

Lake Belton Plant Expansion

Update July 15, 2022

For the past year the District has been seeking customer interest in expanding the Belton Water Treatment Plant. Prior to the Lake Stillhouse Water Plant coming online, it was not feasible to expand the Belton Water Treatment Plant. The plant site is too small to add capacity without taking existing plant improvements offline.

As part of our recent Master Plan update, CDM-Smith developed water use projections for every WCID 1 customer. Four entities are projected to need increase their water treatment capacity interest in the 50 year planning horizon; Nolanville (WCID 3), 439 Water Supply Corporation, Belton, Copperas Cove and Killeen. Some entities also will need additional water supply (raw water contracts) in the 50 year planning horizon.

Of the entities needing additional treatment capacity interest, WCID 3's need is most urgent with a 2024 projection. There have been multiple large subdivisions platted in their service area as of late. The next urgent need, time-wise is Killeen with a need in the 2032 to 2035 timeframe. Belton's need is next with Copperas Cove and 439's need coming around 2050 if growth continues as projected.

At this time, there is not sufficient interest to go forward with an expansion project. It is anticipated that a plant enhancement will be possible to garner a 1 to 2 million gallon per day re-rating and provide WCID 3 with their needed treatment capacity before they exceed their treatment capacity interest.

It's worth noting that the District has 2 sources of supply; Lake Belton and Lake Stillhouse Hollow. There are currently limited water rights in Lake Stillhouse (10,000 acre feet) as compared to Lake Belton (52,000 acre feet). The intake at the Belton Water Treatment Plant has a delivery capacity into the treatment works of 120 million gallons per day. The filters within the treatment plant are rated for 120 million gallons per day. Clarification and disinfection enhancements comprise the biggest needs to optimize the Belton WTP's treated water output. It's also worth noting that some of the Belton WTP components are original to the 1954 construction, including a big portion of the electrical support system to the raw water pumping station. This major maintenance will need to go forward within the next couple of years regardless of expansion plans. When the growth and subsequent water demand on the south part of Killeen begins dominating the Stillhouse Water Plant capacity, the opportunity to expand at the Belton Water Plant will be lost.

It's our intent to post Capital Project needs and updates on this tab. Capital projects will also be on the annual customer meeting agenda held each February regarding conservation plans and efforts.