

SAWS Brackish Groundwater Desalination Program – Work Package 10 - Injection Wells

Owner:

San Antonio Water System
2800 U.S. Hwy 281 North
San Antonio, Texas 78298-2449
Mr. Kevin Morrison
(210) 704-7297

Client:

Zachry-Parsons Joint Venture
Construction-Manager-at-Risk
Mr. Sheldon Eskelson, PE
210-819-1054

Location:

SAWS Twin Oaks WPF
Bexar/Wilson Counties, Texas

Services:

Const. Contractor Project Manager

Performance Period:

2014-2016

Key Personnel:

Grant L. Snyder, P.G.
Hydro Resources
Onsite Project Manager



Project Background

The Carrizo-Wilcox Aquifer in southern Bexar County, Texas is a sandstone, water-bearing unit comprised of the Carrizo Sand Formation and underlying Wilcox Group. In particular, brackish groundwater is available from the Wilcox Group of formations. This confined aquifer system occurs in an area that produces water suitable for public supply, membrane-filtration water treatment. The San Antonio Water System (SAWS) embarked upon a brackish desalination program within this aquifer to create the 2nd largest Desalination project in the Texas at 12 MGD capacity. The project will produce more than 13,440 acre-feet of source water from the Wilcox Aquifer. The groundwater will then be treated through a membrane filtration plant with finished water going to distribution and concentrate to be disposed in deep injection wells. Concentrate brine will be produced as a by-product of the desalination process which will require multiple Class I Injection wells for the disposal of the concentrate.

SAWS and its Construction Manager at Risk (CMAR) requested that Hydro Resources perform construction of Injection Well #2 and development/testing of Injection Well #1. This project is comprised of the construction and testing of two Class I (UIC) injection wells completed into the Edwards Group at a depth of 5,500 feet. As Hydro Resources Onsite Project Manager, Mr. Grant L. Snyder, P.G. provided the following specific services during the project:

- Injection Wells Project Management
- Onsite Construction Management and Supervision