# **AQUIFER STORAGE & RECOVERY**

#### **PROJECT BACKGROUND**



Aquifer Storage and Recovery (ASR) is a water supply strategy for Austin Water to store available water for recovery and use when needed.



ASR is a key long-term water supply strategy in Austin's Water Forward plan, which provides a roadmap for Austin's water future for the next 100 years. Water Forward includes water reuse and conservation strategies along with ASR.



Austin Water plans to store 60,000 acre-feet of water by 2040, which is about 38% of Austin's 2022 annual water use. The ASR capacity will be expanded in the future.

# **PROJECT TIMELINE**



### **PROJECT VIDEOS**

Scan the QR codes to learn more.



# **PROJECT HIGHLIGHTS**

- Austin Water began work on the ASR project in 2021 by studying aquifers in our region to identify favorable aquifers for an ASR project. Results indicate that the Carrizo-Wilcox and Trinity Aquifers in Travis, Bastrop, and Lee counties are most promising for an ASR project (as shown on the map).
- Austin Water is committed to being a good neighbor throughout the implementation of ASR. Since the beginning of



the ASR project in 2021, we have held over 28 stakeholder, community group, and elected official meetings. We also held 8 community workshops (in person, virtual, and on-demand) to gather community input, which was factored into the criteria being used to identify preferred locations for ASR. This input was also used to identify the following top-three mitigation strategies which will be implemented as part of the ASR project:

- 1. Perform well-lowering/mitigation for existing well owners impacted by potential aquifer fluctuations due to ASR.
- 2. Fund additional monitoring and research of the aquifer and groundwater in the region through partnerships.
- 3. Use of ASR wellfield land for continued purposes compatible with ASR (for example, ongoing agricultural use).
- Austin Water expects to complete the first phase of technical analysis in early 2024. At that point, Austin Water will identify a general location for ASR field testing and small-scale piloting.
- Community open houses are planned for early 2024 to share information about the first phase of technical work and to receive additional input on possible mitigation strategies.

### **HOW IT WORKS**

- When water from Austin's existing water supplies is plentiful, treated water from Austin's drinking water system will be stored underground in a natural aquifer.
- Like a savings account, water is deposited into the aquifer during wet years so that water can be withdrawn from storage when needed.
- When regular water supplies become low during a drought or during other emergencies, the stored water is pumped out of the aquifer, tested, and treated to meet Austin's drinking water standards, and then is provided back to AW customers.



#### Learn more at austintexas.gov/ASR