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 INTERA
- Plan was to Drill 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