

Water Supply Update

Drew Molly, P.E.
Chief Operating Officer
July 29, 2025



Reservoir Water Levels

Eastern Water Supply

Lake Texana		
Monday, July 28		97.1%

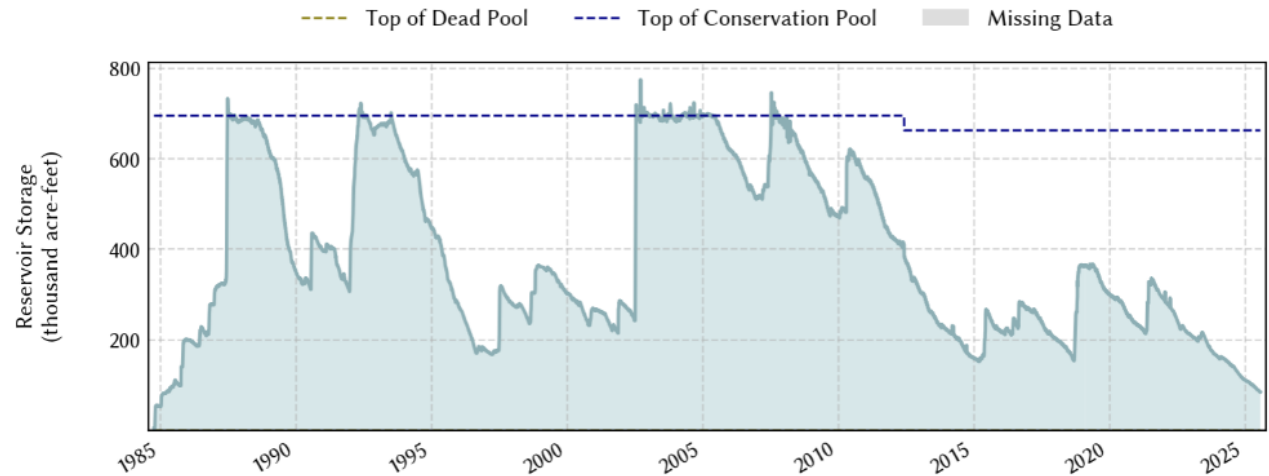
Western Water Supply

Choke Canyon Reservoir		
Monday, July 28		13.1%

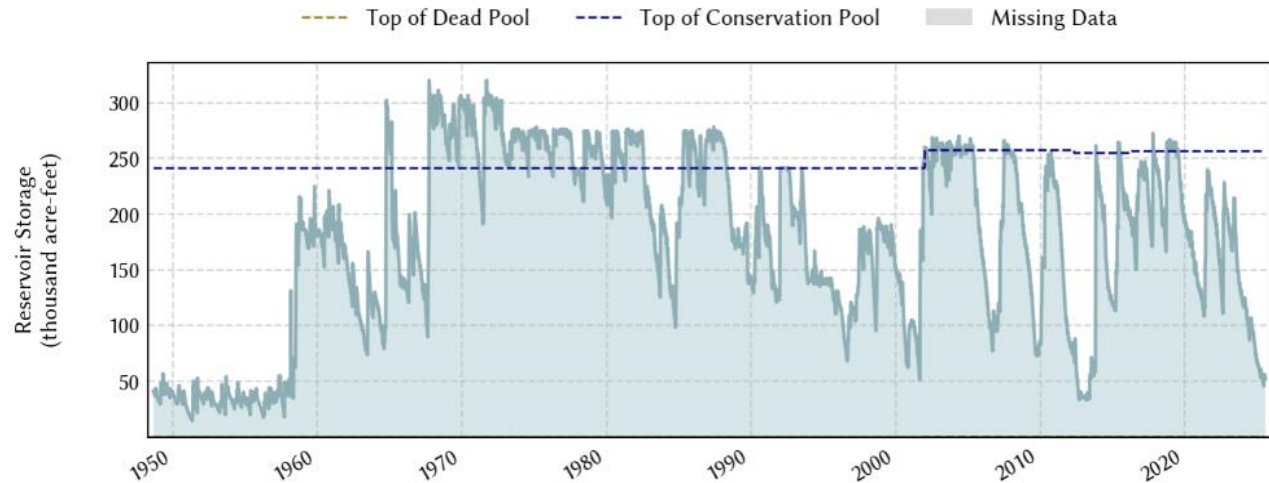
Lake Corpus Christi		
Monday, July 28		19.9%

Combined Capacity		
Monday, July 28		15.0%

Choke Canyon Reservoir



Lake Corpus Christi



Reservoir Water Levels

15% Remaining in Western Supplies	10% Remaining in Western Supplies	Level 1 Water Emergency* (180 days before the Western Supplies Reach 0%)	Western Supplies are Empty	
			Choke Canyon	Lake Corpus Christi
July 2025	December 2025	December 2026	February 2027	May 2027

As of July 28, the combined capacity of Choke Canyon and Lake Corpus Christi was 15.0%.

Lake Texana's water level is 97.1%

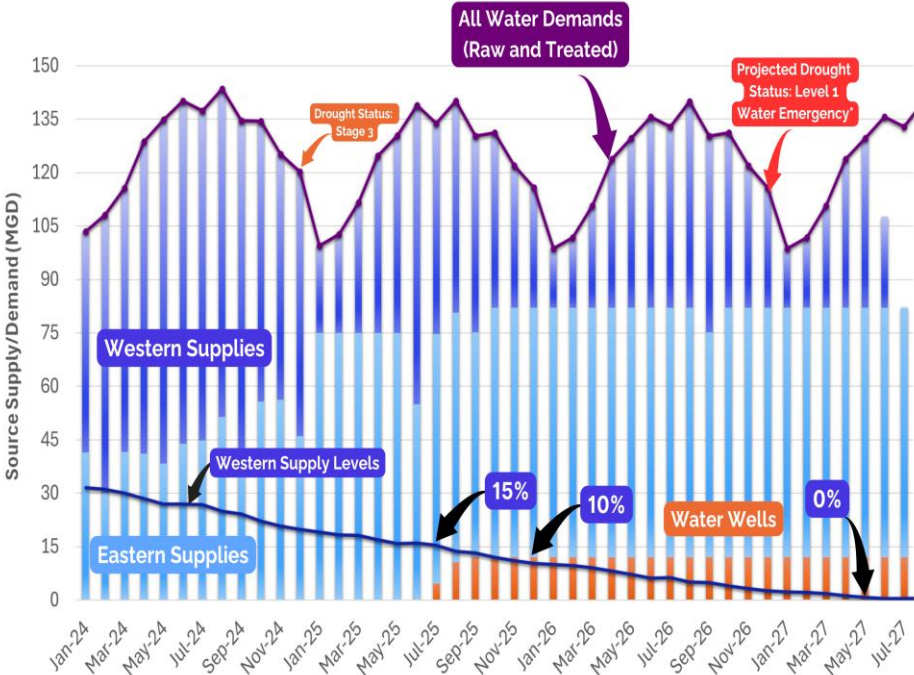
The Lavaca-Navidad River Authority (LNRA) made 4,500 acre-ft of interruptible water available to the City.

Formosa water purchased by the City of Corpus Christi

CCW's plan is to prioritize the City's current water supplies. Our operations team and LNRA/Formosa are on track to divert and account for 2,500 acre-feet of take-or-pay water purchased from Formosa by December 2025.

Updates to the Water Supply Dashboard

The most recent update was published on July 21, 2025.





Corpus Christi Emergency Groundwater Assessment

Dan Olson, PE

July 29, 2025





**Today's presentation will inform the City Council
about key findings from the Groundwater Assessment.**

Introduction

**Groundwater Project
Alternatives**

Project Comparison

Q&A



Introduction

The City has retained Garver to evaluate multiple project opportunities to integrate treated groundwater into the CCW system.

APRIL 2025

April 22nd
NTP

MAY 2025

May 30th
Evaluation report submitted

- Report included EV Ranch, Evangeline and Nueces River Wells projects
- Project information requested from STWA was not provided in time to be included in the initial evaluation report

JUNE 2025

June 20th
STWA provided
limited information
(*marked “Confidential”*)

- We’re evaluating project information from STWA and will include that project in an updated report submission.
- Evaluations are based on costs, implementation timeline, agreement structure, risks, water quality, and other factors.



Groundwater Project Alternatives

**Eshelman-Vogt Ranch
Project Opportunity**

**Evangeline Laguna LLP
Project Opportunity**

**Nueces River Wells Brackish
Groundwater Desalination**

**South Texas
Water Authority
Project Opportunity**

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Groundwater Project Alternatives

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Groundwater Desalination**

**South Texas
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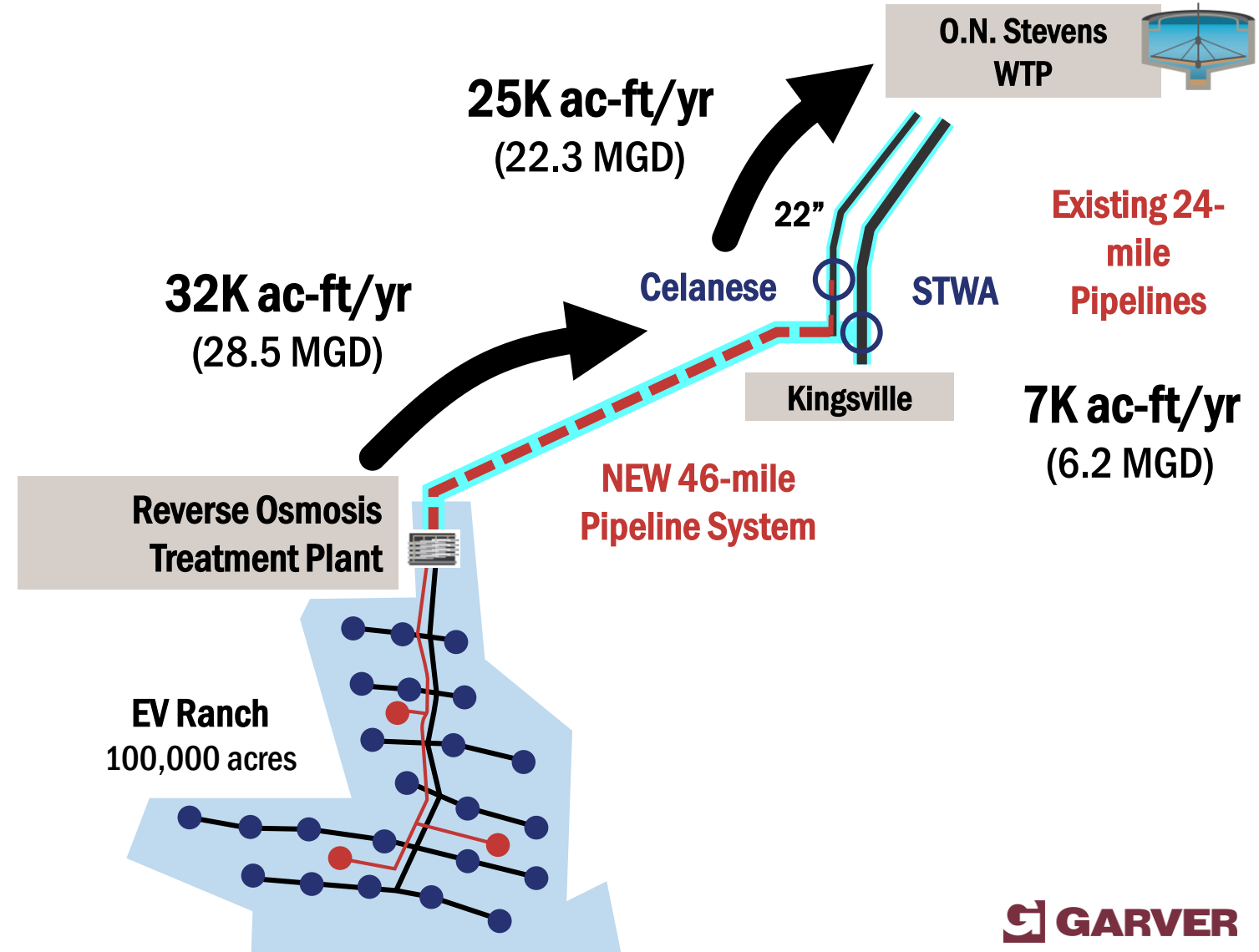
The EV Ranch project is structured as a
“take-or-pay” water supply agreement.

Eshelman-Vogt Ranch

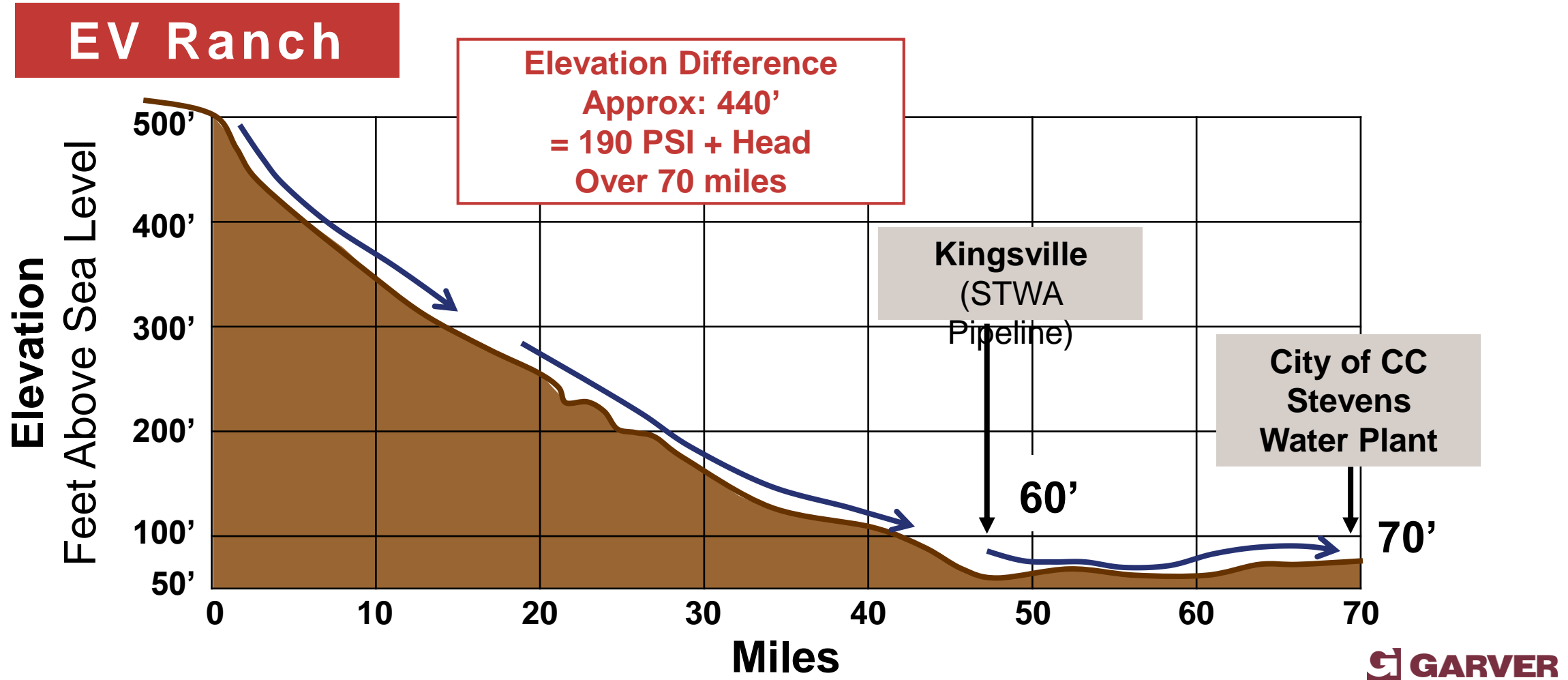
EV BRACKISH DESAL PROJECT

CONCEPTUAL

The developers plan to develop a brackish groundwater desalination facility and connect to the STWA pipeline.



They plan to take advantage of the higher elevation of the ranch relative to Corpus Christi.



The EV Ranch proposal is structured as a take-or-pay water purchase agreement.

Up to 22.3 million gallons/day for CCW



Estimated at \$6.64/kgal by the developers



Initial annual cost of \$59M for CCW



No wells have been drilled and no permits obtained



Water quality has not been confirmed with test wells



Developers plan to use existing STWA pipeline to deliver to O.N. Stevens WTP



Plastic pipeline construction



Implementation estimated at 40-48 months



Feasibility study has not been completed



Groundwater Project Alternatives

Eshelman-Vogt Ranch
Project Opportunity

**Evangeline Laguna LLP
Project Opportunity**

Nueces River Wells
Brackish Groundwater
Desalination

South Texas
Water Authority
Project Opportunity

The Evangeline project that was proposed relies on the use of the Mary Rhodes Pipeline. Additional pipeline capacity is needed to obtain the full water offering from Evangeline.



The project would be located to the north of Sinton and in close proximity to the Mary Rhodes Pipeline.



Evangeline/Laguna, LP

Evangeline Laguna LLP is offering to sell the rights to the groundwater under a 22,789-acre property.

Up to 25.4 million gallons per day



No infrastructure conveyed.
City to design
/construct/operate



San Patricio County Groundwater Conservation District (SPGCD) allows withdrawal of up to 1.25 ac-ft/yr per surface acre currently

Risk of curtailment by SPGCD in the future



Production permit has been obtained.
A transport permit is still needed. The transport permit could be contested.



Water quality meets most regulatory parameters;
does not meet secondary limit on TDS and has had exceedances for arsenic.



First 12 MGD can be integrated into the Mary Rhodes Pipeline



Evangeline Laguna LLP is offering the full groundwater rights for \$200M



Groundwater Project Alternatives

Eshelman-Vogt Ranch
Project Opportunity

Evangeline Laguna LLP
Project Opportunity

**Nueces River Wells
Brackish Groundwater
Desalination**

South Texas
Water Authority
Project Opportunity

**Phase 1B –
West Wellfield
Flow: TBD**

**Phase 2B –
Conveyance and RO
Treatment**

**Phase 1A –
East Wellfield
10 – 13 MGD**

**Phase 2A – Conveyance
and RO Treatment**

O.N. Stevens WTP

ON Stevens WTP

**Groundwater will be
developed from two
wellfields.**



The City would own all assets and would be able to make use of already-drilled groundwater wells.

Eight wells have been drilled to date; additional wells will be drilled on new property



At least 24 MGD of brackish groundwater could be harnessed for the CCW system



Water quality testing has already been performed on the wells that have been drilled



TDS of 1,500 – 5,000 mg/L will require reverse osmosis treatment



The City already owns the groundwater rights



No transport permit would be needed



Brine disposal via deep well injection



Groundwater Project Alternatives

Eshelman-Vogt Ranch
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Nueces River Wells
Brackish Groundwater
Desalination

**South Texas
Water Authority
Project Opportunity**

The STWA project opportunity will likely be structured as a take-or-pay water purchase agreement.

Developer would be Seven Seas Water (STWA) USA, LLC 	Location is expected to be near Driscoll, TX 	Anticipated to be structured as a take-or-pay agreement for 30 years 
STWA has proposed a 30 MGD facility and offered to make 28 MGD available to the City of Corpus Christi 	No test well has been drilled to date 	
Hydrogeological feasibility has not been confirmed for 30 MGD 		
Estimated at \$6.50/kgal initially, with annual increases indexed to CPI 	Anticipated project implementation schedule of 40-48 months 	



**Groundwater
Project Comparison**

Nueces BWROF is the best-value groundwater development option for Corpus Christi.

Project/Phase	Water Rights Purchase	CAPEX	Initial Annual OPEX	30-year Total Cost	Value of Assets Owned by CCW (\$)	Initial Unit Cost of Water (\$/kgal)	Year 30 Unit Cost of Water (\$/kgal)
Nueces River Wells BWROF – 12 MGD	\$0	\$200M	\$7.5M	\$602M	\$200M	\$4.44	\$7.27
Nueces River Wells BWROF – 24 MGD	\$0	\$350M	\$13.9M	\$1.09B	\$350M	\$3.96	\$6.58
Evangeline – 12 MGD	\$100M	\$250M	\$5.2M	\$627M	\$200M	\$5.94	\$7.90
Evangeline – 24 MGD	\$200M	\$640M	\$10.8M	\$1.42B	\$640M	\$6.95	\$8.98
EV Ranch – 24 MGD	\$0	\$20M	\$65.5M	\$3.13B	\$20M	\$6.64	\$17.61
South Texas Water Authority – 24 MGD	\$0	\$35M	\$64.1M	\$3.08B	\$35M	\$6.50	\$17.24

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Q&A



Corpus Christi Emergency Groundwater Assessment

Dan Olson, PE

July 29, 2025



Four horizontal wavy bands in shades of blue and cyan, creating a water-like effect.

Thank you!



Nueces River Groundwater Wells Project

Project Overview:

- On May 12, CCW submitted a Bed and Banks Permit application to the TCEQ.
- On June 18, CCW received the draft bed and banks notice and permit for review.
- Well installation continues with two contractors.
- \$30M of State grants have been appropriated to this project.
- Phase 1 of this project will provide 13 to 15 MGD of water to the river for our raw water supply.
- The City began drilling the first well on the 250-acre property previously purchased.
- Phase 2 proposed future brackish reverse osmosis (RO) treatment plant will provide approximately 11 MGD of drinking water to our drinking water supply.



Picture of a City well in Nueces County.

Evangeline Groundwater Project

Project Overview:

Potential water rights purchase of 12 MGD and up to 24 MGD, near Sinton, Texas, with phased delivery and City ownership of eventual production/conveyance infrastructure.

- On July 23, the City met with the Evangeline Leadership Team.
- On July 24, the City presented a counteroffer based on a broker's price opinion conducted by a third-party consultant team. Evangeline is reviewing the proposal.



South Texas Water Authority (STWA)

Groundwater Project

Project Overview:

- On August 7, 2025, STWA entered into a Water Supply Agreement with Seven Seas Water USA, LLC (Seven Seas) for a 4 MGD brackish water desalination treatment facility.
- STWA has expressed a desire to expand the brackish water desalination plant and sell up to 28 MGD of treated water to the City.
- On June 23, 2025, the City and STWA entered into a Memorandum of Understanding (MOU) to begin negotiations on a possible water supply agreement.
- On July 22, the Council postponed a target date of August 24, 2025 to have a negotiated contract in place with STWA for 28 MGD. This postponement was based on STWA and their legal representation's assertions made multiple times during a July 17 meeting that a contract could not be achieved by August 24. City staff will continue to work with STWA to confirm costs, the timeline of delivery, and the terms of the contract.

