

WATER FORWARD

2024 **PLAN** REPORT

Austin Water Oversight Committee Update

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

Shay Ralls Roalson, PE
November 12, 2024

AUSTIN'S 100 YEAR PLAN



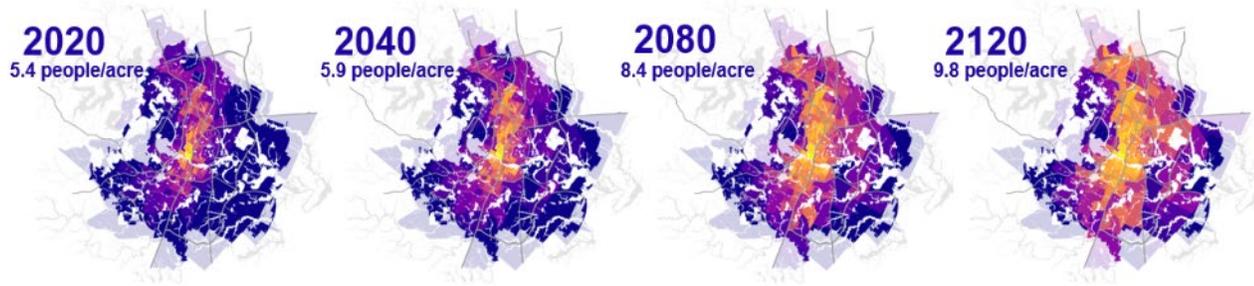
Water Forward

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.

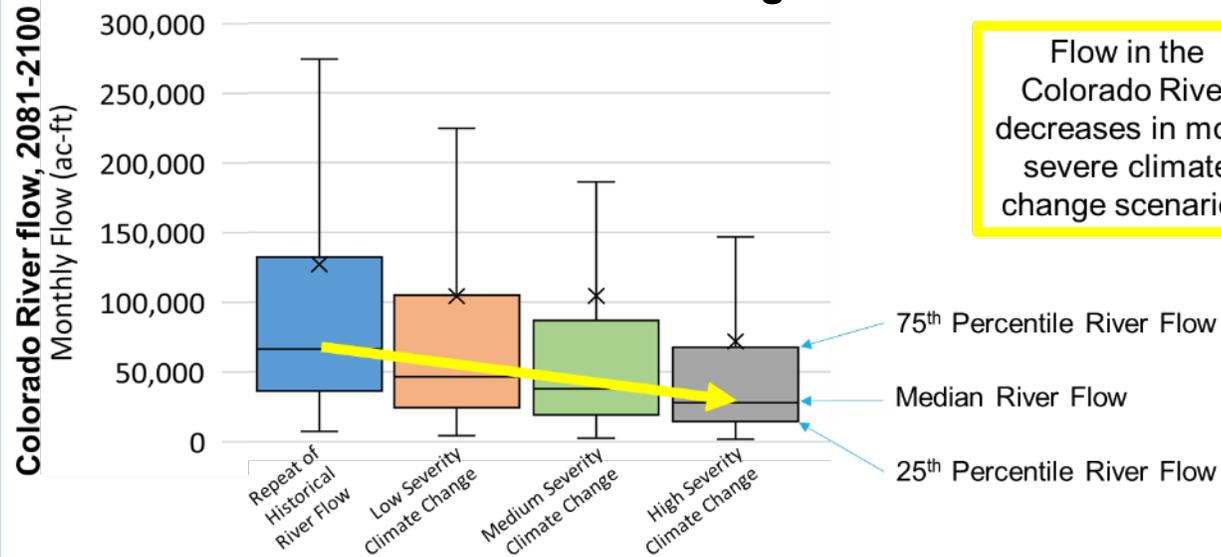


Planning for Uncertainty

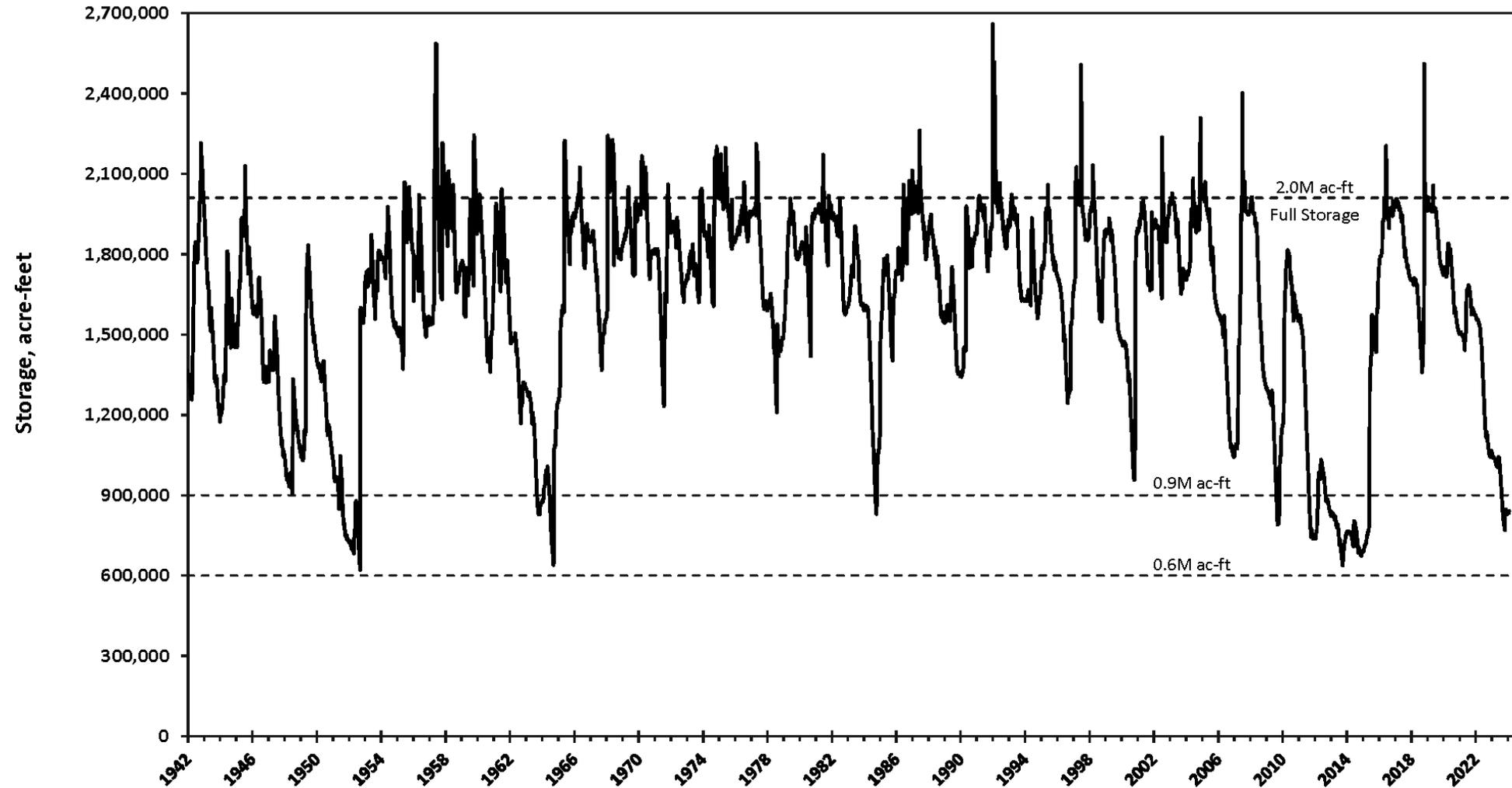
Population Growth



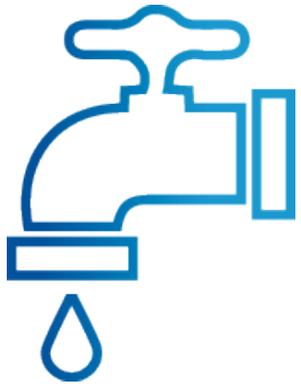
Climate Change



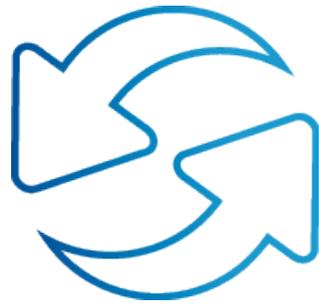
Combined Storage Lakes Buchanan and Travis



Adaptive Management Plan



Conservation



Reuse



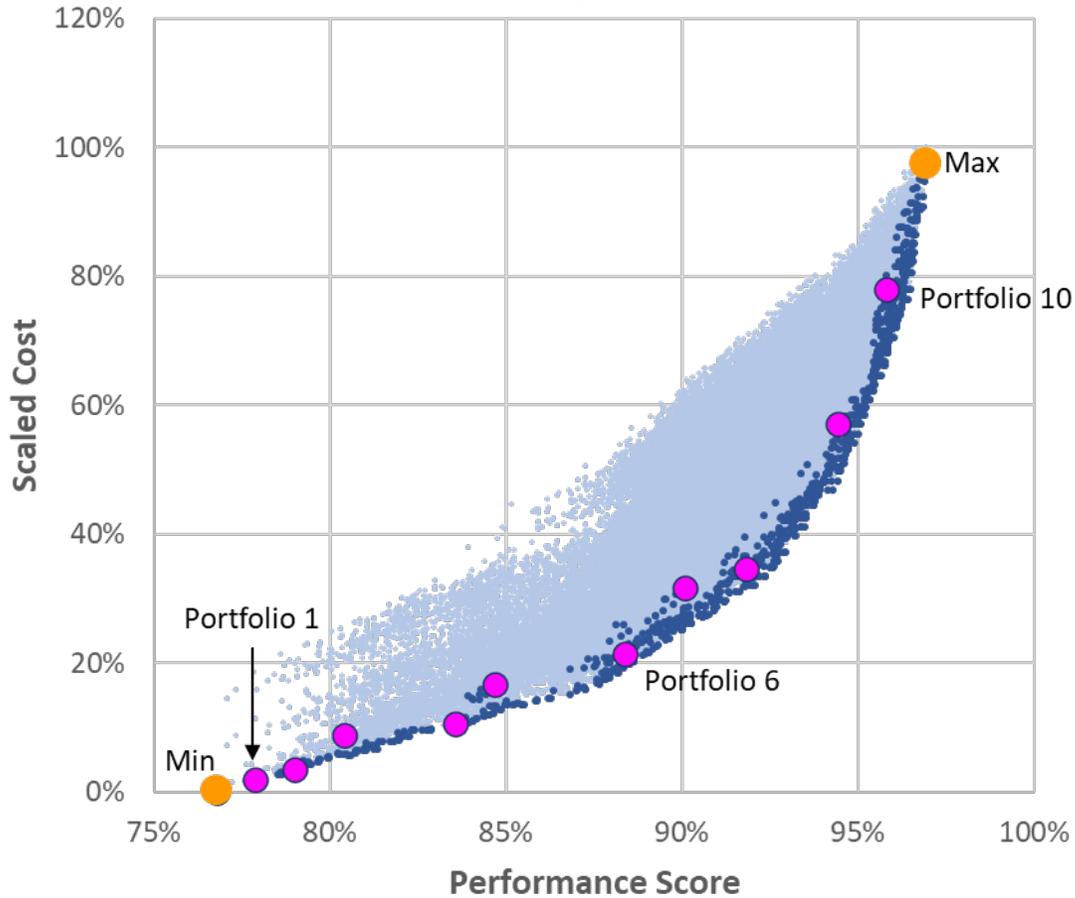
Supply



Partnerships

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
		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
		Indirect Potable Reuse		x	x		x	x	x		x
	New Water Supplies	Contri-acts									
		New Lower Colorado River Supply									
		Brackish Groundwater Desalination				x	x	x	x	x	x
		Seawater Desalination									
	Interbasin Transfer									x	
	Conventional Groundwater								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



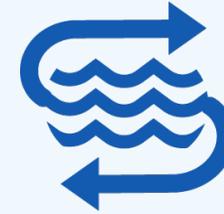
Non-Potable Reuse

- 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



Water Forward Plan: Changes between 2018 and 2024

- 💧 Updated climate and hydrology
- 💧 Planning for uncertainty
- 💧 100-year adaptive management pathways
- 💧 Equity and affordability roadmap
- 💧 Colorado River Land Analysis for water quality protection
- 💧 Expanded water conservation and water loss control
- 💧 Future use of Lake Walter E. Long for off-channel storage

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 Plan: Changes between 2019 and 2024

- Update and expand descriptions and metrics of current conservation activities
- Updated water use goals based on 'bottom-up' estimate of potential savings
- **Proposed new or expanded activities to meet goals:**
 - Single-family landscape transformation
 - Commercial conservation incentives
 - Water loss activities and the reclaimed system
 - Completion and utilization of the My ATX Water smart meter system
 - Public outreach and marketing

Water Conservation Plan: Additions since May

- 💧 **Drip irrigation restrictions in Conservation Stage**
- 💧 **GoPurple program**
 - reclaimed and onsite reuse requirements and incentives
- 💧 **Water loss mitigation – external report recommendations**
- 💧 **Discussion of 2019 Plan goals and outcomes**
- 💧 **Integrate future activities with Water Forward and include milestones and anticipated yields**
- 💧 **Add to the previous activities:**
 - Specific water loss activities
 - Expanded My ATX Water engagement
 - Water use benchmarking & budgeting
- 💧 **Quarterly and annual reporting**
- 💧 **Revised water use goals**

Amended GPCD Water Use Goals

2019 Plan	Baseline	2024 Goal	2029 Goal
Total GPCD	126	119	106
Residential GPCD	65	61	55

2024 Plan (May 2)	Baseline	2029 Goal	2034 Goal
Total GPCD	127	123	116
Residential GPCD	64	62	58

2024 Plan (Nov 21)	Baseline	2029 Goal	2034 Goal
Total GPCD	127	121	114
Residential GPCD	64	60	56



Drought Contingency Plan: Changes between 2016 and 2024

- 💧 **Stage 1** – 1.4 million acre feet (LCRA moved to 1.1)
- 💧 **Stage 2** – 900,000 acre feet + inflow trigger (LCRA)
- 💧 **Stage 3** – 750,000 acre feet added (LCRA)
 - Athletic field exemption replaced by a variance
 - No warnings for watering violations, but dismissal of penalty after completing an online irrigation conservation course
- 💧 **Stage 4** – 600,000 acre feet
 - No irrigation of nonfunctional turf (LCRA)
 - Temporary moratorium on permits for irrigation systems and single-family pool permits
- 💧 **All Stages** – identify discretionary measures to save water: expanded outreach and enforcement, additional incentives, drought surcharge, etc.

Drought Contingency Plan: Additions since May

💧 Add drip irrigation restrictions

- Currently no restrictions

💧 Proposed restrictions:

- Conservation Stage,
Stages 1 and 2: 2 days per week
- Stages 3 and 4: 1 day per week

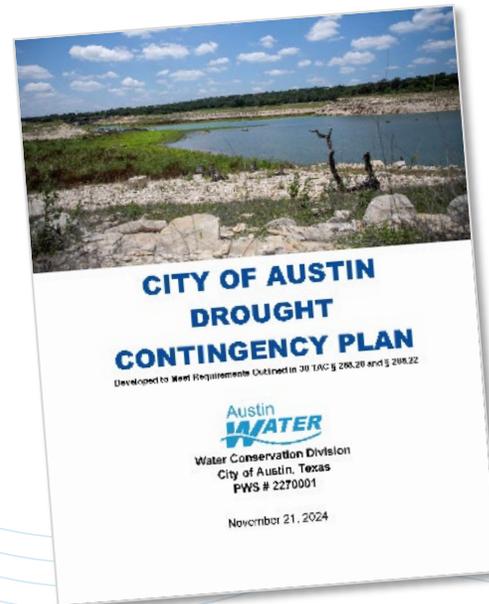
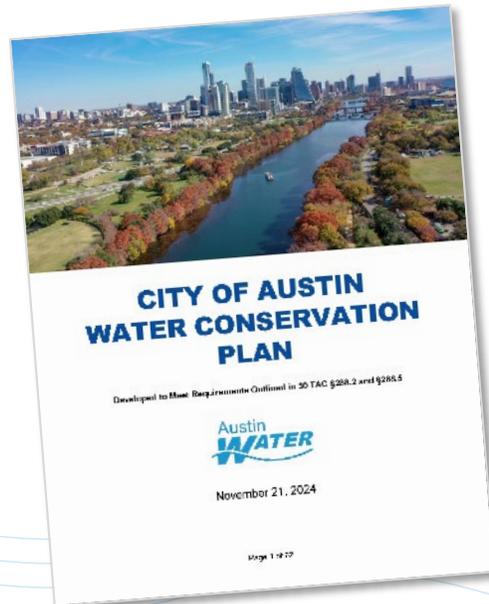
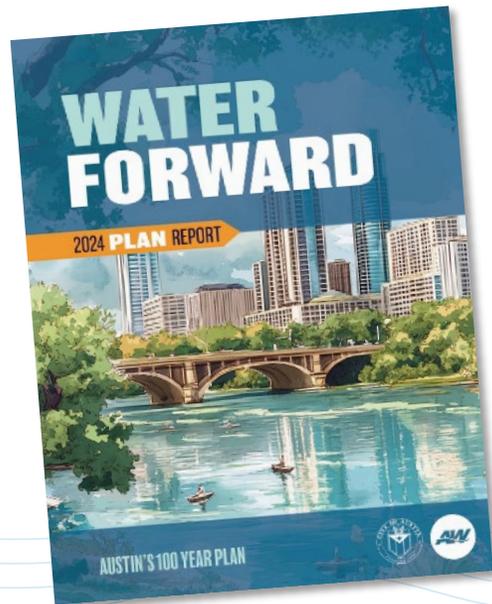
💧 Discussions with landscaping and irrigation stakeholders

💧 Exemptions for trees and gardens



Water Forward Task Force Recommendation

- 💧 Recommended **2024 Water Forward Plan**
- 💧 Recommended updated **2024 Water Conservation Plan**
- 💧 Recommended updated **2024 Drought Contingency Plan**





Questions?



Austin
IN WATER

