

**Rio Grande Regional Water Planning Group
Summary of Public Comments and Responses**

Public Comment No.	Comment Type (Verbal or Written)	Commenter Name and Affiliation	Summary of Public Comment	Rio Grande RWPG Response
1	Verbal	Rene Perez, TCEQ	Commentor requested that Region M incorporate a new salinity study into the 2026 Plan, which focuses on the impact of increasing salinity in the Colorado River. U.S.- Mexico Salinity Study of the Lower Rio Grande/Rio Bravo was conducted collaboratively by the University of Texas at Austin and the Universidad Nacional Autónoma de México	The Rio Grande RWPG has added a new paragraph to Chapter 1, Section 1.4.2 (which discusses other existing water-focused plans in the region). "In 2025, the U.S.- Mexico Salinity Study of the Lower Rio Grande/Rio Bravo was conducted collaboratively by the University of Texas at Austin and the Universidad Nacional Autónoma de México. The study was developed under the Border 2025 Initiative and focuses on the delivery of quality water from the U.S. to Mexico via the Colorado River. It highlights key treaty obligations under the 1944 Water Treaty and Minute 242, salinity control efforts in the U.S., and binational coordination between IBWC and CILA. It also outlines ongoing challenges related to climate change, drought, and infrastructure needs, as well as water and salt exchanges between groundwater and the Lower Rio Grande/Rio Bravo. The study provides insights on organization and cooperation, data and salinity, and recommendations on data, models, and remediation."
2	Written	Rene Perez, TCEQ	Commentor requested that Region M incorporate a new salinity study into the 2026 Plan, which focuses on the impact of increasing salinity in the Colorado River. U.S.- Mexico Salinity Study of the Lower Rio Grande/Rio Bravo was conducted collaboratively by the University of Texas at Austin and the Universidad Nacional Autónoma de México	The Rio Grande RWPG has added a new paragraph to Chapter 1, Section 1.4.2 (which discusses other existing water-focused plans in the region). "In 2025, the U.S.- Mexico Salinity Study of the Lower Rio Grande/Rio Bravo was conducted collaboratively by the University of Texas at Austin and the Universidad Nacional Autónoma de México. The study was developed under the Border 2025 Initiative and focuses on the delivery of quality water from the U.S. to Mexico via the Colorado River. It highlights key treaty obligations under the 1944 Water Treaty and Minute 242, salinity control efforts in the U.S., and binational coordination between IBWC and CILA. It also outlines ongoing challenges related to climate change, drought, and infrastructure needs, as well as water and salt exchanges between groundwater and the Lower Rio Grande/Rio Bravo. The study provides insights on organization and cooperation, data and salinity, and recommendations on data, models, and remediation."
3	Verbal	Isabel Keddy, TCEQ	Wished to second Rene Perez's verbal comments supporting the incorporation of the salinity study into the 2026 Plan.	See response for 1 and 2.
4	Written	City of Donna	Request to add a 5 MGD brackish water desalination project and an off-channel reservoir for raw water storage capacity.	The Rio Grande RWPG has added the new brackish groundwater desalination strategy and project as recommended in Chapter 5 of the final 2026 RWP. There was not enough time and budget to fully evaluate the new reservoir project, but it has been mentioned in the "Considered Water Management Strategies" section (5.4) of Chapter 5 of the final plan.
5	Written	City of Elsa	Request to add 6 water projects (a secondary line from Engleman Garden, a new water well, an interconnect with North Alamo, a study on the interconnect & other raw water supply, acquisition of CCN, and improvements to the filtration plant) and 3 wastewater projects (reactivating the race tract, installation of solar panels, potential reclaimed water)	The Rio Grande RWPG has added the new groundwater well and non-potable reuse strategies and projects as recommended in the final 2026 RWP. The secondary line from Engleman Garden is already included in Section 5.3.2.2 of Chapter 5 of the 2026 RWP. The other requests could not be included as they could not be confirmed to meet TWDB requirements.
6	Written	Maverick County	Request to add a new 1.5 MGD brackish groundwater desalination plant with associated infrastructure.	The Rio Grande RWPG has added the new brackish groundwater desalination strategy and project as recommended in Chapter 5 of the final 2026 RWP. The full 1.5 MGD is not available from the aquifer under the MAG, so firm yield and unit costs were based on an availability of 136 ac-ft/yr.

**Rio Grande Regional Water Planning Group
Summary of Public Comments and Responses**

Public Comment No.	Comment Type (Verbal or Written)	Commenter Name and Affiliation	Summary of Public Comment	Rio Grande RWPG Response
7	Written	City of Mercedes	Request to add a new 5.0 MGD brackish groundwater desalination plant with associated infrastructure and a raw water reservoir.	The Rio Grande RWPG has added the new brackish groundwater desalination strategy and project as recommended in Chapter 5 of the final 2026 RWP. There was not enough time and budget to fully evaluate the new reservoir project, but it has been mentioned in the "Considered Water Management Strategies" section (5.4) of Chapter 5 of the final plan.
8	Written	City of Pharr	Request to add a new brackish groundwater desalination plant with associated infrastructure to expand water capacity, and to update the direct potable reuse water strategy.	The Rio Grande RWPG has added the new brackish groundwater desalination strategy and project as recommended in Chapter 5 of the final 2026 RWP, and has incorporated the updates to the Pharr DPR project.
9	Written	City of Rio Hondo	Request to add an off channel reservoir for raw water storage.	There was not enough time and budget to fully evaluate a new reservoir project, but it has been mentioned in the "Considered Water Management Strategies" section (5.4) of Chapter 5 of the final plan.
10	Written	Debbie Farmer, General Manager of Wintergarden Conservation District	Commentor wrote to protest the 1.5 MGD Brackish GW Desalination project proposed by Maverick County, since the groundwater availability for the project is MAG limited.	Objection was incorporated by including it as part of the "implementation issues" in the description of the Maverick County project in Chapter 5 of the final plan.

Rene Perez, TCEQ

I did sign up right on the correct form. Well, good afternoon, everyone. My name is Rene Perez. I'm with the TCEQ, Regional Office 15. I'm with the Border Affairs Program. So I'm the border affairs liaison for this region.

I sent a study to Mayor Darling. I had sent it to him, actually following up on the last Region M meeting.

The study that I sent to Mr. Darling was conducted by the University of Texas at Austin and the Universidad Nacional Autonoma de Mexico. The study is entitled US-Mexico Salinity Management Program and was developed under the Border 2025 Program, and it focuses on the delivery of quality water from the US and Mexico via the Colorado River.

It highlights key treaty obligations under the 1944 Water Treaty and Minute No. 242 - salinity control efforts in the US and by national coordination between the IBWC and CILA.

It also outlines ongoing challenges related to climate change, drought and infrastructure needs. So the purpose of this study is to recognize the impact of high salinity in the river, an increasing trend, and also to highlight completion of the recent binational study.

Now I know Mr. Eddie Moderow, who is my boss, was online. I think he had to jump into another meeting. He also wanted to make a few comments.

I think my colleague Isabel Keddy is online as well. I don't know if they wanted to say a few words at this time, but that was my pitch - to hope that you will consider adding the salinity study to the regional plan.

Isabel Keddy, TCEQ

Rene, thank you. I just want to hop on – sorry, I was having trouble with my mute button. I just want to step in. And second, Rene's comments. The purpose of the binational study was to really recognize and highlight the impact of high salinity in the river, noticing the increasing trends. Having this highlighted as a recommended strategy and increased visibility of it would be fantastic.

Thank you all for your time, and I appreciate you all considering the plan.

From: [Rene Perez](#)
To: [Outreach_RegionM](#); [Jim Darling \(James.darling@utrgv.edu\)](#); [Jim Darling \(jemd1225@yahoo.com\)](#)
Cc: [Eddie Moderow](#); [Melisa Gonzales](#); [Valerie Ramos](#)
Subject: Request for Consideration of Salinity Study Inclusion in Region M Plan
Date: Wednesday, May 7, 2025 11:18:05 AM
Attachments: [image001.png](#)
[SP2025_U.S.-Mexico-Salinity_2.25_v2_\(1\).pptx](#)
[SP2025_U.S.-Mexico-Salinity_2.25_v2_ESP.pptx](#)

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Dear Chairman Darling,

My name is Rene Perez, and I am with the Texas Commission on Environmental Quality (TCEQ) Office, Region 15, Border Affairs Division.

I had the opportunity to attend this morning's Region M meeting and wanted to extend my sincere thanks to you and your team for the informative update and your continued efforts in water planning for the region.

I also noted that the next scheduled meeting for plan updates is on **May 22, 2025**. In anticipation of that discussion, I would like to respectfully request the opportunity to submit and propose inclusion of a salinity study in the Region M Water Plan. This study, attached to this message, was conducted collaboratively by the University of Texas at Austin and the Universidad Nacional Autónoma de México (UNAM). The study, titled "*U.S.-Mexico Salinity Management Program*", was developed under the Border 2025 initiative and focuses on the delivery of quality water from the U.S. to Mexico via the Colorado River. It highlights key treaty obligations under the 1944 Water Treaty and Minute 242, salinity control efforts in the U.S., and binational coordination between IBWC and CILA. It also outlines ongoing challenges related to climate change, drought, and infrastructure needs.

A summary of the attached PowerPoint includes:

- **Treaty Frameworks:** Legal salinity thresholds and delivery obligations.
- **Salinity Control Mechanisms:** On-farm irrigation improvements and canal modernization led by various U.S. agencies.
- **Binational Coordination:** Monitoring and management of water quality across international boundaries.
- **Monitoring and Reporting:** Transparent data-sharing and adaptive planning.
- **Challenges:** Climate stressors and the need for continued cross-border collaboration.

Please let me know if there is a process or formal step, I should follow to have this study considered for inclusion in the Region M Plan. I would be happy to provide additional background or coordinate further if needed.

Thank you again for your time and leadership.

Warm regards,

Rene Perez

TCEQ Border Affairs Liaison Region 15 Office



1804 West Jefferson Ave. | Harlingen, TX 78550

Direct: 956.430.6035 | Office: 956.425.6010 | Fax: 956.412.5059



TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF DONNA
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: BRACKISH GROUNDWATER DESALINATION PLANT
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Donna to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This strategy is to construct a new brackish groundwater treatment plant and pipeline to address long-term reliability and regulatory compliance. This Water Management Study (WMS) will reduce the City's dependence on the drought-stricken Rio Grande River.

AVAILABLE SUPPLY

The water treatment plant will be designed with a 5.0 million gallons per day (MGD) capacity to support the City's projected future water demand. The City will develop a groundwater well field to supply brackish groundwater to the treatment plant.

ENGINEERING AND COSTING

Costs associated with this strategy include the construction of a new water treatment plant, a high service pump station, a 7-mile transmission pipeline, and land acquisition.

IMPLEMENTATION ISSUES

The availability of surface water rights necessary to supply the treatment plant represents a potential challenge to project implementation.



Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per ac-ft)	Annual Cost of Water After Debt Service (\$ per ac-ft)
\$61,664,622	\$103,120,665	\$7,344,952	\$1,311	\$310

Sincerely,

Jorge Peña
City Manager
City of Donna
jpena@cityofdonna.org
(956) 464-3314



TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF DONNA
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: RAW WATER RESERVOIR
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Donna to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This Water Management System consists of constructing an off-channel reservoir to provide raw-water storage capacity. The raw-water reservoir is crucial for ensuring a reliable water supply during times of drought. The City will need to purchase 25 acres for the reservoir and associated infrastructure. The reservoir will be fed from the Rio Grande River via the Irrigation District raw water canal system.

AVAILABLE SUPPLY

The proposed reservoir will provide a reliable raw-water source to improve system resiliency during drought periods.

ENGINEERING AND COSTING

The reservoir will require land acquisition, intake modifications, the construction of pumping facilities, transmission pipeline and connection to the existing water treatment plant (WTP). The cost estimate reflects a reservoir footprint of approximately 25 acres, including the associated pump station and pipeline infrastructure. Annual cost per acre-foot is based on a preliminary firm yield of 1,000 ac-ft/yr; values will be refined once the yield analysis is complete. Project costs are detailed in Table 1.



IMPLEMENTATION ISSUES

Donna will be required to fulfill all applicable environmental compliance obligations and secure the necessary permits. Additional considerations may include potential impacts to water quality, flood risk, and habitat disturbance.

Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per acft)	Annual Cost of Water After Debt Service (\$ per acft)
\$14,000,000	\$21,000,000	\$1,309,000	\$1,309	\$238

Sincerely,

Jorge Peña
City Manager
City of Donna
jpena@cityofdonna.org
(956) 464-3314

2026 RIO GRANDE REGIONAL WATER PLANNING GROUP

INITIALLY PREPARED PLAN

We were advised that in order for the City to apply for funding from the Texas Water Development Board we needed to submit our plan to the Planning Group.

1. Is it to late?
2. What would we need to submit?
3. We do have needs!

Currently we have a contract with Raftelis and they are working on a Water and Sewer Capital Improvement plan.

We are looking at the following projects:

Water

1. Secondary line from Engleman Garden
2. Water well
3. Interconnect with North Alamo-new infrastructure-South of Elsa
4. Study on Interconnect with North Alamo, and other raw water supply
5. Acquisition of CCN
6. Improvements to Filtration Plant

Wastewater

1. The City plans to reactivate the Race Tract for future growth, due to the size of our Sewer CCN.
2. The City plans to install Solar Panels on approximately 5 acres of land next to our Sewer Plant.
3. The City is looking at the possibilities of reclaiming water.



SURFACE WATER RESOURCES

CITY SECONDARY LINE FROM ENGLEMAN GARDEN

Project Name: Secondary line

Project Description: The project aims to interconnect with Engleman Garden raw water, as an alternate.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





GROUND WATER RESOURCES

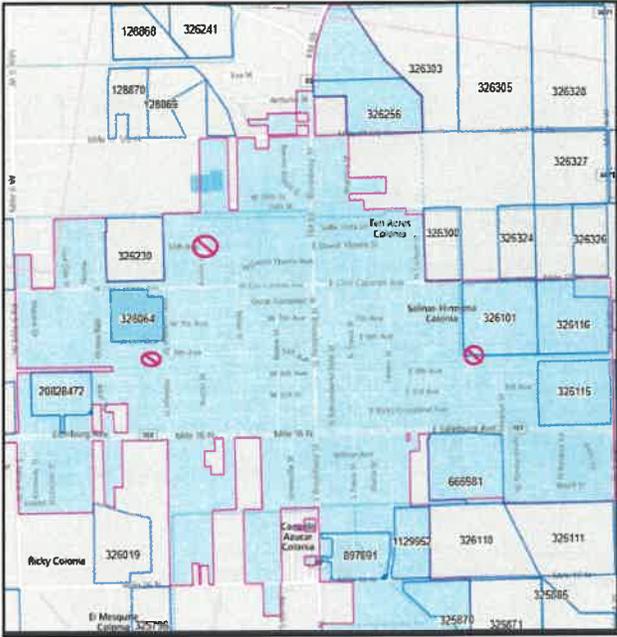
CITY PROPERTY WATER WELL DRILLING

Project Name: Water Well Drilling

Project Description: The project aims to access groundwater, as an alternative water source.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





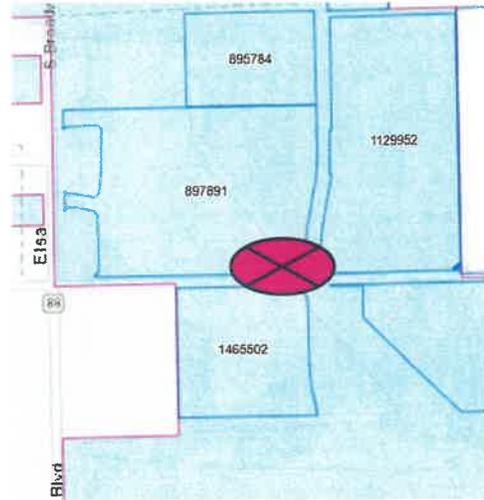
CITY INTERCONNECT WITH NORTH ALAMO WATER SUPPLY CORPORATION-SMALL SCALE

Project Name: NAWSC INTERCONNECT

Project Description: The project aims to interconnect with NAWSC.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





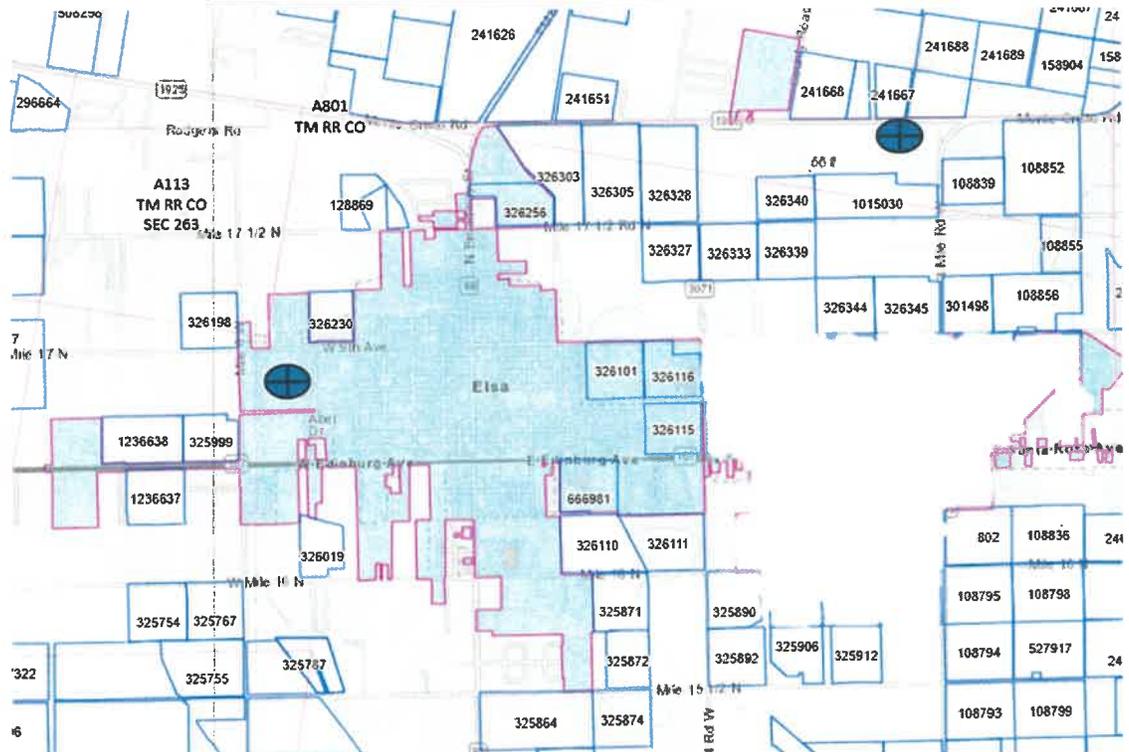
CITY INTERCONNECT WITH NORTH ALAMO WATER SUPPLY CORPORATION-LARGE SCALE

Project Name: NAWSC INTERCONNECT-LARGE SCALE

Project Description: The project aims to interconnect the city of Elsa water plant (2.8mgd) and NAWSC Delta area Regional (4.0mgd) totaling 6.8mgd. In addition access to Turberville Reservoir, and NAWSC Reservoir.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





CITY ACQUISITION OF CCN WITH NORTH ALAMO WATER SUPPLY CORPORATION

Project Name: ACQUISITION OF CCN

Project Description: The City intends to acquire the CCN of existing developments, and are being provided water by the City, but are in North Alamo Water Supply corporation.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout

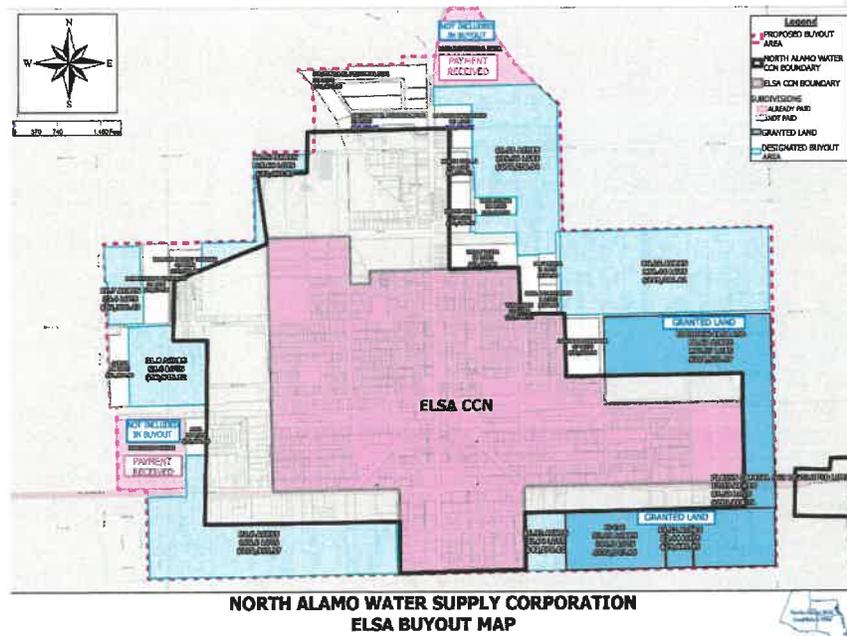
Development Within North Alamo's Service Area (Serviced by City of Elia)						
Item	Type	Subdivision Name	Undeveloped Acres	Lots Per Acre	Lots	Total Cost
1	Subdivision	Valle Verde			60	\$ 41,040.00
2	Subdivision	Salinas Hinglose			57	\$ 36,988.00
3	Subdivision	Yellow Jacket Estates			45	\$ 30,780.00
4	Subdivision	Elsa Housing Authority			36	\$ 24,624.00
5	Subdivision	La Nueva Vida			35	\$ 23,840.00
6	Subdivision	Hacienda El Provenir Phase 2			32	\$ 21,888.00
7	Subdivision	Saenz			31	\$ 21,204.00
8	Subdivision	Vida Doña			24	\$ 16,416.00
9	Subdivision	Hacienda El Provenir Phase 1			23	\$ 15,702.00
10	Subdivision	Ten Acres			22	\$ 15,048.00
11	Subdivision	Abel			20	\$ 13,680.00
12	Subdivision	14 Plus Dwellings			16	\$ 10,544.00
13	Subdivision	Nueva Vida 2			14	\$ 9,776.00
14	Subdivision	Elsa Retirement			1	\$ 684.00
15	Subdivision	La Prada			3	\$ 684.00
Total Cost of Buyout for Area with in NAWSC Water CCN Being Serviced by City of Elia					417	\$ 285,228.00

Undeveloped Land Within North Alamo's Service Area (Designated Buyout Area)						
Item	Type	Subdivision Name	Undeveloped Acres	Lots Per Acre	Lots	Total Cost
1	Acresage	Undeveloped Land	317	2	634	\$ 807,948.32
* Total Cost of Designated Buyout Area within NAWSC Water CCN						\$ 807,948.32

* Note: This calculation is based on development being 2 lots per acre with a sewer septic system.

Undeveloped Land Within North Alamo's Service Area (Designated Buyout Area)						
Item	Type	Subdivision Name	Undeveloped Acres	Lots Per Acre	Lots	Total Cost
1	Acresage	Undeveloped Land	317	4	1,268	\$ 1,696,896.64
* Total Cost of Designated Buyout Area within NAWSC Water CCN						\$ 1,696,896.64

* Note: This calculation is based on development being 4 lots per acre with an organized sewer system.





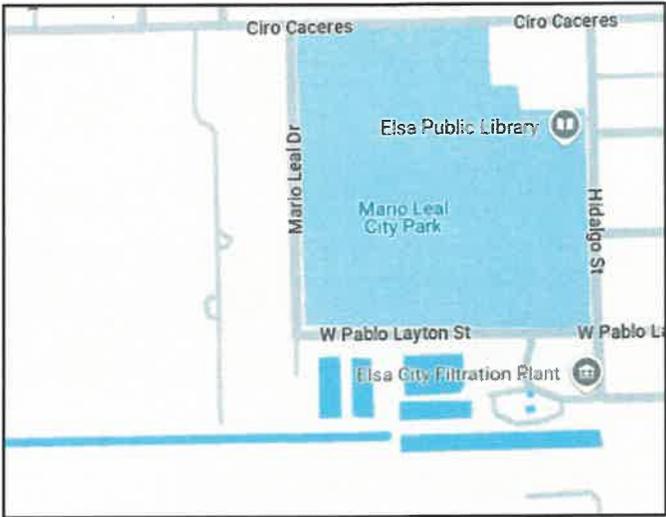
500 W 5TH STREET- CITY OF ELSA FILTRATION PLANT

Project Name: Water Plant Pond Project

Project Description: Setting up drying beds and using sludge pumps to remove and process sludge to manage sludge and vegetation from city water ponds.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





301 W. HOLY INNOCENT ST.

CITY OF ELSA WASTEWATER TREATMENT PLANT-RACE TRACK PROJECT

Project Name: Wastewater Race Track- Project

Project Description: The city plans to reactivate the race track at the sewer plant for future growth.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





301 W. HOLY INNOCENT ST.

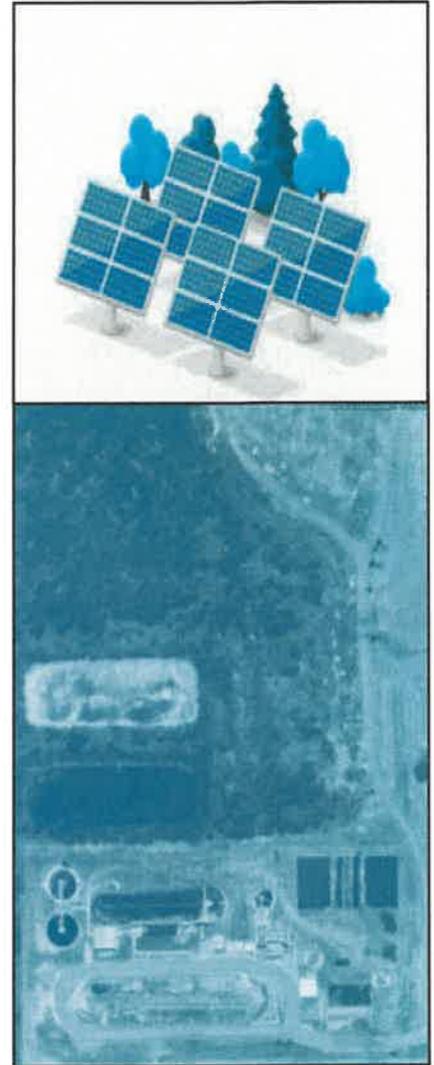
CITY OF ELSA WASTEWATER TREATMENT PLANT-SOLAR PANEL PROJECT

Project Name: Wastewater Plant Solar Panel- Project

Project Description: Installation of solar panels on approximately 5 acres of land to save energy.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





301 W OLY INNOCENT ST.

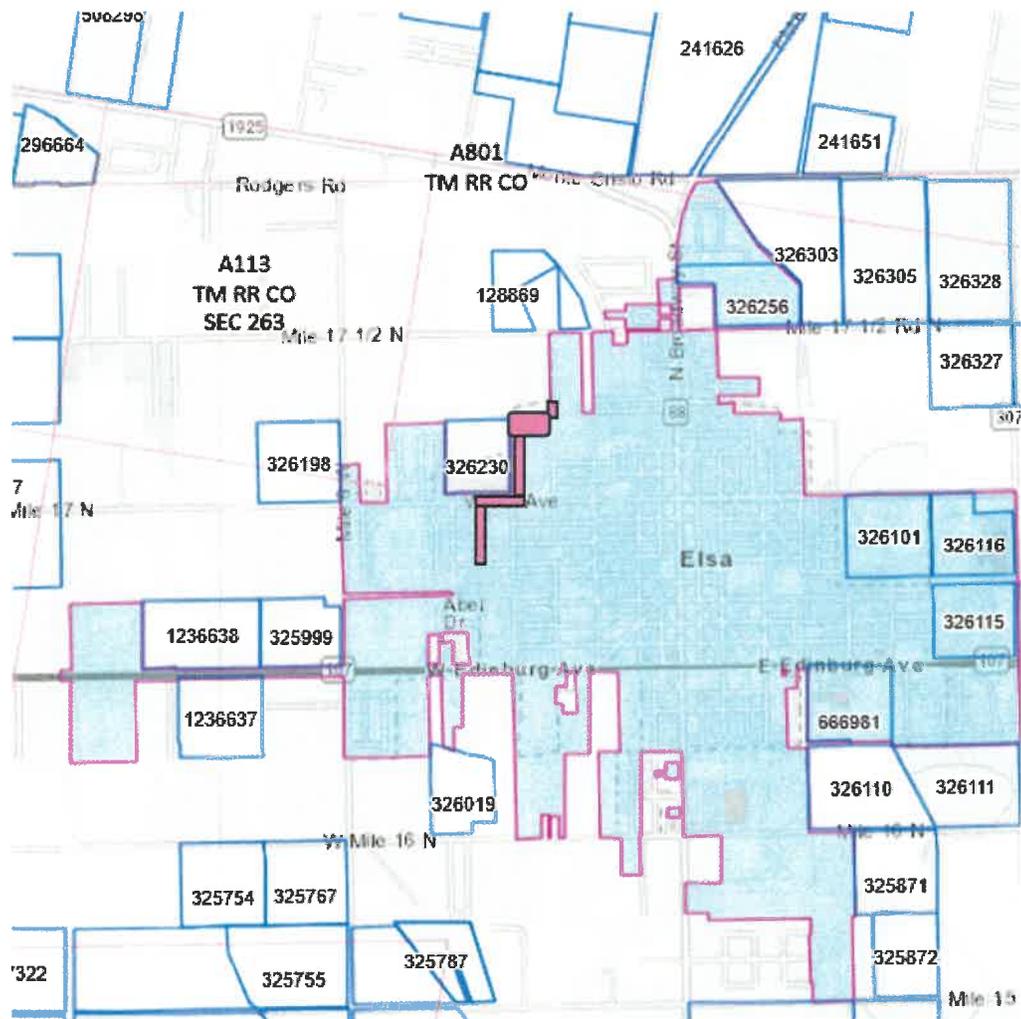
CITY OF ELSA WASTEWATER TREATMENT PLANT-RECLAIMED WATER

Project Name: Wastewater- Reclaimed Water Project

Project Description: The city plans of direct reuse for non-potable purpose include using piping reclaimed for irrigation.

Stage:

- Anticipated
- Planning
- Active
- Construction
- Closeout





OFFICE OF PRECINCT 3 COMMISSIONER
The Honorable Olga Ramos

TO: REGIONAL WATER PLANNING GROUP
FROM: MAVERICK COUNTY
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: BRACKISH GROUNDWATER DESALINATION PLANT
DATE: JULY 17, 2025

PROJECT SOURCE

This strategy was submitted by the Maverick County to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This strategy is to construct a new brackish groundwater well field, treatment plant and distribution system improvements to address long-term reliability and regulatory compliance. This Water Management Strategy (WMS) will reduce the County's dependence on the drought-stricken Rio Grande River.

AVAILABLE SUPPLY

The water treatment plant will be designed with a 1.5 million gallons per day (MGD) capacity to support the County's projected future water demand. The County will develop a groundwater well field to supply brackish groundwater to the treatment plant.

ENGINEERING AND COSTING

Costs associated with this strategy include the construction of a new groundwater well field, water treatment plant, a high service pump station, transmission and distribution pipeline improvements, ground storage tank, and land acquisition.

IMPLEMENTATION ISSUES

Construction of the groundwater well field and water treatment plant will require the purchase of land and right-of-way permitting. Concentrate disposal will require TCEQ approval.

Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per ac-ft)	Annual Cost of Water After Debt Service (\$ per ac-ft)
\$42,000,000	\$58,000,000	\$4,200,000	\$4,377	\$2,500

TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF MERCEDES
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: BRACKISH GROUNDWATER DESALINATION PLANT
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Mercedes to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This strategy is to construct a new brackish groundwater treatment plant and pipeline to address long-term reliability and regulatory compliance. This Water Management Study (WMS) will reduce the City's dependence on the drought-stricken Rio Grande River.

AVAILABLE SUPPLY

The water treatment plant will be designed with a 5.0 million gallons per day (MGD) capacity to support the City's projected future water demand. The City will develop a groundwater well field to supply brackish groundwater to the treatment plant.

ENGINEERING AND COSTING

Costs associated with this strategy include the construction of a new water treatment plant, a high service pump station, a 7-mile transmission pipeline, and land acquisition.

IMPLEMENTATION ISSUES

The availability of surface water rights necessary to supply the treatment plant represents a potential challenge to project implementation.

Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per ac-ft)	Annual Cost of Water After Debt Service (\$ per ac-ft)
\$61,664,622	\$103,120,665	\$7,344,952	\$1,311	\$310

TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF MERCEDES
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: RAW WATER RESERVOIR
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Mercedes to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This Water Management System consists of constructing an off-channel reservoir to provide raw-water storage capacity. The raw-water reservoir is crucial for ensuring a reliable water supply during times of drought. The City will need to purchase 25 acres for the reservoir and associated infrastructure. The reservoir will be fed from two (2) groundwater wells and surface water from the Rio Grande River via the Irrigation District raw water canal system.

AVAILABLE SUPPLY

Current potable-water production capacity totals 5.51 MGD (3.78 MGD surface water and 1.73 MGD groundwater). Demand projections in the Master Plan indicate supply deficits beginning in 2034 under peak-day conditions. The proposed reservoir will provide a reliable raw-water source to expand WTP output and improve system resiliency during drought periods.

ENGINEERING AND COSTING

The reservoir will require land acquisition, intake modifications, the construction of pumping facilities, transmission pipeline and connection to the existing water treatment plant (WTP). The cost estimate reflects a reservoir footprint of approximately 25 acres, including the associated pump station and

pipeline infrastructure. Annual cost per acre-foot is based on a preliminary firm yield of 1,000 ac-ft/yr; values will be refined once the yield analysis is complete. Project costs are detailed in Table 1.

IMPLEMENTATION ISSUES

Mercedes will be required to fulfill all applicable environmental compliance obligations and secure the necessary permits. Additional considerations may include potential impacts to water quality, flood risk, and habitat disturbance.

Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per acft)	Annual Cost of Water After Debt Service (\$ per acft)
\$14,000,000	\$21,000,000	\$1,309,000	\$1,309	\$238



Pharr



MAYOR Ambrosio Hernandez, MD

COMMISSIONERS Michael Pacheco | Roberto "Bobby" Carrillo | Ramiro Caballero, MD | Daniel Chavez | Ricardo Medina | Itza Flores

TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF PHARR
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: BRACKISH GROUNDWATER TREATMENT PLANT
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Pharr to the Regional Water Planning Group.

DESCRIPTION

This direct groundwater supply strategy is intended to supplement the City of Pharr's raw water system with brackish groundwater from newly developed wells. This water would be conveyed to a proposed treatment facility on the City-owned Chowdary Tract. The raw water would be treated using a reverse osmosis (RO) membrane system to meet primary drinking water standards, followed by post-treatment for corrosion control and disinfection. Treated water would then be pumped through a 2.4-mile 24-inch pipeline to integrate with the City's existing 24" transmission main. The proposed water treatment plant site and alignment of the treated water transmission main are illustrated in Figure 1.

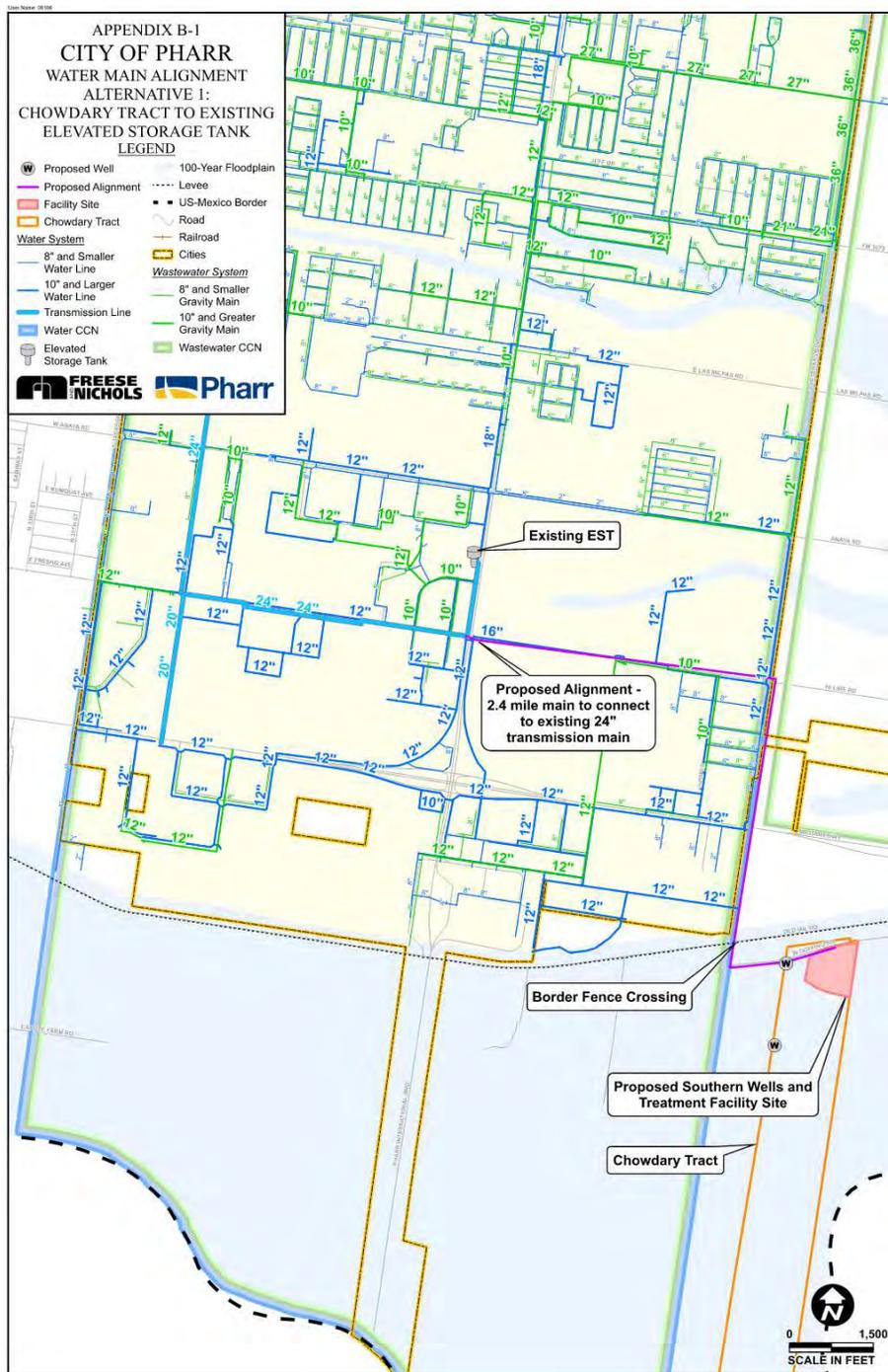


Figure 1. Project Location

AVAILABLE SUPPLY

Aquifer testing indicates each new well can yield 0.72–1.0 MGD. With an assumed 75 percent RO recovery, an initial set of 7–10 wells (≈6.7 MGD of raw water) will provide 5 MGD of finished supply, sufficient to meet average-day deficits through 2060 and expandable to 10 MGD or more as demand grows.

ENGINEERING AND COSTING

The components of this project include the construction of a new groundwater treatment facility, a well field, and a transmission pipeline at the City-owned Chowdary Tract. Up to 16 new groundwater wells are proposed to support the facility. A 2.4-mile, 24-inch PVC pipeline is required to deliver treated water to the City's existing 24-inch transmission main. The advanced treatment system includes RO membrane technology (Advanced Treatment Level 1). Concentrate from the RO process will be discharged into the Arroyo Colorado.

IMPLEMENTATION ISSUES

The final design of the City of Pharr's groundwater supply augmentation project requires approval from the Texas Commission on Environmental Quality (TCEQ), with compliance to regulations for treated water quality and concentrate discharge. Additional permitting may involve multiple agencies such as the U.S. Army Corps of Engineers (USACE), International Boundary and Water Commission (IBWC), U.S. Customs and Border Protection (USCBP), and the Hidalgo County Regional Mobility Authority (HCRMA).

Table 1. Phase I - 5 MGD

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per ac-ft)	Annual Cost of Water After Debt Service (\$ per ac-ft)
\$61,664,622	\$103,120,665	\$7,344,952	\$1,311	\$310

Table 2. Phase II - 10 MGD

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per ac-ft)	Annual Cost of Water After Debt Service (\$ per ac-ft)
\$32,171,110	\$53,813,850	\$7,344,952	\$656	\$396



Pharr



MAYOR Ambrosio Hernandez, MD

COMMISSIONERS Michael Pacheco | Roberto "Bobby" Carrillo | Ramiro Caballero, MD | Daniel Chavez | Ricardo Medina | Itza Flores

TO: REGIONAL WATER PLANNING GROUP
FROM: CITY OF PHARR
SUBJECT: WATER SYSTEM IMPROVEMENTS
PROJECT: RAW WATER AUGEMENTATION POTABLE REUSE
DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Pharr to the Regional Water Planning Group.

DESCRIPTION

This direct potable reuse strategy is to augment the City of Pharr's raw water supply with reuse water. A portion of the wastewater treatment plant effluent will be treated to near drinking water standards, stored in a buffering pond, and then pumped to a raw water storage pond where it will mix with Rio Grande surface water supplied by Hidalgo County Irrigation District No. 2. This strategy was presented to and approved by the Texas Water Development Board in a Water Reuse Priority and Implementation Plan Report, prepared in September 2011. The approximate alignment of the City of Pharr's reuse pipeline for the Raw Water Reservoir Augmentation Water Management System is shown on Figure-1.

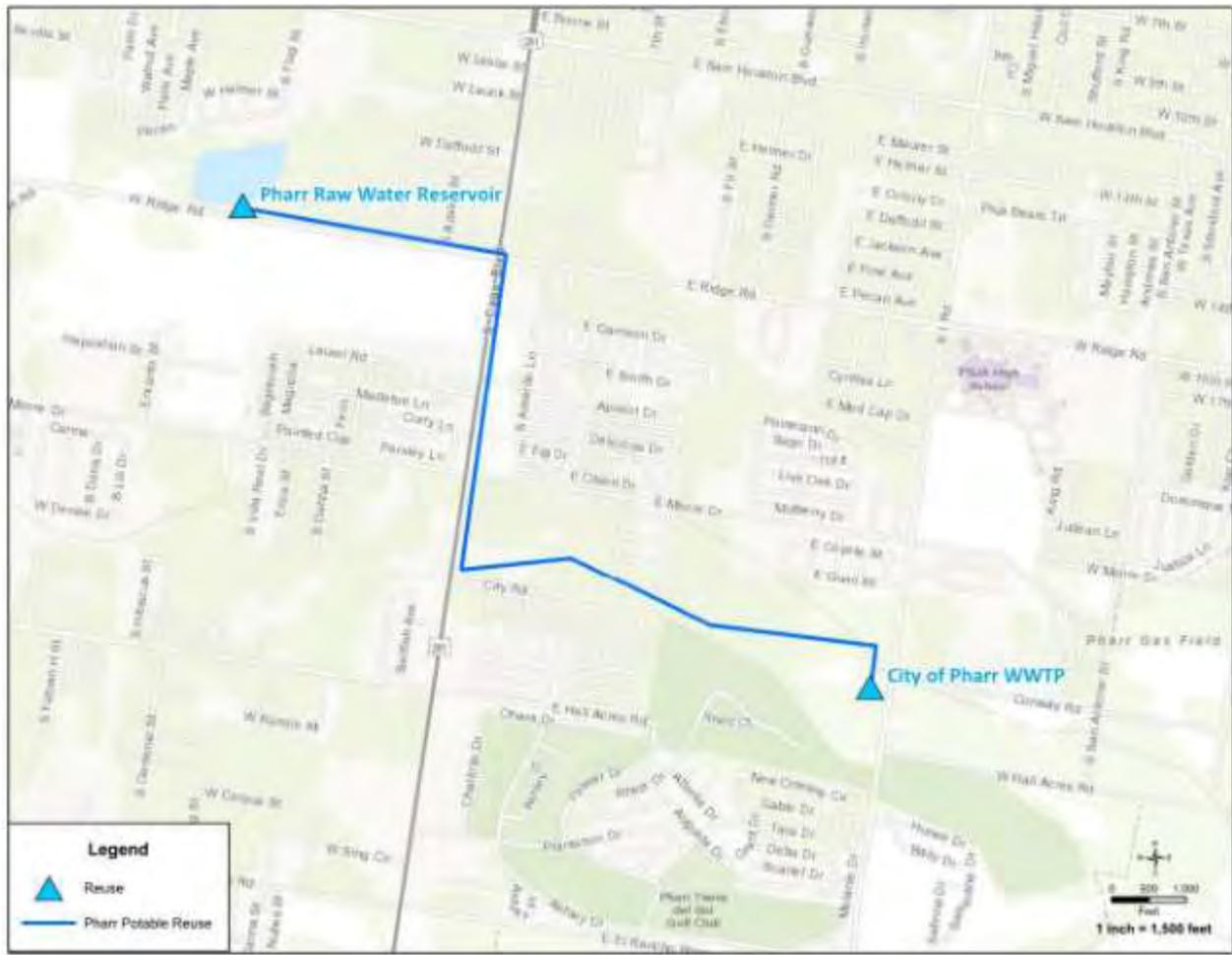


Figure 1. Pharr Raw Water Reservoir Augmentation Potable Reuse Project Location

AVAILABLE SUPPLY

The current plant flow of the City of Pharr’s WWTP is 6 MGD. Based on planning assumptions, no more than fifty percent of the wastewater effluent will be supplied by reuse. The total available supply for this strategy is 3 MGD, or 3,360 ac-ft/yr, and is assumed to come online by 2040. It is assumed that 20 percent of the influent water would be lost through the treatment process; therefore, 4,030 ac-ft/yr of wastewater effluent would be used.

ENGINEERING AND COSTING

The components of this project include an advanced reclaimed WTP, storage pond, and pump station to be constructed next to the existing WWTP on City owned land. A 16” pipeline is proposed to convey the reclaimed water to the raw water storage pond near the WTP. The advanced treatment plant will consist of membrane filtration, RO, and ultraviolet disinfection (Advanced Treatment Level 1). Concentrate disposal from the treatment processes would be discharged to the Arroyo Colorado with the traditional WWTP discharge. It is assumed that the construction period would be 1.5 years.

Land acquisition costs are limited to the pipeline route since the other infrastructure components will be built on City-owned land. Table 5-45 outlines the project costs developed in the UCM. The full UCM project cost estimate summary is provided in Appendix 5D.

IMPLEMENTATION ISSUES

Final design of the indirect potable reuse project would require approval by TCEQ. Any requirements developed by TCEQ for potable reuse by the time this project is constructed would need to be met. Construction of the new pipeline may also include any of the following permits: USACE Section 404 permit; TPWD sand, shell, gravel, and marl permit; TPDES Storm Water Pollution Prevention Plan; Texas DOT ROW permit.

Table 1. Pharr – Raw Water Augmentation Potable Reuse Project Costs

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per acft)	Annual Cost of Water After Debt Service (\$ per acft)
\$47,508,951	\$82,223,872	\$3,199,158	\$2,283	\$952



TO: REGIONAL WATER PLANNING GROUP

FROM: CITY OF RIO HONDO

SUBJECT: WATER SYSTEM IMPROVEMENTS

PROJECT: RAW WATER RESERVOIR

DATE: JULY 15, 2025

PROJECT SOURCE

This strategy was submitted by the City of Rio Hondo to the Regional Water Planning Group in 2025 and will be updated in future planning cycles.

DESCRIPTION

This Water Management System consists of constructing an off-channel reservoir to provide raw-water storage capacity. The raw-water reservoir is crucial for ensuring a reliable water supply during times of drought. The City will need to purchase 12 acres for the reservoir and associated infrastructure. The reservoir will be fed from the Rio Grande River via the Irrigation District raw water canal system.

AVAILABLE SUPPLY

The proposed reservoir will provide a reliable raw-water source to improve system resiliency during drought periods.

ENGINEERING AND COSTING

The reservoir will require land acquisition, intake modifications, the construction of pumping facilities, transmission pipeline and connection to the existing water treatment plant (WTP). The cost estimate reflects a reservoir footprint of approximately 12 acres, including the associated pump station and pipeline infrastructure. Annual cost per acre-foot is based on a preliminary firm yield of 1,000 ac-ft/yr; values will be refined once the yield analysis is complete. Project costs are detailed in Table 1.

IMPLEMENTATION ISSUES

Rio Hondo will be required to fulfill all applicable environmental compliance obligations and secure the necessary permits. Additional considerations may include potential impacts to water quality, flood risk, and habitat disturbance.

Table 1. Project Cost

Facilities Cost	Total Project Cost	Annual Cost	Annual Cost of Water (\$ per acft)	Annual Cost of Water After Debt Service (\$ per acft)
\$3,500,000	\$5,250,000	\$630,000	\$915	\$630

Wintergarden Groundwater Conservation District

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Carrizo Springs, TX 78834

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Website: www.wgcd.net

"An Equal Opportunity Employer"

August 25, 2025

Via Email To: Outreach_RegionM@BlackandVeatch.onmicrosoft.com

Jim Darling, Chairman
Rio Grande Regional Water Planning Group
301 W. Railroad St.
Weslaco, TX 78596

RE: Public Comment to Protest a New Recommended Water Management Strategy - Request to include a new 1.5 MGD (1,680 ac-ft/yr) Brackish GW Desal facility in Maverick County into the Region M Regional Water Planning Group Plan

Dear Chairman Darling:

A request has been made to include a new 1.5 MGD (1,680 ac-ft/yr) Brackish GW Desal facility in Maverick County into the Region M Regional Water Planning Group Plan. If approved, the project would include construction of a new brackish groundwater wellfield, treatment plant, and transmission pipeline to address long-term reliability and regulatory compliance. This project is claimed to provide a new source of reliable water supply.

As noted in the Region M Meeting material dated August 12, 2025, the groundwater source will be from the Carrizo-Wilcox Aquifer in Maverick County. The Modeled Available Groundwater (MAG) for the Carrizo-Wilcox Aquifer was 2,042 acre-ft/year for 2020-2030 in Maverick County in the 2021 Region M Water Planning Group Plan. The MAG was reduced to 545-547 acre-ft/yr for 2020-2060 in the 2026 Draft – Region M Regional Water Planning Group Plan. This reduction was based on the 2020-2030 MAG of 545-547 acre-ft/yr calculated in 2021 by the TWDB for the Carrizo-Wilcox Aquifer in Maverick County. This MAG reduces to 276 acre-ft/year for 2070-2080.

Within the Carrizo-Wilcox Aquifer in the Nueces Basin in Maverick County, volumes were previously identified in the Regional Water Plan for existing supplies for multiple water user groups ("WUGs") in Maverick County. The amount remaining for the proposed Maverick County project under the MAG after existing volumes are accounted was identified as 170 ac-ft/yr. The available amount is considerably less than the volume requested for the proposed project. Groundwater availability for the proposed project is therefore MAG-limited (meaning groundwater pumping is capped by the MAG pursuant to the regional planning process). For this fundamental reason, Wintergarden Groundwater Conservation District opposes the inclusion of a new 1.5 MGD (1,680 ac-ft/yr) Brackish GW Desal facility in Maverick County into the Region M Regional Water Planning Group Plan.

Regards,



Debbie Farmer,
General Manager