

# WINTER STORM EVENT BRIEFING

Austin Water Oversight Committee | April 19, 2021



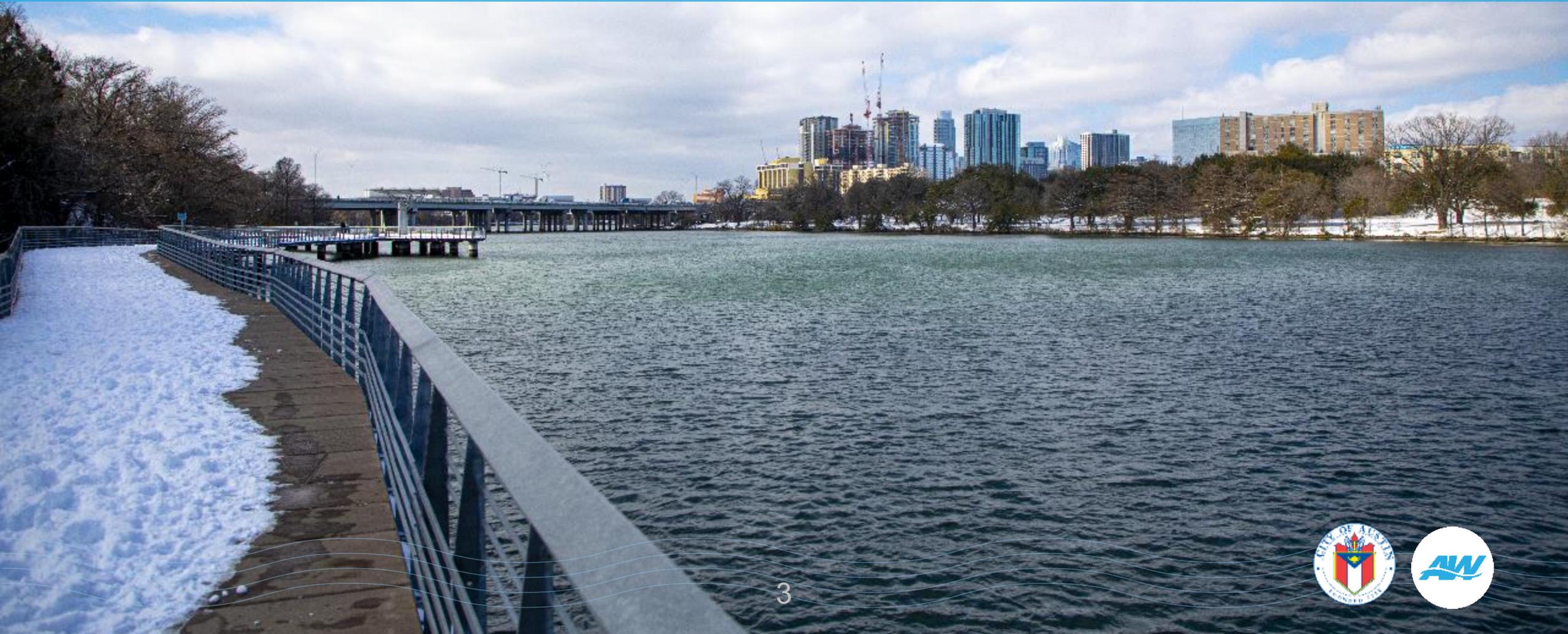
# Agenda

**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>

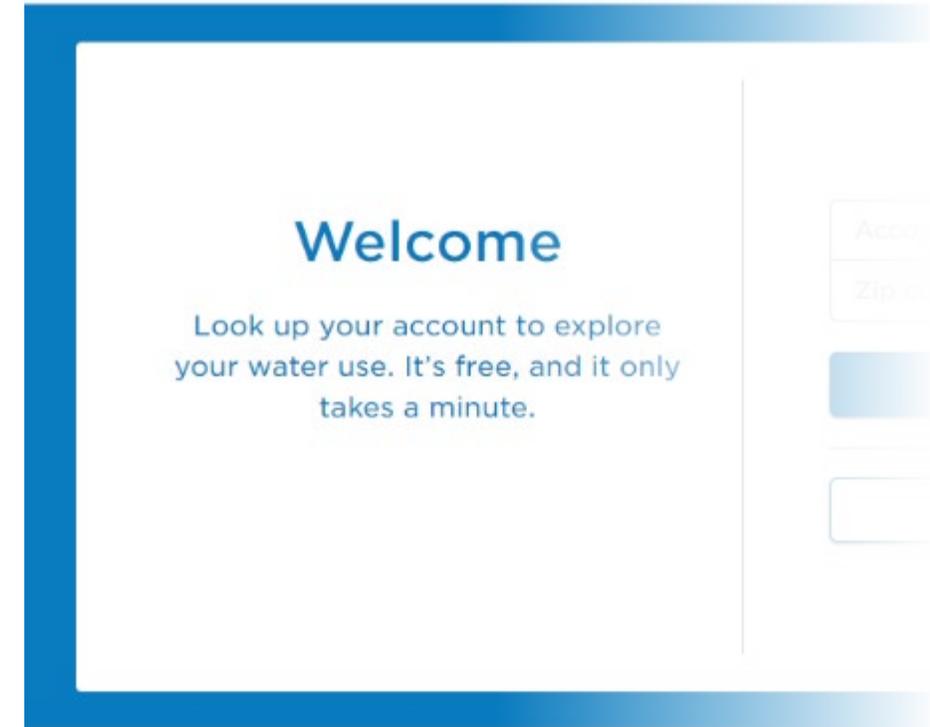
# Emergency Notifications

## 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 account holders; 62% open rate
  - **4,504 Alerts** based on monthly water usage change
    - 92% customer satisfaction rate for alerts based on customer feedback through comments



Austin's Smart Water Meter System



# 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**

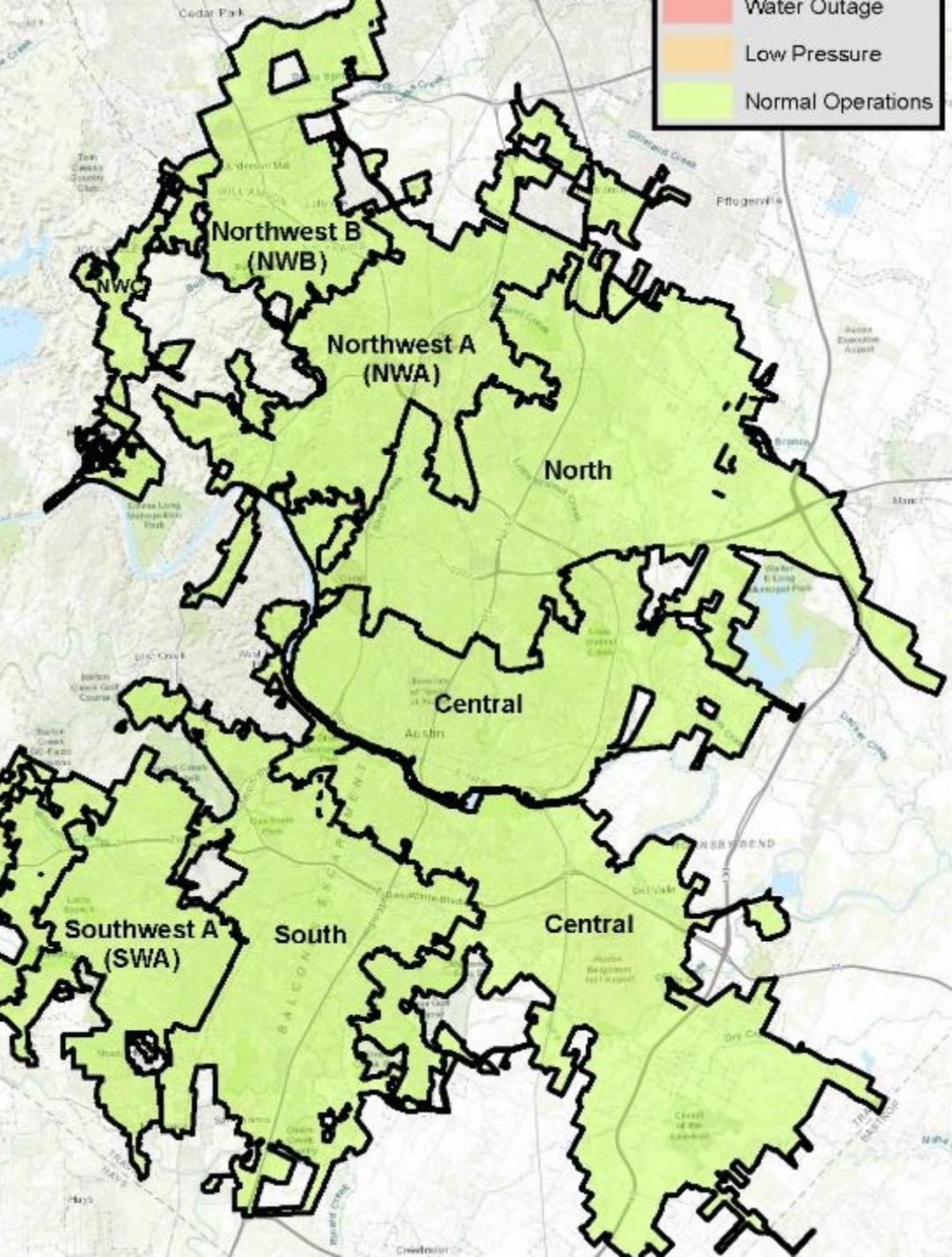


# Customer Communications

## 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**

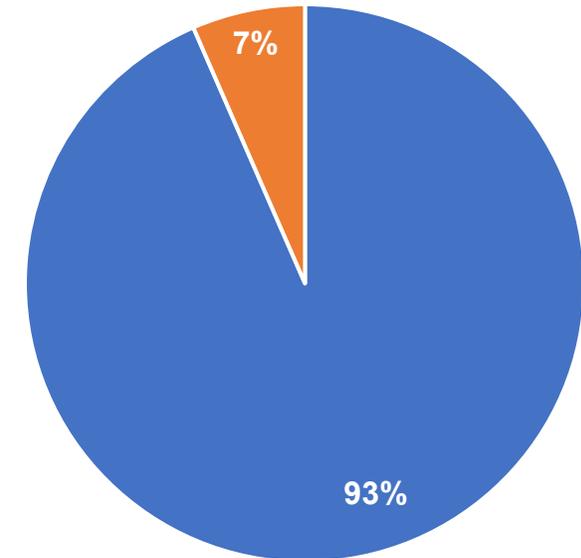
- Address critical asset risks
- Demonstrate maintenance excellence

### 💧 **\$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



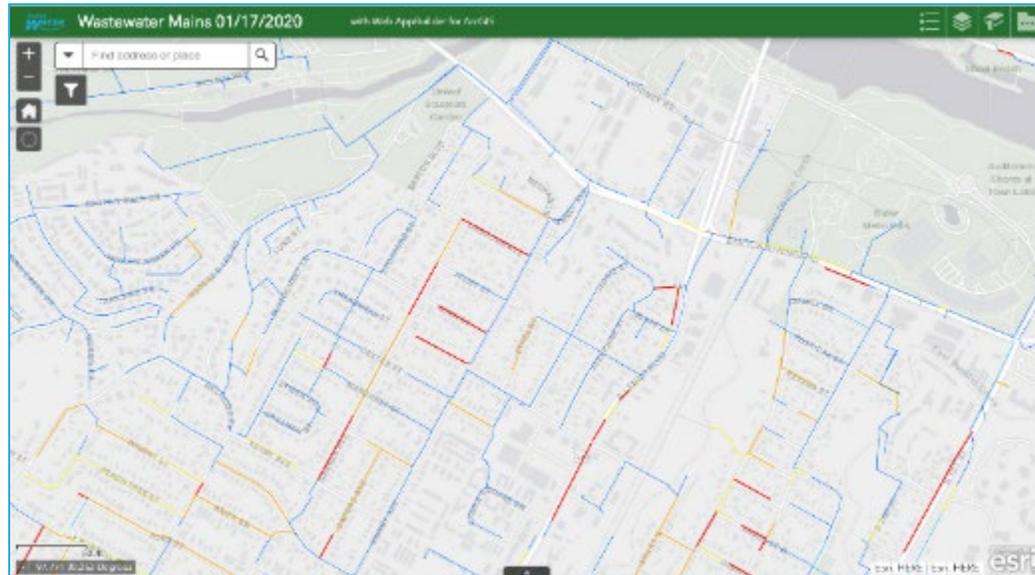
■ Infrastructure

■ IT, vehicles, wildlands, personnel facilities

# Asset Management

## the foundation of risk management

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



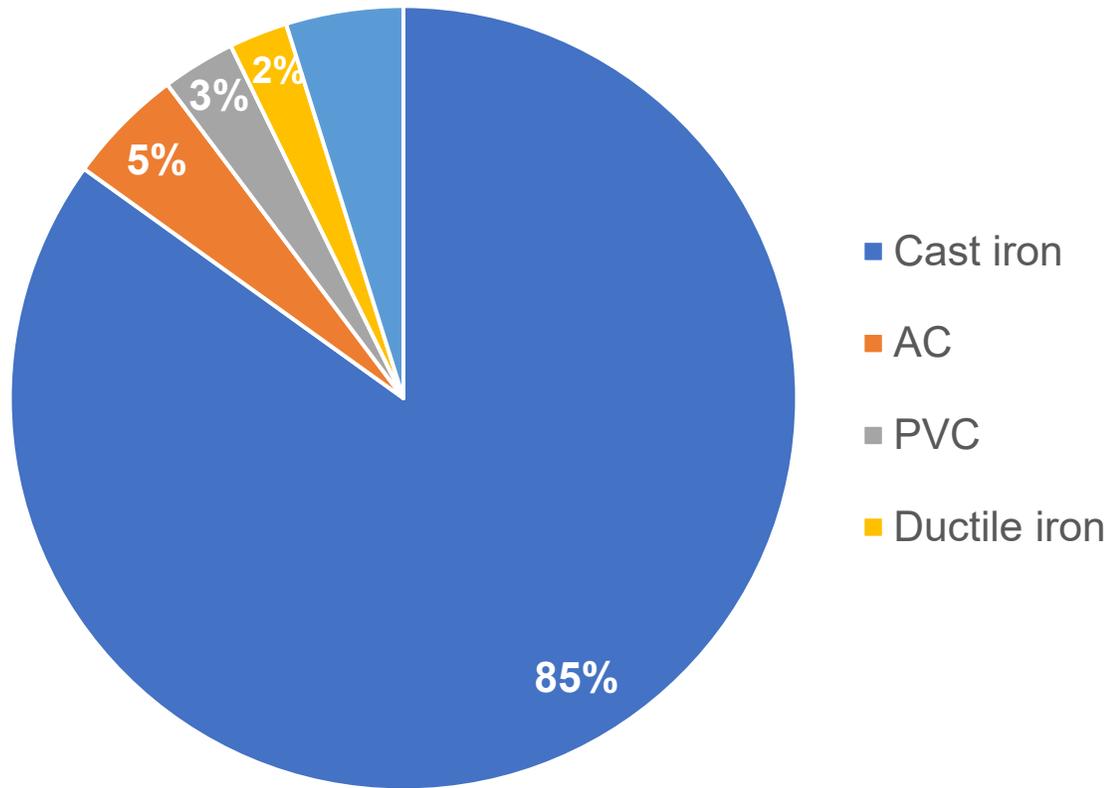
**Horizontal assets**  
pipelines



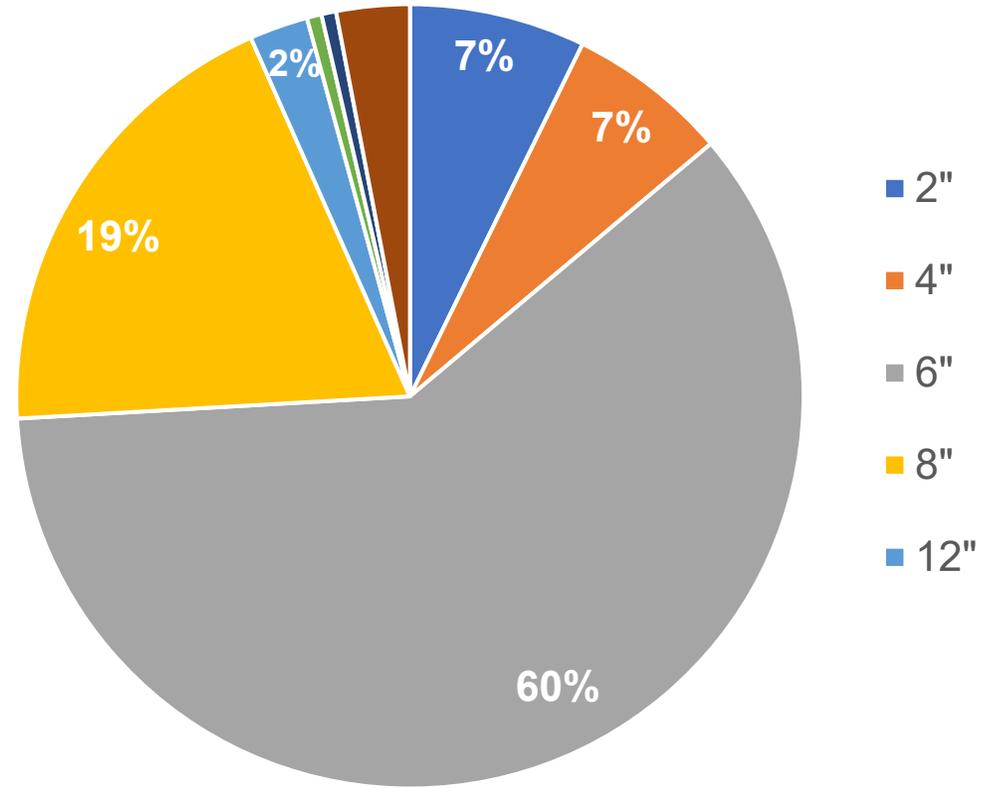
**Vertical assets**  
treatment plants, lift stations,  
reservoirs, pump stations

# 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 programmatically approach reduces risk

Since 2011

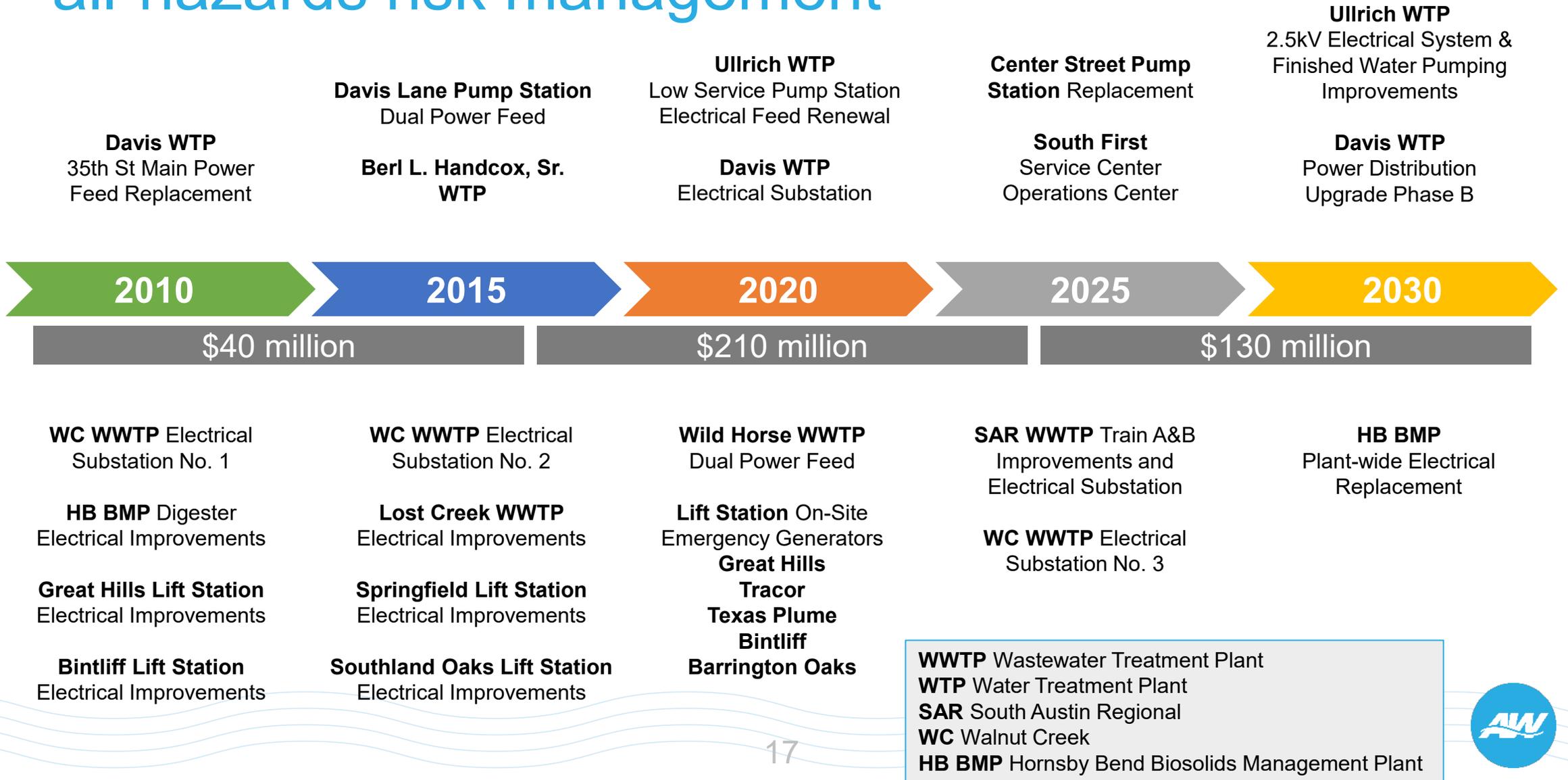
- 💧 **57 miles of pipe replaced**
- 💧 **\$115 million construction cost**
- 💧 **Annual breaks declined 43%**
  - 11 breaks per 100 miles
  - Below industry average of 14

5-Year CIP

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



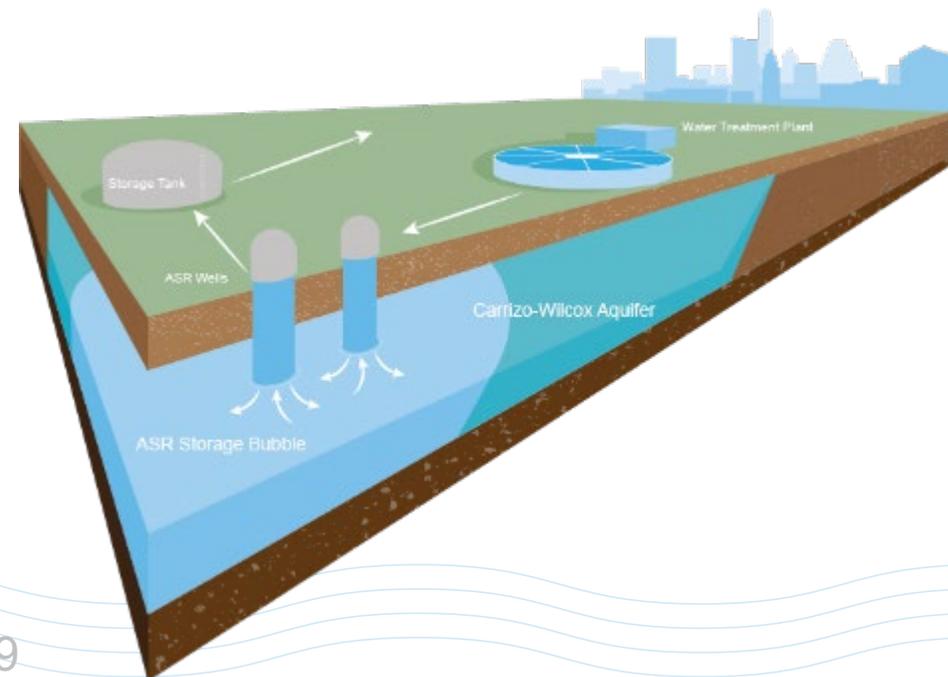
# Electrical System Renewal all-hazards risk management





# 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**

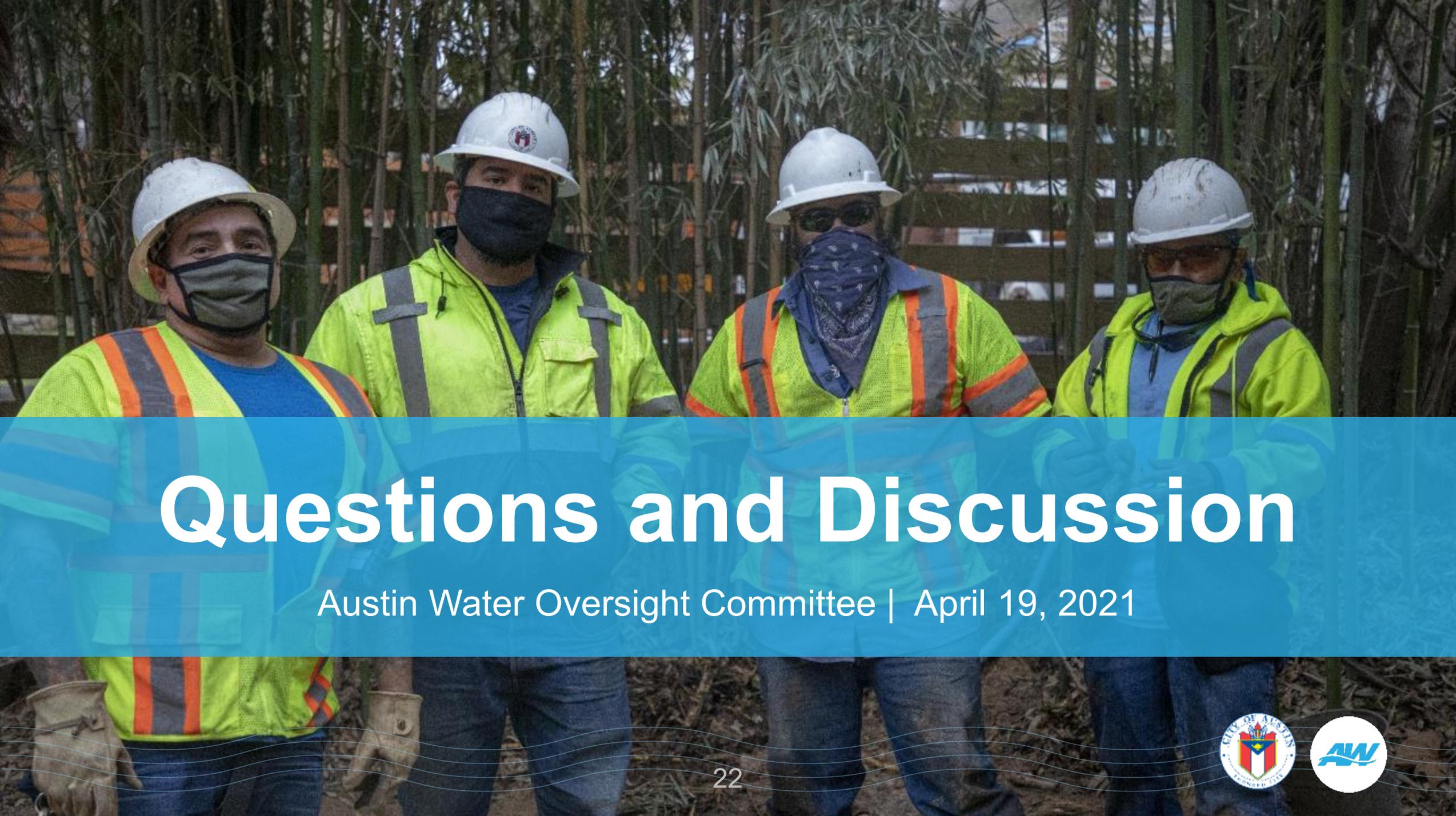


**North Austin Reservoir and Pump Station**

# 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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