

QUARTERLY PROGRESS REPORT NO. 7 (CY 2018)
NBU ASR Demonstration Project

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From:
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Date:
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ARCADIS Project No.:
40256004.0000

Subject:
Quarterly Progress Report for the NBU ASR Demonstration Project (**Contract No. 1600011957**) for **July 1, 2018 through September 30, 2018**.

Introduction:

The New Braunfels Utilities (NBU) Aquifer Storage and Recovery (ASR) Demonstration Project is being partially funded by the Texas Water Development Board (TWDB) under Rider 25 to HB 1 (General Appropriations Act) of the 84th Legislature. The "Project" generally consists of: coordination with TCEQ; design for wireline coring in the brackish Edwards Aquifer; wireline coring; design of a monitor well in the brackish Edwards Aquifer; construction of the monitor well and collection of data; preparation of draft and final reports; and presentations on the Project.

The Project Contractor is the Edwards Aquifer Authority (EAA) and the primary Project Participant is NBU. The Project consulting and engineering team consists of Arcadis U.S., Inc.; ASR Systems, LLC; and INTERA, Inc. (the "Arcadis Team").

The purposes of this Quarterly Progress Report are to explain what work has been accomplished during the reporting period, and to describe any potential or anticipated challenges.

Work Completed:

Task 1: Project Management. During this reporting period project management activities included communication with EAA and NBU, and among the Arcadis team. NBU and the Arcadis Team meet monthly to review progress on the project, and the Arcadis Team has internal conference calls at least once each month.

On July 25, 2018 and October 10, 2018 NBU, EAA and the Arcadis Team held Work Group meetings, as required under the EAA-NBU Interlocal Contract.

Task 2: Coordination with TCEQ. A coordination meeting with TCEQ was held at the TCEQ offices on September 18, 2018. The meeting was attended by representatives of EAA, NBU, Arcadis, INTERA and

ASR Systems (by phone). TCEQ was briefed on the Project, as well as NBU's plans for construction of a full-scale ASR well on NBU property adjacent to the New Braunfels Regional Airport. TCEQ staff provided guidance on preparing an application for a Class V Injection Well authorization for a 5X25 experimental demonstration ASR well. Arcadis will begin preparing the application within the next month.

Task 3: Coring Design. Completed.

Task 4: Wireline Coring. Completed.

Task 5: Monitor Well Design. Completed.

Task 6: Monitor Well Construction and Data Collection. Additional water quality samples were taken from the lower interval of the Edwards Aquifer on August 10, 2018. Kutscher construction then plugged the well up to elevation 710 feet bgs. After plugging, the pump was reset and additional water quality samples were collected from the upper interval of the Edwards Aquifer. These samples will be used for additional geochemical analyses.

Task 7: Draft and Final Reports. During this period the Arcadis Team completed the draft report and submitted the draft to EAA and NBU for review and comment. When those comments have been addressed, Arcadis will submit the draft report to the TWDB.

Task 8: Presentations. No papers or presentations were completed in this reporting period.

Challenges Identified:

No challenges were identified during this reporting period.