



MEMORANDUM

To: Mayor and City Council

Through: Michael Rogers, Assistant City Manager *MR*

From: Shay Ralls Roalson, P.E., Austin Water Director *SMR*

Date: May 14, 2026

Subject: **Update on Water Supply Projects 2026**

The purpose of this memorandum is to provide updates about plans for field testing in Eastern Travis County for Austin Water’s Aquifer Storage and Recovery and Brackish (salty) Groundwater Desalination projects.

On the May 28, 2026 City Council agenda, Austin Water will seek City Council approval to authorize an amendment to the contract for engineering services for the Aquifer Storage and Recovery Pilot and Program Management project with HDR Engineering, Inc., in the amount of \$15,726,269 for a revised total contract amount not to exceed \$21,726,269.

Austin Water will provide a briefing about this item to the Climate, Water, Environment and Parks Committee on May 18, 2026.

BACKGROUND

The item coming before City Council on May 28 for additional contract authorization will allow Austin Water to begin field testing on City-owned land in Eastern Travis County for two key water supply strategies in Austin’s Water Forward Plan and the State Water Plan: Aquifer Storage and Recovery and Brackish Groundwater Desalination.

Aquifer Storage and Recovery (ASR) is a proven water supply strategy in which treated drinking water is stored in an underground aquifer when supplies are plentiful and later recovered during droughts, emergencies, or periods of high demand, functioning like a “water savings account.” Storing water underground protects supplies from evaporation, improves reliability in drought, reduces surface impacts, and provides a secure, resilient source for the community.

Brackish Groundwater Desalination uses water from an aquifer that has salinity levels in excess of TCEQ guidelines and rules for drinking water. The water would be withdrawn through wells, then treated by advanced treatment processes such as reverse osmosis to reduce the salinity and condition the water to be compatible with Austin’s drinking water.

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PROJECT LOCATION

In 2022, Austin Water began a scientific desktop study to evaluate aquifers in an eight-county area and identify those most suitable for ASR. This analysis identified portions of the Trinity Aquifer in eastern Travis County for field testing due to favorable hydrogeologic characteristics and improved feasibility compared to other locations studied. ASR in the Trinity Aquifer will likely yield less water than initial Water Forward targets, so Austin Water is also proposing field testing for Brackish Groundwater Desalination, which could be co-located with an ASR wellfield.

The planned location for field testing is on City-owned land, reducing access barriers, providing greater environmental oversight, and simplifying project logistics for sample collection and monitoring. Additionally, the site's proximity to Austin Water infrastructure supports connecting to existing infrastructure more easily, should pilot or full-scale systems prove feasible. Field testing will include collecting groundwater and soil samples for the laboratory analysis. No water will be injected during this approximately 3-year phase.

CONCLUSION

The engineering services contract amendment scheduled for City Council consideration on May 28 is needed to advance ASR from broad regional screening to detailed field testing in the Trinity Aquifer on City-owned land. This testing is needed to verify aquifer conditions, evaluate potential treatment requirements, and establish the scientific basis for a future, small-scale, pilot project. The amendment will also support field testing necessary to evaluate the feasibility of Brackish Groundwater Desalination as an additional drought-resilient water supply strategy. The request directly supports Water Forward goals to enhance drought resilience, provide additional water supply resilience during emergency events, and strengthen long-term sustainability.

Austin Water will continue outreach efforts through the establishment of an ASR Technical Advisory Group and ongoing engagement with community partners, neighborhoods, and stakeholders. These efforts will support and guide the phased development of the ASR Program, Brackish Groundwater Desalination, and any future pilot or full-scale implementation.

Should you have any questions, please contact Shay Ralls Roalson, Director, Austin Water at 512-972- 0108 or shay.roalson@austintexas.gov.

cc: T.C. Broadnax, City Manager
Erika Brady, City Clerk
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