

CITY OF CORPUS CHRISTI
CORPUS CHRISTI WATER

TO: Peter Zanoni, City Manager

FROM: Nicholas Winkelmann, P.E., Interim Chief Operating Officer 

COPY: Mayor & City Council

DATE: September 12, 2025

SUBJECT: Water Supply Projects Update

Corpus Christi Water (CCW) continues to evaluate various supplemental water supply projects.

Nueces River Groundwater Wells Project

Phase 1 – Groundwater Well Implementation for Diversions to Nueces River

As of today, the current expenditure for this project is \$16,081,858.

Texas Commission on Environmental Quality (TCEQ) granted the Temporary Bed and Banks permit for the City of Corpus Christi's (City) Eastern Wellfield on August 7, 2025. The City is currently discharging approximately 5-7 MGD into the Nueces River in accordance with the approved monitoring plan and in compliance with all State laws.

Intera Incorporated, the City's project hydrogeologist, has estimated that the preliminary data indicates that the long-term sustainable flow from the Eastern Well Field is approximately 11 MGD, and 17 MGD from the Western Well Field. The hydrogeologic model continues to be updated and refined as more data is obtained.

In the Eastern Well Field, Well Nos. 1 to 7 are operational. Test pumping has been completed on Well No. 8, and we are awaiting the delivery of the permanent pumping equipment.

In the Western Well Field, the status is as follows:

- Well No. 9 – Drilling complete, permanent pump is being designed
- Well No. 10 – Drilling complete, development and test pumping to start next week
- Well field site work continues
- Water line design and river outfall are currently under design

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Phase 2 – Proposed Future Brackish Reverse Osmosis (RO) Treatment Plant

Preliminary and conceptual design work continues for the development of this water treatment plant. The developed groundwater from the eastern and western well fields would be conveyed to the brackish reverse osmosis treatment plant.

The Engineering Department is preparing a Request for Qualifications (RFQ) to facilitate the selection of a design engineer for a professional services contract to design the treatment plant, pumping station, and conveyance system.

Evangeline Groundwater Project

CCW is actively negotiating with Evangeline Laguna. On September 23, CCW anticipates presenting a final term sheet to the Council in an executive session. Additionally, CCW will also present professional services contracts to further evaluate project timelines and the required key engineering tasks. HDR is working to complete the Mary Rhodes Pipeline (MRP) hydraulic analysis with the estimated inputs from Evangeline. This analysis is expected to be completed early next week.

South Texas Water Authority

On August 1, the City met with leadership from South Texas Water Authority (STWA). At this meeting, STWA told City staff that a follow-up meeting would be scheduled with the City once more specific details about their project were available to share. However, STWA has not provided City staff with a follow-up meeting to discuss these details. These details include:

- Condition assessment of the existing conveyance line
- Timeline for power and water quality results from the first test well
- Update of STWA's ability to produce raw water to supply up to 28 MGD to the City
- Plan for STWA's effluent discharge

On September 23, STWA Executive Director John Marez will provide the Council with an update to include:

- Test well results
- Volume projections
- Option terms regarding a possible brackish groundwater desalination agreement

CC Polymers Seawater Desalination Treatment Plant

On August 27, City staff met with leadership from CC Polymers. CDM Smith, the City's consultant has prepared a draft technical memo reviewing the proposal from CC Polymers and has recommended that a condition assessment be completed prior to any agreement.

CDM Smith and CCW personnel toured the site on September 10 to review plant equipment in order to confirm the scope of the condition assessment. We are anticipating having a detailed condition assessment proposal in 1 to 2 weeks.

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Harbor Island Seawater Desalination Project

On August 29, City staff met with John Byrum, Executive Director of Nueces River Authority (NRA). The NRA is working to acquire and/or amend the five permits required prior to initiating the construction of their project.

1. TCEQ Intake Permit
2. TCEQ Discharge Permit
3. US Army Corps of Engineers (ACOE) Permit to construct on Harbor Island
4. ACOE Permit to bore under Harbor Island
5. ACOE Right of Way Permit for diversion and discharge lines into the Gulf of Mexico

John Byrum estimated that the construction of their project would begin in March 2027, with a goal of producing water in December 2029. CCW continues to work with NRA regarding a potential reservation fee.

Reclaimed Water Infrastructure Project

Garver

Garver continues to investigate reclaimed water potential with a focus on the following three options.

- Conveyance of effluent and TCEQ permitting to take water to the Nueces River
- Aquifer Storage and Recovery
- Direct potable reuse

Garver has also been communicating with TCEQ to understand any potential requirements for discharging effluent water from one of the wastewater treatment plants into the Nueces River. The summary of alternatives and input on the required permitting is expected to be available within the next three weeks.

Gulf Coast Authority and Ardurra

On September 10, the City received an MOU from Gulf Coast Authority (GCA). The MOU is in the review stage with the City's Legal Department. CCW continues to have discussions with industry to understand their interest in the utilization of effluent water.