Brazosport Now! Texas Desal 2018

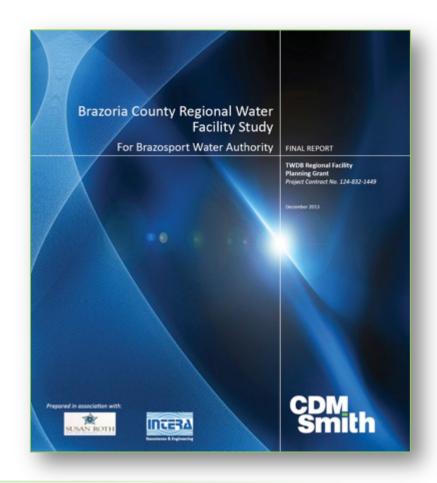
September 13





Historical Context

- Brackish Groundwater Supply Initially Proposed in TWDB Partially Funded Regional Water Facility Plan, December 2013
- Brackish Groundwater was Determined to be a Competitive Supply Compared to Other Water Management Strategies



Historical Context

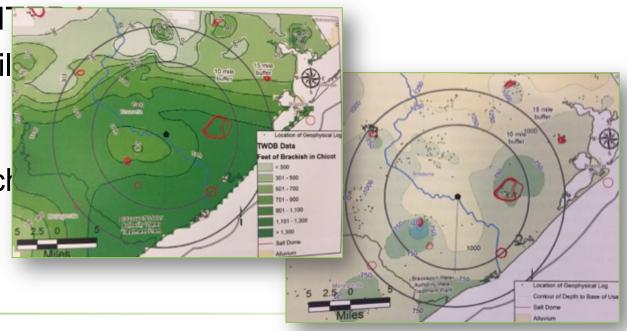
- 2012 State Water Plan Amended so Project was SWIFT Eligible
- Brackish Groundwater Supply Included in 2016
 Region H Plan and 2017 State Water Plan
- Brackish Groundwater Well No. 1 Completed June 2017
- Land Acquisition and Environmental Approvals for Well No. 3A and 3B

Brackish Groundwater Supply in Southern Brazoria County

 2013 Regional Water Facility Plan Included Analysis of Brackish Groundwater Supply and Potential Subsidence

Prepared by IN

Plan was to Dril
 Three Wells
 with a Yield of
 1,600 gpm Each



Brackish Groundwater Supply in Southern Brazoria County

Geophysical Logs of Well No. 1 Showed Multiple Layers

of Brackish Groundwater

 Shallower Formation at 850 ft with lower TDS but Thinner Formation

Deeper Formation at 1,220 ft with higher TDS

- Decision was to Develop Well at 850 ft
- Water Quality of Well No. 1 is
 1,000 mg/L, but Yield is only 800 gpm

What Is In The Short Term

- Decision Was Made to Move Forward with Well No. 3
- Well No. 3 will Actually be Two Wells – One at 850 ft (3A) and One at 1,220 ft (3B)



What Is In The Short Term

- Well No. 3 was Chosen to Better Document the Characteristics of the 850 ft Aquifer and to Determine if There is any Interaction Between the 850 ft and 1,220 ft Aquifers
- Well No. 3 is Located on City of Lake Jackson Park Property
- A Lease with Lake Jackson has been Finalized
- 404 Permitting for the Site has been Completed
- Wells 3A and 3B Advertised for Bid 9/5 and Bids will be Received 10/10

What Is In The Long Term

- Wells 3A and 3B are Completed and Long Term Pump Tests Better Define the Characteristics of the 850 ft and 1,220 ft Aquifer
- Water Quality of the Combined 3A and 3B Wells is Determined
- A Reverse Osmosis Pilot Plant is Procured
- Brackish Groundwater is Treated in the Pilot Plant for 90 Days
- Design of a 6 mgd Brackish Groundwater Treatment Facility Commences Following the Pilot Study