

# WATER FORWARD

2024 **PLAN** REPORT



## City Council Work Session

- 💧 Water Forward 2024
- 💧 Water Conservation Plan
- 💧 Drought Contingency Plan

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October 22, 2024

AUSTIN'S 100 YEAR PLAN

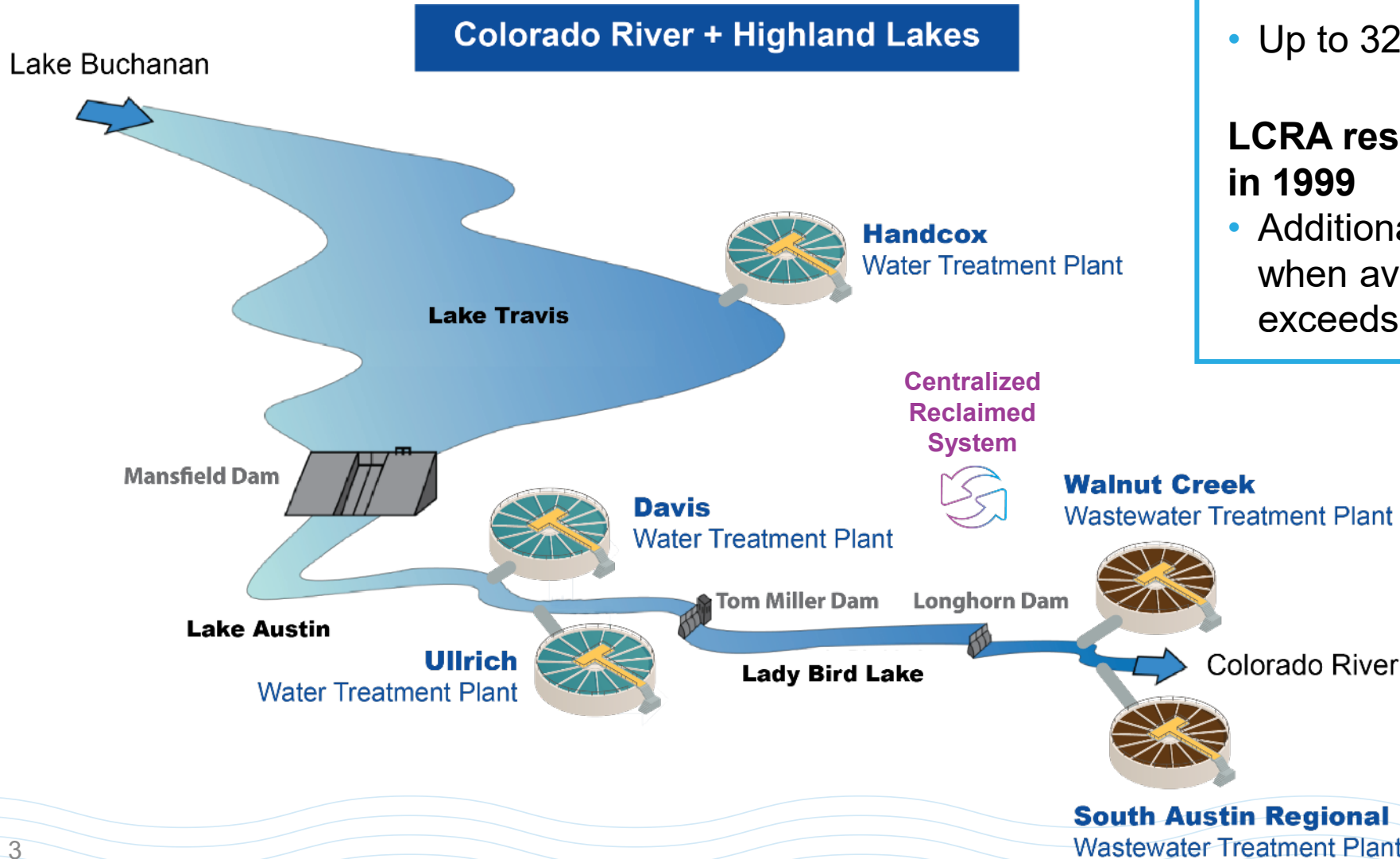


# Water Forward

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:

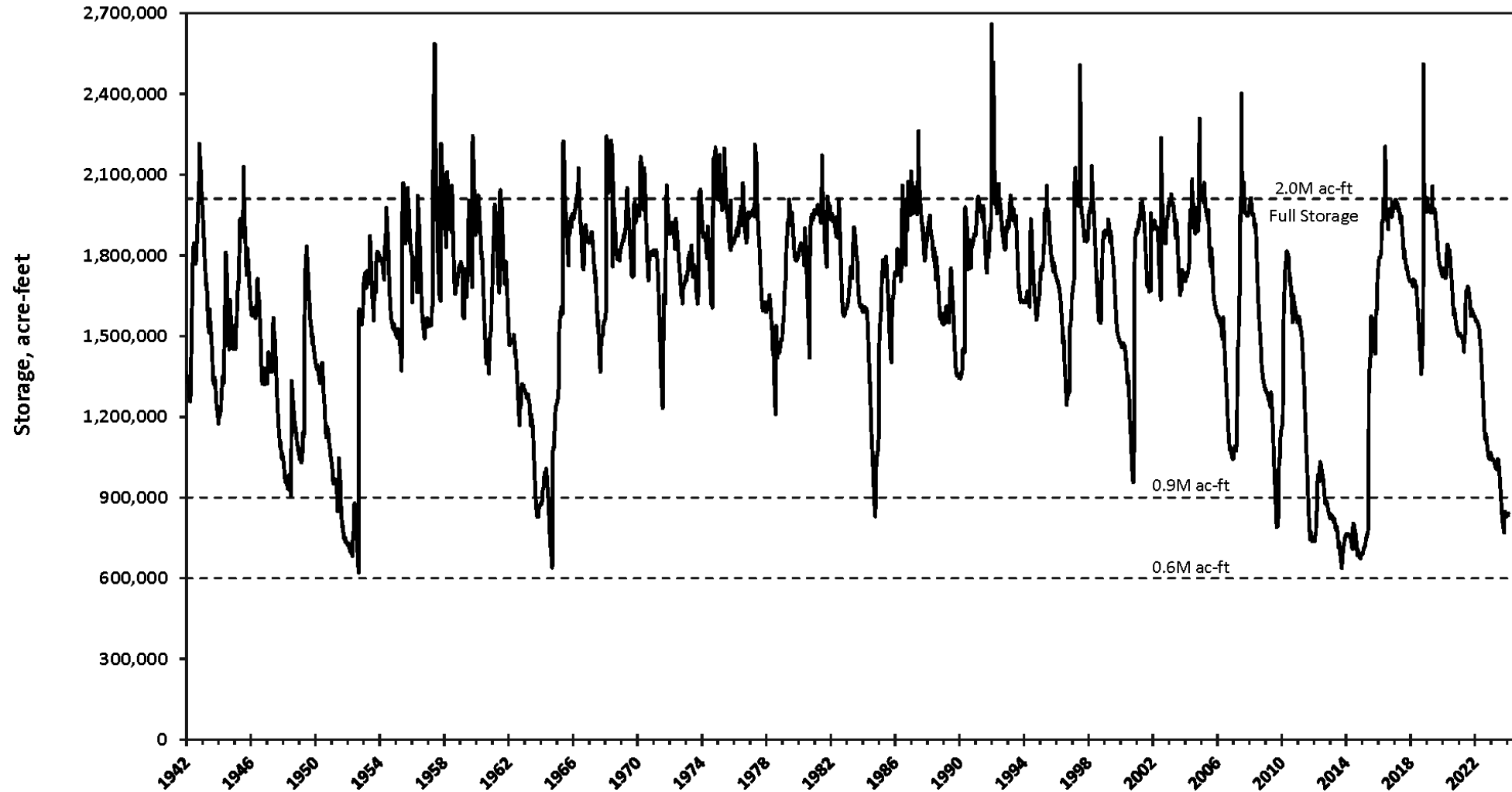
- Combination of State-granted water rights & long-term contract with LCRA
- Up to 325,000 acre-feet per year (afy)

## LCRA reservation & use fees pre-paid in 1999

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



# Combined Storage Lakes Buchanan and Travis



# Water Forward Guiding Principles

Resiliency

Inclusive approach +  
Community values

Diverse strategies

Equity +  
Affordability

Protect the  
Colorado River

Reduce  
operational risks

Focus on  
local supplies



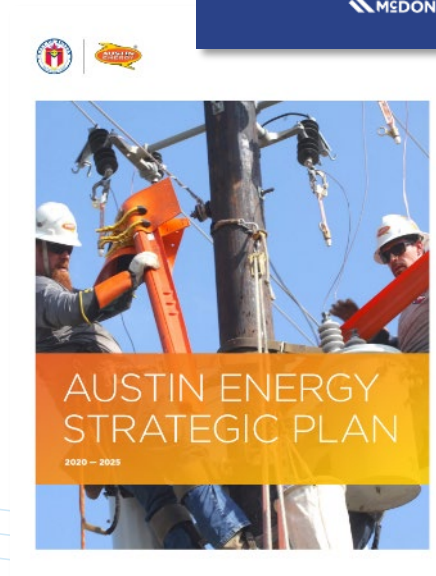
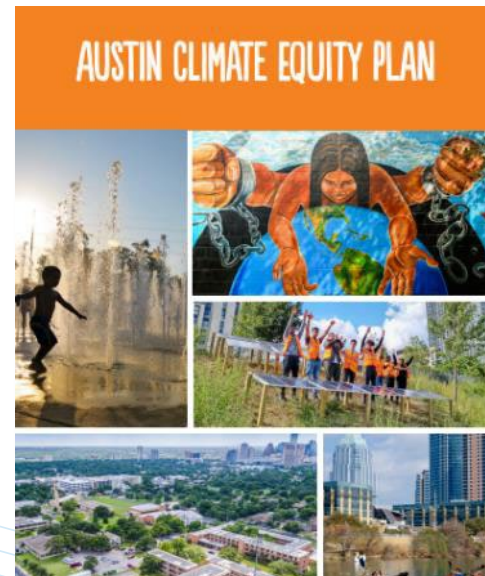
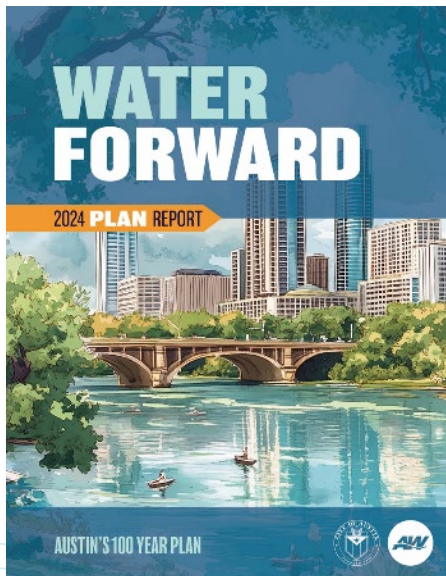
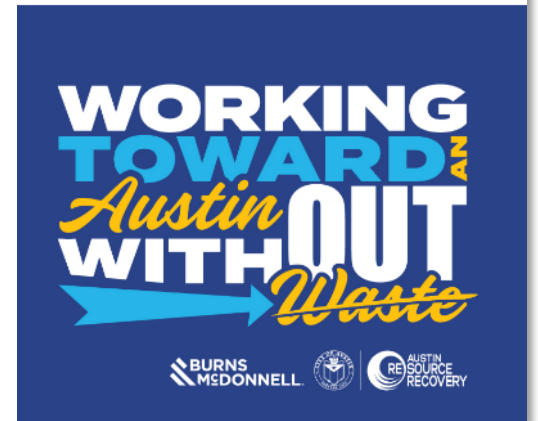
# WATER FORWARD

## One City One Water One Approach

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



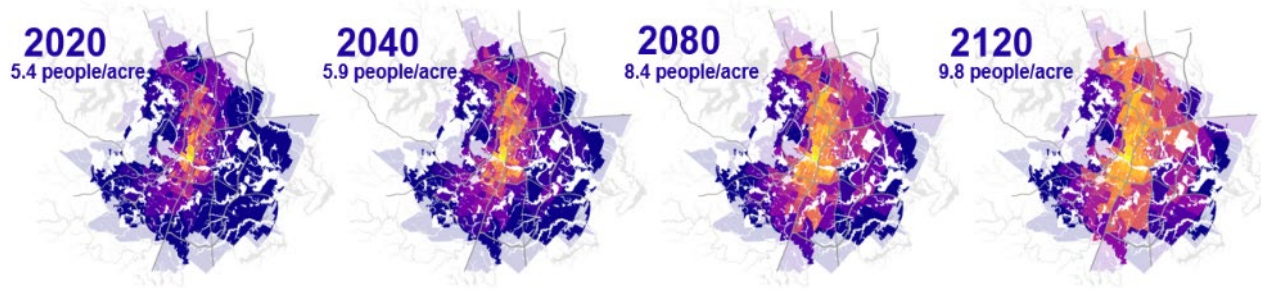
2023 Austin Resource Recovery Comprehensive Plan



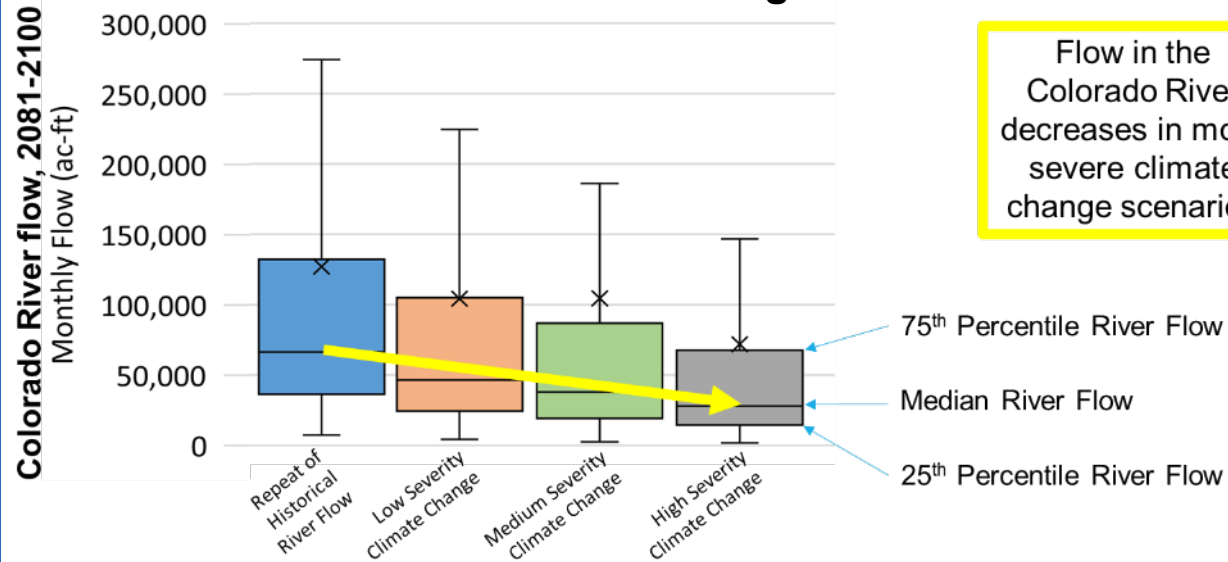


# Planning for Uncertainty

## Population Growth



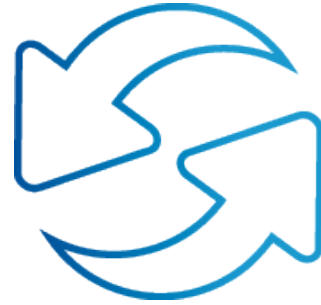
## Climate Change



# Adaptive Management Plan



**Conservation**



**Reuse**



**Supply**

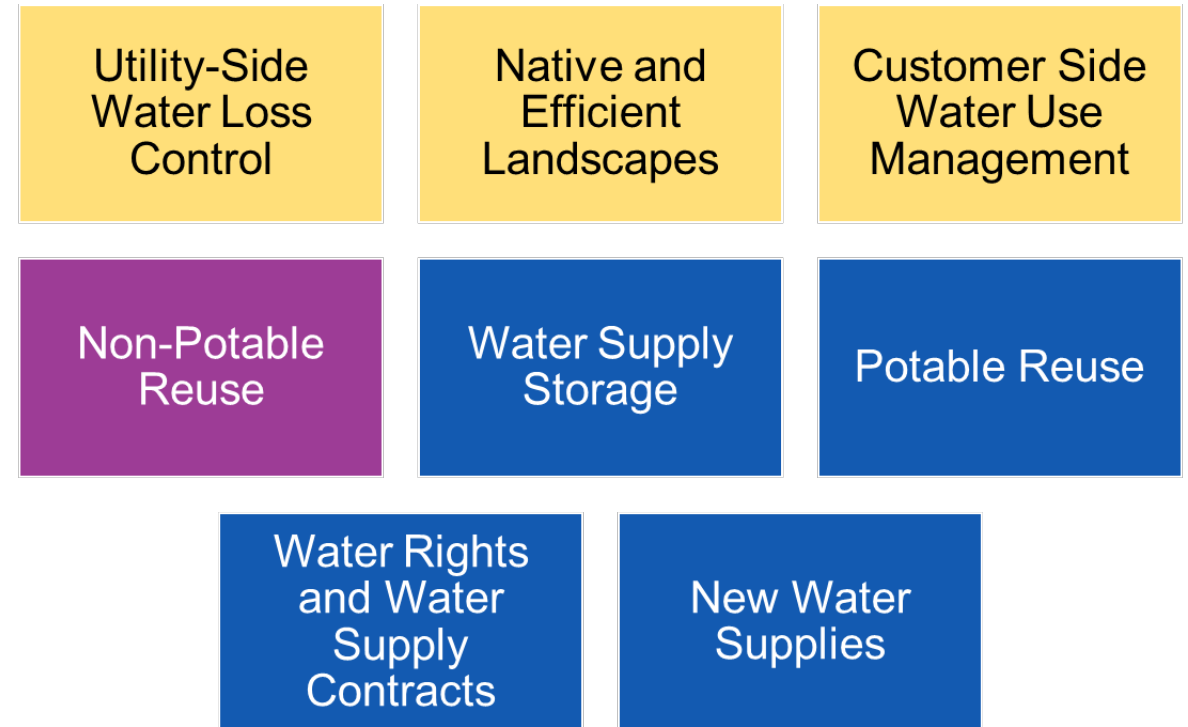


**Partnerships**



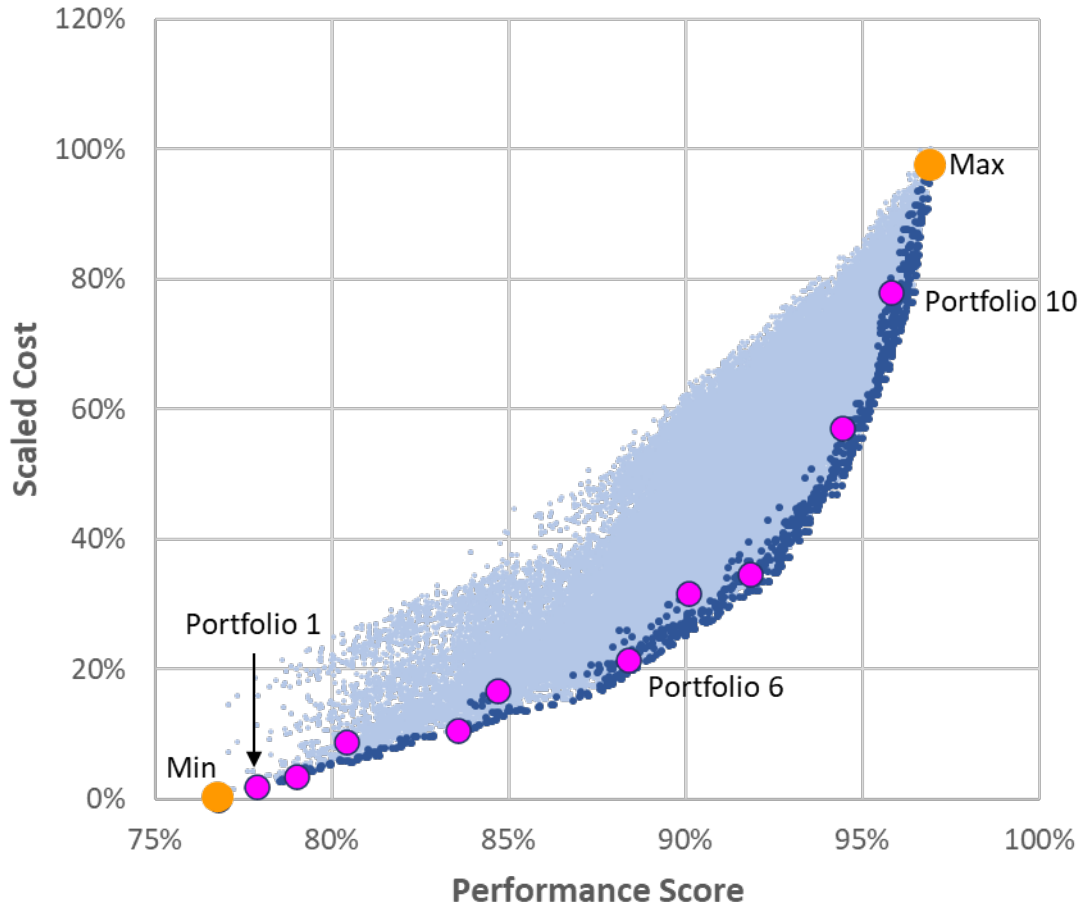
# Plan Development

- Projected water demands
- Developed climate and streamflow projections
- Modeled future supply needs
- Identified strategies



# Portfolio Evaluation

WAVE Analysis Results



		2080 Portfolios										
Strategy		1	2	3	4	5	6	7	8	9	10	
Conservation	Utility-Side Water Loss Control	x	x	x	x	x	x	x	x	x	x	
	Customer-Side Water Use Management	x	x	x	x	x	x	x	x	x	x	
	Native & Efficient Landscaping	x	x	x	x	x	x	x	x	x	x	
Non-Potable Reuse	Centralized Reclaimed	x	x	x	x	x	x	x	x	x	x	
	Decentralized Reclaimed	x	x	x	x	x	x	x	x	x	x	
	Onsite Reuse	x	x	x	x	x	x	x	x	x	x	
Potable Supplies	Water Supply Storage	Aquifer Storage and Recovery	x	x	x	x	x	x	x	x	x	x
		New Off Channel Reservoir							x	x		
		New Off Channel Reservoir with Reuse									x	
	Decker Lake Off Channel Reservoir	x	x		x	x	x					
	Potable Reuse	Direct Potable Reuse					x		x		x	x
		Indirect Potable Reuse		x	x		x	x	x		x	x
	Con-acts	New Lower Colorado River Supply										
	New Water Supplies	Brackish Groundwater Desalination				x	x	x	x	x	x	x
		Seawater Desalination										x
		Interbasin Transfer										x
Conventional Groundwater									x	x	x	

- Candidate portfolio results
- Optimal results for rel. res., and vul.
- Identified portfolios



# Recommended Portfolio



## Utility-Side Water Loss Control

- Production meter improvements
- Expanded active leak detection programs
- Additional analysis of smart meter data



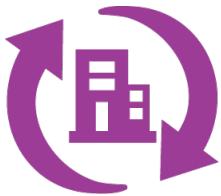
## Customer Side Water Use Management

- Expanded customer incentives for conservation
- Use of smart meter data for customer-side leak identification, education, and outreach
- Water use budgeting



## Native & Efficient Landscapes

- New landscape ordinances & incentives
- Irrigation efficiency incentives
- Landscape conversion programs



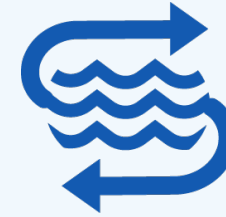
## Non-Potable Reuse

- Onsite Water Reuse Systems
- Decentralized Reclaimed
- Centralized Reclaimed

## Water Supply Storage

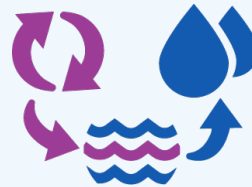


Aquifer Storage and Recovery



Decker Lake Off Channel Reservoir

## Potable Reuse



Indirect Potable Reuse

Strategies reliant on Colorado River and LCRA supplies

## New Water Supplies



Brackish Groundwater Desalination



# Conservation and Drought Planning

## Water Conservation Plan (WCP)

- Plan for all weather conditions
- Describes
  - Utility and water use information
  - Conservation (rebates, education, enforcement)
  - Water loss reduction
  - Reuse activities
- Includes water consumption and water loss goals

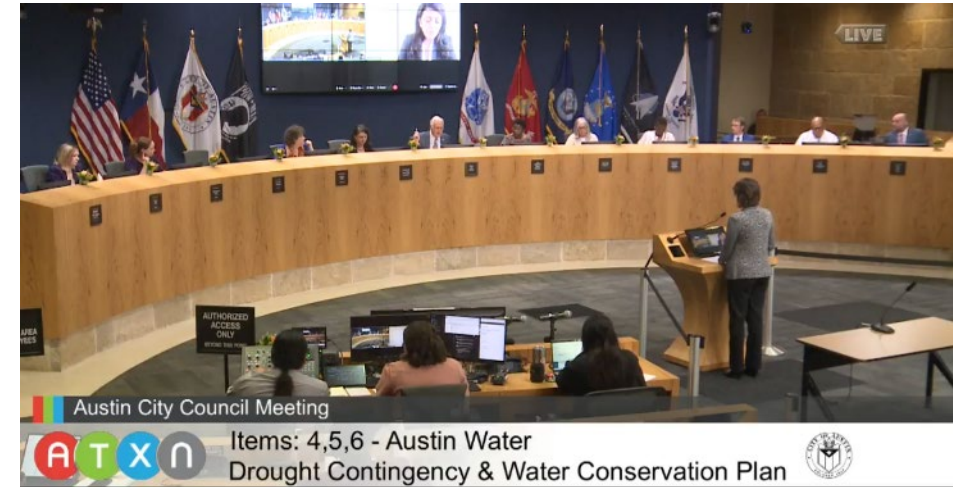
## Drought Contingency Plan (DCP)

- Focuses on drought conditions
- Describes
  - Drought Stages
  - Drought Triggers (demand and supply)
  - Drought Actions & Restrictions
- Must be consistent with the LCRA DCP
- Requires Chapter 6-4 changes



# Water Conservation and Drought Plans Approval – Spring 2024

- 💧 **April 16** - Resource Management Commission recommended DCP & WCP 8-0-1
- 💧 **April 17** - Water & Wastewater Commission recommended DCP 8-0, WCP 7-1
- 💧 **April 25** - Water Forward Task Force no recommendation
- 💧 **May 2** - City Council approved 11-0



Austin Water committed to work with the Task Force to revise plans

# Initial Proposed Conservation Goals

## Gallons per capita per day

2019 Plan	2018 Baseline	2024 Goal	2029 Goal
Total GPCD	126	119	106

2024 Plan (May 2)	2023 Baseline	2029 Goal	2034 Goal
Total GPCD	127	123	116

Red arrows indicate the flow of goals from the 2019/2018 plan to the 2024/2023 plan, and from the 2024/2023 plan to the 2029/2034 goals.

- Continue existing water use, reuse, and water loss activities
- Implement landscape transformation for new homes
- Enhance commercial incentive
- Expand use of My ATX Water alerts and engagement

# What Influenced the Current Baseline for Water Use?

## Key Factors

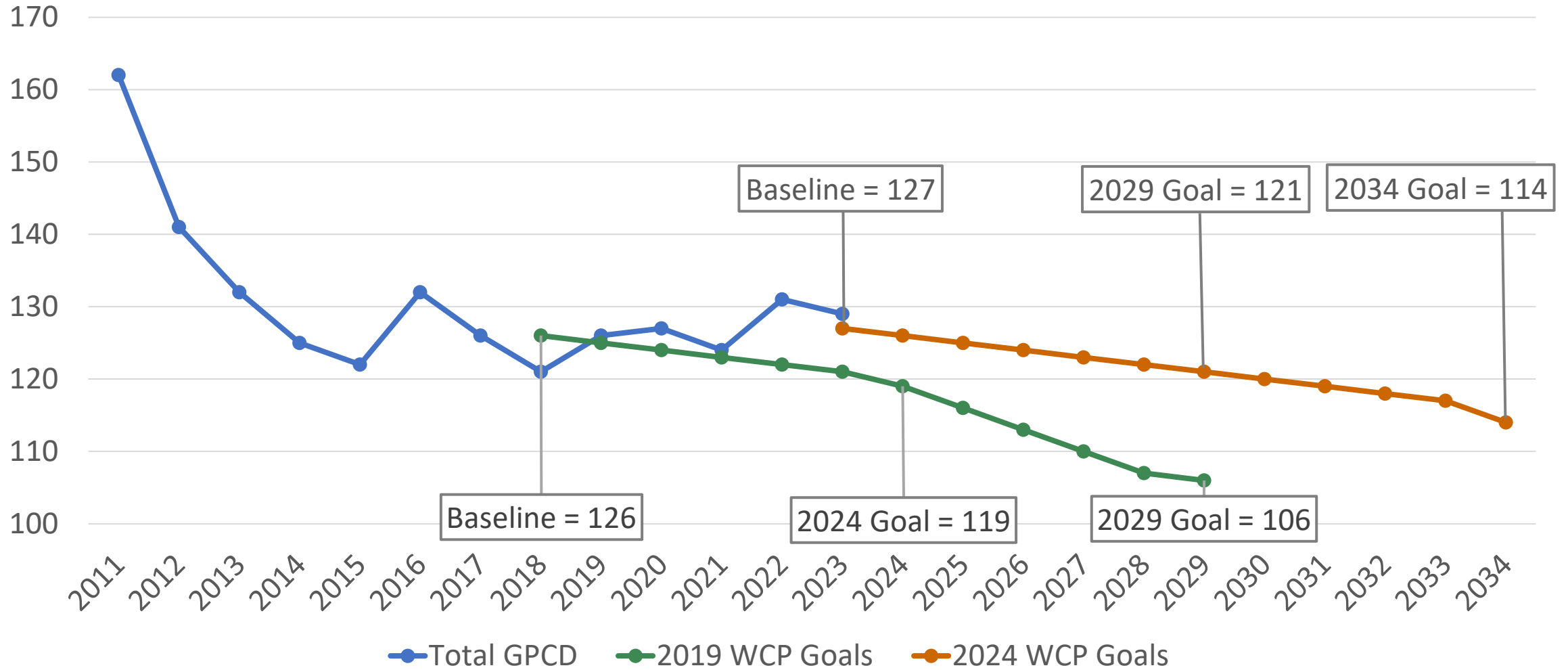
- ◆ 2018 Water Forward and 2019 Water Conservation Plan GPCDs were based on usage data from deep drought years
- ◆ Recent years of hot and dry weather contributed to increased demand
- ◆ Post-pandemic changes in customer behavior contributed to increased demand, especially for single-family residential
- ◆ Key Water Forward water conservation and reuse strategies did not achieve projected savings

# Additional Proposed Activities

- Restrict drip irrigation
- GoPurple program, adopted March 7, 2024
  - Reclaimed water requirements
  - Onsite water reuse requirements
- Water loss activities identified in external report
- My ATX Water
  - Commercial water use focus
  - Water use benchmarking and budgeting
- Quarterly & Annual Reports of conservation efforts



# Water Use Goals



# Task Force, Commission & Council Meetings

- **July 15** – Water Forward Task Force
- **July 24** – Working Group meeting
- **Aug. 13** – Water Forward Task Force
- **Aug. 14** – 2024 Working Group meeting
- **Aug. 27** – 2024 Public Workshop (in-person)
- **Aug. 28** – 2024 Public Workshop (virtual)
- **Aug. 29** – Water Forward Task Force
- **Sept. 10** – Water Forward Task Force
- **Sept. 11** – Implementation Working Group
- **Sept. 19** – Water Forward Task Force
- **Oct. 8** – Water Forward Task Force
- **Oct. 9** - W/WW Commission
- **Oct. 15** – Resource Mgmt Commission
- **Oct. 22** – City Council Work Session Briefing
- **Oct. 28** – Water Forward Task Force
- **Nov. 4** – Water Forward Task Force  
[\[recommendation to Council\]](#)
- **Nov. 12** – Austin Water Oversight Committee
- **Nov. 13** – W/WW Commission  
[\[recommendation to Council\]](#)
- **Nov. 19** – Resource Mgmt Commission  
[\[recommendation to Council\]](#)
- **Nov. 21** – City Council [\[plans approval\]](#)







# Questions?



Austin  
**IN WATER**

