

WATER FORWARD

REUSE STRATEGIES

One City, One Water: A plan for the next 100 years

Presented by Austin Water Director

Shay Ralls Roalson, P.E.

City Council Work Session February 27, 2024



Agenda

- 💧 **Water Forward Overview**
- 💧 **Reuse Strategies**
- 💧 **Addressing Affordability**
- 💧 **Key 2024 Activities to Advance Reuse**

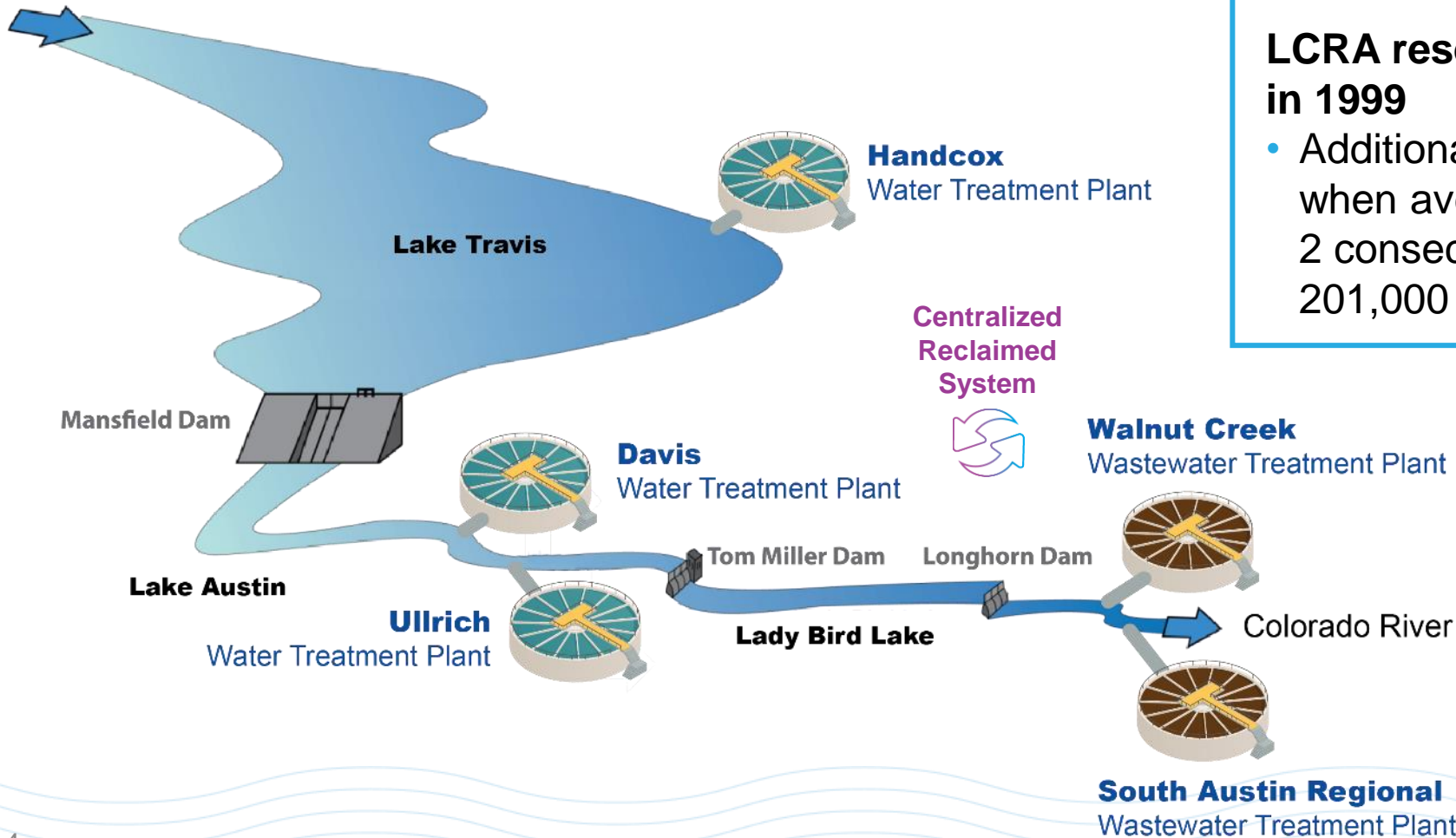
Water Forward

Water Forward is **Austin's 100-year integrated water resource plan**, unanimously adopted by Council in November 2018. Water Forward identifies diverse and environmentally conscious water management strategies to **adapt to growth, drought, and climate change** and ensure a sustainable, resilient, equitable, and affordable water future for our community.

Austin's Water

Colorado River + Highland Lakes

Lake Buchanan



Colorado River:

- Combination of State-granted water rights & long-term contract with LCRA
- Up to 325,000 acre-feet per year (afy)

LCRA reservation & use fees pre-paid in 1999

- Additional use payments trigger when average for 2 consecutive years exceeds 201,000 afy

Water Forward Guiding Principles

Water Forward is updated on a 5-year cycle. The updated plan will be submitted for Council Approval in November 2024.

Resiliency

Inclusive approach +
Community values

Diverse strategies

Equity +
Affordability

Protect the
Colorado River

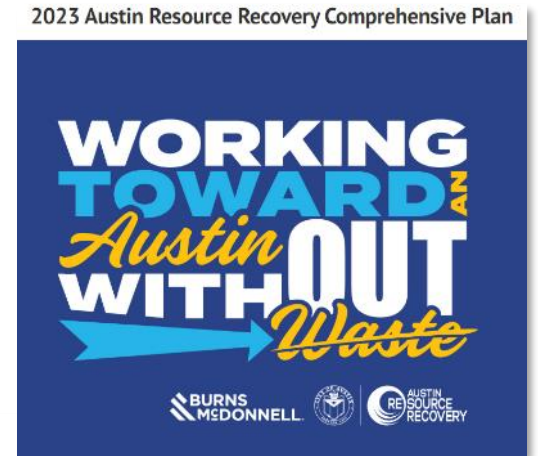
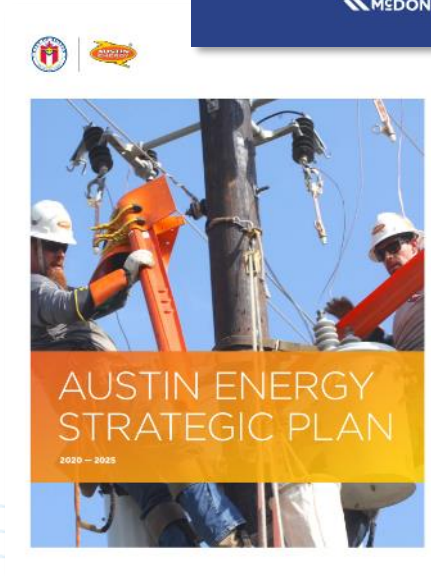
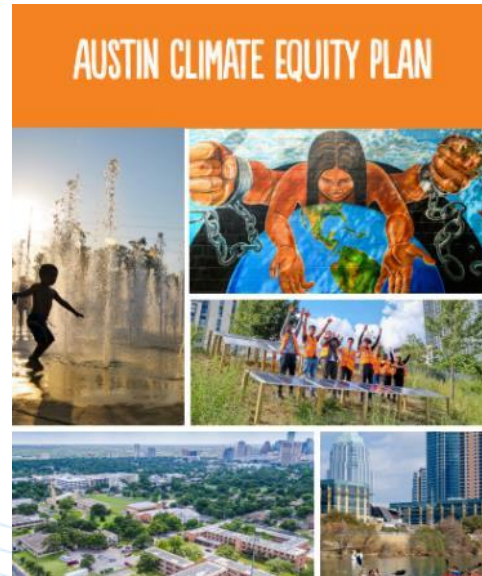
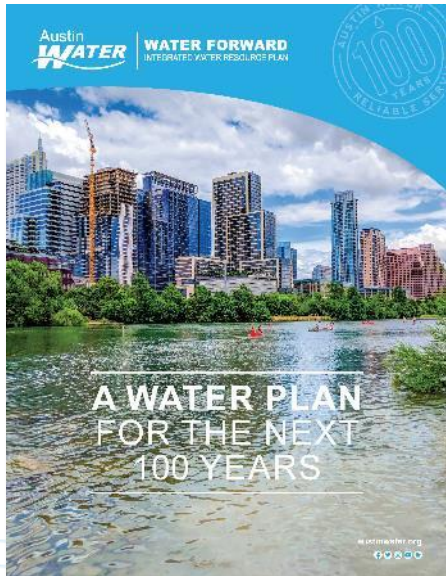
Reduce
operational risks

Focus on
local supplies

WATER FORWARD

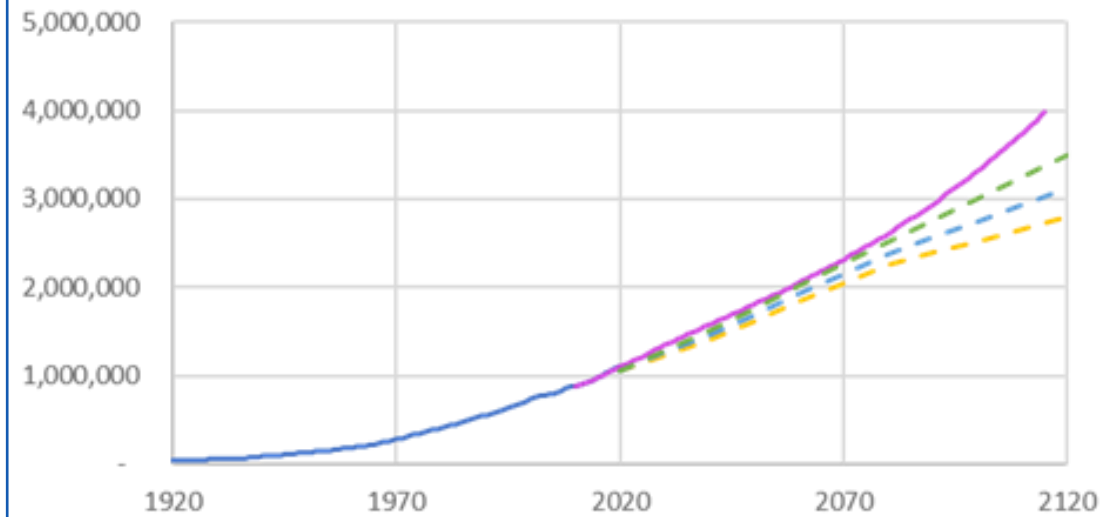
One City One Water One Approach

- 💧 Environmental Sustainability & Climate Equity
- 💧 Affordability
- 💧 Reliability & Resiliency

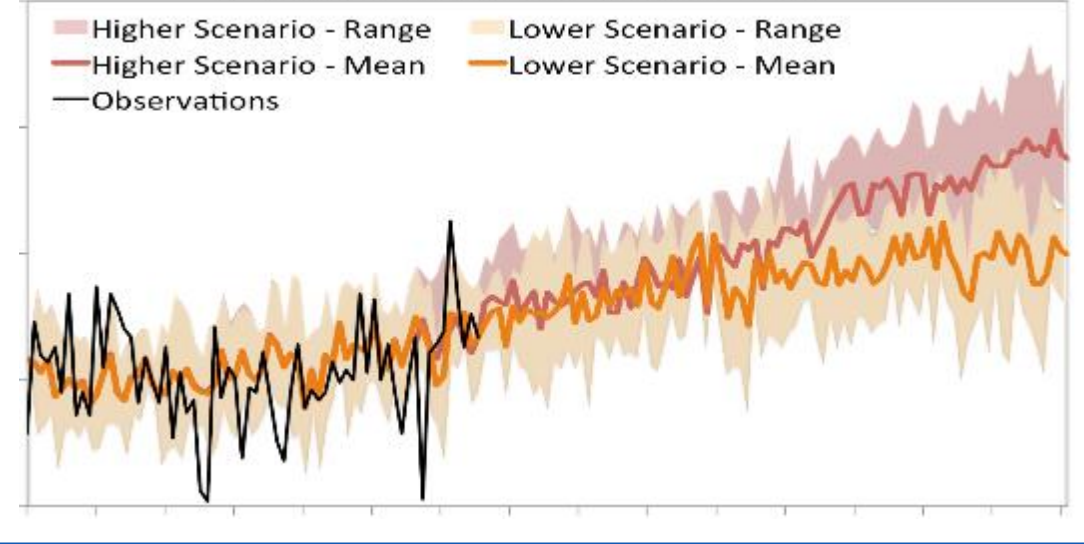


Planning for Uncertainty

Population Growth

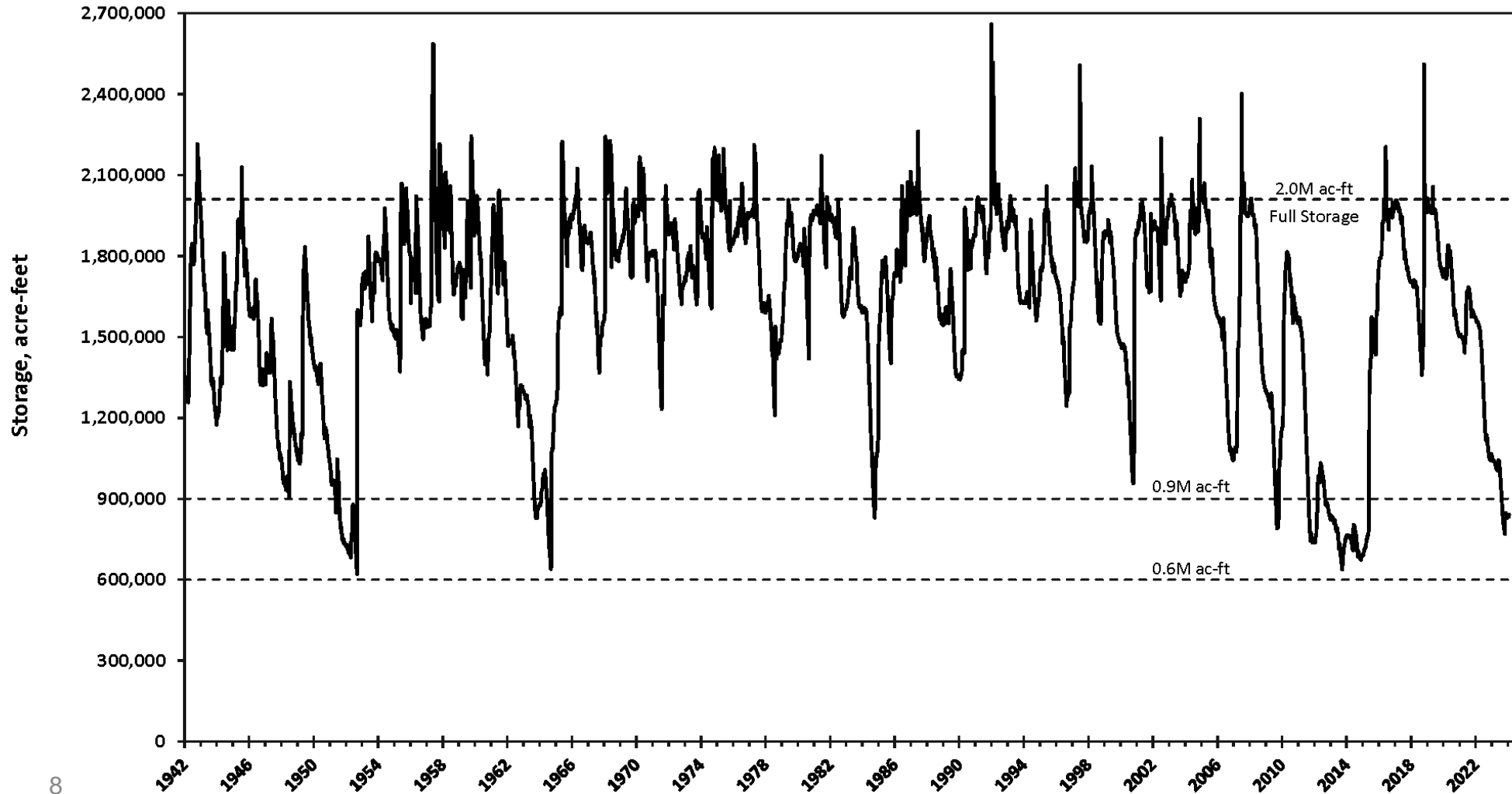


Climate Change



Combined Storage

Lakes Buchanan and Travis



Water Forward Strategies



Reuse



Conservation



Supply



Partnerships

Why Now? Why Reuse?



Value of Reuse

Colorado River + Highland Lakes

Lake Buchanan

Lake Travis

Mansfield Dam

Lake Austin

Handcox
Water Treatment Plant

Davis
Water Treatment Plant

Ullrich
Water Treatment Plant

Tom Miller Dam
Longhorn Dam
Lady Bird Lake

Centralized
Reclaimed
System

Walnut Creek
Wastewater Treatment Plant

Colorado River

South Austin Regional
Wastewater Treatment Plant

- 💧 **Affordability**
 - \$10M+ Annual Cost Savings to Customers
- 💧 **Reliability & Resiliency**
- 💧 **Environmental Sustainability**

AW & COA Leading the Way

Advancing Reuse



- ◆ **Central Library**
- ◆ **Permitting & Development Center**
- ◆ **Austin Energy Headquarters**
- ◆ **Other Developments**
 - **Austin Peace Academy**
 - **Waterloo Park Restrooms**
 - **Mueller Visitor Center**
 - **Travis County Community Center**



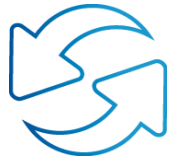
A close-up photograph of industrial machinery, possibly a pump or valve, with a blue semi-transparent overlay across the center. The machinery features several hexagonal bolts and a textured metal surface. The text "Reuse Strategies" is prominently displayed in white on the blue overlay.

Reuse Strategies

Water Forward

Reuse & Conservation

Implementation Highlights



Reuse

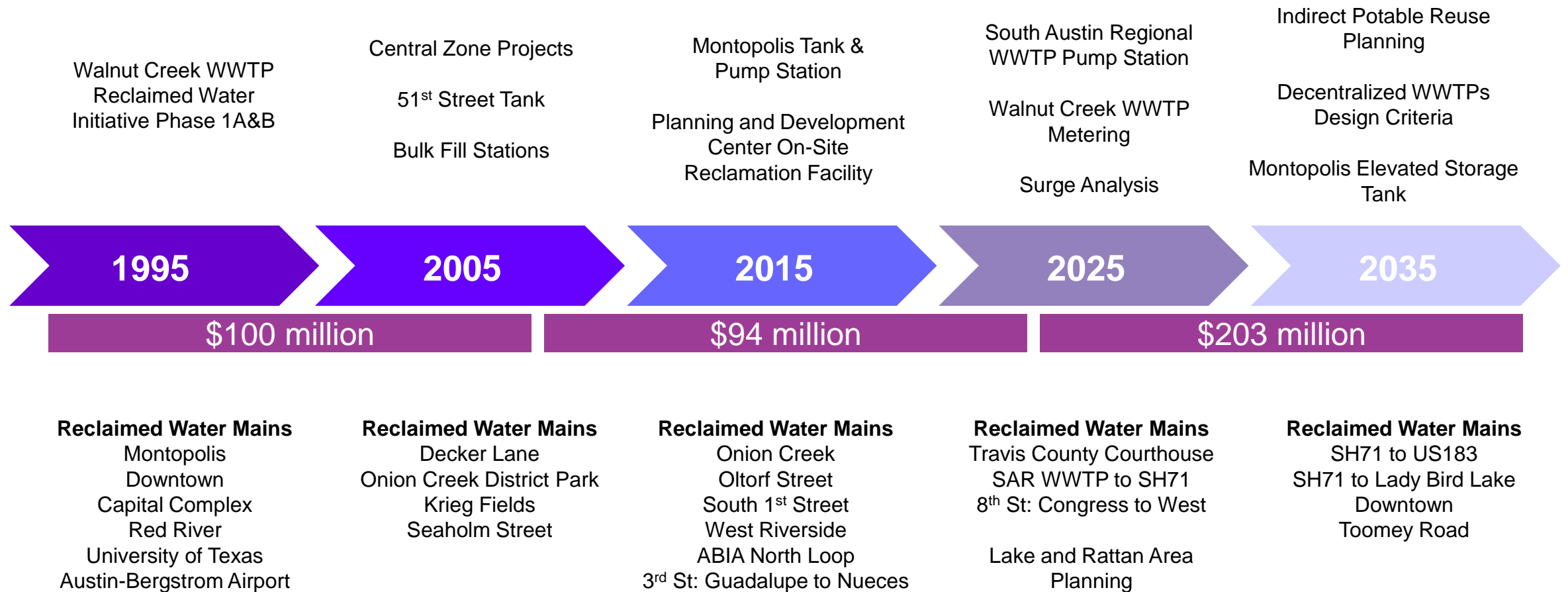
- ✓ Onsite Water Reuse System (OWRS) regulatory framework and incentive approved by Council
- ✓ New Voluntary Reclaimed Water Connection incentive developed



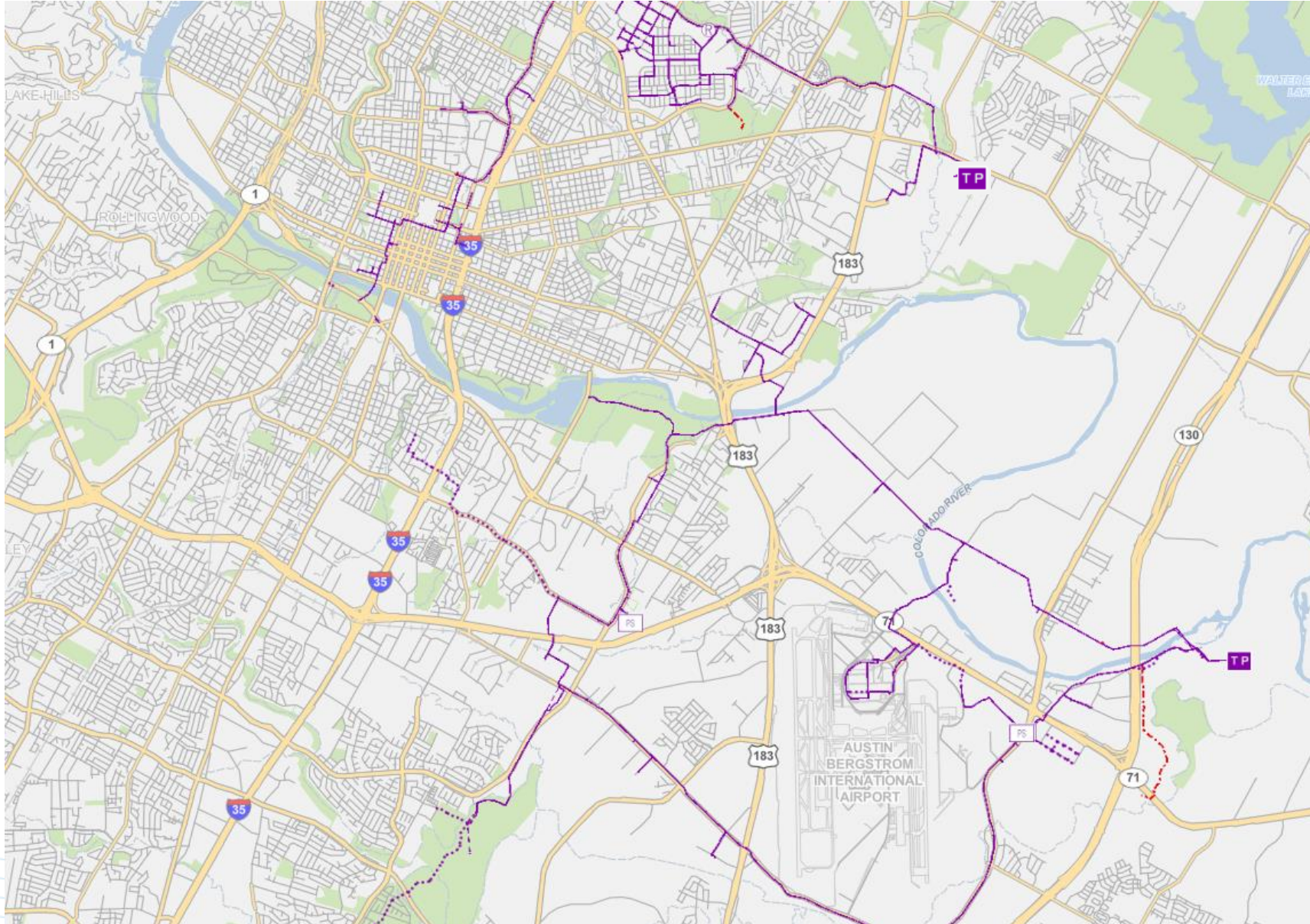
Conservation

- ✓ Water benchmarking, onsite water reuse, and extension of reclaimed water connection requirements approved by Council

Investments to Advance Reuse



Advancing Reuse across Austin



Reuse Strategies



💧 New Affordability Incentives

Incentives to support expansion and adoption of reuse strategies

💧 Reclaimed Water System

Expanding AW's centralized reclaimed water system

💧 Community-scale Reclaimed Water

Localized treatment facilities and distribution systems

💧 Onsite Water Capture and Reuse

Commercial and multifamily rainwater, stormwater, graywater, and air conditioning condensate

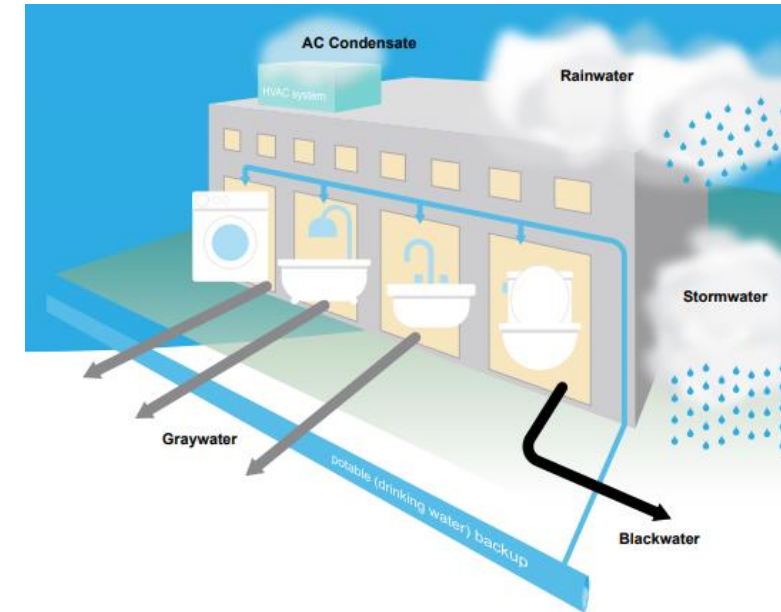


Addressing Affordability

Advancing Reuse



- 💧 Incentives and grants for reuse and conservation
- 💧 Reduced monthly fixed charges
- 💧 Expedited building permit review process
- 💧 Low interest loan program
- 💧 Cost sharing
- 💧 Travis County PACE Loan Program



Funding Strategies

Advancing Reuse



💧 **Community Benefit Charge (CBC)**

- Add an extra \$0.15 per thousand gallons to AW's CBC to fund reclaimed water system expansion and onsite reuse programs

💧 **OWRS Alternative Fee**

- Large developments greater than 500 feet from centralized reclaimed will install dual plumbing and pay a fee to support reclaimed system expansion in place of implementing OWRS

💧 **Purple Choice and Purple Choice Plus**

- Voluntary rate program for AW residential and commercial customers to fund reclaimed system expansion and programs

💧 **Excess Usage Fees**

- Fees applied when potable water allotments from Water Benchmarking are exceeded

Development Size	Current Requirements Effective 12/1/2021	Proposed Updates to Requirements Effective 4/1/2024
Small <250,000 square feet	<ul style="list-style-type: none"> Water Benchmarking Connect to centralized reclaimed water within 250 feet 	<ul style="list-style-type: none"> No Change
Large ≥250,000 square feet <u>without multifamily</u>	<ul style="list-style-type: none"> Water Benchmarking Connect to centralized reclaimed water within 500 feet 	<ul style="list-style-type: none"> Water Benchmarking Connect to centralized reclaimed water within 500 feet; or Install an onsite water reuse system
Large ≥250,000 square feet <u>with multifamily</u> (<i>Exclude projects accredited for Affordability Unlocked or State Low Income Housing Tax Credit</i>)	<ul style="list-style-type: none"> Water Benchmarking Connect to centralized reclaimed water within 250 feet 	<ul style="list-style-type: none"> Water Benchmarking Connect to centralized reclaimed water within 500 feet; or Install an onsite water reuse system; or Install dual plumbing, make ready to connect to centralized reclaimed water, and pay a fee to support reclaimed system expansion, for developments greater than 500 feet from centralized reclaimed water



Key 2024 Activities

Advancing Reuse



March 7: PURPLE PIPE DAY!

- 💧 **Council considers** Code changes for Onsite Water Reuse Systems and Reclaimed Water System Connections
- 💧 **Council considers** reauthorizing existing incentive program
- 💧 **Council considers** Community Benefit Charge increase (\$0.15 per thousand gallons) to fund Reclaimed Water System expansion and Onsite Reuse programs
- 💧 **Council considers** reclaimed water Interlocal Agreement with Travis County.

August

- 💧 Budget adoption, including new rates and incentives for reclaimed water system expansion



Questions?

