# **Winter Storm After Action Review**

Austin City Council Meeting | November 4, 2021



## Introduction

#### Winter Storm After Action Review

- Incident Response and Situational Awareness
- Communications
- Infrastructure Systems
- Power Reliability

#### Resources

- Austin Water Staff
- Water & Wastewater Commission Winter Storm Working Group
- WaterPIO (Communications Consulting Firm)
- Freese & Nichols (Engineering Consulting Firm)
- City-wide After Action Review (led by HSEM and Hagerty Associates)

### **Commission Working Group** Process and Priorities

- Winter Storm Working Group:
  - Chair: Commissioner Christianne Castleberry
  - Vice Chair: Commissioner William Moriarty
  - Members: Commissioners Grant Fisher, Christy Williams, Jesse Penn
- Monthly Meetings (April October)
- Comprehensive Review of Winter Storm Impacts
- Priorities and Recommendations
- Continue to Serve in Advisory Role

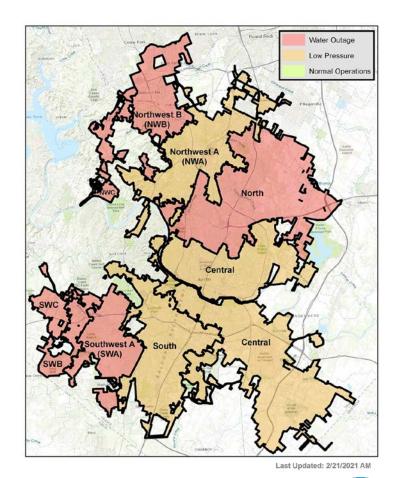
# **Key Recommendations**

Winter Storm After Action Review



## **Incident Response & Situational Awareness** Key Recommendations

- Enhance Incident Command System (ICS) training and depth
- Clarify and strengthen ICS public information roles, resources, and decision-making
- Improve capabilities to provide real-time water system insights from operational and AMI data sources
  - Example: Outage map





## **Communications Strategies** Key Recommendations

- Adjust and enhance Winter Weather Preparedness messaging
- Enhance guidance and training for use of public notification systems
  - Warn Central Texas (Reverse 911)
  - My ATX Water Portal
- Conduct targeted outreach to multi-family properties

### **Infrastructure Systems** Key Recommendations

- Increase investments to replace under performing water mains
- Enhance plant winterization (pipe heat tracing, insulation, thermal blankets)
- Increase chemical and sludge storage at treatment plants
- Modify maintenance and repair schedules and approaches to increase available capacity year-round
- Increase pumping, transmission and storage capacity

# **Power Reliability**

### **Key Recommendations**

- Increase inventory of portable emergency generators
- Prioritize investments to modernize plant electrical systems
- Senate Bill 3 and TCEQ Emergency Preparedness Plan
  - Focuses on water system power reliability
  - TCEQ guidance still evolving
  - Review critical load facility designation with all power providers
  - Critical facility on-site emergency power generation systems

## Implementation – Completed Items

Winter Storm After Action Review



## Implementation of Recommendations Completed Items

- Emergency Water Resources
  - Two potable water trucks procured
  - Increased on-site inventory of emergency water from 6 to 60 Pallets
  - New vendor contract for additional local storage of 19 pallets
  - Inventory of 58 bulk water storage totes and
    65 fire hydrant adaptors
  - New Emergency Management Plans Officer position supporting emergency water planning.



### Winter Weather Preparedness Materials **Completed Items**

#### Winter Weather **Preparedness Tips**

#### Prepare for Freezing Weather

LOCATE YOUR WATER SHUTOFF Make sure everyone in your residence knows where the

water main shutoff valve is located and keep it clear of debris and obstacles at all times

For most homes in our service area, the property owner's shutoff valve is on your side of the water meter at the meter box. If you are not sure if you have an inside shutoff valve, check the property inspection report from when you purchased your residence. For renters, please consult with your property manager.

If you cannot find your shutoff valve or if it is damaged, then you should be prepared to access the City shutoff valve in the meter box. You may need a water meter key to open the meter box, which can be purchased at most hardware stores.

Tightly close doors and windows to the outside. Make repairs to broken or drafty windows, doors, and walls. Seal all leaks in crawl spaces and basements. Winterize unheated spaces and close garage doors for the duration of the freeze.

#### EXPOSED PIPES AND WATER HEATERS

Insulate pipes in unheated and drafty areas, such as an attic or garage. Also check manufacturer recommendations for your tanked and tankless water heaters. Hardware and plumbing supply stores carry insulation to help keep pipes from freezing.

#### I OUTSIDE FAUCETS

Turn off outside faucets. Remove all connected hoses and wrap faucets with towels or a Styrofoam insulator. Turn off and drain automatic sprinkler systems.

#### PREPARE BEFORE LEAVING TOWN

If you plan to be away during a time when freezing temperatures are possible, turn off your water at the meter and set your thermostat to 65 degrees or higher.

#### SUPPLIES to have on hand: WATER

EMERGENCY

METER KEY to access your meter box if necessary

INSULATION for indoor and outdoor pipes







For updates and instructional videos go to: austinwater.org (3 (2) (a)





Austin Water 🧿

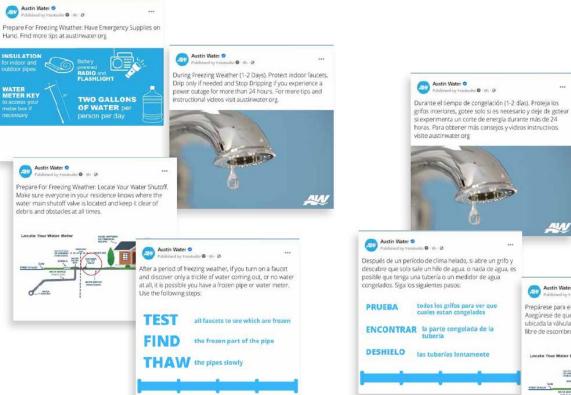
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Prepárese para el clima helado: ubique su cierre de agua.

Asegúrese de que todos en su residencia sepan dónde está

ubicada la válvula de cierre principal de agua y manténgala

libre de escombros y obstáculos en todo momento.



### **Winter Weather Preparedness Materials Educational Videos and Tools**





How to find and turn off your water shut-off valve

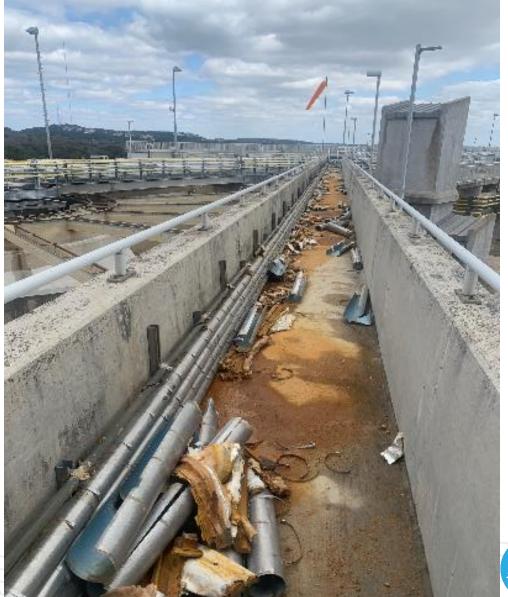




## Implementation of Recommendations Completed Items

#### Operations

- Storm damage repairs (broken pipes, valves, basins, chemical feed systems)
- Insulation enhancements underway
- Procurement of heaters, sand, deicing fluid
- Increased tire chain inventory
- Increased electrician staffing at water treatment plants



# **Questions?**

