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 17, 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 review of the 60% engineering design by Pape Dawson Engineers was reviewed last week with comments provided so that Pape Dawson Engineers can progress towards the next design milestone. Coordination with AEP continues as the City, Pape Dawson, AEP, and the landowners to secure and confirm the easements required for electrical distribution. 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 provided to TCEQ for review and approval in a third application package.

Deliveries of the required High-Density Polyethylene (HDPE) pipe and Polyvinyl Chloride (PVC) pipe continue. As of today, 6,996 linear feet of 36-inch, 4,878 linear feet of 48-inch HDPE is on site. There is also another 33, 270 linear feet of PVC piping on site. Additional deliveries of 12,960 linear feet of PVC pipe is expected to be delivered next week. Clearing and site stabilization work continues at the pump station and 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 on site as part of the construction facilitation.

The team continues to work on improving schedules and adjusting phasing to ensure partial water delivery by November 2026. The 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.

San Patricio Groundwater Conservation District (SPGCD) has scheduled an administrative law judge to preside over the preliminary hearing on April 28, 2026. During this hearing, the judge will review three protests and listen to testimony. The goal is to determine if 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 submitted a request to the SPGCD to issue emergency drilling and transport permits for eleven wells. The eleven wells identified in the request are the furthest from the protestants.

On February 17, the Council approved the purchase of groundwater rights at the Li Ranch. A condition for closing this deal is that the seller obtains permits for production, drilling, and transportation. Hydrogeologists have identified potential well locations for this 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 the 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: 04/09 3.8 MGD, 04/10 3.1 MGD, 04/11 4.1 MGD, 04/12 4.7 MGD, 04/13 4.0 MGD, 04/14 4.9 MGD, and 04/15 2.8 MGD. Calibrations were also conducted at measuring points and generator service has been conducted. Both of these operations require some of the wells to be offline for approximate 4-hour intervals.

The Western Well Field continues to operate, with seven wells currently online. Five wells were online prior to this week, and two additional wells were brought online this week. The addition of the two additional wells will increase the potential production to approximately 10 MGD but the TCEQ operating protocol does limit weekly production. Another well is expected to come online by the end of April which will increase the total to eight. Five wells are currently powered by electric, and two wells are powered by temporary generators. Nueces Electric Coop (NEC) is in the process of completing an upgrade project which will allow all the wells on the Western Well Field to be fully powered by electric.

CCW crews have installed 25,537 linear feet, or 4.84 miles, of 24", 16", and 12" diameter PVC water lines needed 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 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 for support of 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, 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 reverse osmosis treatment process. AEP has confirmed that power is available for the phased implementation and startup of the treatment equipment. The phase implementation will be concurrent with the delivery of the reverse osmosis treatment units.

The team is working to complete the conveyance line and well field pump station by the end of this year. The expected water delivery through 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

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 they are currently investigating a new project site. City staff will further meet with Seven Seas Water Group to gain an understanding of their proposed project, project plan including capacity, and delivery dates.

Wastewater Reuse

Reclaimed Water Infrastructure Project

CCW continues negotiations with other entities about the use of effluent water. Council has approved agreements with Valero and Flint Hills Resources (FHR). Valero is expected to begin delivering material for their 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 is working to provide updated and improved timelines for when these projects are expected to become operational, which will help offset demand.

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

Ardurra and CCW continue to design 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 23. Work is ongoing on potential land and easement acquisitions needed for the pipeline and pump station at Oso WWTP. Once property and easements are finalized and the design is nearly 60% complete, CCW will work with local contractors to discuss the phasing and scheduling of the conveyance line construction to expedite the project.

City staff is working with TAMUCC to discuss the additional property required at the Oso WWTP to accommodate the new pump station that is required as part of this project.

Ardurra has also completed environmental tech memorandums on effluent flows to Oso Bay and Oso Creek.

The Request for Proposal (RFP) for the Construction Manager at Risk (CMAR) is set to be issued this week. It aims to select a firm to serve as a CMAR to complete the conveyance line from the Oso WWTP to the Greenwood WWTP. The selection of the CMAR firm will happen concurrently with the design process. There has been significant interest by CMAR contractors in pursuing this project. The current expected completion timeline for this project is mid-2027. Project delivery and completion dates would be better confirmed once a CMAR contractor is selected and they have provided input into the schedule as developed by Ardurra.

Seawater

Inner Harbor Seawater Desalination

City staff is continuing to work with the Corpus Christi Desal Partners (CCDP) to finalize a contract for Council consideration.

On April 13, City staff were notified that Jordan Furnans, Lead Modeler, was no longer employed by Spheros Environmental (Spheros). City staff met with Spheros on April 14 to review Spheros' staff commitment and the schedule for completion. The project schedule that was developed is as follows:

April 23: Updates to Project Team, Modeling Updates, and next steps
May 7: Preliminary review of model and committee feedback
May 21: Review of refined model results and committee feedback
May 28: Final presentation review of the model to the committee

The request for qualifications (RFQ) for the City's agent and representative was also issued, and two organizations submitted their qualifications. City staff is currently reviewing these documents. The City's agent and representative will only be engaged if the contract with CCDP is approved.

It is projected that at the June 2 Council meeting, 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

Preliminary engineering work on the conveyance line has begun by the two contracted design firms, LAN Inc. and HDR Inc.

The NRA continues to review the qualifications of the four proposers for the treatment plant developer and expects to make a selection at the June Board of Directors Meeting.

TCEQ issued a draft intake permit and published it for public comment on February 25. The application, technical data, and 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. The NRA expects TCEQ to issue the draft discharge permit by the end of February 2026.

Barney Davis Seawater Desalination Project

On March 17, Council approved a motion to authorize City staff to work with CPS Energy to explore options for a seawater desalination treatment plant next to the Barney Davis Power Plant. Further discussions with CPS Energy are to be scheduled to proceed further.

CC Polymer (Aquatech)

March 24, Council approved a motion to authorize City staff to negotiate a water supply agreement with Aquatech, who has reached an agreement with CC Polymers to complete the plant, install the necessary infrastructure, and obtain all required permits for operating 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 will work with Aquatech to schedule the next meeting to further review the 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 8.6%, and 7.4% for Choke Canyon Reservoir. The combined capacity percentage of these reservoirs is 7.8%.

Lake Texana

On April 17, the Lavaca Navidad River Authority (LNRA) reported that Lake Texana's reservoir capacity was 57%. In comparison, the reservoir was at 78% capacity a year ago.

The drought condition plan for LNRA and Lake Texana requires a 10% reduction in water use when the reservoir level falls below 50%. It is currently estimated that the reservoir will fall below 50% on May 17. The prescribed reduction volume required when the reservoir drops below 50% will be deducted from the total water contractual 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%. It is currently estimated that the reservoir will fall below 40% on July 10 if no additional inflows occur.

The City's water supply contract with LNRA is 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 the drought conditions and the operational process of 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 has 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 March 27 and continued making progress. The committee scheduled another meeting for April 24 for a final review of the document.

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