CITY OF CORPUS CHRISTI
CORPUS CHRISTI WATER

TO: Peter Zanoni, City Manager

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

COPY: Mayor & City Council

DATE: April 24, 2026

SUBJECT: WATER SUPPLY UPDATE

Corpus Christi Water (CCW) continues to advance multiple water projects to add new sources and diversify the water supply portfolio. The strategic goal is to develop a diversified water supply portfolio comprising groundwater, wastewater reuse, seawater, and surface water.

Groundwater

Evangeline Groundwater Project

The San Patricio Groundwater Conservation District (SPGCD) has scheduled an administrative law judge to preside over the preliminary hearing on April 28, 2026. During the hearing, the judge will review three protests and listen to testimony. The goal is to determine whether each protestant has standing. Protests were filed regarding either well drilling permits or transport permit. It is the obligation of the protestants to prove they have standing.

The district issued a production permit for 24 million gallons per day (MGD) on May 16, 2019, and renewed it on January 21, 2025. On April 2, the seller's attorney requested that the SPGCD issue emergency drilling and transport permits for eleven wells. The eleven wells identified in the request are the farthest from the protestants.

Engineering work continues by Pape Dawson Engineers, including refinement of the 60% design plans, coordination with AEP, design coordination with Garney Construction, and site coordination with the landowners. The Texas Commission on Environmental Quality (TCEQ) permit applications for Well Nos. 9-14 have been submitted and approved. The next well applications are expected to be submitted to TCEQ by April 24. Permit applications for the two existing wells will be included in a third application package for TCEQ review and approval. The water system package is expected to be submitted to TCEQ in the first part of May.

Deliveries of the required High-Density Polyethylene (HDPE) and Polyvinyl Chloride (PVC) pipe continue. As of today, 35,406 linear feet of water line piping have been delivered to the site. Clearing and site stabilization work continues at the pump station and the ground storage tank site. Garney will mobilize one support crew the week of April 27 and a full pipe installation crew during

the week of May 4. Five construction trailers are also set up on site as part of the construction facilitation.

The team continues to refine schedules and adjust phases to ensure partial water delivery by November 2026. Approval of Amendment 2 for Garney allows Pape Dawson and Garney to transition the implementation plan to focus on pipeline installation, MRP connection, ground storage tank, and pumphouse construction at the start of the construction cycle. As planned in the original construction amendment, the third amendment for Garney construction will be presented to Council for consideration in May. The team remains committed to achieving partial delivery in November 2026, with an estimated production of 4 MGD.

The total expenditure for this project to date, including professional services, construction services, legal, and administration, is $10,776,822.

On February 17, the Council approved the purchase of groundwater rights at the Li Ranch. A condition for closing the deal is that the seller obtain permits for production, drilling, and transportation. Hydrogeologists have identified potential well locations on the land and will schedule an on-site review of these locations before beginning the well drilling permit application process. This on-site location review is expected to occur in April. Our hydrogeologist, Intera, is conducting additional hydrogeologic analysis to confirm well placement.

Nueces Groundwater Program

As of today, the current expenditure for the Eastern Well Field Project is $18,370,143, and for the Western Well Field Project, $27,031,978. The Texas Water Development Board approved the $30,000,000 grant on January 21.

The Eastern Well Field continues to operate in accordance with the approved monitoring plan and complies with all applicable state laws. Over the past seven days, the following volumes were produced: 04/16 4.9 MGD, 04/17 3.0 MGD, 04/18 4.6 MGD, 04/19 3.5 MGD, 04/20 4.9 MGD, 04/21 3.1 MGD, and 04/22 5.1 MGD. Calibrations were also conducted at measuring points, and generator service was performed. Both operations require some wells to be offline.

The Western Well Field continues to operate, with seven wells currently online. Five wells are currently powered by electric, and two are powered by temporary generators. Nueces Electric Coop (NEC) is completing an upgrade project that will allow all the wells in the Western Well Field to be fully powered by electric. Crews are expected to install another well pump by the end of next week, increasing the total number of operating wells in the Western Well Field to eight. Over the past seven days, the following volumes were produced: 04/16 9.2 MGD, 04/17 6.6 MGD, 04/18 10.3 MGD, 04/19 9.3 MGD, 04/20 8.5 MGD, 04/21 8.6 MGD, 04/22 8.6 MGD. Drilling continues on Well No. 17, the ninth well of the Western Well Field. A twenty-inch casing was installed, and the annulus was cemented. The bottom hole will be under-reamed, and production screens will be installed next week.

CCW crews have installed 25,537 linear feet, or 4.84 miles, of 24", 16", and 12" diameter PVC water lines required for this well field's operation. The electrical contractor also continues to prepare each well site by installing electrical and operating control panels.

Brackish Groundwater Reverse Osmosis Treatment Project

CCW, Garver Engineering, and Aqualia are conducting design work. The contract with Aqualia has been fully executed, and CCW is working with them to expedite their delivery timeline for the water treatment equipment. Construction is projected to be completed by CCW, multiple local contractors, and Aqualia. Garver Engineering continues designing the conveyance line, and City staff continue to meet with local contractors to discuss construction. Additional meetings have been held with TXDOT and Nueces County to discuss installing the water line. We expect to begin construction on the first segment of the conveyance line by the end of May. The current estimate for completion of the conveyance line is December 2026.

CCW Engineering continues designing the ground storage tank and pump station at the Western Well Field. Geotechnical work has been conducted on-site to support the design process. The ground storage tank is under contract, and proposals for the pumping equipment are currently being evaluated. Preliminary meetings with TCEQ have also taken place to discuss permits for the treatment plant, discharge, and well permitting. Discharge discussions with the regulatory agency have included evaporative ponds, an injection well, and surface discharge.

CCW is working with AEP and HDR on the electrical service and upgrades required at the O.N. Stevens Water Treatment Plant for the pumping equipment and the reverse osmosis treatment process. AEP has confirmed that power is available for the phased implementation and startup of the treatment equipment. The phased implementation will be concurrent with the delivery of the reverse osmosis treatment units.

The team is working to complete the conveyance line and the well field pump station by the end of this year. Expected water delivery via the Brackish Reverse Osmosis process is 4 MGD in February 2027, 5.3 MGD in May 2027, 5.3 MGD in September 2027, and 6.7 MGD in March 2028, for a total of 21.3 MGD.

The current expenditure for this project is $688,830.

South Texas Water Authority and Seven Seas Water Group

The Council previously authorized staff to work with STWA and Seven Seas Water Group on a brackish reverse osmosis project in Nueces County. Seven Seas Water Group has informed CCW that it is currently investigating a new project site. City staff will meet further with Seven Seas Water Group to understand its proposed project, including capacity and delivery dates.

Wastewater Reuse

Reclaimed Water Infrastructure Project

Ardurra and CCW continue designing the infrastructure to convey approximately 10 MGD from the Oso Wastewater Treatment Plant (WWTP) to Greenwood WWTP. Ardurra expects to complete 60% of the design by April 24. The 100% design is estimated to be completed by June 26. Work is ongoing on potential land and easement acquisitions for the pipeline and pump station at the Oso WWTP. City staff is working with TAMUCC to discuss the additional property required at the Oso WWTP to accommodate the new pump station as part of this project. AEP field coordination meetings have been completed, and Ardurra is coordinating on areas of concern related to distribution and transmission power poles. Supervisory Control and Data Acquisition (SCADA) and controls integration are also being designed to ensure the system can be operated and managed effectively. Ardurra has also completed environmental tech memoranda on effluent flows to Oso Bay and Oso Creek.

The Request for Proposal (RFP) for the Construction Manager at Risk (CMAR) has been issued. Proposals will be evaluated, and a contract will be brought to Council for consideration. The notice to proceed for construction is currently expected in September 2026. The selection of the CMAR firm will occur concurrently with the design process. There has been significant interest from CMAR contractors in pursuing this project. The current expected completion timeline for this project is mid-2027. Project delivery and completion dates will be confirmed once a CMAR contractor is selected and has provided input on the schedule developed by Ardurra.

CCW continues negotiations with other entities regarding the use of effluent water. Council has approved agreements with Valero and Flint Hills Resources (FHR). Valero is expected to begin delivering materials for its conveyance line to a staging area at Greenwood WWTP by the end of the month. Ongoing discussions are underway with other entities regarding future effluent contracts and end users. CCW met with Valero this week, and Valero is working to expedite the project to improve the timeline for using the available effluent water.

FHR is working with CCW to integrate an ultrafiltration (UF) and reverse osmosis (RO) water purification system at the Allison Wastewater Treatment facility. This project may proceed in two phases: the first would supply 1 MGD of effluent to the facility via an FHR raw-water line outside the Allison WWTP, replacing raw water typically drawn from the river. If successful, the second would increase capacity to 3 MGD. The UF/RO system, owned and operated by FHR, would be located on FHR-owned property directly adjacent to the Allison plant. Staff met with FHR this past week, and FHR is working to expedite the project.

Seawater

Inner Harbor Seawater Desalination

City staff continues to work with the Corpus Christi Desal Partners (CCDP) to finalize a contract to complete the 60% design, provide a guaranteed maximum price, and complete system

optimization testing. The contract is projected to be brought to Council for consideration on June 2, 2026.

A Far Field Advisory Committee Meeting was held on April 23. During this meeting, the modeling contractor, Spheros, stated that the model grid adjustments were complete and that additional inputs had been incorporated into the updated model. The upcoming schedule for this committee is as follows:

May 7: Model validation discussion and preliminary review of model
May 21: Review of refined model results and committee feedback
May 28: Final presentation review of the model to the committee

At the June 2 Council meeting, it is projected that the Far Field Model Results will be presented and Council consideration of the CCDP and owner's representative contracts will be requested.

NRA - Harbor Island Seawater Desalination Project

The NRA evaluation committee continues to review the qualifications of the project's development partner. A recommendation and selection are expected to be presented to the Board at the May 15 Committee meeting.

LAN continues its engineering work on the conveyance line. The pre-approval process with Water Utility Contractors has begun, focusing on the construction of the conveyance line and pump stations.

TCEQ issued a draft discharge permit. A public hearing is scheduled for May 27. The draft permit from the Executive Director can be viewed on the TCEQ website at https://www.tceq.texas.gov/permitting/water_rights/wr-permitting/view-wr-pend.apps.

Barney Davis Seawater Desalination Project

On March 17, the Council approved a motion to authorize City staff to work with CPS Energy in exploring options for establishing a seawater desalination treatment plant next to the Barney Davis Power Plant. City staff held discussions with CPS Energy representatives on April 24, during which CPS Energy reaffirmed its commitment to coordinate with the City on a seawater desalination project at the Barney Davis Power Plant.

CC Polymer (Aquatech)

On March 24, the Council approved a motion to authorize City staff to negotiate a water supply agreement with Aquatech, which has agreed with CC Polymers to complete the plant, install the necessary infrastructure, and obtain all required permits to operate the existing desalination facility to sell water to the City. Aquatech is a privately owned company founded in 1981 and based in Pittsburgh, Pennsylvania.

CCW water quality and treatment staff met with Aquatech representatives this week to discuss the project and water quality parameters. CCW has reached out to schedule the next meeting to further review project details and timelines.

Surface Water

Western Reservoirs (Lake Corpus Christi and Choke Canyon Reservoir)

On April 16, the reservoir capacity for Lake Corpus Christi is 8.8%, and 7.5% for Choke Canyon Reservoir. The combined capacity percentage of these reservoirs is 7.8%.

Lake Texana

On April 24, the Lavaca Navidad River Authority (LNRA) reported that Lake Texana's reservoir capacity was 62%. By comparison, the reservoir was at 78% capacity a year ago.

The drought contingency plan for LNRA and Lake Texana requires a 10% reduction in water use when the reservoir level falls below 50%. The prescribed reduction volume when the reservoir drops below 50% will be deducted from the total contractual water amounts at the end of the year for the City of Corpus Christi and Corpus Christi Water. The same drought contingency plan requires a 20% reduction when the reservoir percentage drops below 40%. The projected dates for the reservoir to reach these curtailment levels will be updated next week, as LNRA will then have a better understanding of the impact of the recent beneficial rains.

The City's water supply contract with LNRA provides for a total of 31,440 acre-feet annually from Lake Texana, with options for an additional 12,000 acre-feet or an interruptible 12,000 acre-feet, if available. This additional water has not yet been supplied this year. Additionally, the City has purchased 10,000 acre-feet from Formosa Plastics for 2026.

City staff and LNRA meet regularly to discuss drought conditions and the operational process for curtailing water from Lake Texana.

Lower Colorado River

The Lower Colorado River is managed by the Lower Colorado River Authority (LCRA). The City of Corpus Christi holds an annual run-of-river right of 35,000 acre-feet. Currently, there are no notices of potential restrictions from LCRA.

Water Conservation Advisory Committee

The Water Conservation Advisory Committee met on April 24 for a final review of the updated plan. The completed plan will be presented to Council at a meeting in May.

Area Engagement

This past week, CCW presented at the Council meeting in Port Aransas and attended a meeting with regional school districts. Additional engagement and outreach are scheduled for next week, including a meeting with hoteliers.

Projected Delivery of New Water Sources

The Evangeline project will be updated once the City has more certainty about the outcomes of potential negotiations and the preliminary hearing. Reuse estimates will be revised once construction schedules are confirmed.

2026 Projected Delivery of Additional Water (MGD)														
Source	**Project**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**Total**
Groundwater	WWF River Delivery			6	6	5								17
Groundwater	ERF Property (WWF Extension)						5	4						9
Groundwater	Evangeline											4	1	5
Reuse	FHR												1	1
Total														**32**

2027 Project Delivery of Additional Water (MGD)														
Source	**Project**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**Total**
Groundwater	Evangeline	2	1	1	2	1	1	2	1	1	2	1	1	16
Reuse	FHR												1	1
Reuse	Valero												3	3
Total														**20**

2028 Project Delivery of Additional Water (MGD)														
Source	**Project**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**Total**
Groundwater	Evangeline	2	1											3
Reuse	Valero	5												5
Reuse	Additional Customers	6												6
Total														**14**

Notes:

1) Western Well Field (WWF)
2) The projected delivery for each of our new water supply sources will be updated weekly as various factors influence the completion and partial completion of each project.
3) Eastern Well Field and Western Well Field daily production is dependent upon adherence to the operating protocol established in the bed and banks permit.
4) Evangeline Production estimates will be updated once we are more certain of the timeline for the next steps of the permitting timeline.
5) Well Production is dependent upon results from pumping and aquifer testing
6) Reuse is an offset of the potable water demand