

WINTER STORM EVENT BRIEFING

Austin Water Oversight Committee | April 19, 2021



Agenda

Director's Opening Remarks
Communications
Infrastructure Resiliency

Communications

Randi Jenkins Assistant Director, Customer Experience



Communication Overview

Winter Preparedness Messaging
Emergency Notifications
Customer Communications
Next Steps



Winter Preparedness Messaging

- 💧 **Feb 9: Winter weather prep messaging begins**
- 💧 **Feb 10: Media release, Website and Social Media**
 - Tips for freezing and subfreezing temperatures
 - Conservation reminders
- 💧 **After-Action Review to include:**
 - Revisit winter preparedness messaging
 - Collaboration with other utilities for best practices



Emergency Notifications

Warn Central Texas

- 💧 **“Reverse 9-1-1” System through CAPCOG**
 - Landlines automatically enrolled
 - Residents must subscribe to receive text, cellphone calls, or emails
- 💧 **1.1 million contacts**
- 💧 **Sent two messages:**
 - Announce Boil Water Notice (Feb. 17)
 - Rescind Boil Water Notice (Feb. 23)

Wed, Feb 17, 9:06 PM

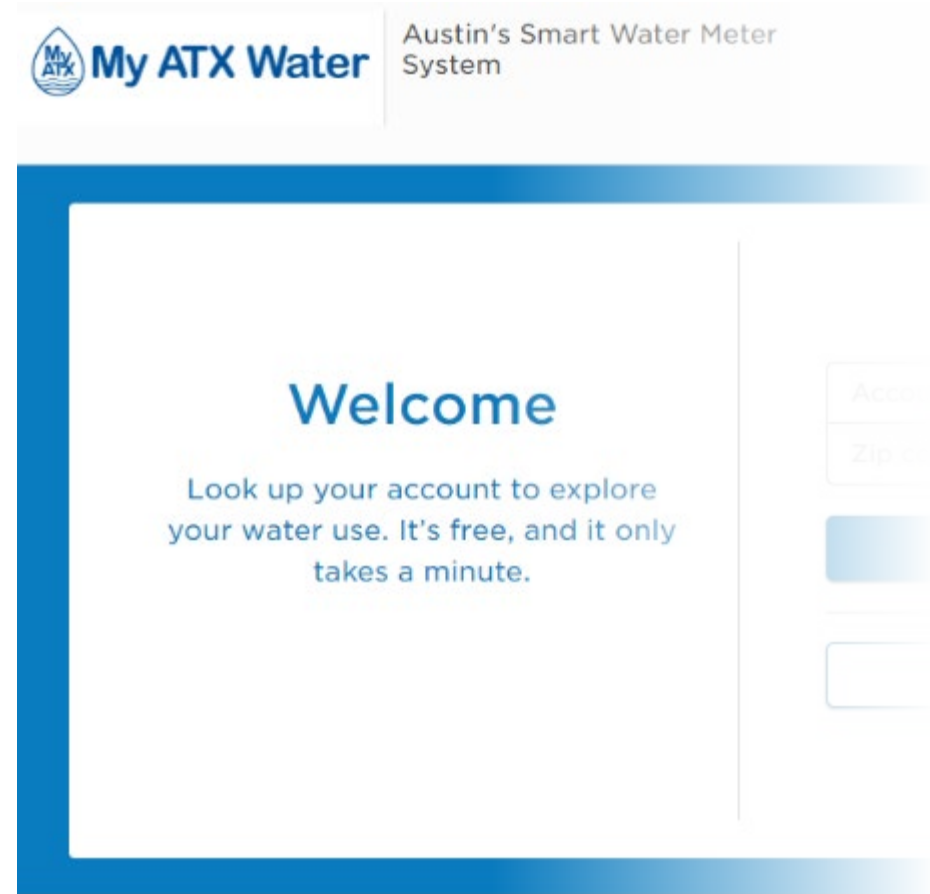
BOIL WATER NOTICE: All Austin Water Customers MUST boil water for 2 full minutes before using it for eating or drinking. Water mu... <https://evb.gg/n#14ooooos2om>

AVISO PARA HERVIR AGUA: Todos los clientes del Departamento de Agua de Austin DEBEN hervir el agua por 2 minutos completos antes ... <https://evb.gg/n#nqeeeebzes>

Emergency Notifications

My ATX Water Customer Portal

- 💧 **Nearly 950,000 email and text messages sent**
 - Text Messages averaged **1,800/minute**
 - Emails averaged **675/minute**
- 💧 **Continuous Usage - Leak Alerts**
 - Currently available to customers in the pilot where new meter is installed
 - **4,190 Alerts** based on hourly water usage change
 - Email alert provided to 2,030 accountholders; 62% open rate
 - **4,504 Alerts** based on monthly water usage change
 - 92% customer satisfaction rate for alerts based on customer feedback through comments



Customer Communications

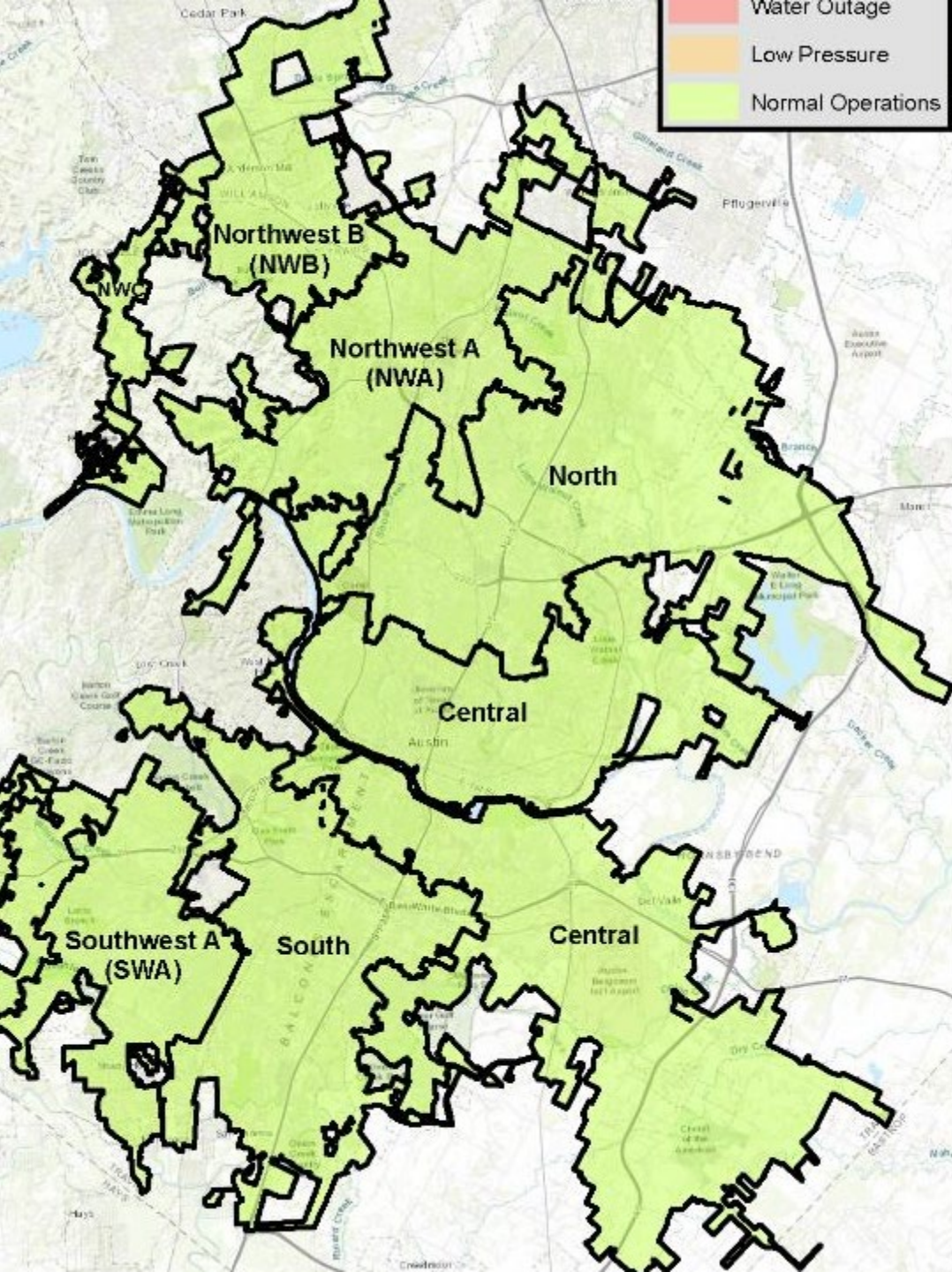
- 💧 **Daily Operational Updates**
- 💧 **Website and Social Media** updates and engagement
 - Received **15,000** comments and direct message questions through social channels
- 💧 Updates to **Frequently Asked Questions**
- 💧 Documents and customer intake form provided in **Spanish, Vietnamese, Chinese and Arabic**
- 💧 **Interactive Online Maps:** Pressure Zone and Boil Water Notice Impacts
- 💧 **Critical Customers**



Customer Communications

Inbound and Outbound Calls

- ◆ **AW's Customer Service Center**
takes customer calls 24-hours a day, every day
- ◆ **Inbound Call Volume**
 - Typical: 50 per day
 - Winter Weather Event: **More than 10,000 per day**
- ◆ **Technology challenges**
resulted in extreme wait times and merging customer calls
- ◆ **Initiated online customer intake form in multiple languages**
 - Received nearly **30,000 requests over four days**
- ◆ **Outbound Calls**
 - Established Virtual Call Center (**60+ AW staff and 24 COA staff**)
 - Contacted customers for service requests, community recovery and apartment complex checks



Next Steps & Immediate Needs

- 💧 Continued **outbound call efforts**
- 💧 Continued **online customer intake form**
- 💧 Online **interactive map**
- 💧 Revisit winter **preparedness communications, collaborating with other utilities** and the **Texas AWWA**
- 💧 Phone system **enhancements**
- 💧 **After Action Review**

Infrastructure Resiliency

Shay Ralls Roalson, PE Assistant Director, Engineering Services



Risk-Based Planning

an “all hazards” approach to resiliency

💧 **Effective Utility Management Principles**

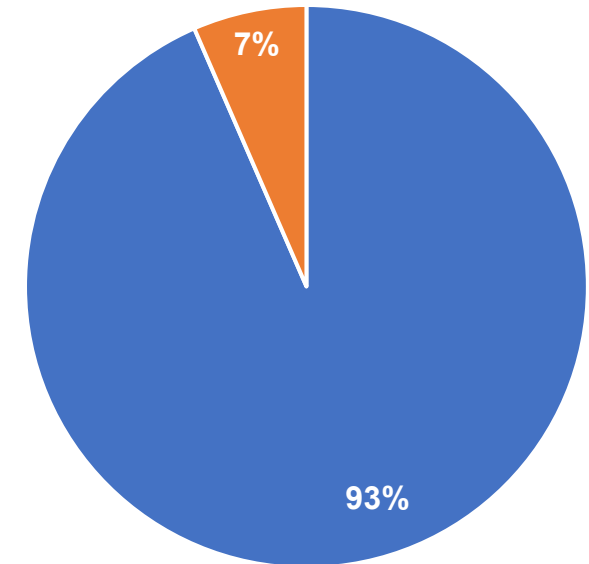
- Address critical asset risks
- Demonstrate maintenance excellence

💧 **\$1.07 billion 5-year CIP**

- 93% direct investment in utility infrastructure

💧 **Zero-based budget**

- Built from the ground up
- Reviewed annually
- 5-, 10-, and 20-year plans analyzed for delivery feasibility and rate impacts



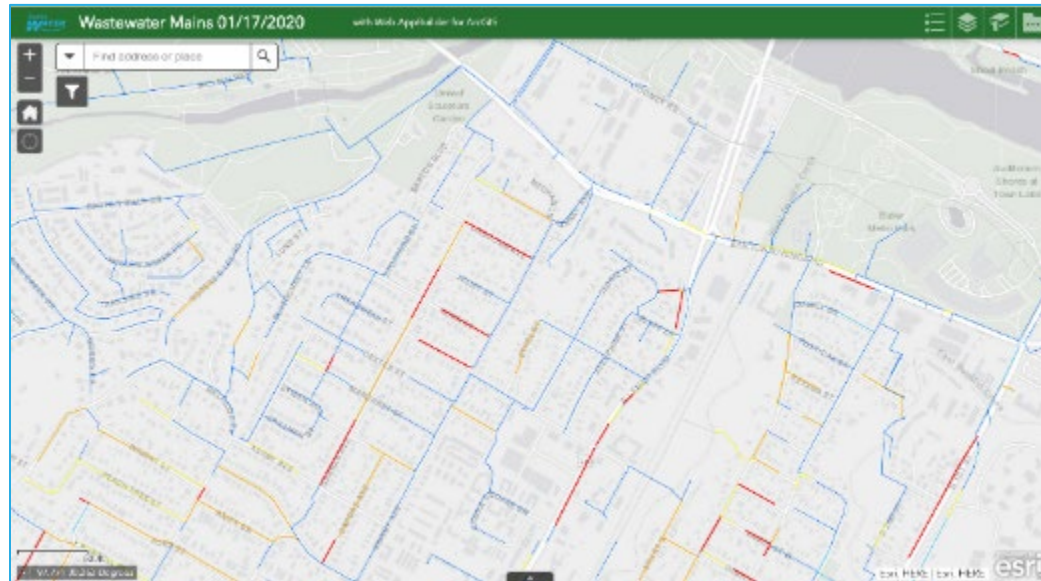
■ Infrastructure

■ IT, vehicles, wildlands, personnel facilities

Asset Management

the foundation of risk management

- 💧 Asset condition and criticality
 - Risk = likelihood of failure x consequence of failure



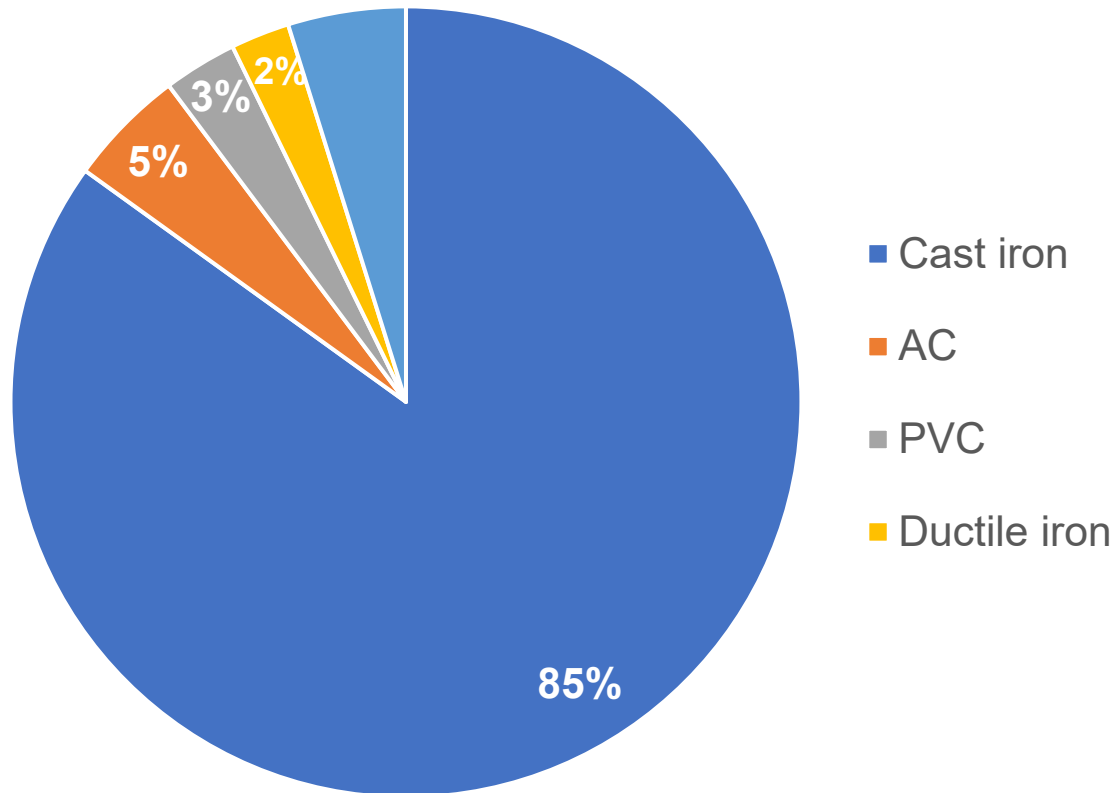
Horizontal assets
pipelines



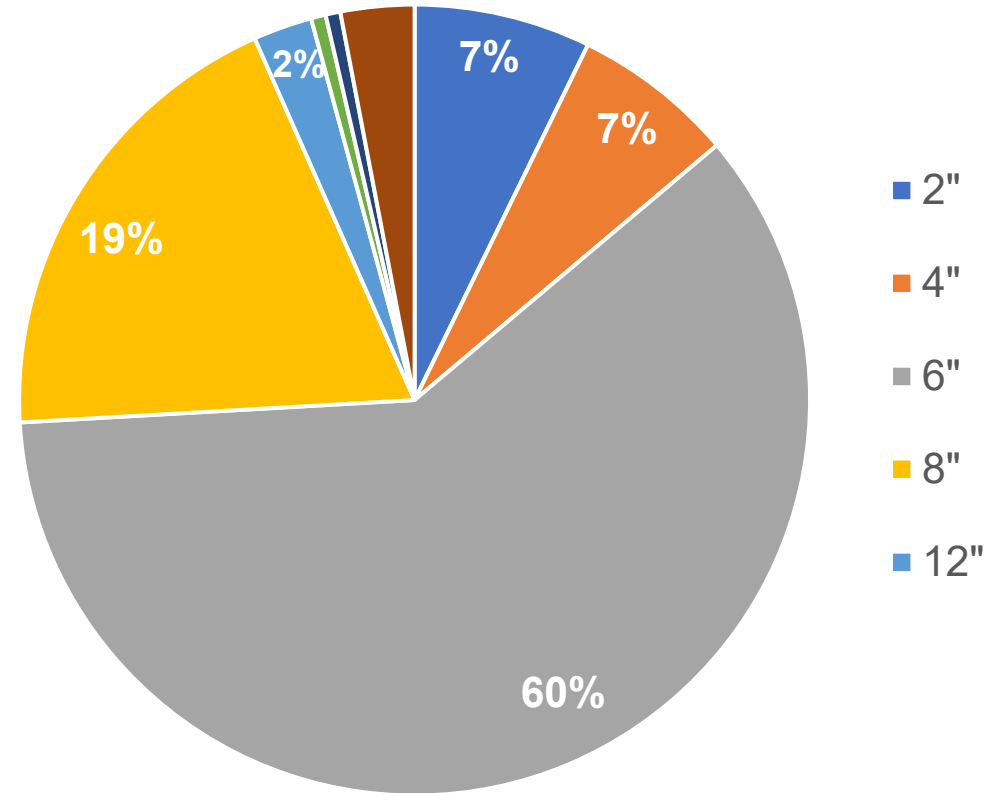
Vertical assets
treatment plants, lift stations,
reservoirs, pump stations

Winter Storm

166 public side pipe breaks



Pipe Material



Pipe Diameter

Data Analytics

supports risk-based decision making

💧 Main break analysis – last 10 years

- 76% of main breaks were cast iron pipe
- Only a fraction of cast iron pipes experienced a break

💧 Cast iron pipe

- 27% of pipe in our system
- Replacement value of \$1.3 billion

💧 Data analytics tools

- Target renewal funding where it's needed



Renewing Austin programmatic approach reduces risk

Since 2011

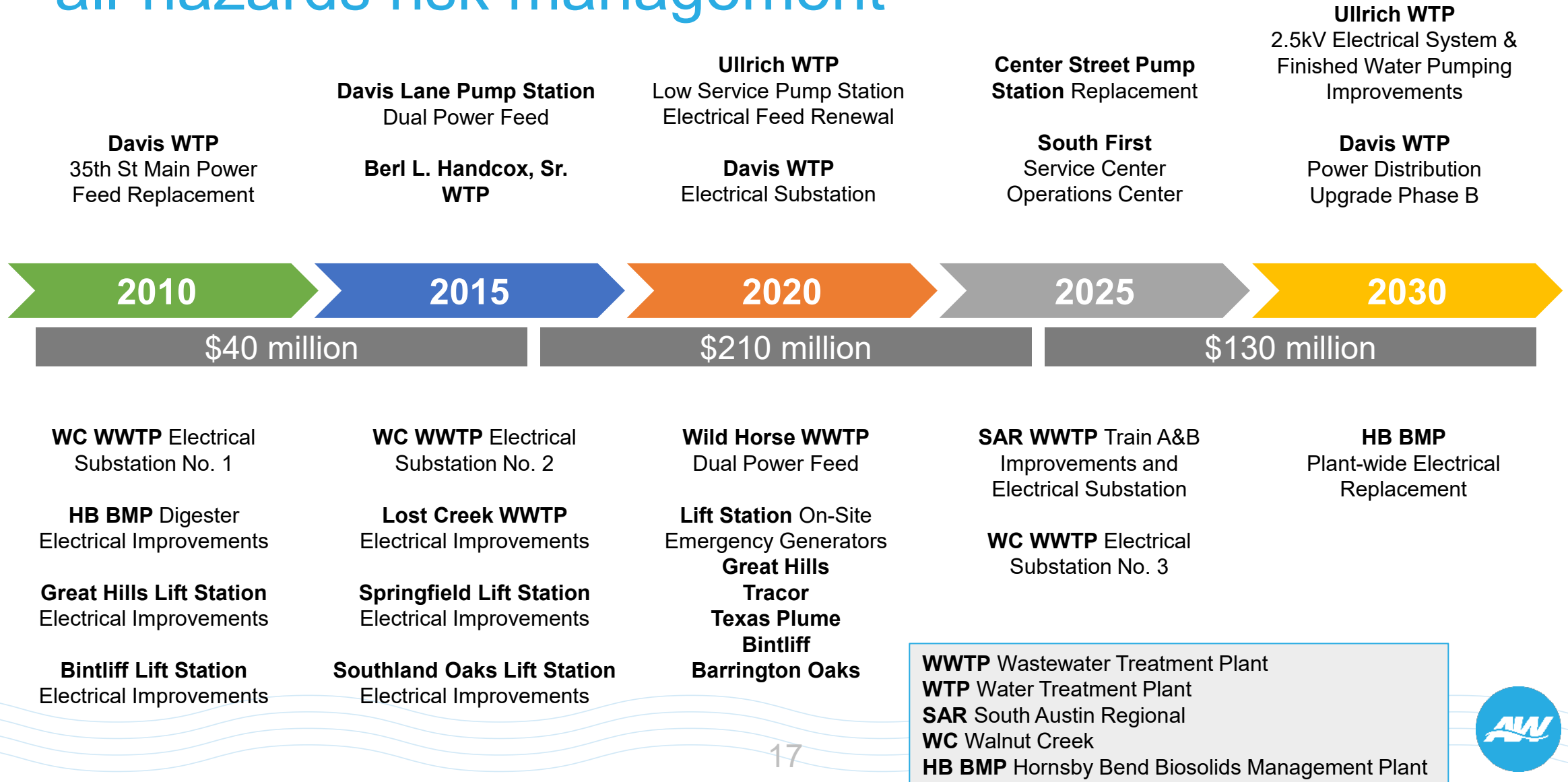
- 💧 **57 miles of pipe replaced**
- 💧 **\$115 million construction cost**
- 💧 **Annual breaks declined 43%**
 - 11 breaks per 100 miles
 - Below industry average of 14

5-Year CIP

- 💧 60+ pipeline renewal projects
- 💧 Located across Austin



Electrical System Renewal all-hazards risk management



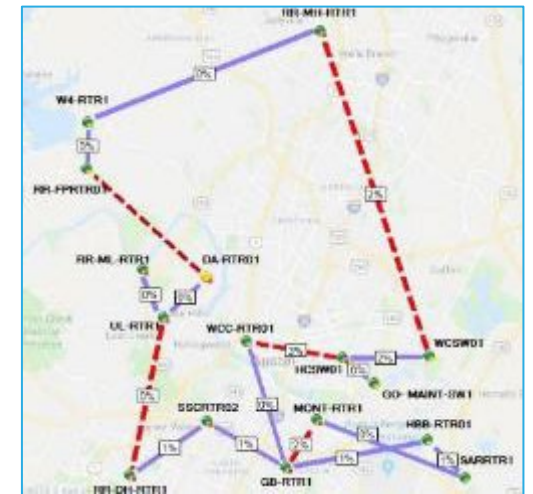
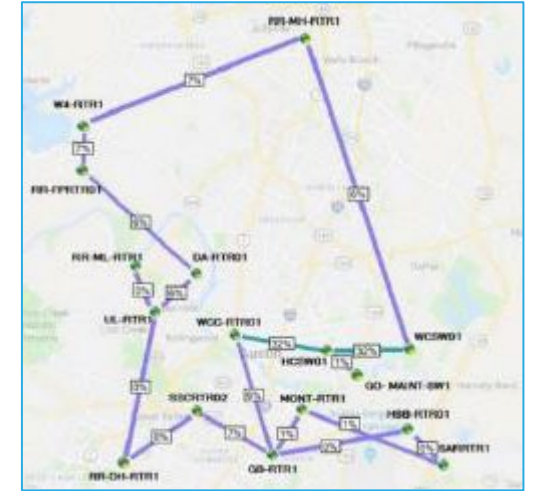
Communications and Controls winter storm success story

💧 Communications network of radios and fiber optic

- Distribution system
 - pressure points, pump stations, reservoirs
- Collection system
 - lift stations
- Water and wastewater treatment plants

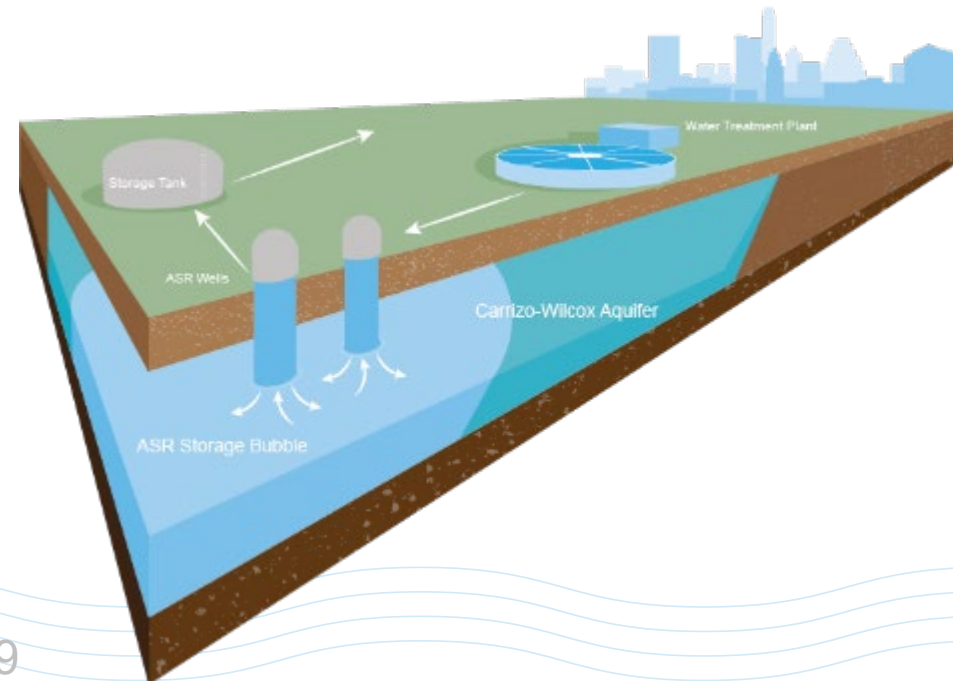
💧 Radio upgrades and cellular links

- Power outages caused fiber optic system outages
- Cellular links maintained communication and remote access



Strategic Investments build resilience

- 💧 My ATX Water
- 💧 Reclaimed Water
- 💧 Aquifer Storage and Recovery



Strategic Investments build reliability



**Ullrich WTP Low Service Pump Station
Electrical Feed Renewal**



North Austin Reservoir and Pump Station

Winter Storm Response CIP Projects to Accelerate

- 💧 Expand Renew Austin program
- 💧 Accelerate water storage CIP projects
- 💧 Accelerate operations center improvements
- 💧 Continue programmatic approach to electrical resiliency
- 💧 Purchase bulk water truck





Questions and Discussion

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