Winter Storm Uri UPDATE

Austin Water Oversight Committee | January 20, 2022

Presentation Overview

Prioritization, Implementation and Reporting

Greg Meszaros Director

Community Outreach and Messaging

Randi Jenkins Assistant Director of Customer Experience

Winterization of Operations

Stephanie Sue, P.E. Water Treatment Operations Manager

Emergency Management

Anna Bryan-Borja Assistant Director of Business Services

Infrastructure Improvements Priorities

Shay Ralls Roalson, P.E. Assistant Director of Engineering Services

Prioritization, Implementation & Reporting

- **Prioritization** – Commission Working Group Recommendations
- **Implementation** – Executive Chaired Teams
  - Community Outreach and Messaging (AD Randi Jenkins)
  - Operations (AD Rick Coronado)
  - CIP Projects (AD Shay Ralls-Roalson)
  - Emergency Management (AD Anna Bryan-Borja)
  - Systems Planning (AD Kevin Critendon)
  - Master Steering Committee (Director Greg Meszaros)
- **Reporting**
  - Quarterly Austin Water Oversight Committee Meetings
  - Quarterly Commission Meetings
- **Example** - 2018 Colorado River Flood

Community Outreach and Messaging

Randi Jenkins

Assistant Director, Customer Experience

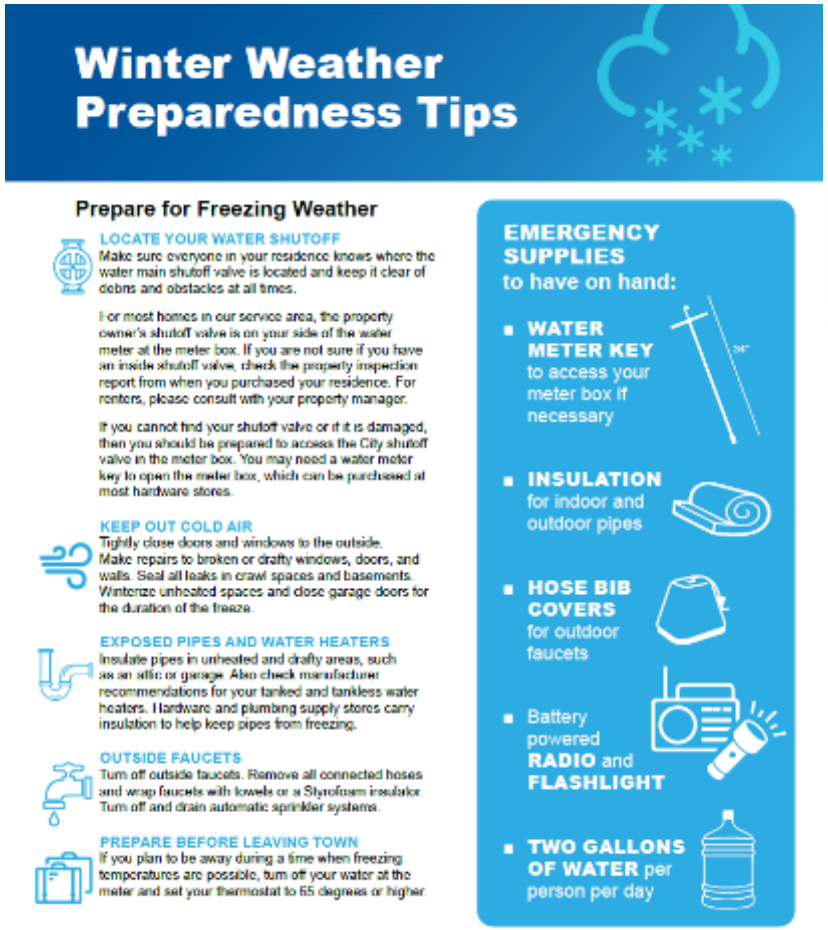
Communications Strategies

Key Recommendations

- **Adjust** and **enhance** Winter Weather Preparedness messaging
- **Increase** use of My ATX Water portal notifications during emergencies
- **Conduct** targeted outreach to multi-family properties
- **Enhance** guidance and training for use of public notification systems

Winter Weather Preparedness Materials

Tips, Social Posts, Notifications – 6 languages



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.

KEEP OUT COLD AIR
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.

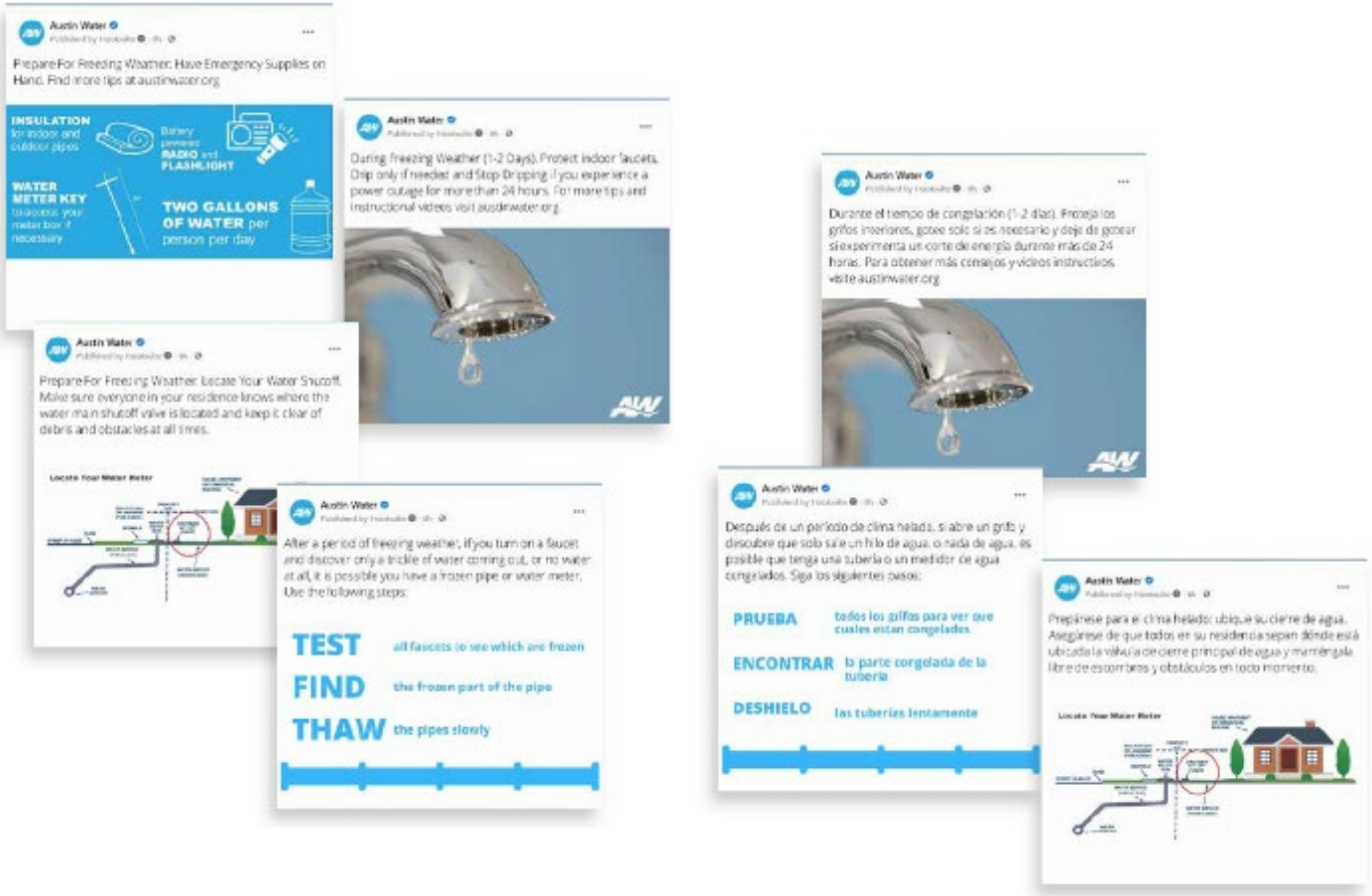
EXPOSED PIPES AND WATER HEATERS
Insulate pipes in unheated and drafty areas, such as an attic or garage. Also check manufacturer recommendations for your tanked and tankless water heaters. Hardware and plumbing supply stores carry insulation to help keep pipes from freezing.

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.

EMERGENCY SUPPLIES to have on hand:

- **WATER METER KEY** to access your meter box if necessary
- **INSULATION** for indoor and outdoor pipes
- **HOSE BIB COVERS** for outdoor faucets
- Battery powered **RADIO** and **FLASHLIGHT**
- **TWO GALLONS OF WATER** per person per day



Austin Water
Prepare For Freezing Weather: Have Emergency Supplies on Hand. Find more tips at austinwater.org

INSULATION for indoor and outdoor pipes
Battery powered RADIO and FLASHLIGHT
WATER METER KEY to access your meter box if necessary
TWO GALLONS OF WATER per person per day

During Freezing Weather (1-2 Days). Protect Indoor Faucets. Drip only if needed and Stop Dripping if you experience a power outage for more than 24 hours. For more tips and instructional videos visit austinwater.org

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.

Locate Your Water Meter

After a period of freezing weather, if you turn on a faucet and discover only a trickle of water coming out, or no water at all, it is possible you have a frozen pipe or water meter. Use the following steps:

TEST all faucets to see which are frozen
FIND the frozen part of the pipe
THAW the pipes slowly

Durante el tiempo de congelación (1-2 días). Proteja los grifos interiores, gotee solo si es necesario y deje de gotear si experimenta un corte de energía durante más de 24 horas. Para obtener más consejos y videos instructivos, visite austinwater.org

Después de un período de clima helado, si abre un grifo y descubre que solo sale un hilo de agua, o nada de agua, es posible que tenga una tubería o un medidor de agua congelados. Siga los siguientes pasos:

PRUEBA todos los grifos para ver que cuales estan congelados
ENCONTRAR la parte congelada de la tubería
DESHIELO las tuberías lentamente

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 mantengala libre de escombros y obstáculos en todo momento.

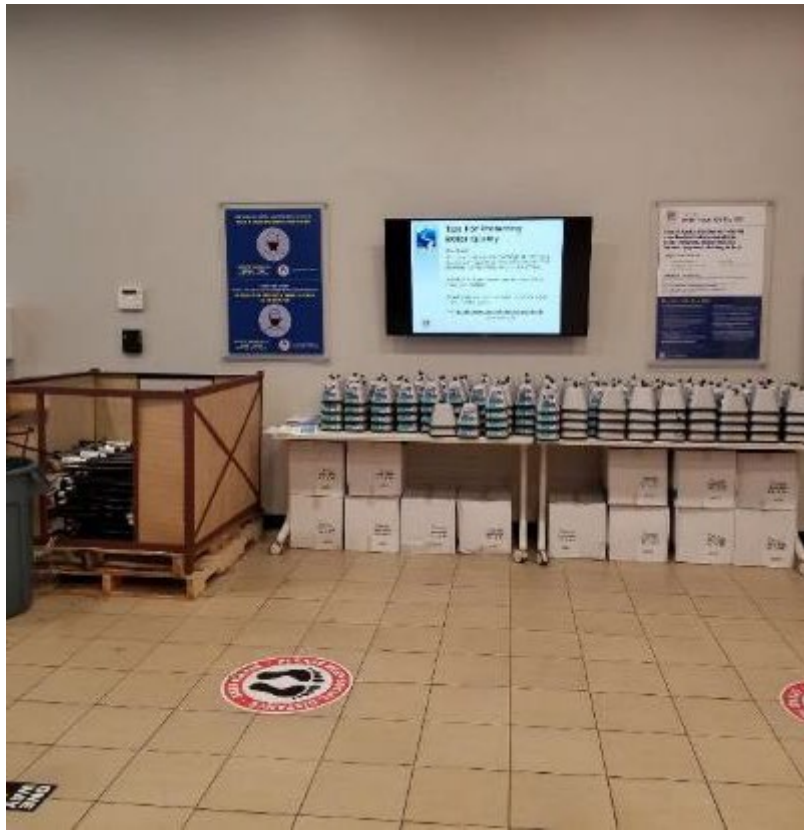
Locate Your Water Meter

Winter Weather Preparedness Materials

Educational Videos and Tools

Toolkit Distribution

- **Community Events**
  - 5 community events
  - Senior Activity Centers, Recreation Centers on the East side
- **Branch Libraries**
  - Tip sheets distributed to all open branch libraries
  - Worked with APL staff to deliver appropriate translated materials



Toolkit Distribution
COA Utilities Customer Service Centers

“I live down in South Austin. About 10 days ago you guys were passing out free water keys and hose bib covers and I went down and got one, and there were also printed blue and black sheets that were the best tips I have ever seen on prevention and fixing of water leaks. Is there a possibility you could send me some more copies? I'd like to get some to pass out to some of my neighbors. “

Additional Actions Underway

- **Notifications Improvements**
  - Warn Central Texas – base maps for service areas, pressure zones
  - My ATX Water – staff cross-training, Standard Operating Procedures
- **Media Coordination**
  - Updates timed to align with news cycle
  - Radio ads convert to emergency messaging
- **3-1-1 Coordination**
  - Service request routing improvements
- **Multifamily Outreach**
  - Winter Preparedness e-newsletter developed with Austin Energy
  - Quarterly communications planned

Service Outage Map

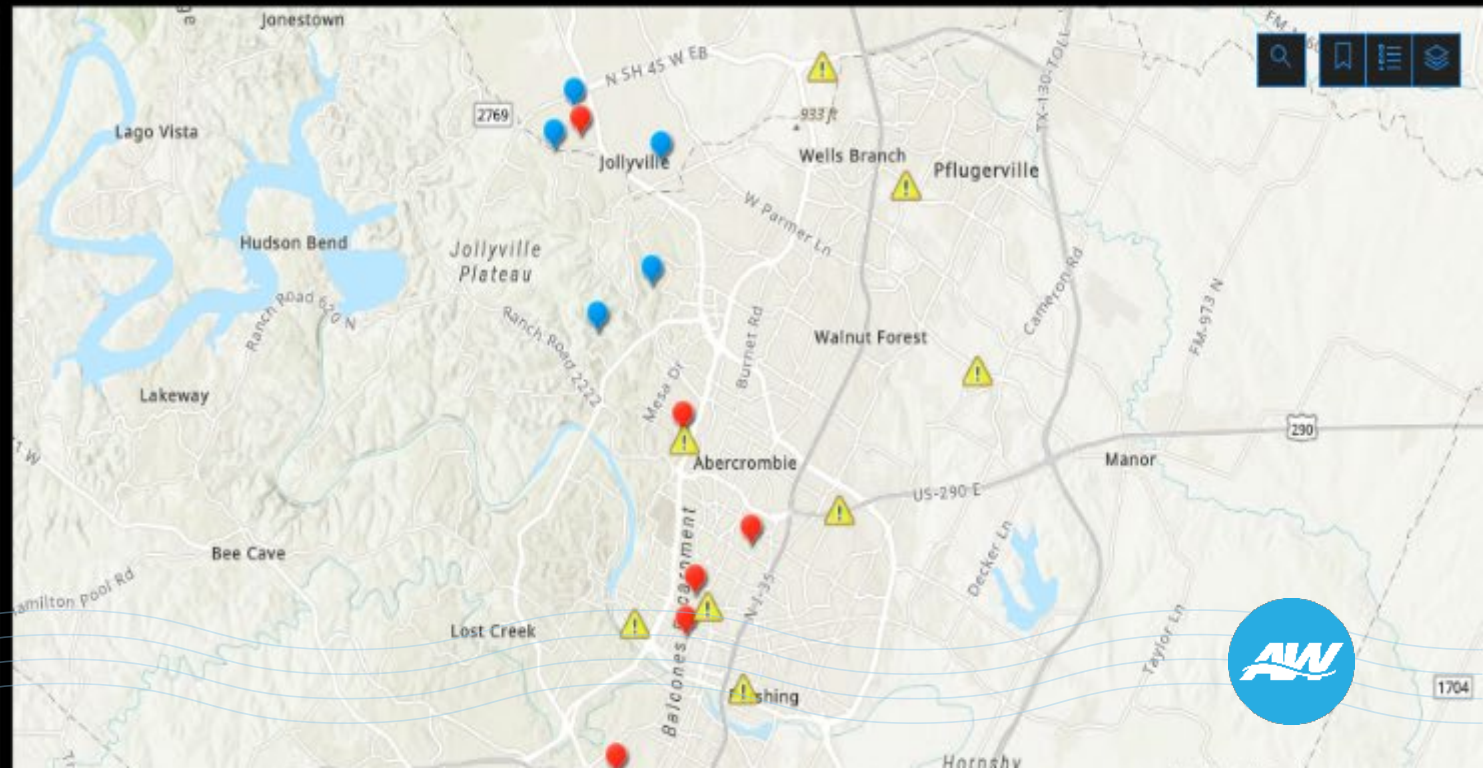
AW Leak & Outage Map

Current Shutouts	Leaks Pending Repair	Leaks Pending Inspection
12	8	9
Last update: a few seconds ago	Last update: a few seconds ago	Last update: a few seconds ago

Current Shutouts

Address:
5005 PARMER LN
Reference #:
SR 968691
Details:
5005 E PARMER LN
From:
1/5/2022, 8:52 AM
To:

Address:
2513 SETON AVE
Reference #:
SR 961452
Details:
2513 SETON AVE
From:
1/10/2022, 9:00 AM
To:



Winterization of Operations

Stephanie Sue, P.E.

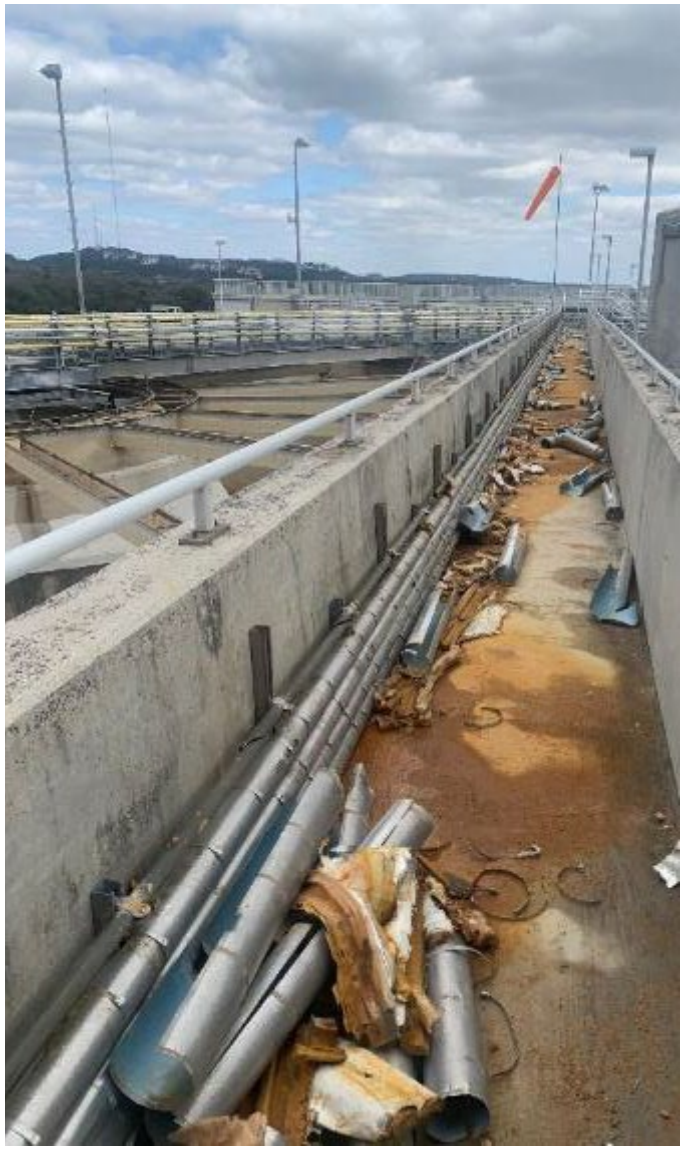
Operations Manager, Water Treatment Operations

Winterization of Operations

- Winter Weather Preparations
- Updated Available Capacity Protocols
- Strategies to Achieve Maintenance with Available Capacity Protocols

Winter Weather Preparations

- **Completed Storm Damage Repair and Piping Insulation**
  - Critical repairs completed
  - Insulation and winterization of piping and equipment completed
- **Secured Alternative Chlorine Analysis Tools**
  - Alternative tools do not rely on lab supplies

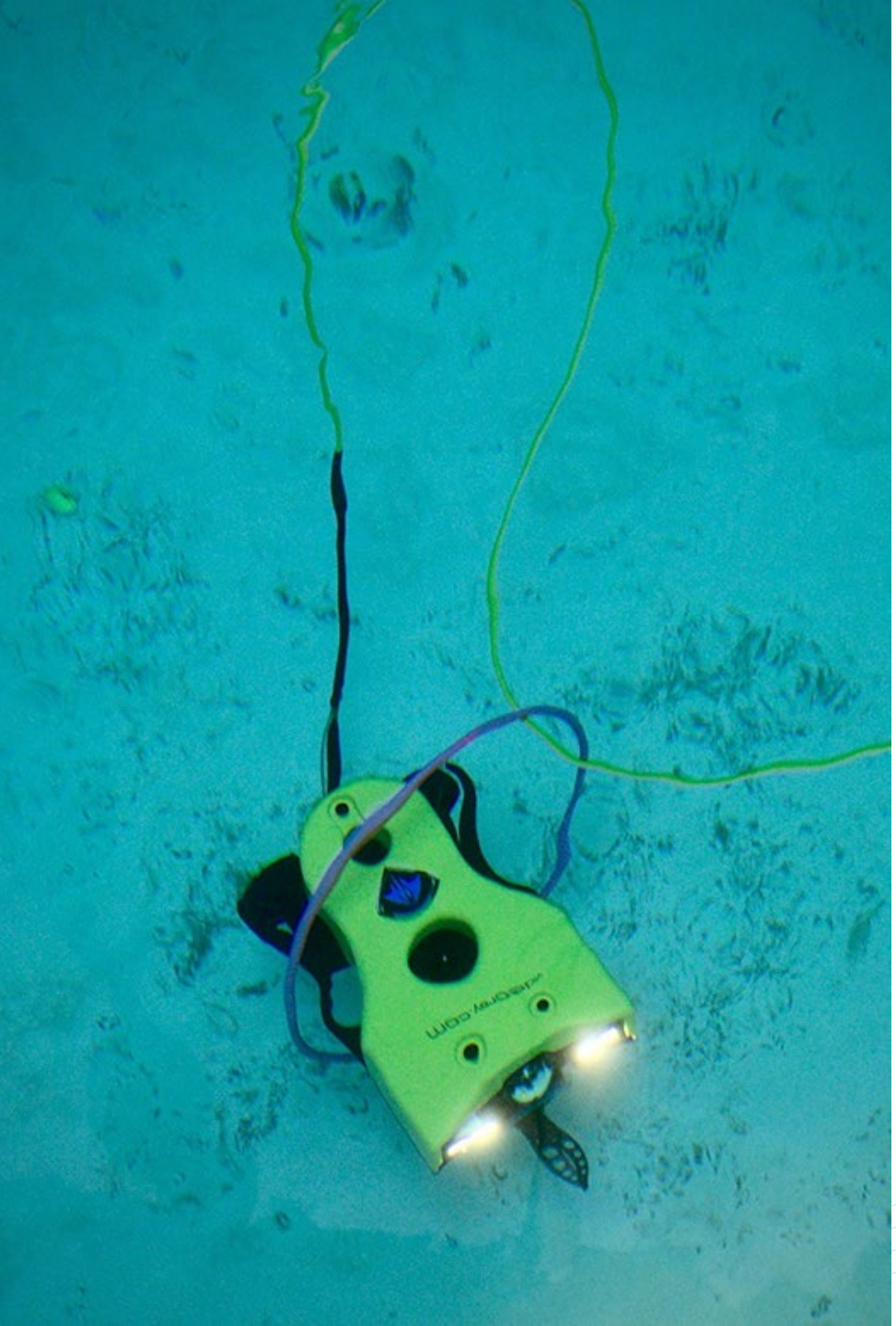


Winter Weather Preparations

- **Winter Weather and Safety Supplies Stocked**
  - For facility preparation: sand, deicing, and heaters
  - For employee safety: boot spikes, tire chains, cots, ready to eat meals
- **Winterization Standard Operating Procedures Updated**
  - Common Winter and hard freeze steps depending on severity of freezing weather

Updated Capacity Availability Protocols

- **Updated Maintenance and Operations Protocols**
  - Enable AW to be able to meet higher water demands in the winter season, if needed
- **Impact for Maintenance and Construction Projects**
  - Fewer basins and facilities can be offline at the same time requiring new strategies to keep up maintenance and construction



Strategies to Achieve Maintenance with New Capacity Protocols

- Facility Concurrence Process
  - Aids planning and helps avoid multiple outages
- Situational Awareness
  - Tracking chemical storage, staffing availability, and production capacity
  - Reporting of pumpage, usage and storage
- Using Technology to Inspect In-Service Infrastructure
  - Implementing Remotely Operated Vehicle (ROV) to inspect tanks while in operation

Emergency Management

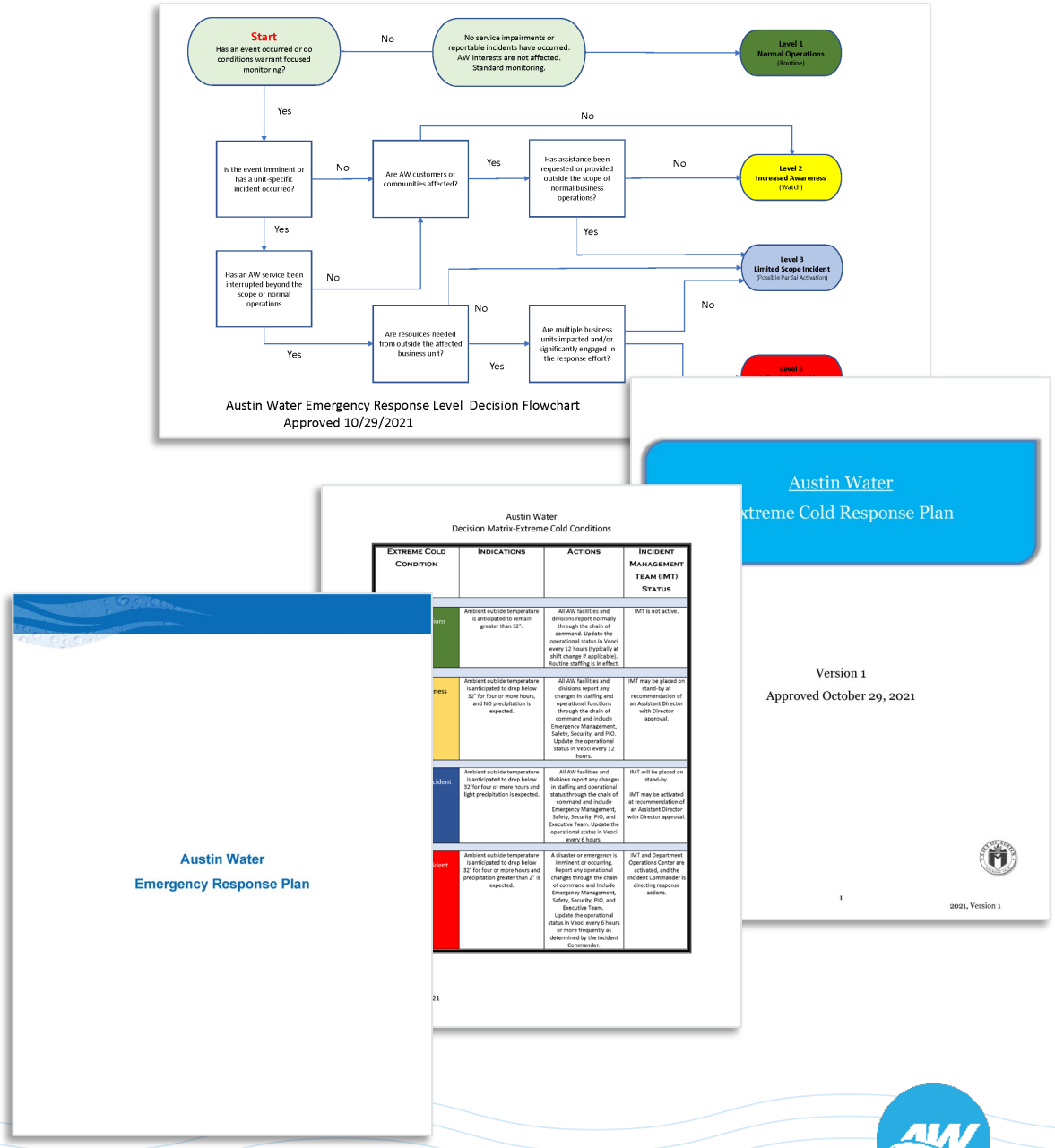
Anna Bryan-Borja

Assistant Director, Business Services

Emergency Response Plan Updated

Revised Emergency Response Plan includes:

- Extreme Cold Response Plan
- Decision Matrices:
  - Extreme Cold Conditions
  - General Operations Conditions
- Enhanced Emergency Communications
- Emergency Alternate Drinking Water Supplies
- Added Data on Wastewater Facilities
- Emergency Water Use Restrictions Procedures



Updated ERP Promotes Situational Awareness

- **Decision Matrices for Incident Management Team consider:**
  - National Weather Service forecasts for extreme weather
  - AW operational status and impairments
  - External events in the community
- **As conditions worsen, IMT status is elevated**
- **Pre-determined activation triggers prepare for varied incidents beyond weather**

Level 1
Normal Operations
(IMT Not Activated)

Level 2
Increased Awareness
(IMT Possible Stand-By)

Level 3
Limited Scope Incident
(IMT on Stand-By, Potential Activation)

Level 4
Utility-Wide Incident
(IMT Activated)

Staffing and Training

- **Expanded Emergency Management Team**
  - Three FTEs added in FY 22
- **Emergency Plans Officer Senior**
  - Focus on community resilience
  - Co-located with HSEM part-time
- **Incident Management Team**
  - Three rotating shifts
  - Enhanced communications role
  - Reporting process
- **Incident Command System Training**
  - Online and in-person training
  - Reporting process

Emergency Supplies

- **Hub Warehouse Equipped for Incidents and Emergencies**
  - Shelter in Place Supplies for staff: cots, blankets, meals ready to eat, bottled water, and hygiene kits
  - Emergency water distribution supplies for customers: bottled water, water totes, fire hydrant adaptors
- **Two Potable Water Trucks Delivered**
- **Bottled Water Contracts Ready**
  - Local vendor with supply on hand
  - Second vendor for multiple truck load shipments

Infrastructure Improvements Priorities

Shay Ralls Roalson, P.E.

Assistant Director, Engineering Services

Infrastructure Improvement Priorities

- Accelerated Projects
- Water System Resiliency Projects
- Electrical Reliability Projects
- Collaboration with Austin Energy
- SB3 Emergency Preparedness Plan

Accelerated Projects

- **Southwest Parkway Elevated Storage Tank and Transmission Main**
  - New 2-million gallon water storage tank to serve Southwest B pressure zone
- **McNeil Road Transmission Main**
  - 72-inch water main to increase flow from Handcox Water Treatment Plant into the North and Northwest Austin pressure zones
- **Center Street Pump Station**
  - Replace pump station, including electrical improvements, to serve customers in the South pressure zone

Water System Resiliency Projects

- **North Austin Reservoir**
  - Replacing reservoir built in 1913 *(construction underway)*
- **My ATX Water**
  - Replacing nearly 250,000 water meters with smart meters and implement a customer portal to communicate about water use *(meter installation in progress)*

Water System Resiliency Projects

- **Renewing Austin**
  - Replace small diameter poor performing pipes *(ongoing since 2011)*
  - 37 miles of new water pipeline in the works
    - 9 projects in construction
    - 30 projects in design
- **Aquifer Storage and Recovery**
  - Water Forward water supply strategy for storing water in a natural aquifer *(pilot project underway)*
- **South I-35 Elevated Storage Tank**
  - New 3-million gallon storage tank

Electrical Reliability Projects

- **Davis Water Treatment Plant Power Distribution Upgrade**
  - New power distribution building with electrical gear to distribute dual feed service *(construction complete)*
- **Ullrich Water Treatment Plant Low Service Pump Station Electrical Feed Renewal**
  - Replace electrical gear original to the plant *(in construction)*
- **Davis Lane Pump Station Electrical Resiliency Project**
  - Secure secondary power source for pump station
- **South Austin Regional Wastewater Treatment Plant Substation No. 1**
  - Replace electrical gear original to the plant *(in construction)*
- **Lift Station Generators**
  - Additional generators at priority wastewater lift stations

Collaboration with Austin Energy

- **Davis Water Treatment Plant**
  - Implement ability to transfer power between feeds on the Austin Water side
- **Ullrich Water Treatment Plant**
  - Implement third feed with automatic transfer capability at Bee Cave Substation
- **Lift Stations, Pump Stations and Data Centers**
  - Maintain load list
- **Electrical Reliability as a Service**
  - Evaluate locations for third-party power generation

SB3 Emergency Preparedness Plan

- **SB3 Deadlines**
  - **November 1, 2021:** Notify power providers of critical loads *(complete)*
  - **March 1, 2022**: Submit EPP to TCEQ identifying options to be used *(on track)*
  - **July 1, 2022:** Implement EPP *(on track)*
- **Extensive system-wide review of AW water facilities**
  - Electrical system hardening and redundancy at critical sites
  - Critical Load designation status from Austin Energy for critical facilities
  - Treatment, pumping, and storage capacity management and demand management

Questions / Discussion