

Pinellas County Utilities Water Blending Facility

The Water Blending Facility (WBF) is being developed to both improve the quality of water delivered to the County's customers and to replace the 50 year old Keller High Service Pumping Station.

The County receives water from Tampa Bay Water at two distinct points of connection. The regional system connection includes a varying blend of groundwater, surface water, and desalted seawater. The Eldridge-Wilde connection includes a blend of regional system water and water from the Eldridge-Wilde wellfield. The water from the two points of connection is high quality and meets or exceeds all health requirements, but blending of these somewhat dissimilar waters in our distribution system has resulted in unwanted water quality changes. The WBF will allow the blending, enhanced stabilization, refined disinfection, and elimination of blending in the distribution system and produce a single high quality water for distribution to our customers.

The WBF also includes new high service pumps. These pumps are needed to ensure the delivery of adequate water pressure to our customers from Tarpon Springs to Ft. DeSoto. The County's existing high service pumps are located at the Keller water treatment plant and are 50 years old. The reliability of the Keller pumps is impacted by their age and the difficulty in both maintenance and repair due to the lack of spare parts. The WBF project will bring the high service pumps up to today's standards in order to improve reliability and produce operational cost savings.

The WBF is located to facilitate combining water from the two TBW connection sites. Initially the existing Keller water treatment facility site was considered as a possible location, but was determined to be too small for the new facility. The selected site was purchased using rate payer funds by the County in 1983 for water supply and supply protection purposes, and was made part of the Brooker Creek Preserve in the early 1990s.

The specific location of the WBF on the site was selected to maintain the preserve to the greatest degree possible while still meeting the County's water needs. The County worked with the Army Corp of Engineers and the Southwest Florida Water Management District to select a site that avoided any significant wetland impacts and preserved a substantial area of undivided habitat. The site and its development were reviewed by the County with the Friends of Brooker Creek. As a result, the facility is designed to be fit with its surroundings including the use of plants native to Brooker Creek in the landscape design. Constructed and natural vegetation areas are incorporated to help reduce the visibility of the facilities. Sound proofing, the use of non-gaseous chemicals, low level lighting, and specifically designed containment facilities all make the WBF safe and less intrusive to its neighbors. Through WBF location and design, the nature of the preserve is maintained and intrusion is minimized.