



# Water Forward 2024 Update

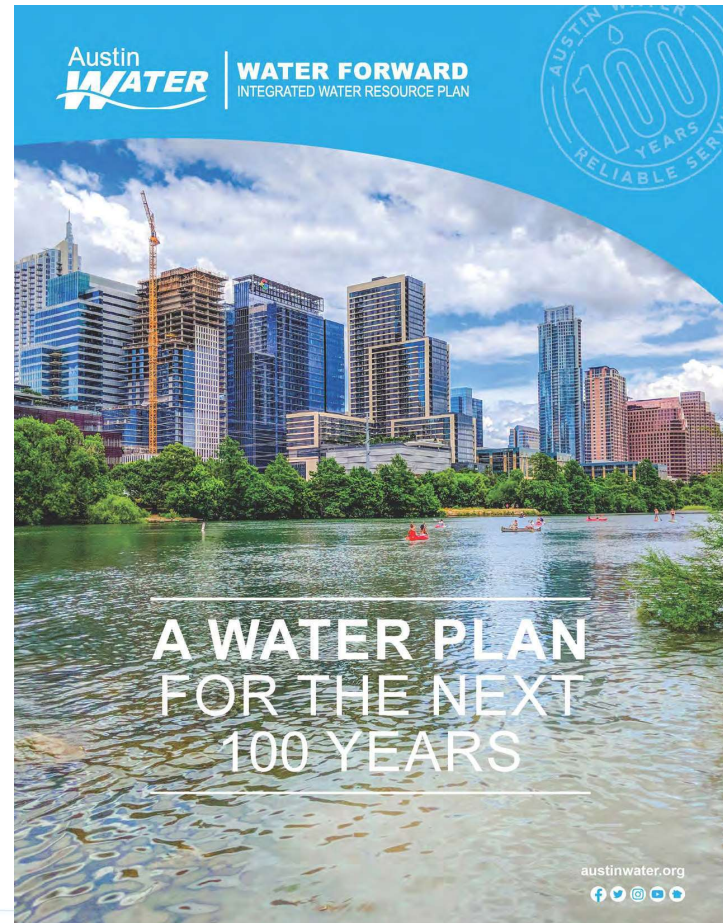




# Water Forward 2018 (WF18)

## Overview

- ◆ Approved by Council in November 2018
- ◆ An Austin Water-led interdepartmental effort to develop a 100-year water plan that reflects our community's values
- ◆ Key drivers included population growth, droughts, and climate change
- ◆ Council-appointed Task Force met monthly
- ◆ Community outreach throughout the plan development process
- ◆ Goal is to ensure a diversified, sustainable, and resilient water future, with strong emphasis on water conservation
- ◆ Planned to be updated on a five-year cycle



# 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

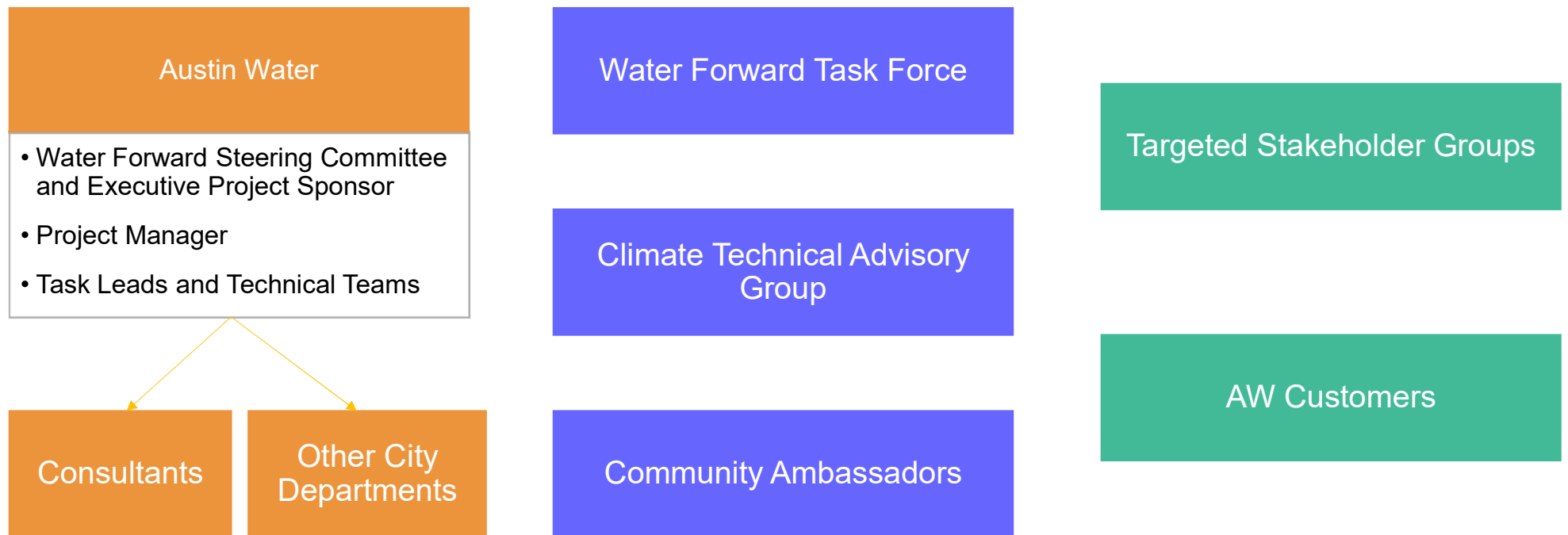
1/2022

1/2023

1/2024



# Roles & Responsibilities



# WF24 Task Progress to Date & Next Steps

	Task Name	Progress to Date	Next Steps
1	Project Management	<ul style="list-style-type: none"> <li>Identified consultant procurement approaches</li> </ul>	<ul style="list-style-type: none"> <li>Continue consultant procurement process</li> </ul>
2	Community Engagement	<ul style="list-style-type: none"> <li>Developed Community Advisory Group (CAG) recruiting materials and currently recruiting CAG members</li> <li>Began draft Education and Engagement Plan (EEP) development</li> </ul>	<ul style="list-style-type: none"> <li>Develop CAG meeting materials and review CAG applications</li> <li>Complete draft EEP</li> </ul>
3	Planning Methodology	<ul style="list-style-type: none"> <li>Developed draft mission statement &amp; guiding principles and received WF24 Internal Working Group &amp; Steering Committee feedback</li> </ul>	<ul style="list-style-type: none"> <li>Receive WF Task Force feedback on draft mission statement &amp; guiding principles</li> </ul>
4	Demand Forecast	<ul style="list-style-type: none"> <li>Began development of baseline 2020 population estimates</li> <li>Continued Disaggregated Demand Model (DDM) structural update work</li> </ul>	<ul style="list-style-type: none"> <li>Continue development of baseline population and employment estimates</li> <li>Continued DDM structural update work</li> </ul>
5	Climate and Hydrology Analysis	<ul style="list-style-type: none"> <li>UT developed Global Climate Model (GCM) selection memo and identified downscaling methodology</li> <li>Held Climate Technical Advisory Group meeting 1/28</li> </ul>	<ul style="list-style-type: none"> <li>Develop time series of downscaled weather variables from each GCM</li> </ul>





# Draft WF24 Mission Statement, Guiding Principles, and Objectives



# Statement of Purpose

## Water Forward 2018

The Integrated Water Resource Plan (IWRP) will provide a mid- and long-term evaluation of, and plan for, water supply and demand management options for the City of Austin in a regional water supply context.

Through public outreach and coordination of efforts between City departments and the Austin Integrated Water Resource Planning Community Task Force, the IWRP offers a holistic and inclusive approach to water resource planning.

The plan embraces an innovative and integrated water management process with the goal of ensuring a diversified, sustainable, and resilient water future, with strong emphasis on water conservation.

## Water Forward 2024 – Draft Proposed

The purpose of Water Forward is to develop and implement diverse 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.





# Guiding Principles

## Water Forward 2018

- Avoid severe water shortages during times of drought
- Engage the public and stakeholders throughout the plan development process
- Continue Austin's focus on water conservation and water use efficiency
- Strengthen long-term sustainability, reliability, and diversity of Austin's water supply through maximizing local water resources
- Continue to protect Austin's natural environment, including source and receiving water quality
- Focus on projects that are technically, socially, and economically feasible

Foundational  
Utility  
Practices

Recognizing that Colorado River water is Austin's core supply, continue a strong partnership between the City and LCRA to assure its reliability

Ensure Austin's water supply continues to meet/exceed all federal, state and local public health regulations

Align with Imagine Austin's "Sustainably Manage Our Water Resources Priority Program"

Moved to  
Objectives

Maintain coordination and communication with regional partners

## Water Forward 2024 – Draft Proposed

- 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
- Continue to protect Austin's natural environment
- Minimize implementation and operational risk
- New

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





# Concepts

## Distributive justice

- Pertains to the fair distribution of benefits and burdens within society.

## Procedural justice

- Focuses on the fairness of the process by which a distributive decision is reached.

# Concepts

- Distributive and procedural fairness in this context will seek to align with the City of Austin Equity Office's focus on racial equity.
  - This is in recognition that race is the most consistent predictor across all quality of life outcomes.
  - “Intersections exist within other oppressions such as gender, sexual orientation, age, ability, class, immigrant status, veteran status, but outcomes within these identities still most negatively impact people of color.”



# Draft WF24 Guiding Principles + Objectives

## Procedural Elements

Guiding Principles (strategic goals)	Objectives (tactical)	Performance Measures (specific measures to be determined)
Create a plan that is resilient to growth, drought, and climate change	<ul style="list-style-type: none"> <li>Incorporate methods to plan for uncertainty with strategies that are resilient through a range of possible futures</li> <li>Focus primarily on long term water supplies, but consider emergency water supply benefits</li> </ul>	<ul style="list-style-type: none"> <li>Document process to incorporate climate data, perform scenario planning, and evaluate resiliency benefits</li> </ul>
Use a holistic and inclusive approach to water resource planning that incorporates the Austin community's values	<ul style="list-style-type: none"> <li>Meaningfully engage the Austin Integrated Water Resource Planning Community Task Force, other City departments, regional partners, and the community throughout the process</li> <li>Use multicriteria decision making and reflect community values in the evaluation of trade-offs</li> </ul>	<ul style="list-style-type: none"> <li>Track engagement and coordination efforts</li> <li>Document inclusion of community input throughout the planning process</li> </ul>
Include diverse water management strategies that make use of all water sources, including reuse, conservation, and efficiency	<ul style="list-style-type: none"> <li>Plan for water supply, reuse, and demand management options for the City of Austin</li> </ul>	<ul style="list-style-type: none"> <li>Document process to select and characterize strategies</li> </ul>
Use an equity and affordability lens to develop and implement the plan	<ul style="list-style-type: none"> <li>Use an equity lens throughout the planning process</li> <li>Evaluate affordability impacts in a holistic manner that balances near-term and long-term costs</li> </ul>	<ul style="list-style-type: none"> <li>Develop a WF24 Equity and Affordability Roadmap</li> </ul>





# Draft WF24 Guiding Principles + Objectives

## Distributive Elements

Guiding Principles (strategic goals)	Objectives (tactical)	Performance Measures (specific measures to be determined)
Create a plan that is resilient to growth, drought, and climate change	<ul style="list-style-type: none"> <li>Avoid severe water shortages during drought and a variety of climate change scenarios</li> </ul>	<ul style="list-style-type: none"> <li>WAM modeling results</li> </ul>
Include diverse water management strategies that make use of all water sources, including reuse, conservation, and efficiency	<ul style="list-style-type: none"> <li>Continue Austin's focus on water conservation and water use efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Potable GPCD</li> <li>Portfolio diversity score*</li> </ul>
Use an equity and affordability lens to develop and implement the plan	<ul style="list-style-type: none"> <li>Minimize impacts and maximize benefits of plan outcomes for vulnerable communities</li> </ul>	<ul style="list-style-type: none"> <li>Cost (lifecycle, capital, O&amp;M)</li> <li>Equity &amp; Affordability Tool*</li> </ul>
Continue to protect Austin's natural environment	<ul style="list-style-type: none"> <li>Develop strategies that continue to protect Austin's natural environment, including source and receiving water quality</li> </ul>	<ul style="list-style-type: none"> <li>Net return flows</li> <li>Operational energy use</li> <li>Water quality impacts*</li> </ul>
Minimize implementation and operational risk	<ul style="list-style-type: none"> <li>Develop strategies that can be implemented and operated with a manageable level of risk</li> </ul>	<ul style="list-style-type: none"> <li>Implementation and operational risk score</li> <li>Volume of local and AW-controlled water resources</li> <li>System resiliency benefits</li> </ul>

\*New for Water Forward 2024



# Draft WF24 Guiding Principles + Objectives

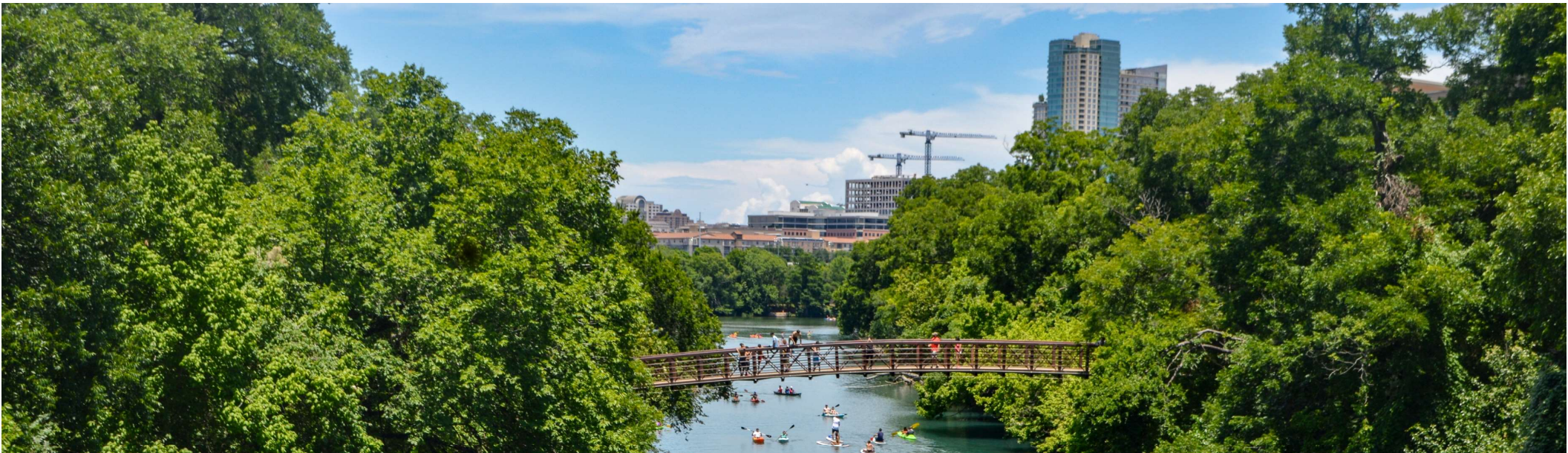
Guiding Principles (strategic goals)		Objectives (tactical)	Performance Measures (specific measures to be determined)
Create a plan that is resilient to growth, drought, and climate change	Procedural	<ul style="list-style-type: none"> <li>Incorporate methods to plan for uncertainty with strategies that are resilient through a range of possible futures</li> <li>Focus primarily on long term water supplies, but consider emergency water supply benefits</li> </ul>	<ul style="list-style-type: none"> <li>Document process to incorporate climate data, perform scenario planning, and evaluate resiliency benefits</li> </ul>
	Distributive	<ul style="list-style-type: none"> <li>Avoid severe water shortages during drought and a variety of climate change scenarios</li> </ul>	<ul style="list-style-type: none"> <li>WAM modeling results</li> </ul>
Use a holistic and inclusive approach to water resource planning that incorporates the Austin community's values	Procedural	<ul style="list-style-type: none"> <li>Meaningfully engage the Austin Integrated Water Resource Planning Community Task Force, other City departments, regional partners, and the community throughout the process</li> <li>Use multicriteria decision making and reflect community values in the evaluation of trade-offs</li> </ul>	<ul style="list-style-type: none"> <li>Track engagement and coordination efforts</li> <li>Document inclusion of community input throughout the planning process</li> </ul>
Include diverse water management strategies that make use of all water sources, including reuse, conservation, and efficiency	Procedural	<ul style="list-style-type: none"> <li>Plan for water supply, reuse, and demand management options for the City of Austin</li> </ul>	<ul style="list-style-type: none"> <li>Document process to select and characterize strategies</li> </ul>
	Distributive	<ul style="list-style-type: none"> <li>Continue Austin's focus on water conservation and water use efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Potable GPCD</li> <li>Portfolio diversity score*</li> </ul>
Use an equity and affordability lens to develop and implement the plan	Procedural	<ul style="list-style-type: none"> <li>Use an equity lens throughout the planning process</li> <li>Evaluate affordability impacts in a holistic manner that balances near-term and long-term costs</li> </ul>	<ul style="list-style-type: none"> <li>Develop a WF24 Equity and Affordability Roadmap</li> </ul>
	Distributive	<ul style="list-style-type: none"> <li>Minimize impacts and maximize benefits of plan outcomes for vulnerable communities</li> </ul>	<ul style="list-style-type: none"> <li>Cost (lifecycle, capital, O&amp;M)</li> <li>Equity &amp; Affordability Tool</li> </ul>
Continue to protect Austin's natural environment	Distributive	<ul style="list-style-type: none"> <li>Develop strategies that continue to protect Austin's natural environment, including source and receiving water quality</li> </ul>	<ul style="list-style-type: none"> <li>Net return flows</li> <li>Operational energy use</li> <li>Water quality impacts*</li> </ul>
Minimize implementation and operational risk	Distributive	<ul style="list-style-type: none"> <li>Develop strategies that can be implemented and operated with a manageable level of risk</li> </ul>	<ul style="list-style-type: none"> <li>Implementation and operational risk score</li> <li>Volume of local and AW-controlled water resources</li> <li>System resiliency benefits*</li> </ul>

# Next Steps

- ♦ Requesting any additional Task Force feedback by Tuesday, February 22<sup>nd</sup>
- ♦ Plan to revisit this item at the March 1<sup>st</sup> Task Force meeting







# Questions

