



BROWNSVILLE
PUBLIC UTILITIES BOARD

Water Renewal Project

Indirect Potable Reuse Initiative

Project Overview

The Water Renewal Project is BPUB's Indirect Potable Reuse (IPR) initiative, designed to strengthen Brownsville's water future by creating a reliable local water resource.

Water is too valuable to use only once. That's why the project will recover up to 8.0 million gallons per day (MGD) of highly treated reclaimed water from the Robindale Plant and renew it through a multiple-barrier treatment approach before it enters the potable water system.

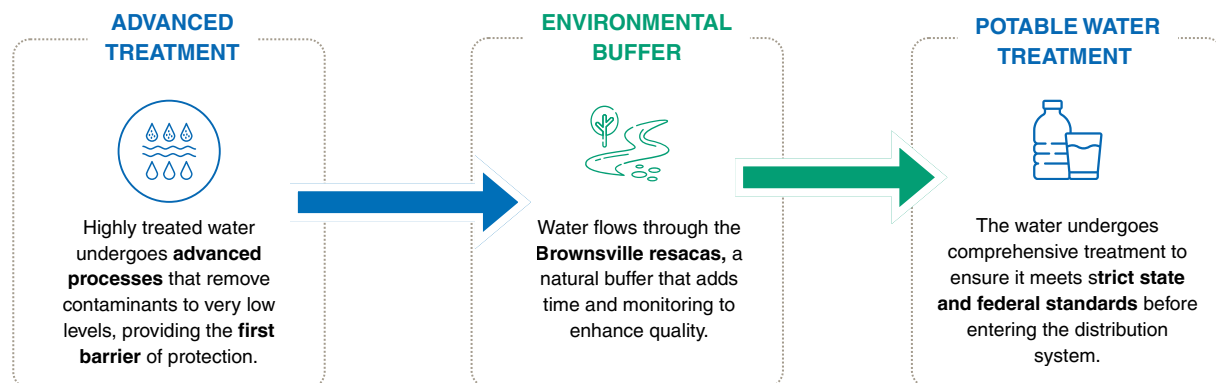
Instead of being discharged, the water will undergo advanced treatment, pass through the Brownsville resacas as an environmental buffer, and receive comprehensive drinking water treatment to ensure it meets rigorous state and federal drinking water standards.

With the Water Renewal Project, every drop has a future, helping diversify Brownsville's water portfolio by creating a dependable local source that supports long-term water security and resilience.

The project aligns with Texas Senate Bill 905 and the Texas Commission on Environmental Quality (TCEQ) regulatory framework for potable reuse, addressing growing water scarcity in the Rio Grande Valley.



Multiple-Barrier Treatment Approach



Technical Specifications

- Water Renewal Capacity: Up to 8.0 MGD.
- Pipeline: A 36-inch pipeline will connect the Robindale Plant to Resaca de la Guerra.
- System Integration: Water will be conveyed to the Water Treatment Plant No. 2 raw water intake for final drinking water treatment.
- Regulatory Framework: Developed in alignment with Texas Senate Bill 905 and the Texas Commission on Environmental Quality (TCEQ) potable reuse framework.



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Project Investment

- Estimated Cost: Approximately \$40 million
- Grant Funding: \$34,558,000 awarded by the Texas Water Development Board (TWDB) on Jan. 28, 2026
- Estimated Completion: 2028

Strategic Impact

- The project will add up to 8.0 MGD to Brownsville's potable water supply and offset approximately 10.1% of current Rio Grande withdrawals.
- By creating a reliable local water resource, the project helps Brownsville diversify its water supply and prepare for future drought conditions.
- The project will reduce nutrient-rich discharge to downstream waterways while incorporating the resacas into a water management strategy that supports long-term environmental stewardship.
- As Brownsville continues to grow, infrastructure must grow with it. The Water Renewal Project is an investment in the community's future water reliability.

