CITY OF CORPUS CHRISTI CORPUS CHRISTI WATER

TO:

Peter Zanoni, City Manager

FROM:

Drew Molly, P.E., Chief Operating Officer

COPY:

Mayor and City Council

DATE:

May 2, 2025

SUBJECT:

Alternative Water Supply Projects Update

Below are updates on Corpus Christi Water's (CCW) efforts to secure alternative water sources. CCW will present these updates to the City Council on Tuesday, May 6th.

Evangeline Laguna, LLP (Evangeline) Groundwater Project

On April 22nd, the City of Corpus Christi (City) and Evangeline executed a Memorandum of Understanding (MOU) regarding purchasing water rights and related rights for approximately 23,000 acres in San Patricio County. The one-page MOU highlights the terms under which the City and Evangeline will define the potential purchase of partial or full water rights, with a possible closing date of June 30th.

• The Evangeline Groundwater Project will be included in the Groundwater Supply Assessment conducted by Garver.

Echelman-Voigt (EV) Ranch Project

On April 11th, the City and the Catahoula Water Company (CWC) met to discuss details for a draft term sheet to purchase groundwater from the EV Ranch. The EV Ranch, near Hebbronville, TX, approximately 70 miles southwest of the City of Corpus Christi, comprises approximately 100,000 acres and can produce up to 28.5 million gallons of brackish groundwater daily (March 6, 2025 EV Ranch Presentation to the City Council). The City and CWC continue to discuss opportunities for regional partnerships, leveraging regional water distribution systems to lower overall conveyance costs and negotiate terms.

• The EV Ranch Project will be included in the Ground Water Supply Assessment conducted by Garver.

Nueces River Groundwater Wells Project

Significant progress has been made in the Nueces River Water Ground Water Wells Program since the City Manager signed the emergency authorization on January 27, 2025.

The City continues the permanent development and installation of Wells Nos. 1 through 3. We have begun drilling Well No.4 and aim to complete the work within the next two weeks. We are mobilizing a second drilling rig to begin developing Well No. 5.

Alternative Water Supply Projects Update Page 2

On April 15th, the City Council approved the purchase of an additional 4.63 acres adjacent to the existing well field. Preparations for the new property, including fencing and concrete foundation work to support the additional wells.

City staff continue to develop the necessary information to submit the permit application to TCEQ by May 12th.

The current expenditures for this project are \$5,796,163. Attached is a detailed list of completed work through May 1st and scheduled work.

• The Nueces River Groundwater Wells Project will be included in the Groundwater Supply Assessment conducted by Garver.

Reclaimed Water Infrastructure Project

On April 1st, the City Council approved a professional services contract with Garver to provide the preliminary design services for this project, which is anticipated to be completed by January 2026.

Groundwater Supply Assessment

At the April 15th City Council Meeting, the City discussed the need for outside support to help evaluate groundwater supply alternatives. Pape-Dawson Engineers (Pape-Dawson) was initially considered for this assessment due to its knowledge of the Evangeline Project and their experience. On April 18th, City staff were told by the Evangeline team that Pape-Dawson would not be released to support the City.

On April 20th, Garver, who also has a strong background in groundwater resources, was alternately selected to conduct the assessment. The signed agreement includes a scope of work to evaluate technical and business case components, focusing on feasibility, cost, risk, and long-term infrastructure and system planning. Garver will complete their scope of work by May 30th.

The Groundwater Supply Alternatives include:

- 1. Nueces River Groundwater Wells Project—City-led production and treatment of brackish groundwater wells along the Nueces River
- **2. Evangeline Groundwater Project**—Water rights purchase of 12 MGD and potentially up to 24 MGD near Sinton, Texas, with phased delivery and City ownership of eventual production/conveyance infrastructure
- **3. EV Ranch Project**—Third-party treated brackish groundwater supply with City-involved project development
- **4. South Texas Water Authority (STWA) Project**—Third-party well field development by STWA/Seven Seas to consider supplying the City, if there is additional water available

Attachments:

1. Detailed List of Nueces River Groundwater Wells Project

Detailed List of Nueces River Groundwater Wells Project Completed Work through May 1st and Scheduled Work

The progress to date includes the following:

- Site cleanup and preparation of the existing city-owned properties, including security fence installation
- Drilling development, test pumping, and permanent pump installation for Well No. 1
- Drilling, development, test pumping, and design of permanent pumping assembly for Well No. 2
- Drilling, development, and test pumping for Well No. 3
- Installation of 13,700 Feet of 4-inch polyethylene pipe by Corpus Christi Gas with assistance from CCW to fuel generators that will electrify the well pumps
- Installation of 500 Foot of twenty-four (24) inch PVC waterline
- Construction of discharge outfalls at Well No. 1 site, Well No. 4 site, and for multiple wells at the well field site
- Ongoing development and evaluation of the groundwater model
- As approved by the City Council on April 15, 2025, purchasing an additional 4.63 acres adjacent to the existing well field.
- Begin drilling Well No. 4
- Rig and equipment mobilization of the second driller to Well No. 5
- TCEQ permit review meetings held on March 3, April 2, and April 23
- Generator concrete pad installed at Well No. 1

The scheduled work, expected to occur in the next two weeks, will consist of:

- Placement and installation of the 150 KW natural gas generator, installation of electrical controls, final gas connections, and startup testing of the permanent pumping assembly at Well No. 1
- Complete the drilling of Well No. 4
- Continue drilling of Well No. 5
- Complete the design and pump selection for Well No. 3
- Preparation of the new property, including fencing and pad construction for additional wells
- Complete the generator concrete pad at Well No. 2
- Continue installation of water line to Well No. 2 and Well No. 3
- Submit the TCEQ Bed and Banks permit application on May 12