



City of Austin

Recommendation for Action

File #: 24-6135, **Agenda Item #:** 3.

11/21/2024

Posting Language

Approve adoption of Water Forward 2024, Austin's Integrated Water Resource Plan, which includes conservation, reuse, supply strategies and an adaptive management framework to respond to changing conditions to meet Austin's water needs for the next 100 years. Funding: This item has no fiscal impact. Related to Items #4, #5, and #6.

Lead Department

Austin Water.

Fiscal Note

This item has no fiscal impact.

Prior Council Action:

November 29, 2018 - Council approved adoption of the Water Forward 2018 plan with additional Council direction.

For More Information:

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Council Committee, Boards and Commission Action:

November 4, 2024 - Recommended by the Austin Integrated Water Resource Planning Community Task Force (Water Forward Task Force) on a 9-0 vote with Task Force Member Lorenz absent.

November 13, 2024 - To be reviewed by the Water and Wastewater Commission.

Additional Backup Information:

In response to the drought from 2006 through 2016, Austin Water worked with the Council appointed Water Forward Task Force, consultants, and the community over a three-year period to develop the first Water Forward plan.

Water Forward 2018 Plan Implementation

Following unanimous Council approval of the 2018 plan, Austin Water began implementing near-term plan strategies. The Water Forward Task Force continued to meet regularly to participate in the implementation phase. Since 2018, Austin Water has achieved key implementation milestones including My ATX Water meter and portal deployment, onsite reuse and GoPurple program implementation, expansion of customer conservation incentives, as well as initial planning for aquifer storage and recovery and indirect potable reuse. These milestones are detailed further in the memo issued to Mayor and Council on November 5, 2024.

Water Forward 2024 Updates

As part of our adaptive management approach, Austin Water established a five-year cycle for updating the Water Forward plan and began the current cycle in late 2021. The 2024 plan builds on the 2018 plan and subsequent implementation activities and provides a roadmap to provide a sustainable, resilient, equitable,

and affordable water future for Austin for the next 100 years. Most of the strategies reflected in the Water Forward 2018 plan remain as a key and continued strategies in the Water Forward 2024 plan. In the future, the lower Colorado River and Highland Lakes system that provides Austin's drinking water supply will likely experience impacts from regional growth, droughts, and climate change, based on updated technical modeling included in the plan. Water Forward 2024 includes an updated 50-year portfolio of conservation, reuse, and supply strategies to meet these challenges. The plan also includes an updated 100-year adaptive management framework to respond to changing conditions. Water Forward 2024 was developed by Austin Water, working in collaboration with the Water Forward Task Force, while incorporating the values and feedback of the Austin community.

Highlights of Water Forward 2024 Strategies

The Water Forward 2024 plan objectives include ensuring water reliability, increasing equity, protecting the environment, being cost-effective, and reducing risks in implementing strategies. To achieve these objectives, Water Forward 2024 includes a diverse set of water conservation, non-potable reuse, and potable water supply strategies intended to stretch our current Colorado River and Highland Lakes supplies.

Water Conservation

- decreasing losses from the City's water system by implementing the recommendations of the Water Loss Program Review, Analysis & Optimization as described in the memo issued to Mayor and Council on October 2, 2024.
- expanding customer incentives for more efficient water use
- using near real-time customer meter data for water budgeting, identifying customer leaks, and encouraging changes in customer behavior
- supporting the transition to native and efficient landscapes through new ordinances, expanded incentives, and outreach using the My ATX Water portal

Non-Potable Reuse

- continued expansion of the existing centralized and decentralized reclaimed water ("purple pipe") systems for non-potable demands for uses like irrigation, cooling, and toilet flushing for more customers
- implementation of existing and expanded onsite water reuse requirements
- continued implementation of Austin Water's GoPurple program

Potable Water Supply

- implement aquifer storage and recovery (ASR) to store treated drinking water in an underground aquifer during wet times, making it available during droughts or other emergencies
- develop Lake Walter E. Long as an off-channel water storage reservoir within a limited operating range (up to five feet fluctuation during drought periods)
- utilize Indirect Potable Reuse (IPR) during severe drought emergencies, where highly treated reclaimed water would be conveyed to Lady Bird Lake and then treated for potable use
- evaluate brackish (salty) groundwater desalination as a 2070 strategy, which would involve treating salty groundwater from very deep aquifers to meet drinking water standards.

Water Forward 2024 Implementation

During the next five years, Austin Water will implement the five-year actions outlined for each strategy. The plan will use an adaptive management approach in which strategy effectiveness will be monitored and evaluated at regular intervals. This evaluation will be transparent and publicly reported. The findings will also inform potential adjustments that Austin Water may need to make to specific strategies. The Water Forward plan will also continue to be updated on a five-year cycle to review program effectiveness and incorporate updated data and changing conditions into the overall plan. These steps will provide continual feedback that

we are on track to meet our goals to achieve Austin's 100-year sustainable and equitable water future.