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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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*make every drop count*

## **Commentary: Water Fuels Our Future**

Charles Perry<sup>1</sup>

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**Editor's note:** The opinion expressed in this commentary is the opinion of the individual author and not the opinion of the Texas Water Journal or the Texas Water Resources Institute.

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<sup>1</sup> Senator, Texas Senate; Chairman, Senate Committee on Water and Rural Affairs.

It is the beginning of the 86<sup>th</sup> Legislative Session, and state officials have begun laying out priorities ranging from school finance, property tax reform, school security, healthcare, and Hurricane Harvey assistance, just to name a few. This session will be narrow in scope but large in dollars needed.

One of the biggest events to change the landscape of the state in the interim was the landfall of Hurricane Harvey and its aftermath. Estimates for damage hover around \$125 billion, and 68 Texans lost their lives directly from the hurricane.<sup>1</sup>

At some time every county in Texas has had some form of flash flooding or flood event.<sup>2</sup> Chances are everyone in our state could be directly or indirectly affected by flooding in their lifetime. In Senate District 28, Sonora, Texas experienced a flooding event that destroyed or damaged 250 homes in September 2018.<sup>3</sup> The following month, Junction, Texas and the Llano River experienced two catastrophic floods. The first flood struck a campground causing Texans to be rescued from trees and the loss of three lives.<sup>4</sup> The second produced a wall of water that traveled through the Llano watershed into the Highland Lakes creating the first official boil water notice for the City of Austin.<sup>5</sup>

Flooding, whether from Hurricane Harvey or other events, only reminded Texans that there is a lot of work to do in order to be prepared for the next event. During the interim I met and shared ideas with federal, state, and local partners. Learning best practices from those who have worked in disaster management helped establish the framework for the best solution going forward. I have filed SB 396, which outlines a State Flood Plan developed under the Texas Water Development Board. Texans rightfully expect and assume that Texas has adequate flood prevention and recovery planning in place in order to protect property and lives. SB 396 is a strong step in the right direction.

The State Flood Plan is a comprehensive look at the state through mapping and cooperative planning between watersheds. Without planning and properly pulling all projects

<sup>1</sup> Blake ES, Zelinsky DA. 2018 May 9. National Hurricane Center Tropical Cyclone Report, Hurricane Harvey; [accessed 2018 August 24]. Available from: [https://www.nhc.noaa.gov/data/tcr/AL092017\\_Harvey.pdf](https://www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf).

<sup>2</sup> United States Geological Survey. 2003. Major and Catastrophic Storms in Texas; [accessed 2018 August 24]. Available from: [https://pubs.usgs.gov/of/2003/ofr03-193/cd\\_files/USGS\\_Storms/date.htm](https://pubs.usgs.gov/of/2003/ofr03-193/cd_files/USGS_Storms/date.htm)

<sup>3</sup> Green Y. 2018 September 27. Reality sets in for Sonora residents who lost homes in flood. San Angelo Live; [accessed 2018 October 8]. Available from: <https://sanangelolive.com/news/business/2018-09-27/reality-sets-sonora-residents-who-lost-homes-flood>.

<sup>4</sup> McGuinness D. 2018 October 8. 9 rescued as major flooding sweeps Junction, wiping out RV park. The San Antonio Express News.

<sup>5</sup> Downs C. Llano River expected to crest at similar level Wednesday as rescue operations continue. mySanAntonio.com; [accessed 2018 October 20]. Available from: <https://www.mysanantonio.com/news/weather/article/NWS-urges-residents-near-Llano-Riverto-evacuate-13310682.php>.

under one umbrella, Texas is left with a patchwork solution to a problem that requires cooperation from all. The most important item for the state is to openly discuss solutions and not limit projects to one watershed without talking to the neighboring watershed. A bottom-up approach to flood planning incorporates local input while supporting the collaboration between watersheds.

Proper flood management planning should include water supply development when possible. Texas peaked at almost 90% of the state experiencing a level of drought conditions in 2012. In May 2017, almost half of the state was experiencing drought conditions. Currently, Texas has under 10% of the state under drought conditions.<sup>6</sup> Texas is a large and diverse geographical region with significant variances in weather patterns. It is the state's responsibility to research, plan, incentivize, and implement strategies that deal with both flooding and water supply needs, remembering these strategies should not be mutually exclusive.

In the State Flood Plan framework, a ranking system is created including: federal matching opportunities, an emergency need, and the creation of a new or enhanced water supply source. A reservoir does not just have to prevent a flood; it can catch and store water or be used in aquifer storage and recovery.

Knowing how much water is available is crucial to supplying our state with its most vital resource. Because of this, I will refile Water Availability Model (WAM) legislation. Sound science will guide the state going forward to make the best decision. Both flooding and drought has changed the look and capacity of the river basins in the state. The WAMs will map several basins so that water permitting is completed with a thorough view of water availability.

The balance between private property rights and water development will continue to be a focus in the 86<sup>th</sup> Legislature. I plan to refile legislation related to groundwater and surface water permitting as well.

There will be an abundance of legislation this session that will address flooding, groundwater, surface water, mapping, and water science. It is important to receive input from all stakeholders to make the best decisions for Texans. As Chairman, I strive to protect private property rights, insist on a coordinated effort to tackle the flood challenges and continue to be the "canary in the coal mine" when it comes to water supply development. Texas is the greatest state in the union and has the resources to meet the needs of all future Texans. The only question is, "Will we?"

<sup>6</sup> Texas Water Development Board Drought Monitor.