

Water Forward Update

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Austin Water Oversight Committee
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Water Forward Overview

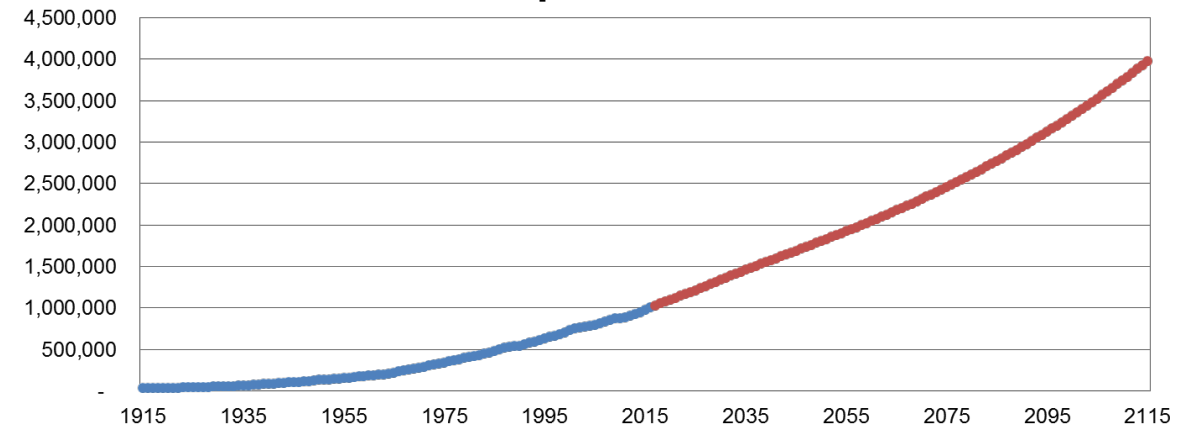
Water Forward is **Austin's 100-year integrated water resource plan** to develop and implement diverse and environmentally conscious water management strategies **to adapt to growth, drought, and climate change** and ensure a sustainable, resilient, equitable, and affordable water future for our community for the next 100 years.



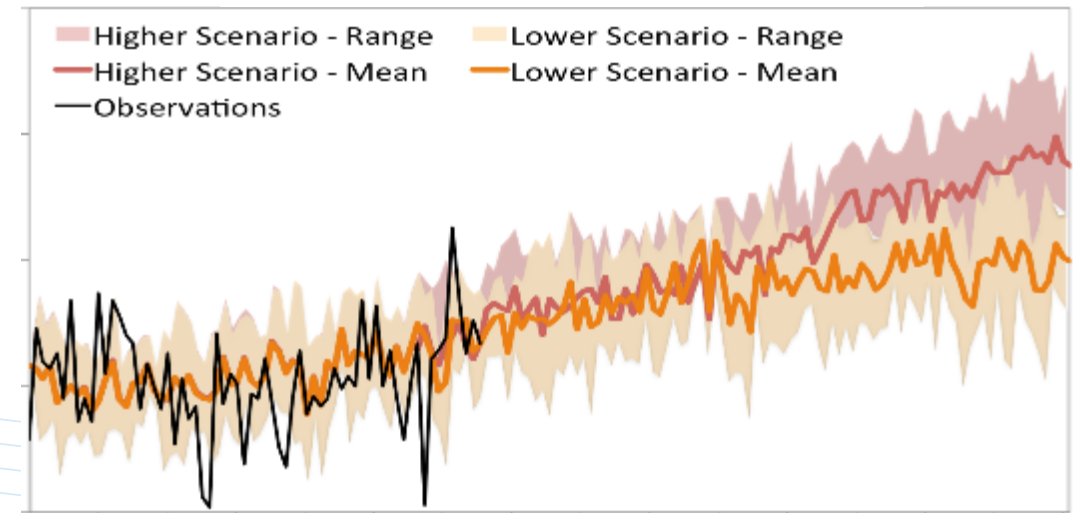
Plan Drivers



Population Growth

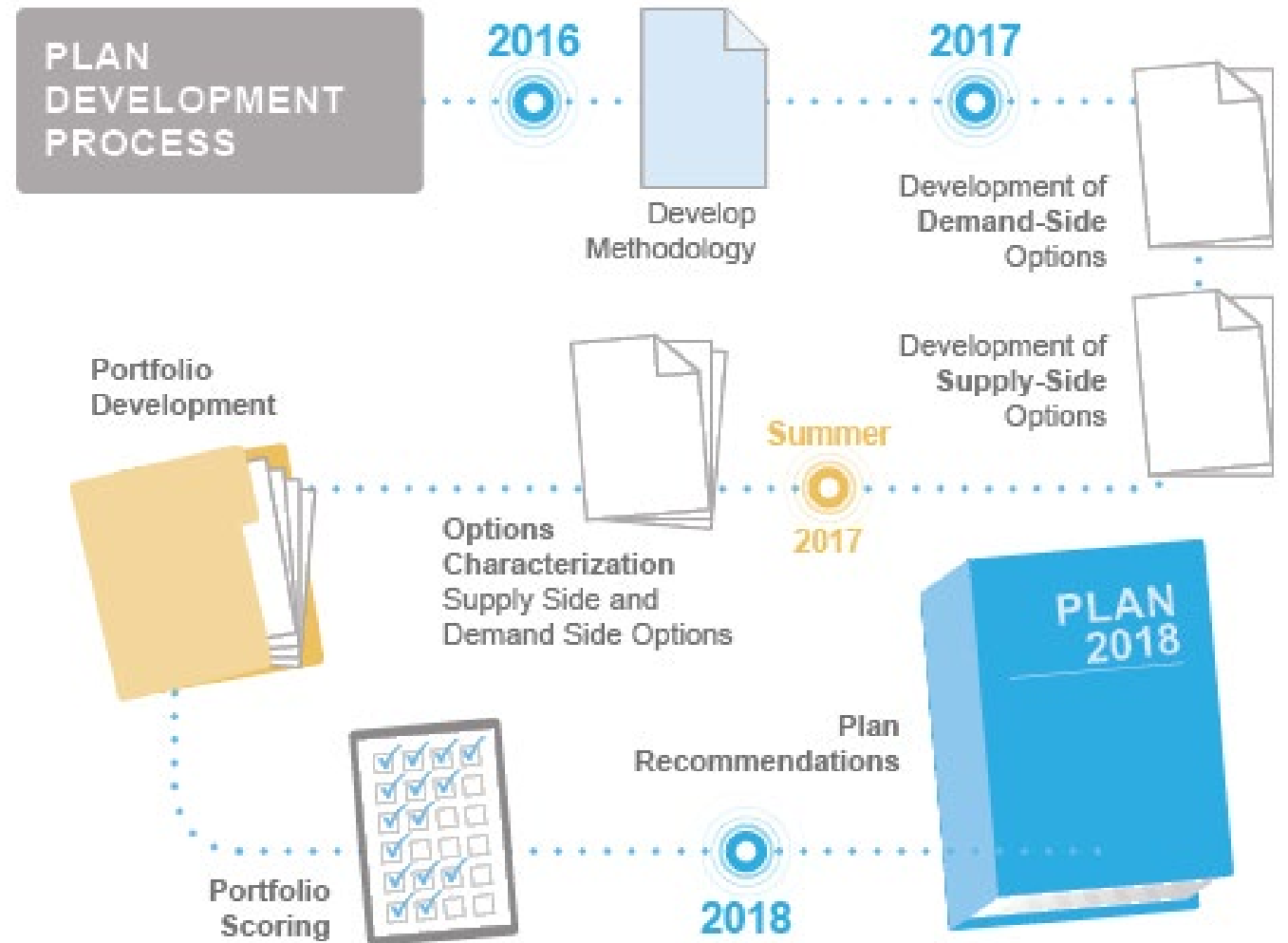


Climate Change



Water Forward 2018 (WF18)

- Developed by Austin Water with the Council-appointed Water Forward Task Force and community input
- Technical work supported by engineering, climate science, and hydrology consultants
- Approved by Council in November 2018



WF18 Strategies

Reducing Demand

- Benchmarking
- Advanced Metering Infrastructure
- Water Loss Control
- Conservation Ordinances and Incentives

Moving Reuse Forward

- Onsite Reuse
- Centralized and Decentralized Reclaimed

Protecting our Core Colorado River Supplies

- Working with our Regional Partners

Building Resiliency

- Aquifer Storage and Recovery
- Indirect Potable Reuse

Continued Stakeholder Engagement



Future Demands with Implemented Strategies



WF18 Implementation Progress



My ATX Water
Advanced Metering
Infrastructure project
began

2020

Onsite Water Reuse
System (OWRS)
regulatory framework
and incentive approved
by Council

Execution of consultant
contract for Aquifer
Storage and Recovery
Pilot and Program
Management project
approved by Council



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

2021

New Voluntary
Reclaimed Water
Connection incentive
developed

Region K water plan
adopted by Texas
Water Development
Board



ASR preliminary
storage zone screening
completed and aquifers
in Travis, Bastrop, and
Lee Counties identified
for detailed study

2022

My ATX Water:
installation of 63,000
meters completed

Water Forward 2024
plan update process
began



Irrigation and Landscape Ordinance

- 💧 Currently in the stakeholder engagement phase
- 💧 Ordinance will apply to new single-family residences and will set requirements for conserving water in irrigation systems and landscapes

The screenshot shows the 'SPEAKUP Austin!' website. The header includes navigation links: Home, Share Your Ideas!, All Projects, a search bar, and Login/Register options. The main banner features the title 'IRRIGATION AND LANDSCAPE ORDINANCE' over a background of green grass and plants, with the Austin Water logo in the bottom right. Below the banner, the breadcrumb trail reads 'Home > Austin Water > Irrigation and Landscape Ordinance for New Single-Family Residential Developments'. The main heading is 'Irrigation and Landscape Ordinance for New Single-Family Residential Developments', followed by social media icons for Facebook, Twitter, LinkedIn, and Email. The section 'About the Future Ordinance:' explains that Austin Water is seeking public input to address growing water needs and climate impacts, aiming to create an ordinance for new single-family residences. The 'Why we are focusing on new Residential Landscapes and Irrigation:' section notes that landscape irrigation accounts for 32% of residential water use in Austin. On the right, a 'Timeline' lists four milestones: 'Initial landscape code research', 'February 2022: Stakeholder outreach and input', 'February 2022: Public outreach and input', and 'May 2022: Public outreach and input' with a link to 'Public Meeting 2a'.

Home > Austin Water > Irrigation and Landscape Ordinance for New Single-Family Residential Developments

Irrigation and Landscape Ordinance for New Single-Family Residential Developments

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About the Future Ordinance:

Austin Water is asking for public input to help meet Austin's growing water needs and prepare for impacts from our changing climate. Based on your input, we will create an **Irrigation and Landscape Ordinance** for new single-family residences that will set requirements for conserving water in irrigation systems and landscapes.

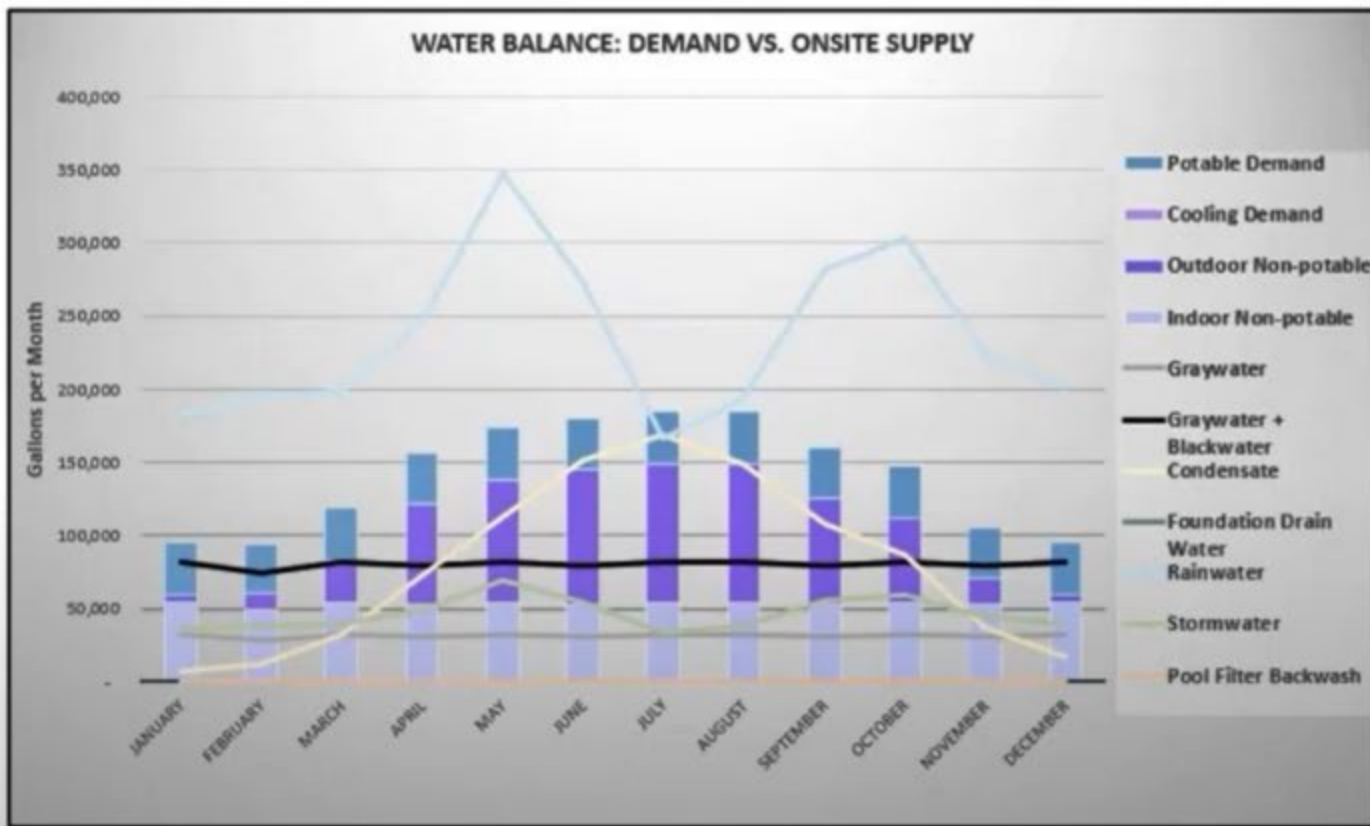
Why we are focusing on new Residential Landscapes and Irrigation:

Did you know that landscape irrigation accounts for 32% of all residential water use (from single-family homes) in Austin? That's a lot! It's also a bit of a problem because although Austin is not under an immediate threat of running out of water,

Timeline

- ✓ Initial landscape code research
- ✓ February 2022: Stakeholder outreach and input
- ✓ February 2022: Public outreach and input
- ✓ May 2022: Public outreach and input
[Public Meeting 2a](#)

Water Use Benchmarking



DEMANDS	PROJECT SUMMARY	SUPPLIES
<p>GPD = gallons per day GPY = gallons per year</p> <p>POTABLE DEMANDS:</p> <p>POTABLE FIXTURES/FEATURES 1,200 GPD 426,100 GPY</p> <p>NON-POTABLE DEMANDS:</p> <p>INDOOR FIXTURES/FEATURES 1,800 GPD 645,100 GPY</p> <p>COOLING - GPD - GPY</p> <p>OUTDOOR IRRIGATION/FEATURES 1,700 GPD 627,200 GPY</p> <p>TOTAL NON-POTABLE DEMAND 5,000 GPD 1,917,400 GPY</p>		<p>GRAYWATER 1,000 GPD 373,300 GPY</p> <p>GRAYWATER + BLACKWATER 2,600 GPD 964,100 GPY</p> <p>CONDENSATE WATER 2,600 GPD 955,200 GPY</p> <p>FOUNDATION DRAIN WATER - GPD - GPY</p> <p>RAINWATER 7,700 GPD 2,815,700 GPY</p> <p>STORMWATER 1,500 GPD 559,100 GPY</p> <p>POOL FILTER BACKWASH WATER - GPD - GPY</p> <p>TOTAL ONSITE SUPPLIES 15,000 GPD 5,294,000 GPY</p>

Onsite Water Blackwater Reuse Pilot



Onsite Water Reuse System Program

Phase 1 went into effect December 2020

Voluntary* OWRS Program

- New OWRS regulations in Title 15 (Utility Regulations) for the design, permitting and operation and maintenance of multi-family & commercial systems
- Encourage voluntary adoption of OWRS in new development to test out the new regulatory framework with pilot incentive

***Mandatory for 100 ton+ cooling towers**

Phase 2 to take effect December 2023

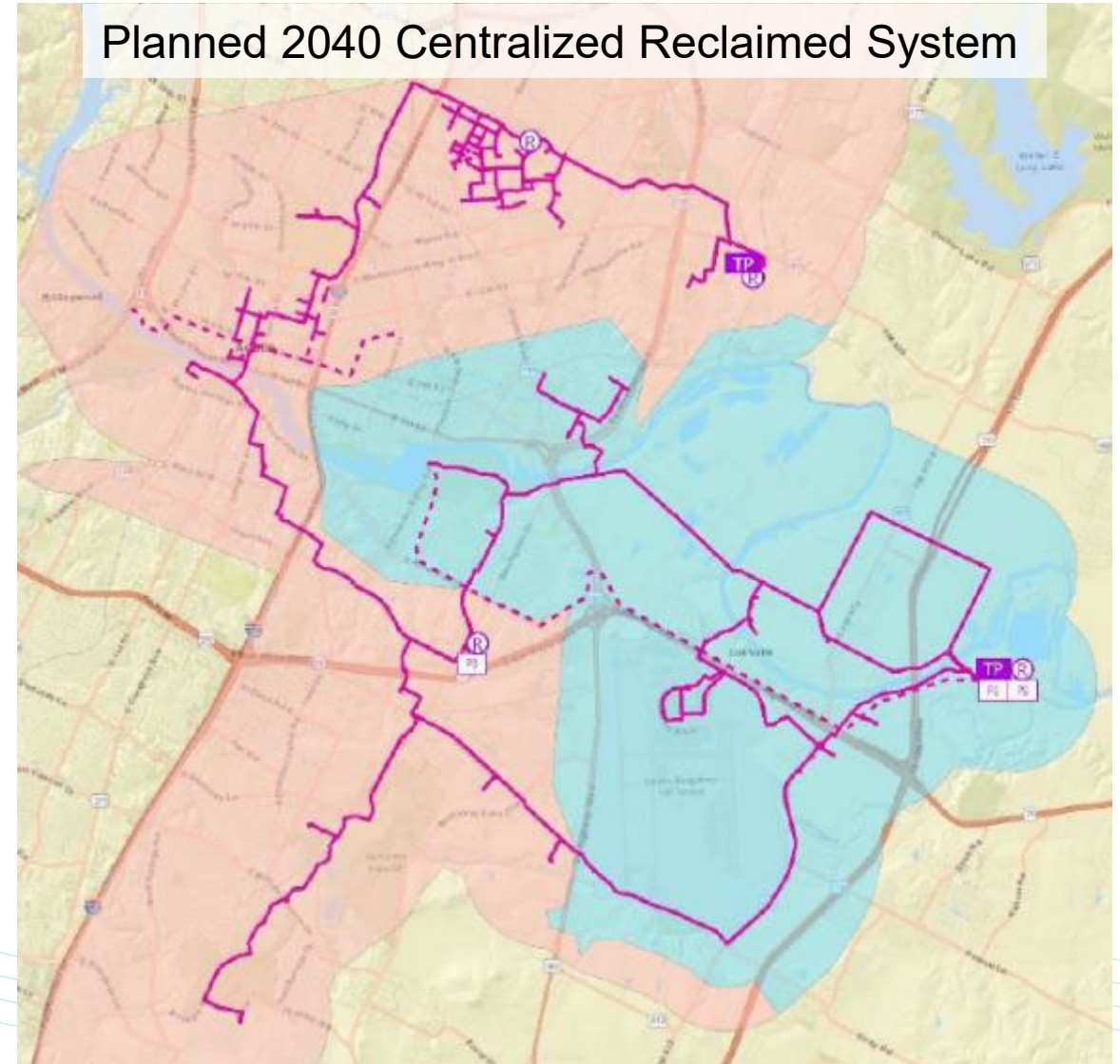
Mandatory OWRS Program

- Mandatory installation of OWRS for commercial and multi-family developments >250,000 sq. ft. in Title 25 (Land Development Code)
- Rules will be posted on the applicability for the mandate along with provisions for enforcing the mandate

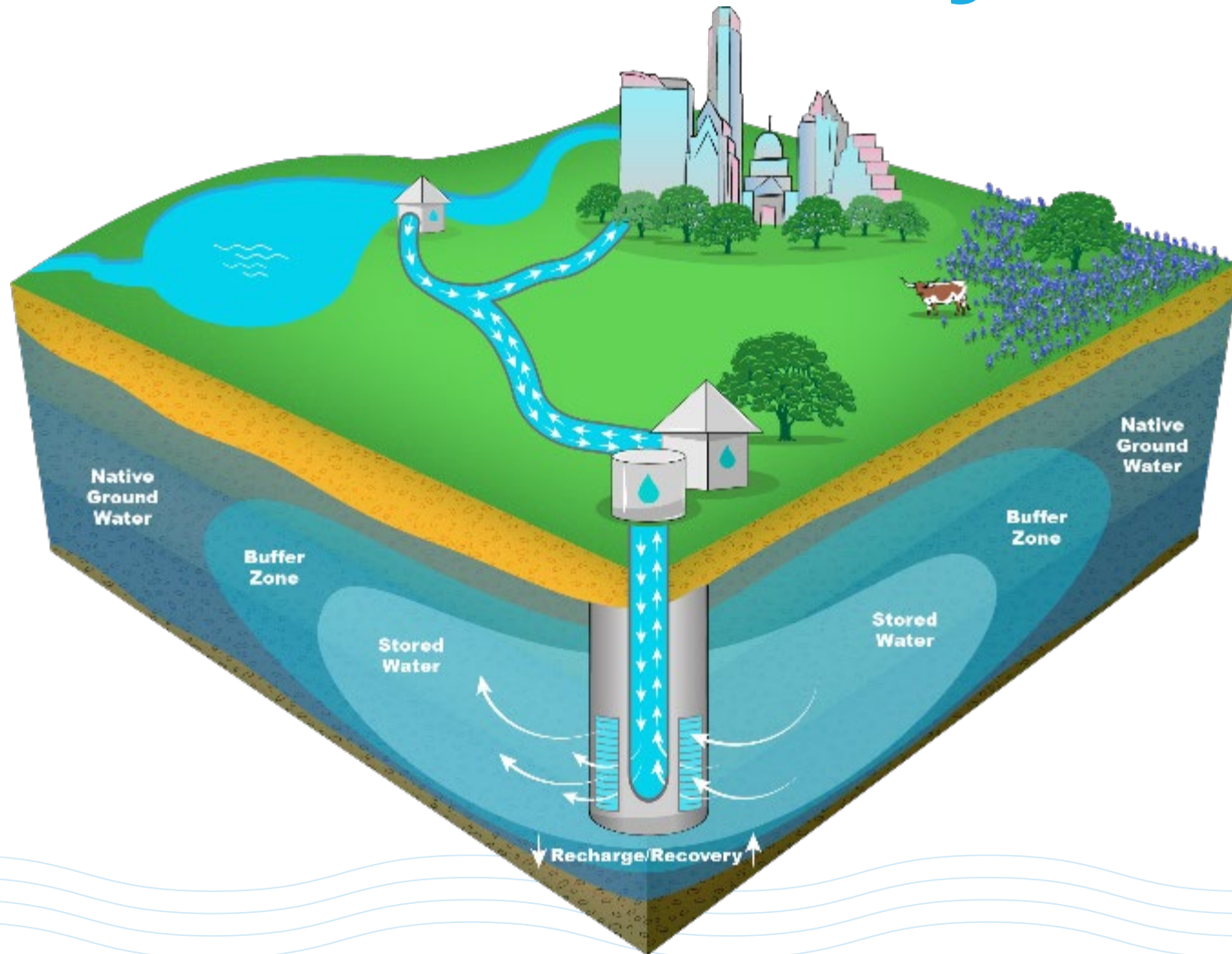


Centralized Reclaimed

- Expansion of the system
- Extension of reclaimed connection requirements

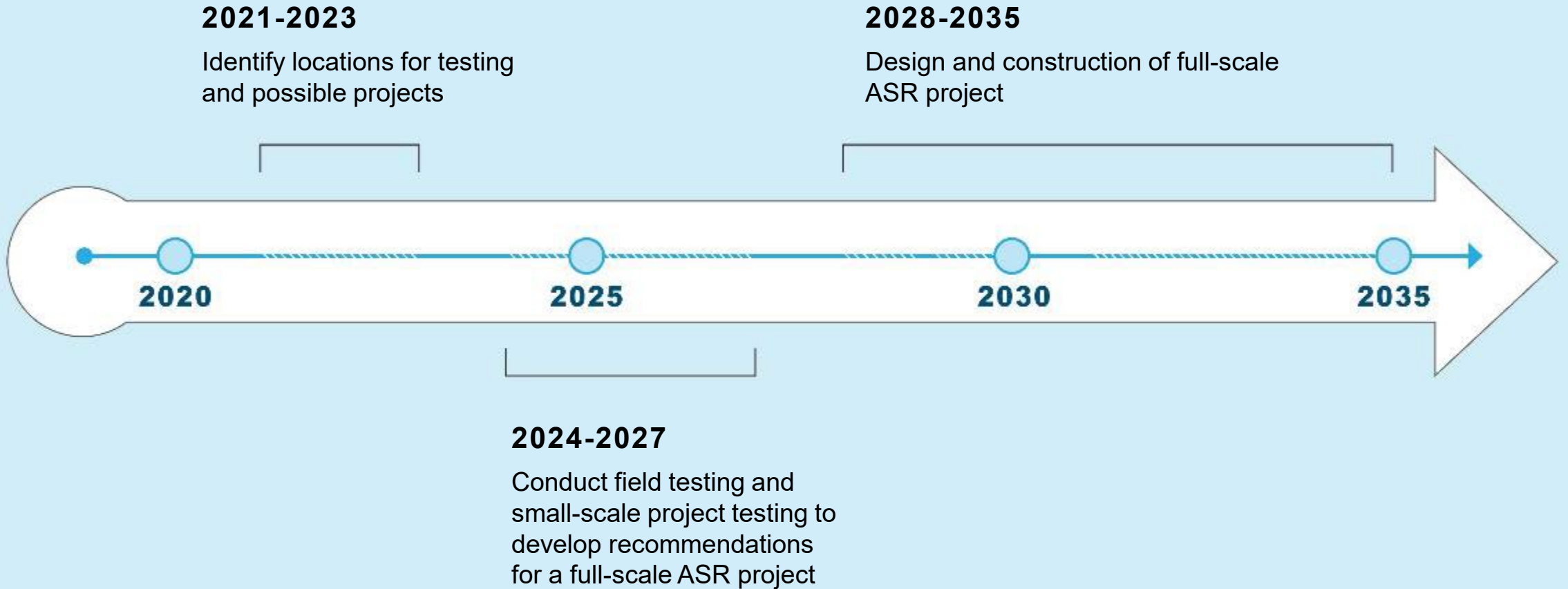


Aquifer Storage and Recovery



- When water supplies are plentiful, available water from Austin's drinking water system is pumped into an aquifer underground.
- Treated, potable water is stored in the aquifer until it is needed.
- When Austin's regular water supply becomes low, stored water can be pumped out of the aquifer
- Stored water is tested and treated before delivered to customers.

ASR Project Timeline



Water Forward 2024 (WF24) Project Plan

Task 1 - Project Management

Task 2 - Community Engagement

Task 3. Refine planning methodology

Task 4. Forecast baseline water demands

Task 5. Update climate and hydrology analysis

Task 6. Identify water resource needs

Task 7. Identify, screen, and characterize strategies

Task 8. Develop and evaluate 50-yr water resource portfolios

Task 9. Develop plan recommendations and 100-yr adaptive management plan



WF24 Guiding Principles

Create a plan that is resilient to growth, drought, and climate change

Use a holistic and inclusive approach to water resource planning that incorporates the Austin community's values

Include diverse water management strategies that make use of all water sources, including reuse, conservation, and efficiency

Use an equity and affordability lens to develop and implement the plan

Protect the health of the Colorado River and natural environment

Minimize implementation and operational risk

Focus on locally available water supplies



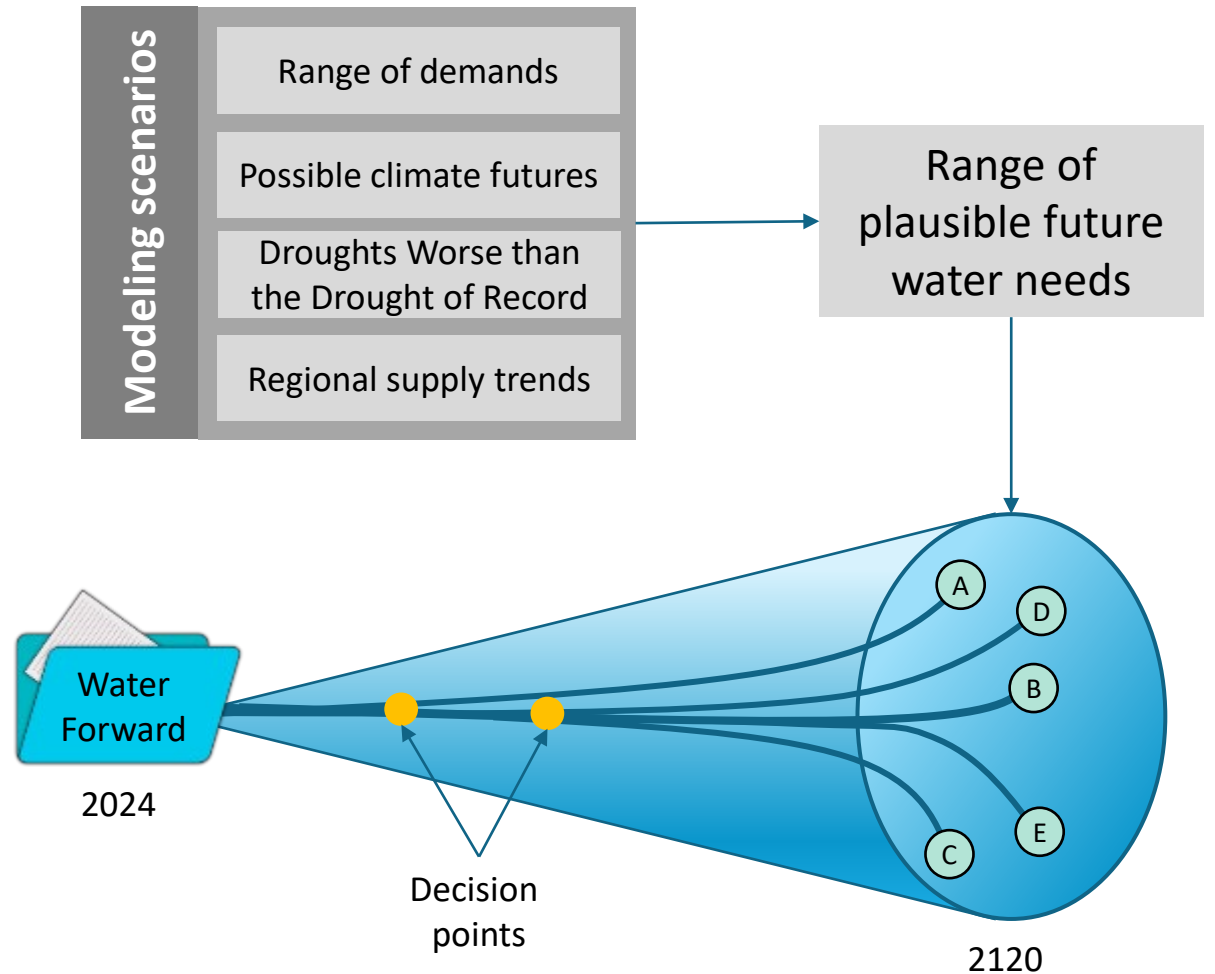
Key changes from Water Forward 2018

Category	Water Forward 2024 Approach
Coordination	Describing WF24's relationship to related AW and COA efforts
	Better alignment with regional water planning considerations, including decadal timesteps through Region K planning period
Equity	Development of Equity and Affordability Road Map
	Development of Equity and Affordability Tool
Methodology	Clearer approach to water needs identification
	More robust approach to addressing risk and uncertainty



Planning for Uncertainty in WF24

- Develop range of futures
- Find common near-term strategies that work for a broad range of futures
- Develop adaptive management plan with key decision points
- Re-evaluate at key decision points



Temperature

- Annual mean temperature is projected to increase
- Number of hot days with temperatures above 100°F are projected to increase



Rainfall

- Rainfall distribution is projected to change
- Less frequent and more intense rainfall events are projected



Dry Days

- Number of dry days with precipitation below 0.01" are projected to increase

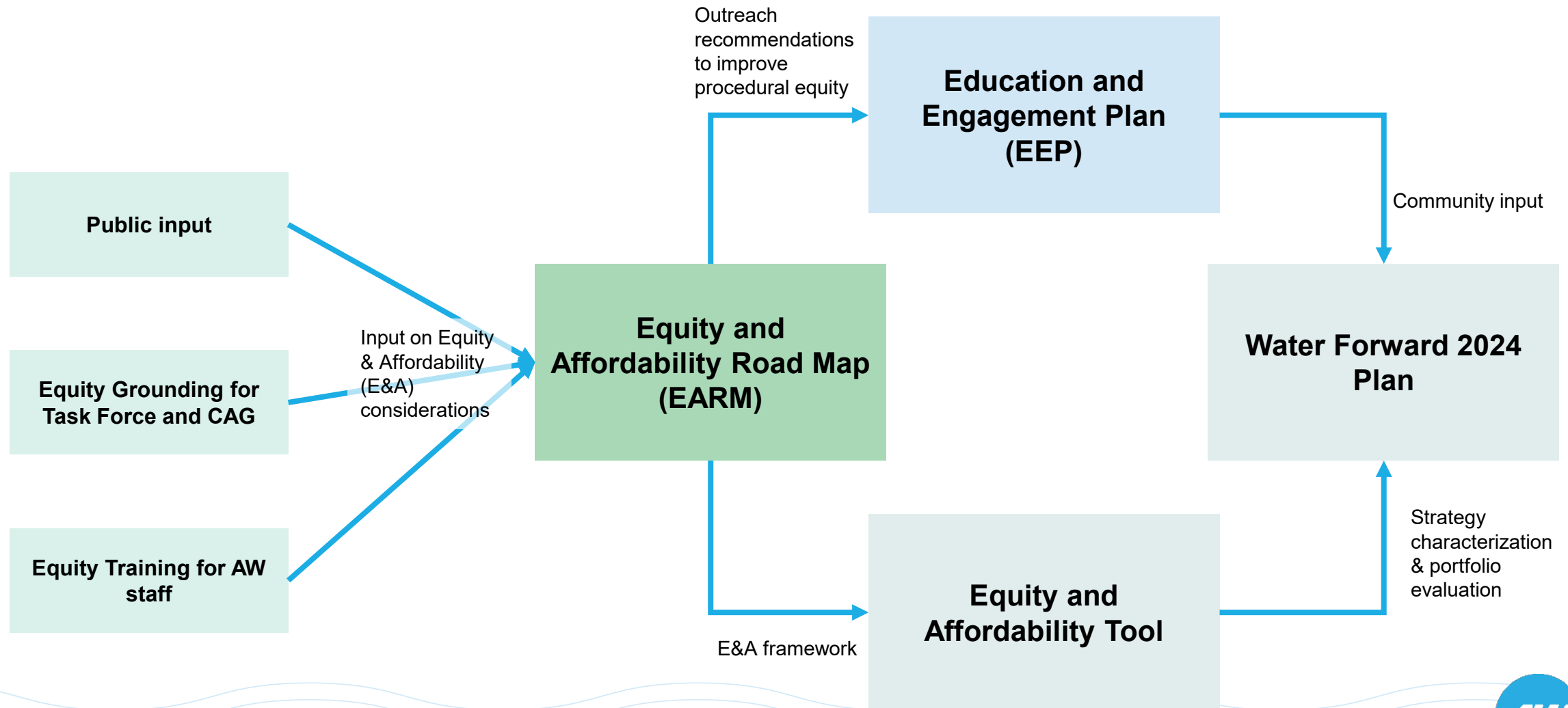


Projected high-level climate trends in the basin

Based on initial Task 3 results



Planning with an Equity Lens





Thank You

Visit us online at
speakupaustin.org/water-forward-2024

Request a presentation at
a community event or
meeting

Sign up for the Water
Forward Newsletter

