

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: October 24, 2025

SUBJECT: Water Supply Update

Corpus Christi Water (CCW) continues to progress forward on our water supply projects to add new sources and diversify the water supply portfolio.

Nueces River Groundwater Wells Project

As of today, the current expenditure for the Eastern Well Field Project is \$15,896,921, and \$8,247,604 for the Western Well Field Project. The State has committed to providing a \$30,000,000 grant for this project. Staff has been working with the Texas Water Development Board (TWDB) on fund appropriation. The resolution to request the granted money will be presented to Council on November 18, 2025.

In the Eastern Well Field, Well Nos. 1 to 8 are complete. The City is currently discharging into the Nueces River in accordance with the approved monitoring plan and in compliance with all State laws. The natural gas generator for Well No. 4 has had a warranty issue and is awaiting repairs.

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

- Well No. 9 – Drilling complete, permanent pump has been designed, awaiting delivery of the permanent pumping equipment
- Well No. 10 – Drilling complete, test pumping and water quality sampling complete.
- Well No. 11 – Drilling complete, development is ongoing with the pumping and water quality sampling scheduled for October 28
- Well No. 12 – The 20” casing has been installed and cemented. The production well screen is in manufacturing, and we are awaiting delivery
- Well No. 13 – The pilot hole has been drilled, and geophysical logging is scheduled to begin this weekend.
- Well field site work continues
- Water line and river outfall have been designed with construction ongoing with 2,408 linear feet (LF) of 24” diameter PVC water line installed and 1,140 LF of 12” diameter PVC water line installed by CCW crews

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Investigative work continues on the factors influencing the Nueces River. Staff is working with professional engineering consultants to review the data and prepare the application for the second bed and banks permit.

Evangeline Groundwater Project

At the City Council meeting on October 21, 2025, the Council approved an ordinance that authorizes the execution of a Groundwater Rights Purchase and Sale Agreement with Evangeline/Laguna, LP in the amount of \$169,491,700; and execution of an Interlocal Cooperation Agreement with City of Sinton; and an agreement with Saint Paul Water Supply Cooperation and amending the FY 2026 Capital Budget.

The design team, consisting of Pape Dawson, Hanson, Intera, and HDR, is moving forward on due diligence and pre-design efforts. Following is a status of some of the primary efforts:

- The initial layout of the well field is complete
- Coordination with AEP continues, and 20% of the electrical demand design has been completed
- The Mary Rhodes Pipeline (MRP) connection point has been identified, with coordination and modeling work continuing to support design operating scenarios
- The detailed delivery schedule is anticipated to be available for review by December 16, 2025
- The detailed opinion of probable construction cost (OPCC) is anticipated to be available for review by December 16, 2025

Reclaimed Water Infrastructure Project

CCW has been in discussions with multiple entities regarding the use of effluent water from our Wastewater Treatment Plants. Discussions and negotiations are continuing with multiple meetings scheduled for next week.

Ardurra is preparing a proposal for effluent conveyance from the Oso Wastewater Treatment Plant. The intent will be to present a professional services contract to Council on November 11 to move this phase of the reclaimed water plan forward. The project will be designed for expediency and would involve bringing on a contractor early in the process to expedite delivery.

Garver has completed their preliminary technical and feasibility memo regarding Aquifer Storage and Recovery, effluent conveyance, and direct potable reuse.

NRA - Harbor Island Seawater Desalination Project

The project consists of a 100 MGD seawater desalination facility located on Harbor Island. The intake structure would be located approximately 1.3 miles southeast of San Jose Island. The discharge structure would be located approximately 1.8 miles southeast of San Jose Island. The City would need to develop a conveyance water line project to transport water from the Nueces River Authority (NRA) infrastructure to a preferred connection point.

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On October 21, Council approved a reservation agreement with the NRA for 56,007-acre feet of water per year, or approximately 50 MGD, for a one-time payment of \$2,737,622.16.

This reservation agreement will also allow CCW to provide input into conveyance alignment and design.

Required permits include the following:

- TCEQ Intake: draft expected 10/2025
- TCEQ Discharge: draft expected 10/2025
- US Army Corps of Engineers (USACE) – Construction on Harbor Island
- USACE – Bore under the Island
- USACE – Structures and diversion

The NRA's agreement with the Port of Corpus Christi (POCC) includes the following provisions

- 30 acres of land located on Harbor Island
- Fifty-year agreement with an extension to build and operate a water treatment plant
- Includes easements for water conveyance line
- POCC would obtain all TCEQ and ACOE permits

South Texas Water Authority

On September 23, South Texas Water Authority (STWA) Executive Director John Marez provided an update to Council and provided the following information:

- The STWA Board of Directors approved the offering of water to the City on September 9, 2025
- Raw water quality results from their test well were provided to the City as requested
- The water purchased by the City will be treated/finished water and meet or exceed all TCEQ primary and secondary drinking water standards
- The final target of Phase 1 of the project is 13 MGD, with 3 MGD for STWA and 10 MGD available for sale to the City
- There could be an option to add additional water in 10 MGD increments
- STWA has drafted a potential contract to prepare for potential future negotiations

STWA has requested that current discussions first focus on extending its existing water purchase contract with the City, which expires on December 31, 2025. STWA has provided additional information on contract considerations, and we are working to schedule another meeting for the week of October 27, 2025.

CC Polymers Seawater Desalination Treatment Plant

On October 16, the City provided a letter to CC Polymers affirming the interest in pursuing a plant/equipment purchase. CC Polymer responded to this correspondence on October 23, 2025. In the reply, CC Polymer stated that they decided not to proceed with the proposed discussions regarding the potential acquisition of the Desalination property. However, they would be open to continuing discussions regarding alternative forms of collaboration.

Inner Harbor Water Treatment Campus

A formal notice of cancellation was sent to Kiewit on October 10, 2025. Notification letters regarding the cancellation were also issued to the Texas Water Development Board (TWDB) and the Texas Commission of Environmental Quality (TCEQ).

Per Council's direction, a formal request was made of the TWDB in correspondence dated October 14, 2025, to authorize a change in scope for the State Water Implementation Fund for Texas SWIFT loans currently allocated to the City's Inner Harbor Desalination Treatment Plant Project. No response to this correspondence has been received to date.

Water Supply Dashboard Projections

Attached is a copy of the presentation that was prepared for the council meeting this Tuesday. The presentation provides three scenarios that would influence the projections on the Water Supply Dashboard and the estimated date of the Level One Water Emergency. It is important to understand the conditions and assumptions used to develop these projections.

The current projections are presented and were developed using the following conditions:

- 2024 water supply demand
- Watershed inflows using the USGS gauge data
- The Mary Rhodes Pipeline (MRP) is operating at approximately 70 MGD
- Production for the Nueces Eastern Well Field at approximately 10 MGD
- 7% channel loss in the river

The projection for Scenario 1 was developed using the following conditions:

- Same conditions as the existing baseline
- Total production from the Nueces Eastern and Western Well Field at 28 MGD starting May 2026
- 7% channel loss in the river
- Obtaining the second bed and banks permit

The projection for Scenario 2 was developed using the following conditions

- Same conditions as the baseline
- Total production from the Nueces Eastern and Western Well field at 28 MGD starting in May 2026
- 7% channel loss in the river
- Obtaining the second bed and banks permit
- Evangeline Wells producing 12 MGD by December 2027 and an additional 12 MGD by December 2028
- Offsetting demand by Effluent reuse with 3 MGD starting November 2026 and an additional 13 MGD by December 2028

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The projection for Scenario 3 was developed using the following conditions

- Same conditions as the baseline
- Total production from the Nueces Eastern and Western Well field at 28 MGD starting in May 2026
- 7% channel loss in the river
- Obtaining the second bed and banks permit
- Evangeline wells producing 12 MGD by November 2026 and an additional 12 MGD by December 2027
- Offsetting demand by Effluent reuse with 3 MGD starting July 2027 and an additional 13 MGD by December 2028

This information will be provided and discussed in detail during the water supply update at the November 11 council meeting. Further scenario updates will be provided as additional project details and timelines are confirmed.

Water Supply Dashboard Update

**Nicholas Winkelmann, P.E.
Interim Chief Operations Officer
October 21, 2025**



Water Supply Dashboard Projections

- Current Projection
- Scenario 1 w/ assumptions and qualifying conditions
- Scenario 2 w/ assumptions and qualifying conditions
- Scenario 3 w/ assumptions and qualifying conditions

Water Supply Scenarios

Current Projection

All scenarios include the following baseline conditions:

- 2024 water supply demand and watershed inflow
- Watershed inflows updated bi-weekly using USGS gauge data
- Supply Sources:
 - Mary Rhodes Pipeline (MRP) at 70 MGD
 - Reduced partially for planned maintenance interruption
 - No additional MRP interruption
 - Eastern Nueces Well Field (Eastern WF) - 10 MGD starting Oct 2025
 - 7% channel loss in river
 - No interruptions to the Nueces Well Field Operations

Current Water Supply projections using the baseline conditions

Level 1 Water Emergency*	Western Supplies are Empty	
	Choke Canyon	Lake Corpus Christi
November 2026	January 2027	April 2027

***180 days until supply will not meet demand**

Water Supply Scenarios

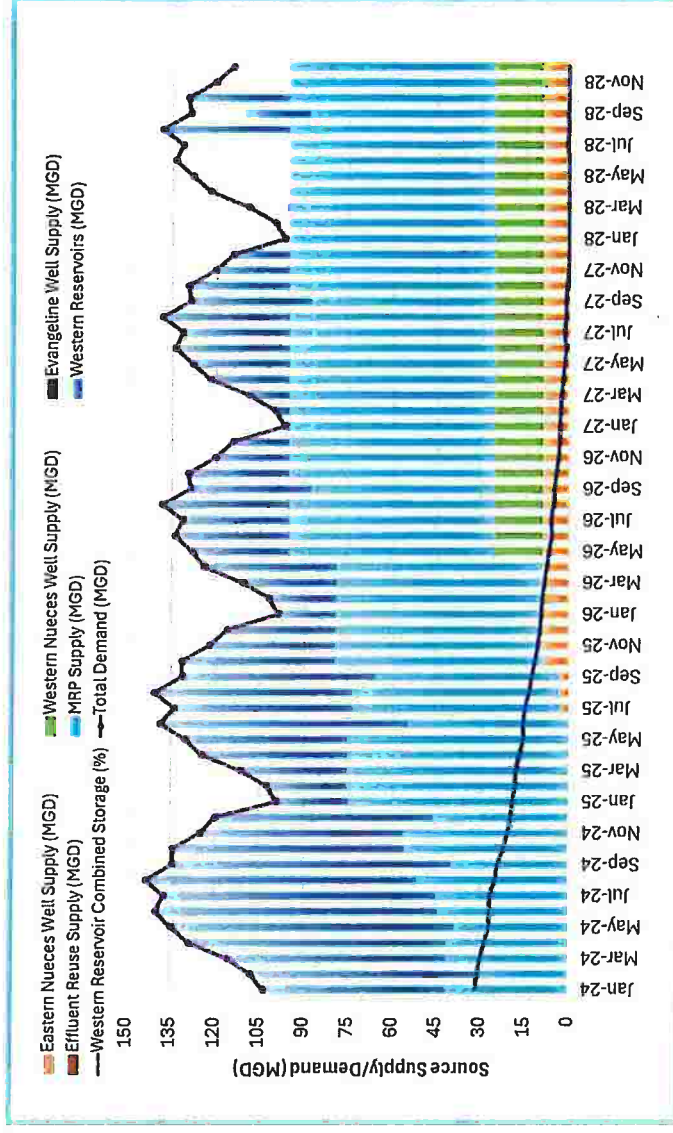
Scenario 1 Projections

Assumptions:

- Baseline conditions (see slide 3)
- Additional water supply:
 - Eastern and Western Nueces Well fields producing 28 MGD starting May 2026
 - 7% channel loss in river
 - Second TCEQ Bed and Banks permit required

Water Supply Projections:

Level 1 Water Emergency*	Last Month without Storage	
	Choke Canyon	Lake Corpus Christi
May 2027	May 2027	November 2027



Water Supply Scenarios

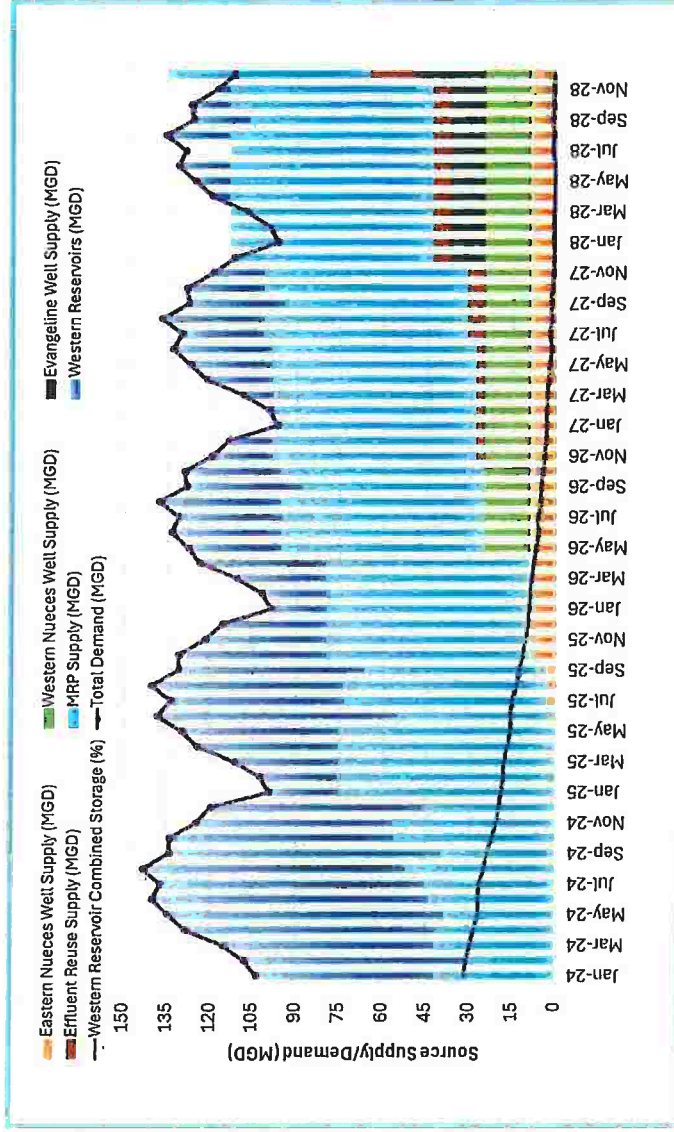
Scenario 2 Projections

Assumptions:

- Baseline conditions (see slide 3)
- Additional water supply:
 - Eastern and Western Nueces Well fields producing 28 MGD starting May 2026
 - 7% channel loss in river
 - Second TCEQ Bed and Banks Permit Required
- Evangeline permits obtained, wells producing 12 MGD by Dec 2027 and additional 12 MGD by December 2028
- Effluent Reuse 3 MGD Starting Nov 2026 and additional 13 MGD by December 2028

Water Supply Projections:

Level 1 Water Emergency*	Last Month without Storage	
	Choke Canyon	Lake Corpus Christi
December 2027	May 2027	May 2028



Water Supply Scenarios

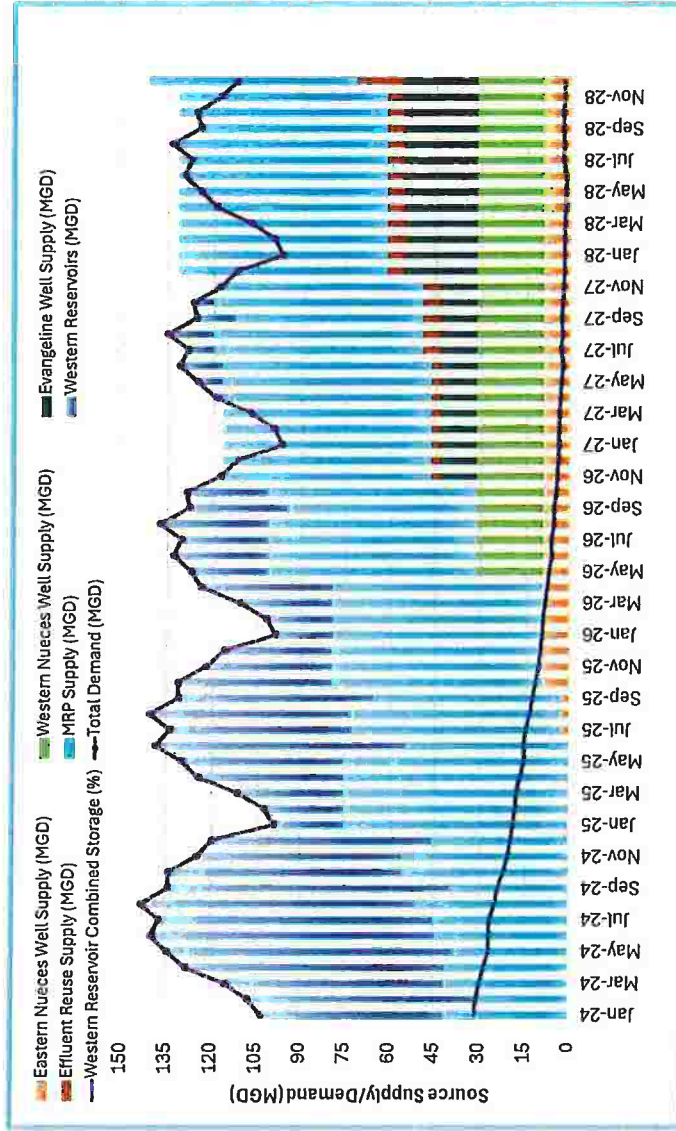
Scenario 3 Projections

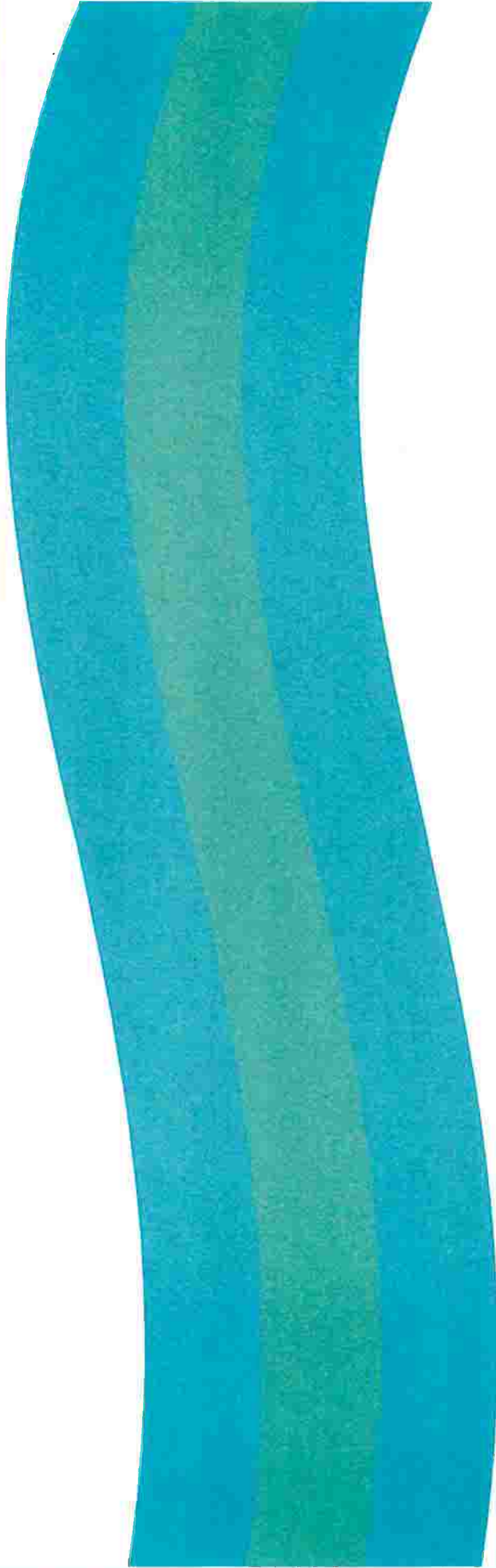
Assumptions:

- Baseline conditions (see slide 3)
- Additional water supply:
 - Eastern and Western Nueces Well fields producing 28 MGD starting May 2026
 - 7% channel loss in river
 - Second TCEQ Bed and Banks Permit Required
 - Evangeline permits obtained, wells producing 12 MGD by Nov 2026 and additional 12 MGD by December 2027
 - Effluent Reuse 3 MGD Starting July 2027 and additional 13 MGD by December 2028

Water Supply Projections:

Level 1 Water Emergency*	Last Month without Storage	
	Choke Canyon	Lake Corpus Christi
Not Triggered	August 2027	





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WATER**