaty. This water is necessary for irrigation and other uses in the Rio Grande Valley and we owe it to those folks to make sure Mexico releases the water as required by the treaty. We continue to advocate for synchronization of the Colorado River and Rio Grande within the treaty to ensure that Texans receive the total allocation of water to which they are entitled.

The exponential population growth Texas is experiencing should be met with a focused agenda brought forth by the leadership in Austin. This session we will bring forward constructive and innovative approaches to governing both ground and surface water with a commitment to future Texans in mind.