

The recent severe cold weather event exacted a terrible toll on our state. Massive power outages left millions of Texans shivering in the dark, an experience prolonged and intensified when many public water systems were unable to maintain adequate pressure in their lines to safely distribute water to customers. Throughout this crisis, TCEQ staff – many of whom endured the hardships shared by their fellow Texans – tirelessly worked to help local officials restore their systems as quickly as possible. While the experience showed the mettle of agency employees, it also revealed the need for changes in the state’s water infrastructure to prevent this from happening again, as highlighted in this op-ed in the Houston Chronicle.

TCEQ: Winter storm exposed state's vulnerable water infrastructure

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March 13, 2021

As many Texans breathed a sigh of relief after what may go down as the worst winter storm on record, the Texas Commission on Environmental Quality has begun to examine what can be done to prevent such a crisis from recurring.

Texans not familiar with TCEQ may envision a faceless, nameless bureaucracy with an odd acronym, but I can tell you the crisis hit us hard, too — personally and professionally. My family and I were without water for four and a half days.

Our hearts go out to the families of those who lost their lives during the storm and to the millions of people who suffered frigid temperatures for days on end with no power. To make matters worse, one crisis triggered another, exposing vulnerabilities in our water infrastructure.

The storm was also a painful reminder of the interdependence of our power and water systems and the need to think about solutions more holistically. I will leave it to others to unravel the causes of the power crisis, but one thing is clear: changes must be made — and soon — to ensure local water systems can withstand conditions like those we just experienced.

TCEQ is responsible for overseeing protection of the state’s water resources, including supervision of systems that provide drinking water. While we don’t own or operate any of the state’s 7,000 public water systems, we provide guidance to the local officials who do.

Throughout this crisis, TCEQ staff, in our Austin headquarters and in regional offices across the state, worked around-the-clock to help local water systems get back up and running as soon as possible.

Last week, TCEQ commissioners convened a special work session to candidly discuss why so many local systems failed and how we can help prevent a breakdown from happening again.

To gather feedback for future planning, TCEQ will conduct a survey of public water system officials and hold roundtable meetings to ensure their continued involvement in whatever solutions are developed. We’re also going to push local officials to undergo a top-to-bottom review of their operations to better understand what worked and what didn’t, as TCEQ does after major incidents. And, we’ll encourage them to conduct tabletop exercises to plan for various scenarios, including hurricanes, cybersecurity threats and other disasters.

In many respects what just happened was the result of a “perfect storm.” Rapidly escalating power outages, frozen pipes and water main breaks forced many water systems offline, rendering them incapable of pumping treated water through their distribution systems.

The crisis quickly intensified when limited water supply, combined with increased demand, led to a drop in water pressure. Low water pressure, as well as other issues like backflow device failure, can produce conditions in which dangerous bacteria can contaminate the water supply. When that happens, TCEQ rules require local systems to issue boil water notices that instruct residents to boil tap water before drinking or cooking with it. At the height of the crisis, more than 2,000 local water systems had disrupted service, most under a boil water notice, affecting approximately 16 million Texans.

TCEQ immediately began assisting public water systems in numerous ways, starting with creation of a shared network that allowed us to track problems they were experiencing and help resolve them. Agency staff also aided local officials with their emergency response efforts, provided technical expertise, and more.

We also created a severe cold weather response incident webpage, posted a toll-free number for local officials seeking labs for bacteriological testing of drinking water samples, and issued a news release and informational videos highlighting our efforts.

TCEQ is exploring a variety of ways to help public water systems better prepare for cold weather events so they can maintain essential services. Local officials will be an integral part of whatever changes we ultimately implement.

We’ll work with appropriate government agencies and companies to ensure local water systems are considered critical operations, so their electricity stays on during emergencies affecting the state’s power grid.

We also will be asking legislators to authorize an additional five employees in our Texas Optimization Program, which provides training and technical assistance to local officials and helps them respond to crises.

These are just a few of the changes we’re considering — everything is on the table.

The upheavals we just experienced may have been unprecedented, but we can’t use that as an excuse. TCEQ will continue to work with our state and local partners to ensure that local water systems never experience these failures again. We have to do better, and we will.

Baker is the executive director of the Texas Commission on Environmental Quality.