



WATER FINANCE EXCHANGE
NO COMMUNITY LEFT BEHIND

COMMUNITY PROFILE

Water as Economic Development in Coastal Bend Texas

South Texas Water Authority

BY THE NUMBERS

\$7.83M

SRF application amount for upgrades at the Ricardo Water Supply

9,000,000

Estimated gallons per day to support the Tesla facility

40,000

Approximate number of connections in the South Texas Water Authority

69

Highway running through STWA that is becoming a major transportation corridor

7

Entities in the South Texas Water Authority

0

Number of commercial users in South Texas Water Authority before Tesla



Daily life at South Texas Water Authority (STWA), a collection of seven utilities that buy their water from nearby Corpus Christi, has been steady since its inception in the 1970s. The utility was created by the state legislature to be a rural water provider and for the past half-century, STWA has only served residential customers. When Tesla announced a new lithium refining facility in the region in 2022, paired with a broader federal plan to create a corridor of economic development from Canada to Mexico that runs along Highway 69, STWA found itself at the center of an exciting opportunity to realize massive economic development that would require it to, for the first time, serve a commercial connection. This opportunity spurred a deeper view into the desire to attract other commercial connections to capture economies of scale and provide the residents with affordable infrastructure funding opportunities. The STWA embarked upon a multiyear master planning exercise to ensure that the residents would maintain the consistent reliable healthy access to water while making room for commercial opportunities.

The Need

STWA had been investigating ways to make their water system more resilient in 2022, which included exploring supplemental water supply opportunities that might be needed in the future. Shortly after those conversations began, Tesla announced it would be constructing a lithium refinery in the service area of STWA, in an unincorporated area between the cities of Robstown and Driscoll. STWA, which has only served residential customers in its approximately 50-year history, would now have its first commercial user, and it would be one of the highest profile names in the world with average water needs exceeding 9 million gallons per day. This announcement and the additional economic development opportunities expected to follow taxed the administrative and technical capacity of leaders at STWA, who had successfully and reliably delivered water to only their residential users for decades.

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In addition to this opportunity, some utilities in STWA were managing challenges common to thousands of utilities across the country, including aging infrastructure, water loss, and considering the need for desalination if the future water would come from the Gulf Coast Aquifer. As Tesla moved rapidly to break ground on the facility in April 2023, STWA also wanted to be sure they protected their long-time residential customers as the utility went through the biggest shift since its inception.

The Process

STWA sought assistance from Water Finance Exchange to help it sustainably manage this growth. WFX helped identify infrastructure needs and coordinate across the seven different utilities to hire an engineer that will create a master plan to balance economic development opportunities with sustainability, taking into consideration the needs of existing residential customers.

While that planning process is underway, WFX helped the Ricardo Water Supply Corporation – one of the seven entities in STWA – apply for \$7.83 million from the State Revolving Fund (SRF) program to address main line breaks that would leave the entire community without water. After the planning process is complete, STWA will have a better idea of its water system needs, and WFX will help identify the funding sources that can best meet those needs. WFX is also supporting the administrative staff as STWA expects to engage in future negotiations with additional industrial and commercial users that may follow Tesla.

The Outcome

STWA is currently engaged in the master planning process, which will identify future needs, including lead line replacement.

“The master plan is going to do a great job providing us with projects that STWA is going to need to take advantage of economic development while maintaining a good system for current residents,” said Rogelio Rodriguez, WFX Director of the Texas Infrastructure Fund. “Then we can have some ideas about how much funding they need and where to go to get it.”

The potential awards for the SRF application to replace lines in the Ricardo Water Supply Corporation will be announced in fall of 2023.

