



# **WATER/WASTEWATER IHS NEWSLETTER**

## ***Winter Edition***

The Institute for Homeland Security exists to provide innovative, value-added knowledge tailored to the needs of industry and public institutions, to protect critical infrastructure supporting Texas and the nation's economy. Our newly formed Water/Wastewater Critical Infrastructure Exchange is comprised of a community of academic, public, and private entities, and associations. This Exchange aims to facilitate the cross sector sharing of ideas, all working towards a collaborative effort to improve the security, resiliency, and business continuity of the Water/Wastewater Critical Infrastructure sector. We encourage you to learn and collaborate with us and we hope you find this newsletter engaging and informative.







# PODCASTS



## Navigating Texas Waters: Critical Infrastructure Protection for Future Water

*Podcast Mini-Series*

Critical Infrastructure Protection (CIP) involves a comprehensive approach to protect assets, systems, and networks, that are vital to Texans and the State. [1]

The Cybersecurity and Infrastructure Security Agency (CISA) has identified 16 critical infrastructure sectors, and out of all 16, the Water/Wastewater (W/WW) sector is the only one that provides the one invaluable resource of safe drinking water.

The W/WW Critical Infrastructure Sector has been identified by Presidential Policy Directive 21 (PPD 21) as a lifeline sector. The ability to provide clean drinking water and properly treated wastewater are considered National Critical Functions [2]. Therefore, the protection of this sector is paramount not only for the business continuation of the other critical infrastructure sectors, but for the security, economic stability, public health, and environment of the great State of Texas. The W/WW sector currently faces many challenges and vulnerabilities. The State of Texas is vast, and with a forecasted increase in population, the State is bound to be faced with water challenges. Therefore, it is imperative to discuss the varying needs of the sector in the State of Texas and how to collaboratively understand and address the varying degrees of the meaning of security and resilience in this sector. As part of Sam Houston State University and following our legislative intent to enhance the security and resilience of critical infrastructure, we have created this podcast mini-series to educate, engage, and provide insights from different areas of the State. It is at this time that we must come together, unify, and collaborate in protecting the vital W/WW sector. Security, resilience, and business continuity depend on our ability to understand the problems, find a solution to address or support others addressing those problems, and together ensure Texas has safe reliable drinking water and properly treated wastewater; protecting the public health and the environment from those that will come after us.







# PODCASTS



Each podcast will cover issues affecting the security, resiliency, and business continuity of this lifeline sector.

We want to thank the participating State Agencies, Water Associations, and Private businesses for sharing their knowledge and expertise.

For more information on the podcast mini-series or other Critical Infrastructure podcasts, please visit our IHS Podcast webpage at [ihsonline.org](https://ihsonline.org).



The mini-series will kick off with the release of the introductory episode on **January 6, 2025**. After this date, a new episode will be released every **Monday**, starting with our first episode of the series, **Security Spotlight**.

## ***Mini-Series Episodes***

- Security Spotlight
- Against the Flow: Workforce Challenges
- Unique Challenges for a Unique State
- A Dry Tap: Water Supply Challenges
- Vulnerabilities of Critical Infrastructure Interdependencies
- Future Water: Economic Impact of Small and Rural Communities

## **SPECIAL THANKS TO OUR VALUABLE GUESTS:**

<a href="#"><u>Trinity River Authority</u></a>	<a href="#"><u>Houston Community College</u></a>	<a href="#"><u>Presidio County Underground Water Conservation District</u></a>
<a href="#"><u>Texas Water Development Board</u></a>	<a href="#"><u>Water Finance Exchange</u></a>	<a href="#"><u>Elston Johnson and Associates</u></a>
<a href="#"><u>Sam Houston State University Department of Computer Science</u></a>	<a href="#"><u>Texas Rural Water Association</u></a>	<a href="#"><u>Northeast Texas Municipal Water District</u></a>
<a href="#"><u>Texas Department of Agriculture</u></a>	<a href="#"><u>Texas Water Foundation</u></a>	<b>Michael Mastrangelo</b>





# TCEQ APPROVED TRAINING <<<

## Resiliency Continuing Education

### Incident Command System for Water Operators

- 2 Credit Hours
- Self-Paced
- Online
- Cost: \$25.00



Many of us endured the freezing temperatures brought by Winter Storm Uri on the week of February 14, 2021. The stress and challenges faced by the water and energy sectors brought on by the storm posed questions regarding preparedness, resiliency, and business continuity, and on June 8, 2021, the 87th Texas Legislature passed Senate Bill 3. This Bill addressed the need to prepare, prevent, and better respond to weather emergencies and power outages. As a result of this bill, all individuals applying for an initial water

operator license or renewing an existing license, will need to undergo resiliency training. For more information, on requirements or different types of training requirements, please visit the TCEQ Occupational Licensing page or TCEQ publication RG-637. The legislative intent for the Institute is to enhance the security and resilience of the Critical Infrastructure sectors, and one of our priorities is to deliver training and education focused on the needs of the sectors. We aim to continue enhancing the security and resiliency of the Water/Wastewater sector by providing a two-hour resiliency overview course in Incident Command System, entirely self-paced and online. We understand the demands of the water workforce and it is our goal to provide training that fits the schedule of the frontline operators. For more information and course registration, please our Learning Academy webpage at [ihsonline.org](https://ihsonline.org).

## >>> EVENTS

*Secure and Unified Texas*

### WEAT Safety, Cyber and Infrastructure Security Symposium

*October 22, 2024*

A one-day event hosted by WEAT with the intent to provide a venue for knowledge sharing between utilities across Texas. WEAT extended an invitation to IHS to present at event, providing attendees with information regarding the importance of cross-sector/ interdependencies training for the water/wastewater and energy sectors. In collaboration with Brownsville Public Utilities Board (BPUB), IHS presented a case study on the outcomes and lessons learned from an energy/water sector interdependency scenario training.

### Brownsville Public Utilities Board Vulnerability Assessment Training

*September 16-17, 2024  
November 13-14, 2024*

The two-day workshop offered by IHS is designed to equip management-level employees with the skills to implement an effective vulnerability evaluation process. Participants will learn to identify weaknesses in their systems and enhance business continuity during emergencies or disruptions. A key aspect of the workshop is the use of the CARVER method, a structured approach to assessing and prioritizing vulnerabilities, helping participants better understand potential threats and risks. This enables them to prioritize which vulnerabilities to address first and develop strategies to mitigate those risks. By the end of the workshop, attendees will be well-prepared to implement comprehensive vulnerability management strategies to ensure organizational resilience in times of crisis.

