

# Water Supply Projects Update

Nicholas Winkelmann, P.E.  
Interim Chief Operations Officer  
October 3, 2025



# Water Supply Projects Update

- National Weather Service Drought Briefing
- Nueces Groundwater Project
- Evangeline Groundwater Project
- NRA Harbor Island Seawater Desalination Project
- Reuse Alternatives
- CC Polymers Seawater Desalination Treatment Plant
- STWA

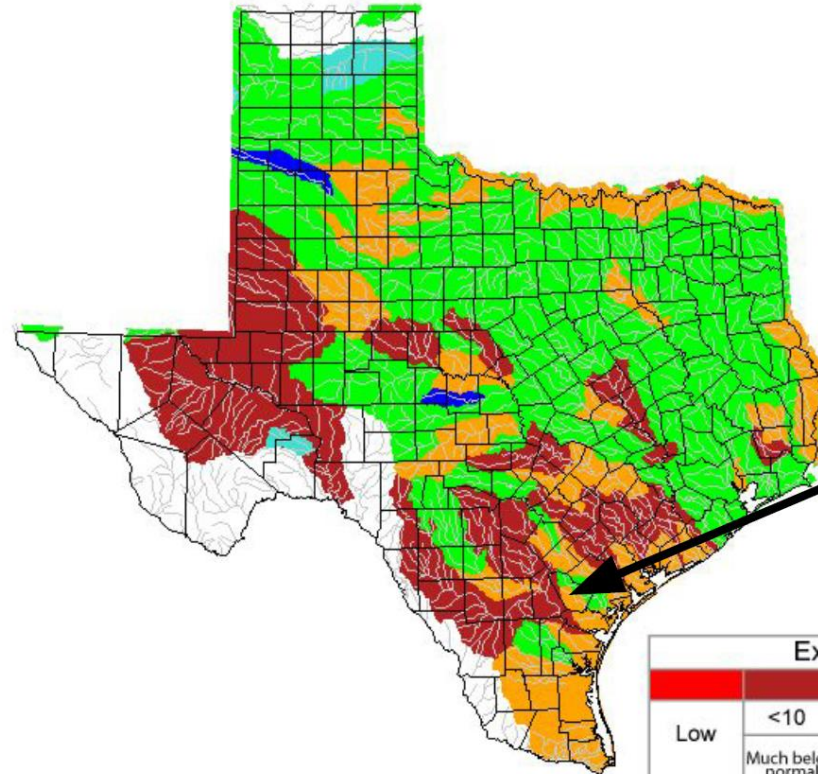
# Water Supply Projects Update



## 7-Day Streamflow Anomaly

October 13, 2025  
10:31 AM

Sunday, October 12, 2025



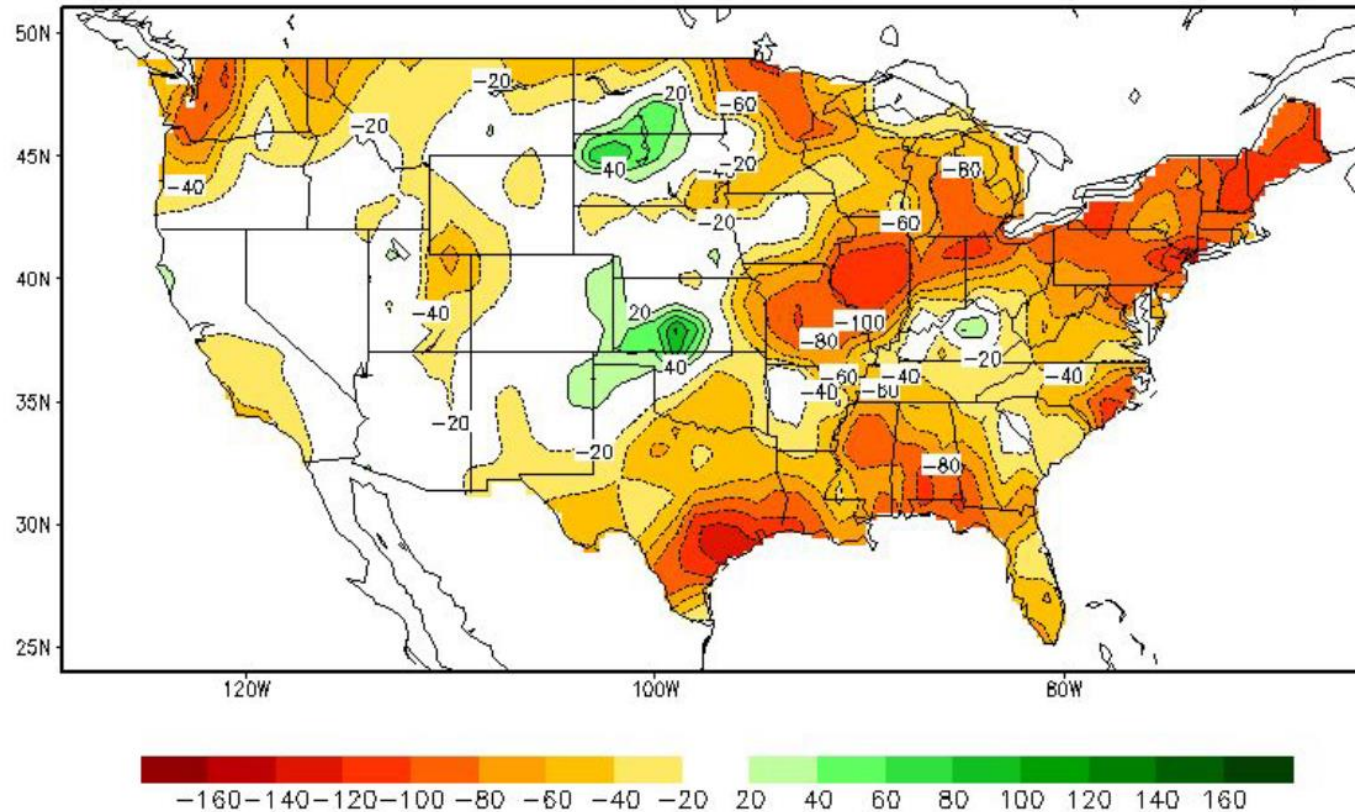
Below normal to much below normal streamflow across the watershed near the reservoirs

Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

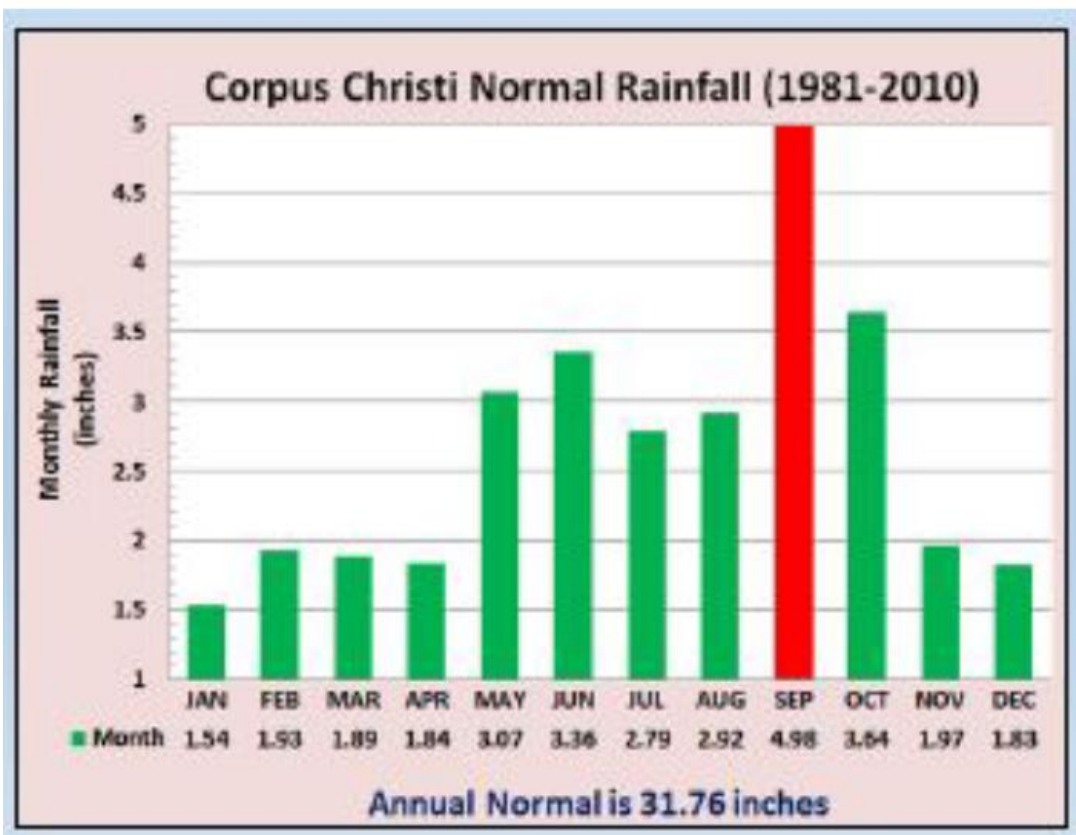


# Water Supply Projects Update

Calculated Soil Moisture Anomaly (mm)  
OCT 12, 2025



# Water Supply Projects Update



- September Totals

Year	Total Rainfall (inches)
2022	1.6
2023	1.1
2024	6.5
2025	2.9

- Annual Totals

Year	Total Rainfall (inches)
2022	25.8
2023	27.7
2024	26.7
2025	16.1 as of Sept 30

# Water Supply Projects Update



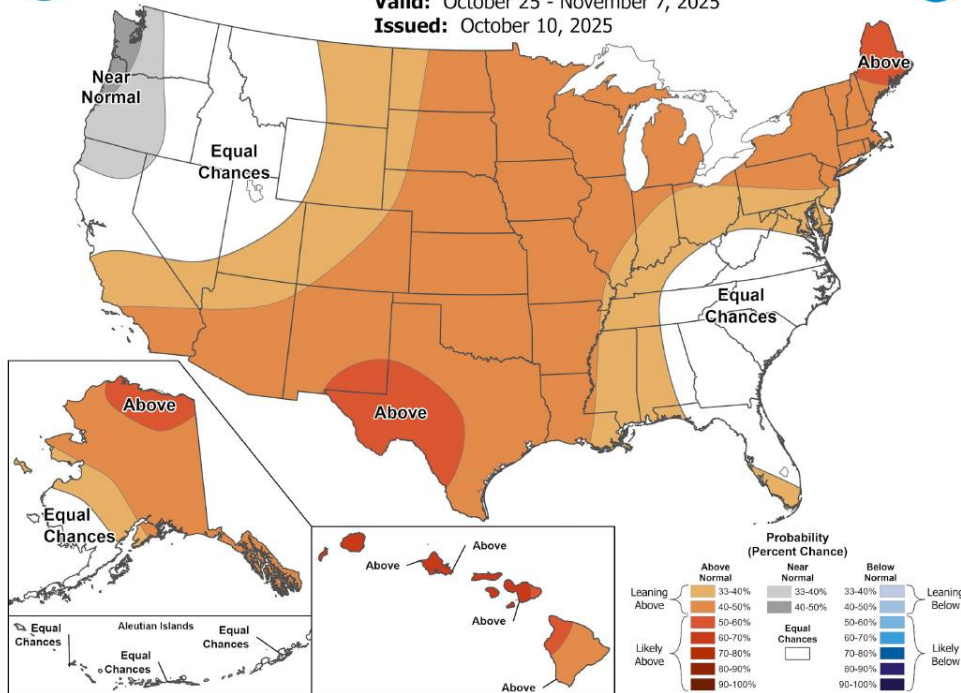
## Week 3-4 Temp/Precip Outlook

October 13, 2025  
10:31 AM



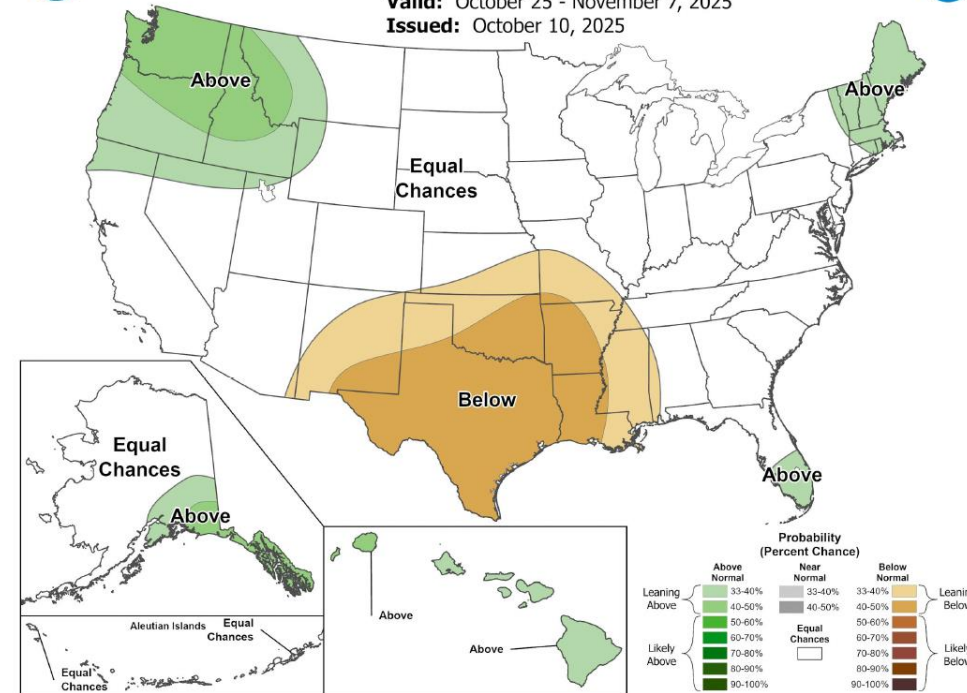
### Week 3-4 Temperature Outlook

Valid: October 25 - November 7, 2025  
Issued: October 10, 2025



### Week 3-4 Precipitation Outlook

Valid: October 25 - November 7, 2025  
Issued: October 10, 2025



# Water Supply Projects Update

## Nueces River Groundwater Wells

### Eastern Well Field

- Permits – Bed & Bank Permit secured on August 7, 2025
- Wells No. 1-8 drilled, discharging up to 8 MGD
- Well No. 1 Modifications Complete
- Long-term sustainable pumping is approx. 11 MGD
- Current expenditures is \$15,762,146

### Western Well Field

- Bed and Banks Permit – Ongoing analysis and Nueces River Investigation
- Well No. 9 permanent pump has been designed, Well No. 10 pump testing complete and pump is being designed, Well No. 11 drilling complete, Well No. 12 drilling on-going
- Interior Well Field Piping in progress
- Long-term sustainable pumping is approx. 17 MGD
- Current Expenditures is \$5,800,270

\$30M grant funding secured from the State of Texas



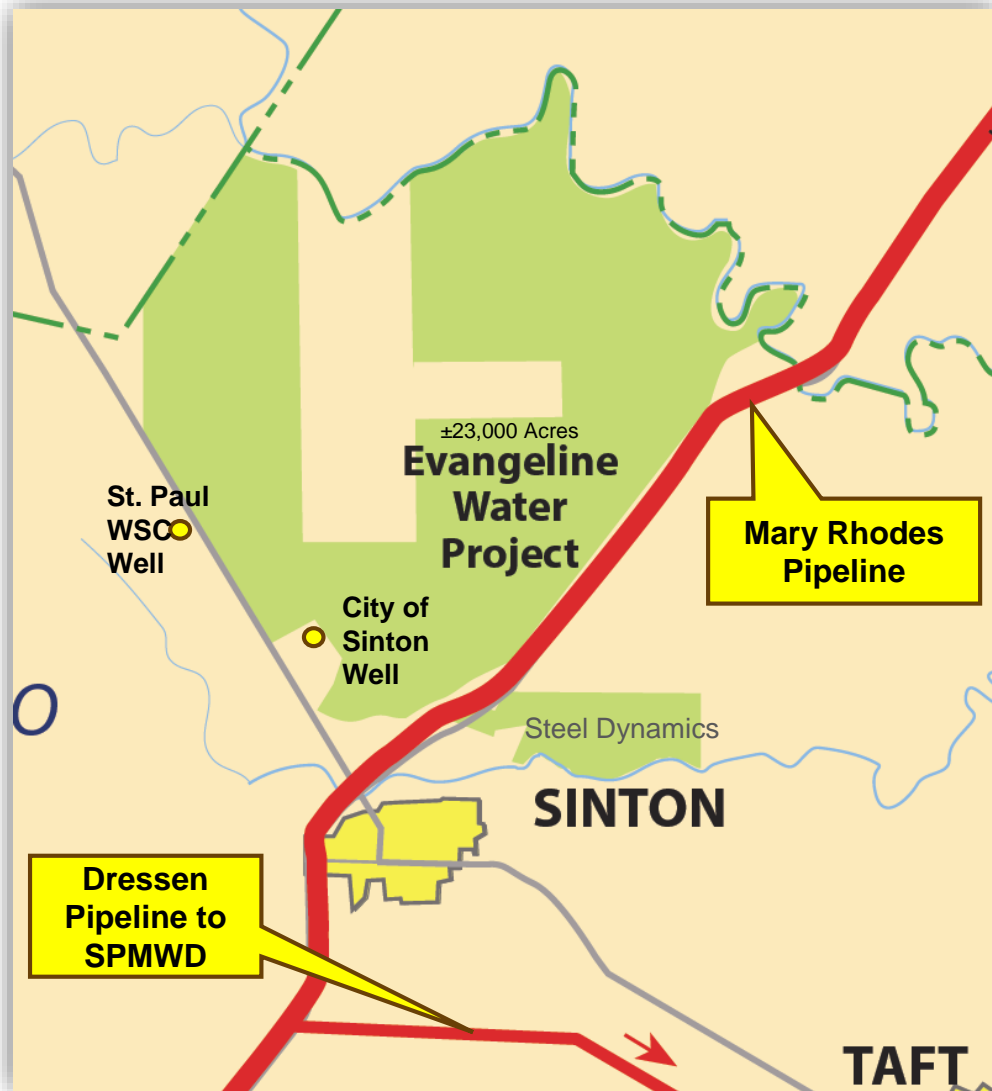
# Water Supply Projects Update

## Evangeline Groundwater

During the September 23 City Council meeting, Council approved the negotiated term sheet for fee simple groundwater rights which will be the basis for a final contract.

- Purchase price of \$7,437 for 22,789 acres of groundwater rights
- \$1M earnest and option payment for a 120-day inspection period with an additional \$3.25M to be escrowed at the end of the inspection period and applied to the purchase price at closing
- Seller will have 180-days after the inspection period to provide final, non-appealable permits for 22 wells, production permit, and transport permit with closing to occur 60 days after all permits are obtained. Seller has stated that they would work to begin obtaining the permits as soon as the contract is signed
- Seller to provide clean and indefeasible title to groundwater rights with no rights of reverter, and with title insurance at closing
- Conveyance of existing groundwater wells and appurtenances
- Assignment of surface use agreements and surface accommodation agreement to the City

Additionally, Council approved agreements with Allensworth & Porter, LLP, T. Baker Smith, and Pape Dawson Engineers for legal, survey, and engineering professional services.

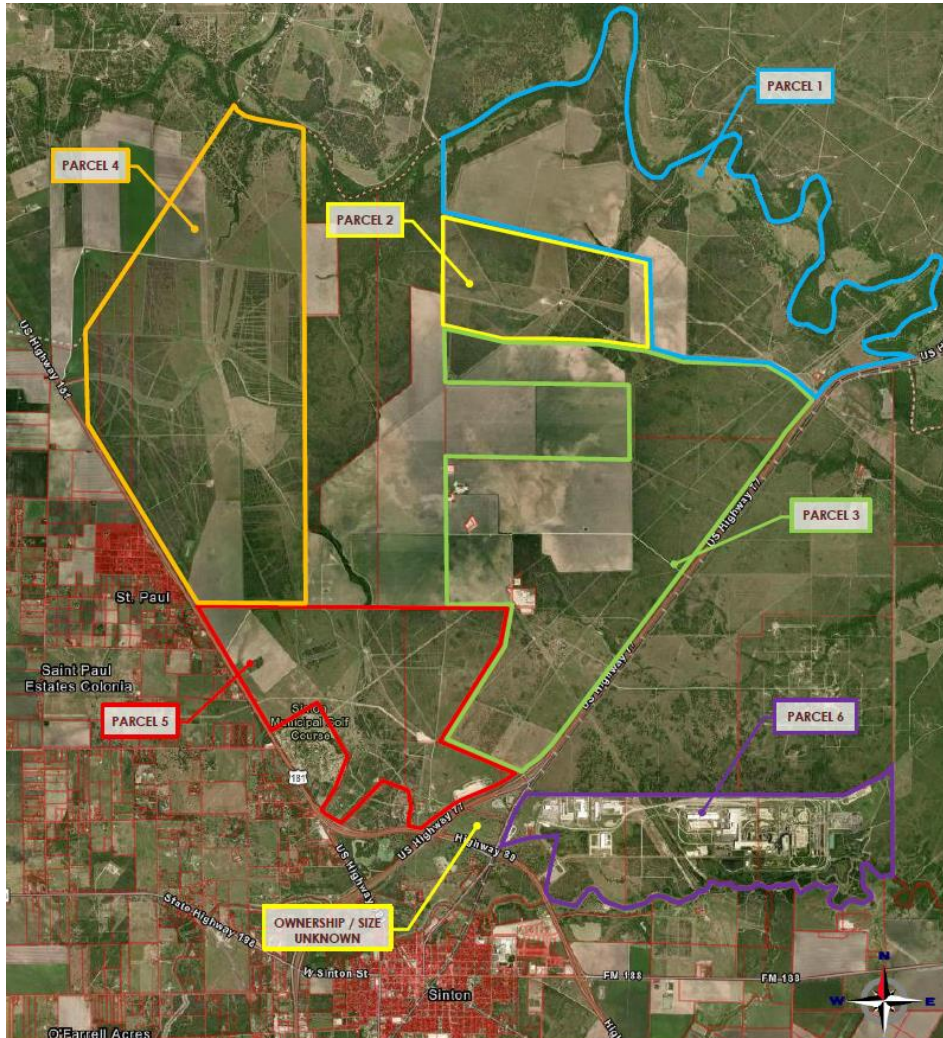


# Water Supply Projects Update

## Evangeline Groundwater

### Project Implementation Considerations

- Staff with Pape Dawson, Hanson, Intera, and HDR are engaged in pre-engineering and due diligence efforts
- Additional Permits Required
- Property survey is forthcoming
- TCEQ Well permit/authorization
- Permanent power needed for each well and for the new pump station
- Connection point to the MRP has been confirmed
- Review of MRP easements required
- Infrastructure required on site to consist of wells, water lines, electrical lines, pump station, roads, etc.
- Interlocal agreement with Sinton, TX has been drafted and reviewed with Sinton Staff
- Local meetings with area entities including Saint Paul WSC



# Water Supply Projects Update

## NRA – Harbor Island Seawater Desalination

- **Project Details: Phase 1 – 100 MGD**

- **Procurement:** Public Private Partnership (P3) Design, Build, Finance, Operate, Maintain (DBFOM), & Transfer
- **Timeline:**
  - RFQ for the conveyance line is advertised
  - RFQ for P3 partnership should be advertised within 2 to 3 weeks
- **Required Permits**
  - 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, discharge lines into the Gulf obtained

- **Proposed option fees**

- One-time, non-refundable option fee to reserve the water and provides for consideration and design input during the process
- Fee does not guarantee a delivery date for the water
- CCW will bring option fee for Council consideration on October 21

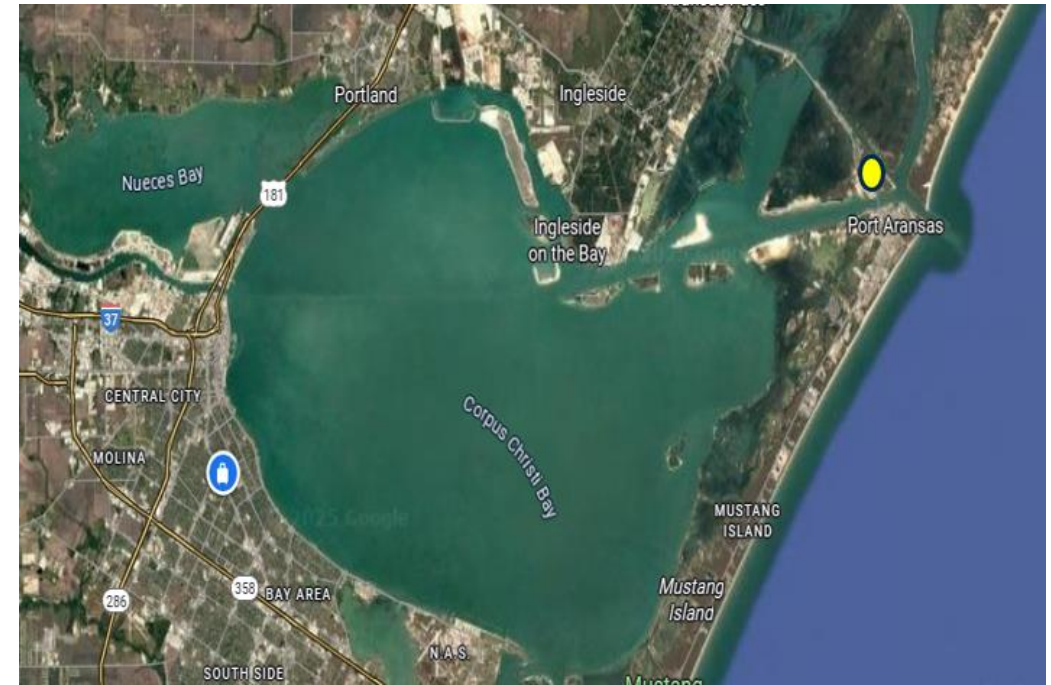
Water Purchase Agreement Amount	Reservation Fee
30 MGD	\$1,642,578.98
40 MGD	\$2,190,105.30
50 MGD	\$2,737,631.62

# Water Supply Projects Update

## NRA Harbor Island Seawater Desalination

### Project Implementation Considerations

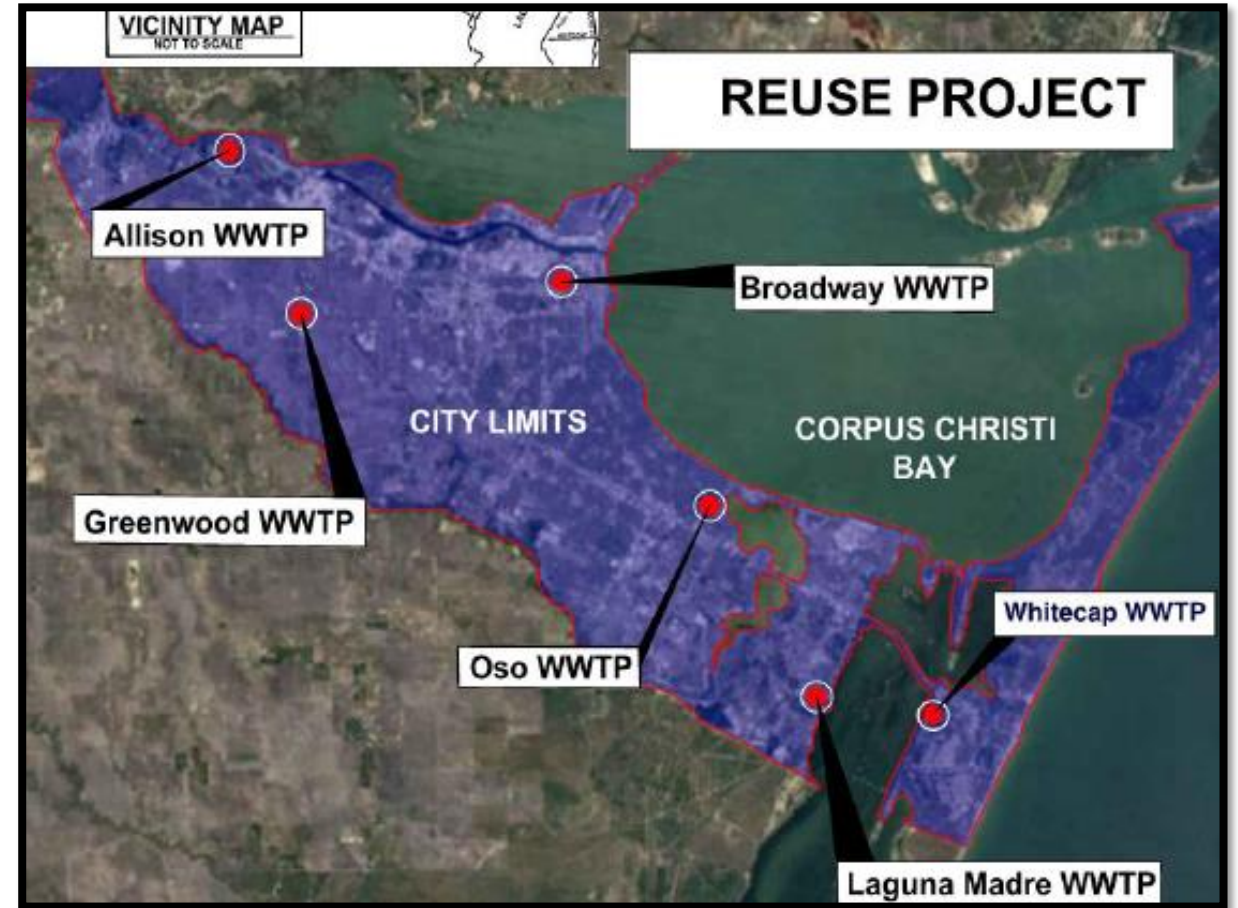
- 50 year lease agreement w/ extension for 30 acres of property owned by POCC
- POCC responsible for all permits
- Draft TCEQ Permits expected in October 2025
- Water Supply Contract to be negotiated once construction costs are confirmed
- CCW to provide input regarding design of the conveyance water line
- CCW to develop a new project for its conveyance line
- Intake structure to be 1.3 miles SE of San Jose Island
- Effluent diffuser to be located 1.8 miles SE of San Jose Island
- NRA is currently working on electric power companies to provide transmission level power to the site



# Water Supply Projects Update

## Reuse Alternatives

- CCW continues to meet with multiple entities regarding use of effluent from various WWTPs
- Conveyance of effluent from Oso WWTP to Greenwood is being considered with upcoming meetings scheduled
- Garver is nearing completion of a technical memo that reviews the potential and implementation considerations for the following:
  - Conveyance of effluent and TCEQ permitting to take water to the Nueces River
  - Aquifer storage and recovery
  - Direct potable reuse



# Water Supply Projects Update

## CC Polymers Seawater Desalination Plant

- Reviewing the feasibility for acquisition of the CC Polymer desalination plant
- If consideration is allowed by the three owners, a detailed condition assessment is recommended to review the equipment
- CDM Smith, the City's consultant, provided preliminary technical memo with estimates for project cost, timeline, and permitting requirements



# Water Supply Projects Update

## CC Polymers Seawater Desalination Plant Cont.

### Project Implementation Consideration

- CC Polymer requires 7 MGD
- Improvements required to deliver potable water
- Age and condition of the equipment
- Upgrades needed to increase capacity and permit revisions required
- TCEQ plant approval
- Negotiation of an agreement
- Connection to the distribution system to be engineered including hydraulic modeling

Phase	Total capacity	OPCC Capital Cost	Total Time	Permitting Requirements
PHASE 0 - Initial Inspection + Purchase Negotiations	9.4 MGD	Condition assessment +engineering support \$1.62 M	12 months	N/A
PHASE 1 - TCEQ Potable Pilot and Initial Engineering	9.4 MGD	Studies, permits and engineering for expansion \$19.9 M Purchase plant \$225 M Total \$244.9 M	28 months	-TCEQ approval to produce drinking water -Intake permit amendment for change use type and expansion
PHASE 2 - Expand to 23.5 MGD Potable	23.5 MGD	\$263.5 M	32 months produce potable water 9.4 MGD 36 months delivery 7.4 MGD to CCP (to be confirmed) 51 months to produce 23.5 MGD	Construction permits Intake, discharge and potable production permit previously approved
PHASE 3 - Expand to 31.5 MGD (total production of 24 MGD potable and 7.5 MGD industrial)	31.5 MGD	\$144 M	51 months	Idem to phase 2
<b>Total</b>	<b>31.5 MGD</b>	<b>\$654 M</b>		

\*Please note: this is preliminary information and has not been finalized.

# Water Supply Projects Update

## South Texas Water Authority

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

- STWA Board of Directors approved offering water to City of Corpus Christi on September 9, 2025
  - Raw water quality results from STWA's test well were provided to the City as requested for City staff review
- Water purchased by the City will be treated/finished water and meet or exceed all TCEQ primary and secondary drinking water standards
- 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
- A potential contract has been drafted by STWA to prepare for potential future

STWA has requested current discussions focus first on the extension of their existing water purchase contract with the City which expires on December 31, 2025.

# Supplemental Water Supply Projects

Project	Projected Supply	Projected Delivery	Comments
Nueces Groundwater	28 MGD	Ongoing - partial May 2026 – full	2 <sup>nd</sup> Bed and Banks permit required Dates shown are without treatment
Evangeline Laguna	24 MGD	Nov. 2026 – partial 2027 – full	Inspection/due diligence period Contract conditions are to be fulfilled prior to close Pre-engineering has started, dates to be confirmed
Effluent Reuse	10-16 MGD	2027	Discussing with multiple entities Reviewing potential options and routes Possibility for partial delivery in advance of date shown
NRA Harbor Island	50 MGD	Dec 2029	Reservation Fee required Council item October 21, 2025
South Texas Water Authority	10 MGD		Memorandum of Understanding is guiding discussions
CC Polymer	24 MGD		Process and equipment inspection required

