



## Water & Wastewater Commission Review and Recommendation

<b>Commission Meeting Date:</b>	October 10, 2018
<b>Council Meeting Date:</b>	November 15, 2018
<b>Department:</b>	Austin Water
<b>Client:</b>	Marisa Flores-Gonzalez, Teresa Lutes, and Kevin Critendon
<b>Agenda Item</b>	
Approve adoption of Water Forward, Austin's Integrated Water Resource Plan as developed by Austin Water with support from the Austin Integrated Water Resource Planning Community Task Force.	
<b>Amount and Source of Funding</b>	
N/A	
<b>Purchasing Language:</b>	N/A
<b>Prior Council Action:</b>	<p>December 11, 2014- Council approved Resolution No. 20141211-119, creating the Austin Integrated Water Resource Planning Community Task Force and directing the City Manager to hire a consultant to assist in the development of the a Integrated Water Resource Plan.</p> <p>February 25, 2016- Council approved a professional services agreement 20160225-012, with CDM Smith Inc. to provide consulting services for the Integrated Water Resource Plan.</p> <p>April 21, 2016- Council approved a contract 20160421-017, with Atmos Research and Consulting to provide an evaluation of climate change impacts on hydrology.</p> <p>June 9, 2016 – Council approved a professional services agreement 20160609-004, with CDM Smith Inc. to provide consulting services for the Integrated Water Resource Plan.</p>
<b>Boards and Commission Action:</b>	<p>October 9 2018- To be reviewed by the Austin Integrated Water Resource Planning Community Task Force.</p> <p>October 10, 2018 – To be reviewed by the Water and Wastewater Commission.</p>
<b>MBE/WBE:</b>	N/A

Austin Water serves a population of approximately 1,056,000 customers with water, wastewater, and reclaimed water services. From 2008-2016, Central Texas experienced a historic drought that led to less water available in the Colorado River and very low storage levels in Lakes Travis and Buchanan, the City's primary water supply sources. While Austin successfully weathered the drought, the event highlighted the need to increase the sustainability, reliability, and diversity of Austin's water supplies. In addressing challenges posed by the drought, the Council created the Austin Water Resource Planning Task Force in April 2014 to evaluate the City's water needs, to examine and make recommendations regarding future water planning, and to evaluate potential water resource management scenarios for Council consideration.

One of the key recommendations of the Austin Water Resource Planning Task Force was the development of an Integrated Water Resource Plan. In December 2014, to support the Integrated Water Resource Plan development process, the City Council passed a resolution that created the Austin Integrated Water Resource Planning Community Task Force (also referred to as the Water Forward Task Force) and directed the City Manager to hire a consultant. Austin Water has lead the process to develop the Water Forward plan, with support from the Austin Integrated Water Resource Planning Community Task Force, which has been meeting monthly since May 2015. The final recommended plan is the culmination of a robust effort that involved the Austin community, the Water Forward Task Force, an outside consultant team, City staff, and others.

Austin's continued population growth and development, the historic 2008-2016 drought, and climate change pose challenges that require creative and robust solutions. For example, climate scientists project that in the future the Austin region will see longer and deeper periods of drought punctuated by heavy rain events. Water Forward addresses these issues by modeling potential climate change effects on Austin's water supplies and evaluating multiple future scenarios to plan for droughts worse than what we have experienced in the past.

The Water Forward plan includes strategies to conserve water, making our buildings and landscapes more water efficient and reducing losses on the utility and customer side. The plan also includes strategies to make use of all water, including rainwater, stormwater, graywater, air conditioning condensate, and wastewater (typically called "alternative waters") that can be treated and reused to meet non-drinking water demands. To do this, the plan recommends immediately beginning work to develop ordinances to require that new larger commercial and multifamily buildings use alternative water generated on-site or from the City's reclaimed water system for both indoor and outdoor non-drinking water purposes. The plan also recommends expansion of the centralized reclaimed water system to meet growing non-drinking water demands in the future.

To help see our community through future droughts, the plan recommends implementing storage strategies like Aquifer Storage and Recovery by 2040 and a new Off Channel Reservoir within the next fifty years. Storage strategies will allow Austin to store water during wet times so that water can be retrieved and used to meet drinking water demands during dry times. In the event of a severe drought, the plan recommends Indirect Potable Reuse to be used for the shortest possible time in drought emergencies to meet critical drinking water demands. The plan also recommends the City bring on additional supplies by capturing local inflows to Lady Bird Lake in the near

term and treating Brackish Groundwater further out into the future.

The Water Forward plan reflects our continued commitment to Austin's core Colorado River supplies and implementation of best management practices. All of the Water Forward strategies are recommended as additions to Austin's current supplies, which include our core Colorado River supply, reclaimed water program, water conservation program, and drought contingency plan. As Austin's core supply, the City will continue to work with its regional partners to protect and enhance the Colorado River and Highland Lakes system supply.

Implementation of the recommended Water Forward strategies will be transformative for the City of Austin. Plan benefits include:

- Stretching existing supplies through water use reductions, more efficient water use, and water reuse.
- Enhancing supply diversity using local water sources in alignment with our community's values by capturing and reusing water closer to the point of use
- Increasing potable water supply resilience through drought and climate change with storage strategies like Aquifer Storage and Recovery

By diversifying Austin's water supply and demand management portfolio, Water Forward increases the City's ability to maintain a reliable supply for the next 100 years. Austin Water plans to begin the implementation process immediately after City Council approval of the Water Forward Plan. Further information on planned implementation steps is outlined in the Implementation Outlook and Adaptive Management Plan included in the Water Forward Plan. The Water Forward plan will be updated on a five year cycle, using new data about changing conditions to inform potential adjustments to the planned implementation strategy and ensuring that we are on a path to meeting our goals.

Implementing the Water Forward recommendations will require a thoughtful approach that protects public health, considers social equity, and maintains affordability and utility financial resilience. Austin Water is committed to implementing the Water Forward plan as quickly as possible, with appropriate time to hear from the community and develop implementation approaches that mitigate unintended consequences.

Future Water Forward efforts will continue the plan's emphasis on public outreach and community involvement. The plan recommends convening the Water Forward Task Force on a quarterly basis to support plan implementation efforts. With hard work and community support, implementation of Water Forward will create a more sustainable, reliable water supply for Austin for the next 100 years and beyond.