

August 25, 2022

## Eastern New Mexico Rural Water System Update to the Water and Natural Resources Committee



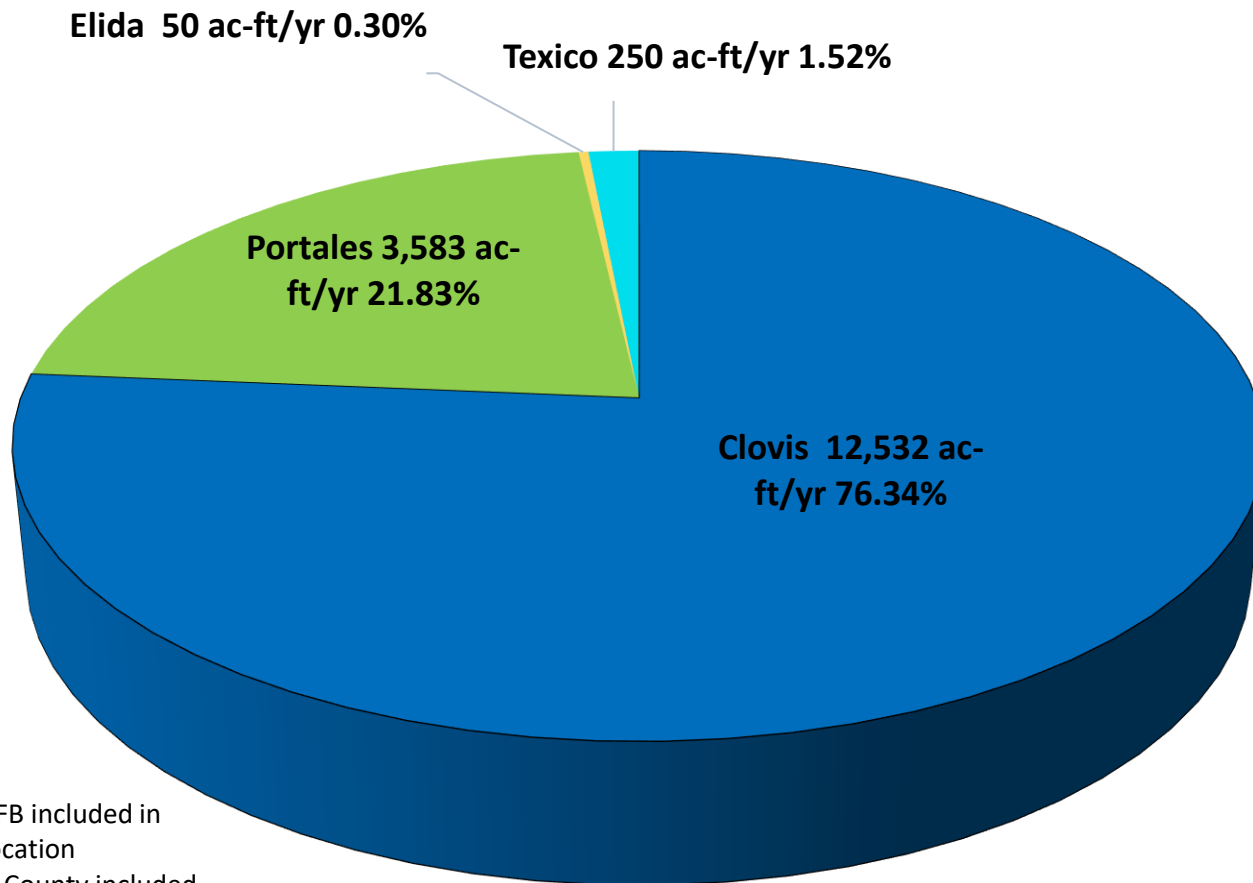
# ➤ Eastern New Mexico Water Utility Authority (ENMWUA)

## Facts

- The ENMWUA's water pipeline system is called the Eastern New Mexico Rural Water System (ENMRWS), also known as the Ute Pipeline Project.
- The ENMRWS is a regional rural water supply project projected to address municipal and industrial water supply issues resulting from a declining and deteriorating Ogallala groundwater source.
- The ENMWUA's water delivery system will deliver 16,415-acre feet of renewable potable water annually to four-member communities to include Clovis, Portales, Texico, Elida, areas in Roosevelt and Curry counties, and Cannon Air Force Base.
- ENMRWS was federally authorized through the Omnibus Public Land Management Act of 2009.
- New Mexico Legislature enacted the Eastern New Water Utility Authority Act establishing ENMWUA as an official governmental Water Utility Authority effective July 1, 2010.

# ➤ Eastern New Mexico Water Utility Authority (ENMWUA) Facts

## ENMWUA Member Allocation



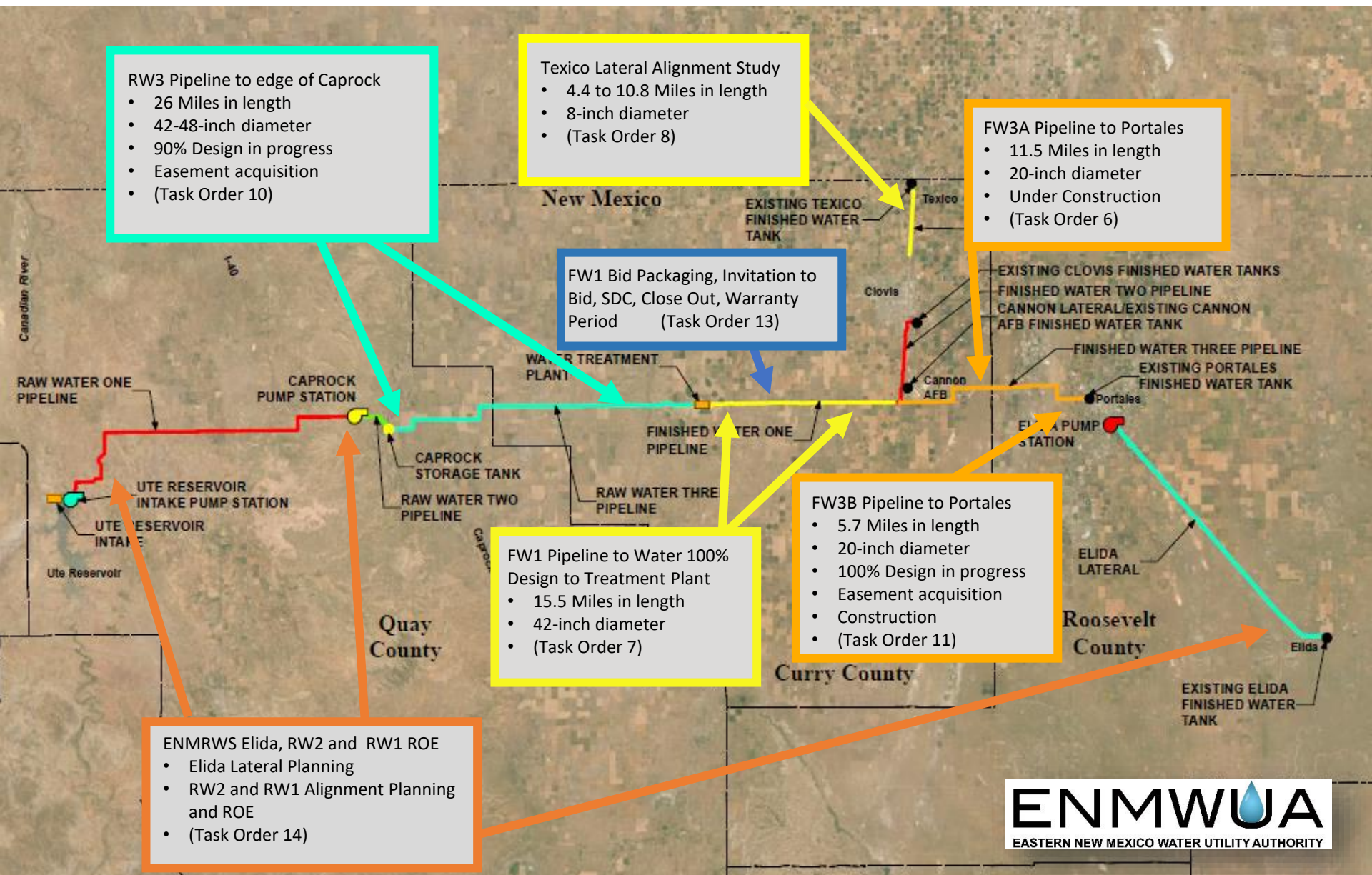
Notes;  
Cannon AFB included in  
Clovis Allocation  
Roosevelt County included  
In Portales Allocation

# ➤ Eastern New Mexico Water Utility Authority (ENMWUA)

## Facts

- The project includes a 28-million-gallon-per-day (mgd) water treatment facility, over 90 miles of transmission pipeline, and over 30 miles of lateral pipeline to serve several communities.
- Funding Breakdown: 75% Federal, 15% State, 10% Local ENMWUA Membership.
- Intake Facility at Ute Reservoir – **Completed** in 2016 – Cost **\$14.2 Million**
- Finished Water 2 (FW2) – **Completed** in 2021 – Cost **\$27.3 Million**  
(Connects Cannon Air Force Base (CAFB) and Clovis Community)
- Finished Water 3 (FW3) – **Under Construction** – Cost **\$37.1 Million**  
(Connects from CAFB to Portales)
- Finished Water 1 (FW1) – Request for Proposals published on June 12, 2022  
(Connects from north FW2 to proposed Water Treatment Plant location)

# ➤ FY2022/2023 ENMWUA Budgeted Projects (Currently Underway)



**RW3 Pipeline to edge of Caprock**

- 26 Miles in length
- 42-48-inch diameter
- 90% Design in progress
- Easement acquisition
- (Task Order 10)

**Texico Lateral Alignment Study**

- 4.4 to 10.8 Miles in length
- 8-inch diameter
- (Task Order 8)

**FW3A Pipeline to Portales**

- 11.5 Miles in length
- 20-inch diameter
- Under Construction
- (Task Order 6)

**FW1 Bid Packaging, Invitation to Bid, SDC, Close Out, Warranty Period (Task Order 13)**

**FW3B Pipeline to Portales**

- 5.7 Miles in length
- 20-inch diameter
- 100% Design in progress
- Easement acquisition
- Construction
- (Task Order 11)

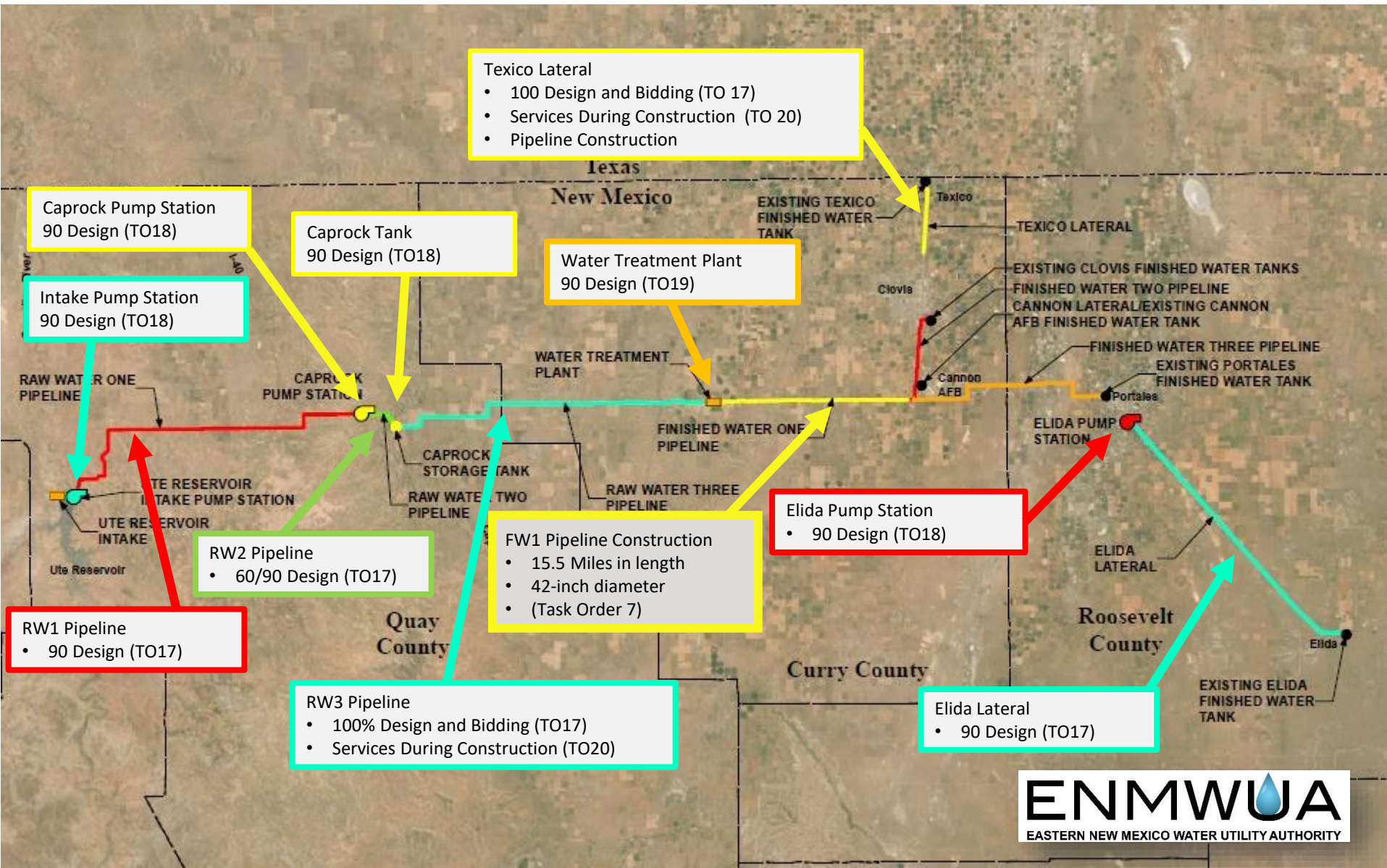
**FW1 Pipeline to Water 100% Design to Treatment Plant**

- 15.5 Miles in length
- 42-inch diameter
- (Task Order 7)

**ENMRWS Elida, RW2 and RW1 ROE**

- Elida Lateral Planning
- RW2 and RW1 Alignment Planning and ROE
- (Task Order 14)

- FY2023 Projects (Currently Underway)
- Made possible with 2022 Federal, State, Local funding



## ➤ CURRENT REAL TIME ACTIVITY

Current projects underway include:

- **Finished Water 3 (FW3)** construction, 17.2-mile 20-inch diameter water transmission pipeline connecting FW2 to Portales. (Under construction)
- **Finished Water 1 (FW1)** 100 percent design is complete. RFP published June 15, 2022 with proposals due on September 28, 2022. This involves 16 miles of 39-inch diameter water transmission pipeline begins at the north end of FW2 and will connect to the proposed water treatment plant. Construction on FW1 is planned to begin winter of 2022/2023.
- **Raw Water 3 (RW3)** is currently being designed to a 90 percent level. This includes 26 miles of 42-48-inch diameter pipeline. RW3 begins on the north end of the proposed water treatment plant and continues to the edge of the caprock.
- **Texico Lateral** planning study conducted by ENMWUA stakeholders. The conclusion of this planning has allowed for a decision of best alignment option. ENMWUA will commence on design after this planning is complete and best lateral option is approved by all stakeholders.

## ➤ CURRENT REAL TIME ACTIVITY

Current projects underway include:

- **Raw Water 2 (RW2)** is a three-mile section of 42-inch diameter pipe currently under alignment planning and Right-of-Entry activity. Geotech and surveys have commenced. 90% design and easement acquisition will be next steps. Remaining 10% of design, bid packaging, RFP, and construction will follow with next round of funding.
- **Raw Water 1 (RW1)** is a 28-mile pipeline of 42-inch diameter that connects from RW2 to the Intake Facility at Ute Reservoir. Current activity includes alignment planning and Right-of-Entry. Geotech and surveys will commence. 90% design and easement acquisition will be next steps. Remaining 10% of design, bid packaging, RFP, and construction will follow with next round of funding.
- **Elida Lateral and Pump Station** This is a 30-mile pipeline, 4 to 6-inch in diameter. Right-of-Way acquisition and 90% design have begun. Remaining 10% of design, bid packaging, RFP, and construction will follow with next round of funding.
- **ENMRWS Facilities** 90% design has begun on all facilities to include the Water Treatment Plant, Caprock Pump Station and Tank, and Intake Pump Station. Land acquisition is in progress. Power to facilities are being planned and will commence.



## CURRENT REAL TIME ACTIVITY

Current projects underway include:

- **Water Treatment Plant Design to 90%**
- **Intake Facility Condition Assessment**
- **Intake Facility Pump Station Design to 90%**
- **Caprock Booster Pump Station Design to 90%**
- **Caprock Storage Tank Design to 90%**
- **Elida Pump Station Design to 90%**
- **Aqueous Ammonia Design for all Member Connections to 90%**
- **Solar Energy Feasibility for Pump Stations and Water Treatment Plant**

# ➤ ENMRWS Intake Facility

**ENMWUA**  
EASTERN NEW MEXICO WATER UTILITY AUTHORITY

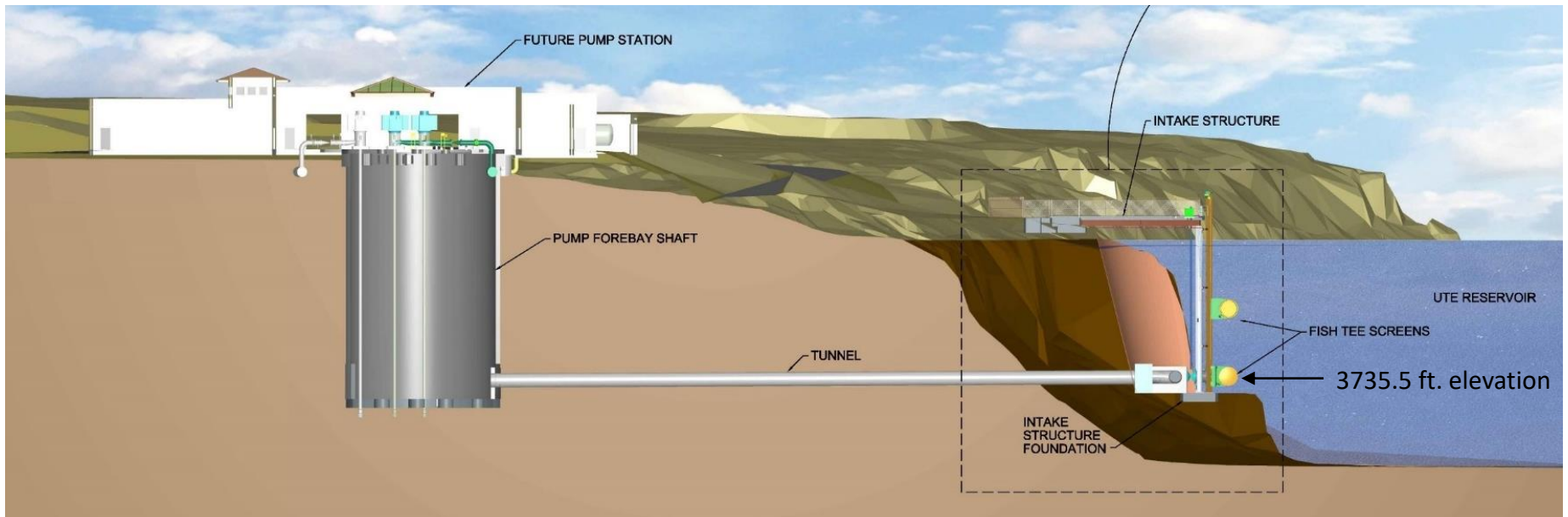


# ➤ ENMRWS Intake Facility

**ENMWUA**  
EASTERN NEW MEXICO WATER UTILITY AUTHORITY



# ➤ ENMRWS Intake Facility



- Centerline of intake tunnel - 3735.5 ft. elevation
- Intake tunnel diameter – 54-inches

## FW2 Pipe Installation



## FW2 Pipe Installation

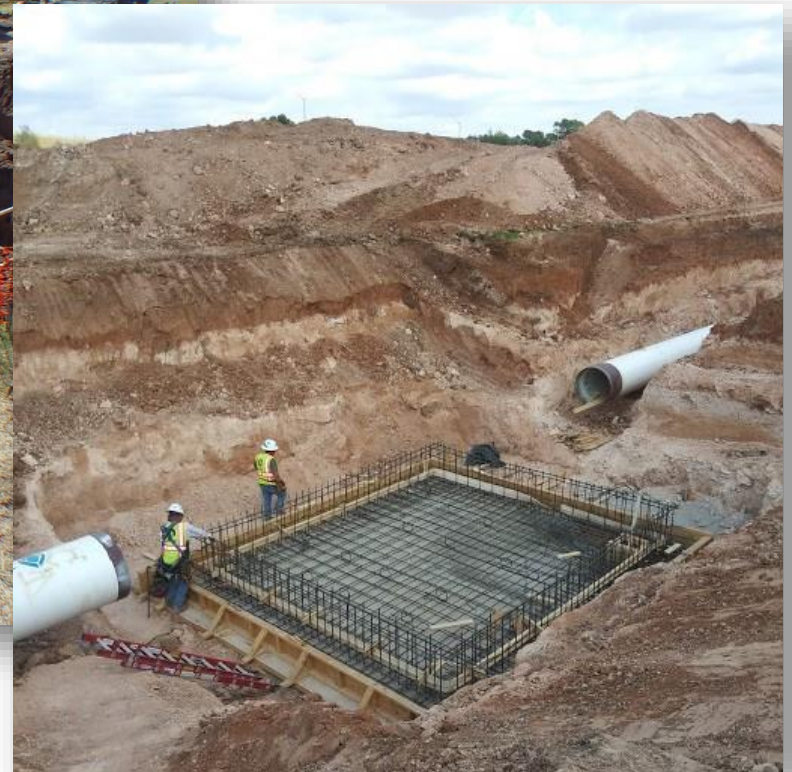


# ENMRWS Construction

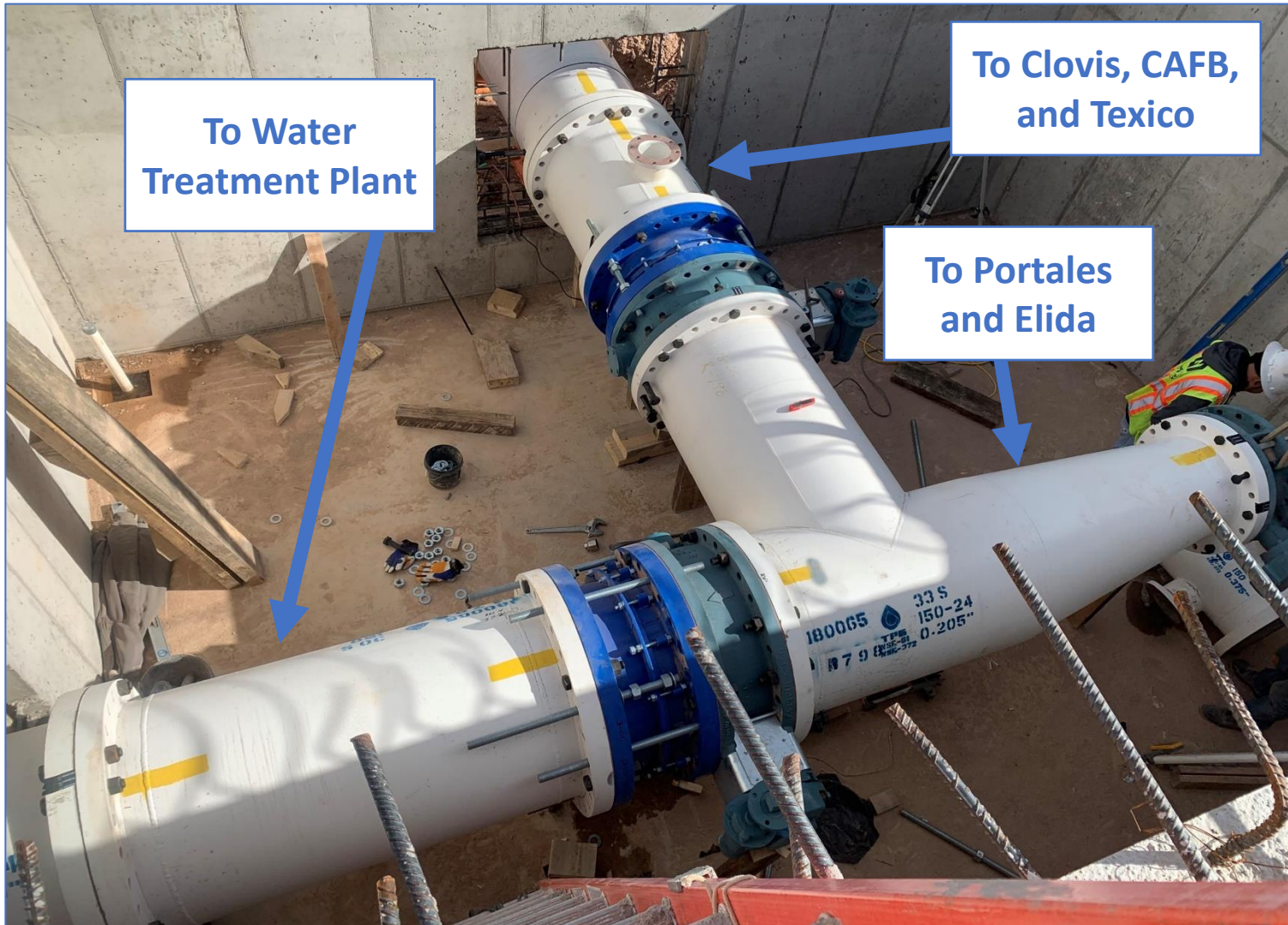
## FW2 Pipe Installation



## CAFB Lateral Vault



# ➤ ENMRWS Construction



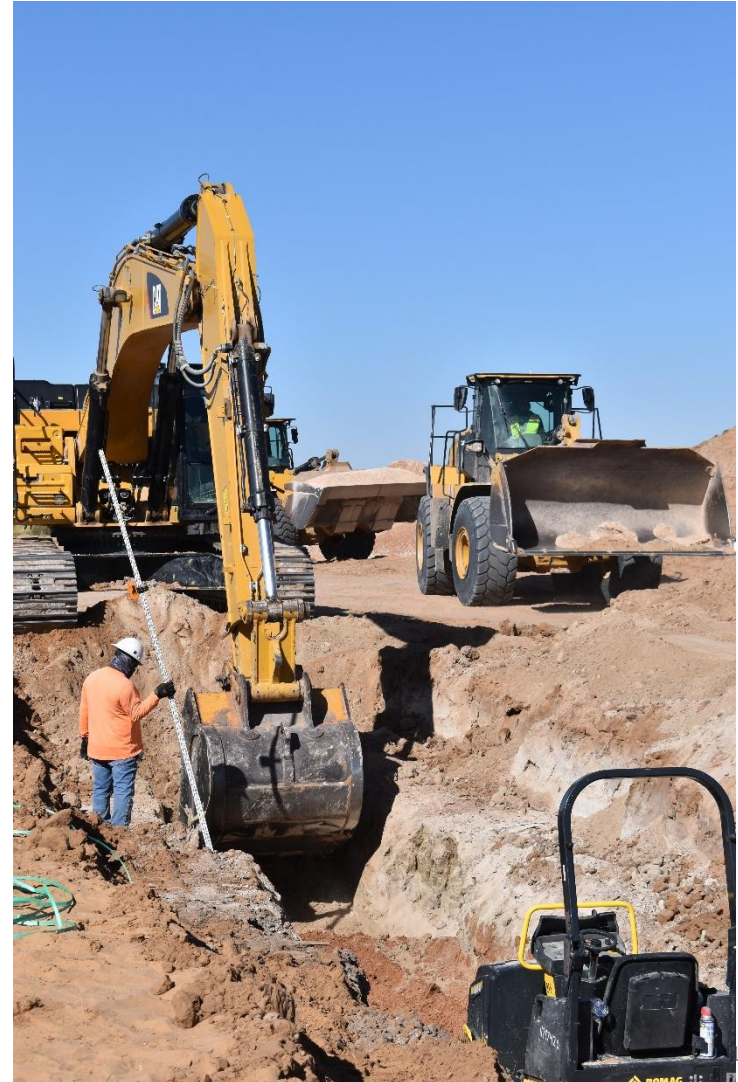


## FW3 Clearing & Grubbing





FW3 Pipe Installation



## FW3 Pipe Installation



## FW3 Land Restoration



## FW3 Land Restoration



## ➤ Passage of the Infrastructure Investment and Jobs Act

On November 15, 2021, the President of the United States signed into law the Infrastructure Investment and Jobs Act.

The infrastructure bill has earmarked \$1 billion toward completing the federally authorized Rural Water Projects under the United States Bureau of Reclamation. The ENMWUA is among the recipients to receive funding to complete construction of the ENMRWS “Ute Pipeline Project”.

## ➤ 2022 New Mexico Legislative Session

2022 New Mexico Legislative Session was successful for the ENMWUA.

## ➤ FY2022 Infrastructure Investment and Jobs Act Funding and FY2022 Federal Appropriations

FY2022 Infrastructure Investment and Jobs Act Funding -	\$160,000,000.00
FY2022 Federal/Administration/Congressional Funding -	<u>\$ 17,400,000.00</u>
FY2022 total Federal Appropriations -	<b>\$177,400,000.00</b>

## ➤ 2022 New Mexico Legislative Session

New Mexico SB212 Capital Outlay -	\$20,000,000.00
New Mexico HB2 Capital Outlay -	<u>\$10,000,000.00</u>
2022 total NM Legislative Capital Outlay -	<b>\$30,000,000.00</b>

## ➤ 2022 ENMWUA Match

(In the form of DWSRLF loan of \$32 million plus City of Clovis DWSRLF loan of \$15 million)

**\$20,740,000.00**

## ➤ 2022 Total Funding

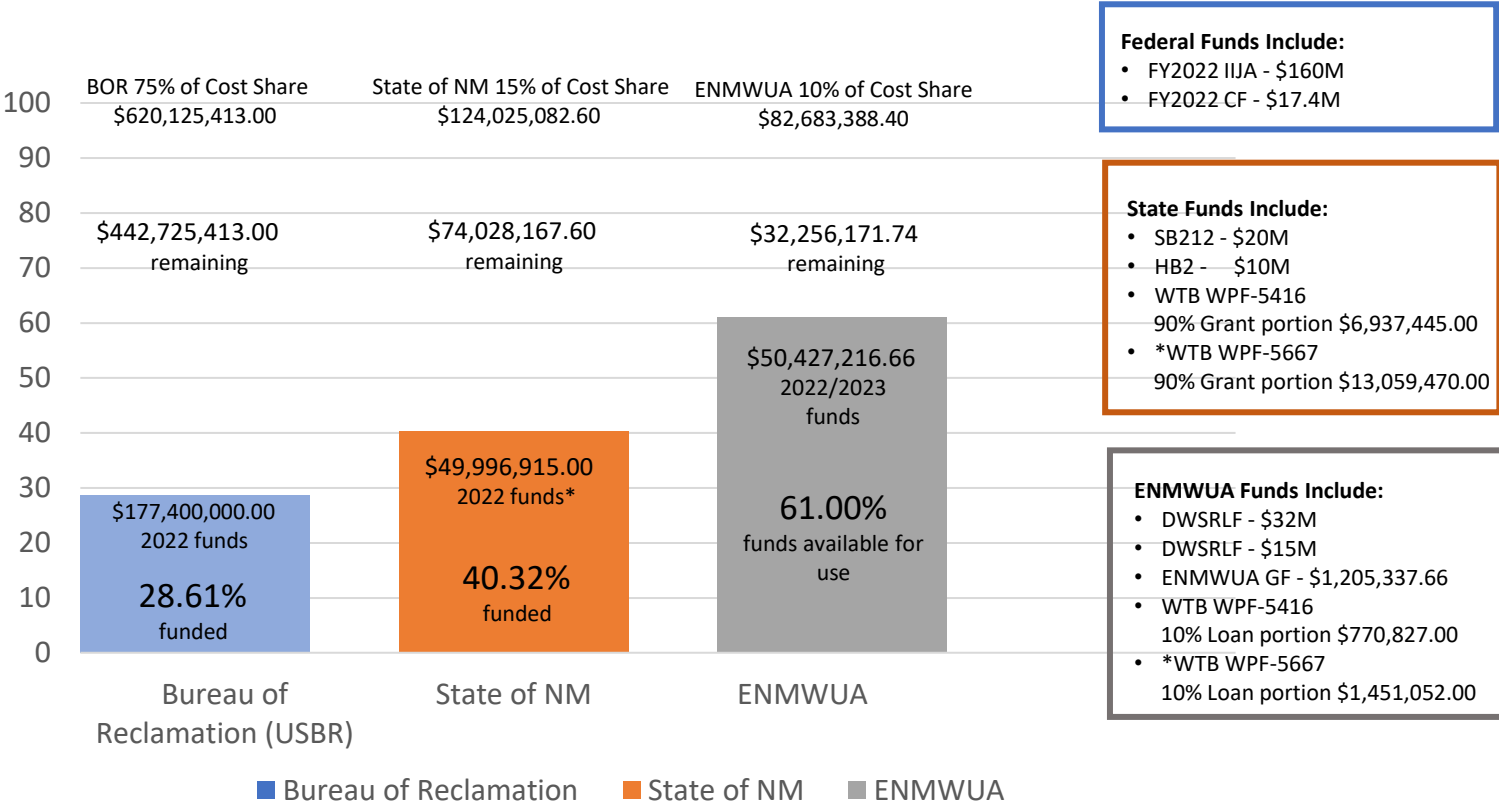
**\$228,140,000.00**

# Total Remaining Funding for ENMRWS

**(\$826,833,884.00)** ↔  
 Projected Remaining Project Cost  
 Based on April 2022 Updated Costs

**State Funds Overmatch to date:**  
 • \$16,414,489.81

**ENMWUA Funds Overmatch to date:**  
 • \$7,412,571.61



**Federal Funds Include:**

- FY2022 IJJA - \$160M
- FY2022 CF - \$17.4M

**State Funds Include:**

- SB212 - \$20M
- HB2 - \$10M
- WTB WPF-5416 90% Grant portion \$6,937,445.00
- \*WTB WPF-5667 90% Grant portion \$13,059,470.00

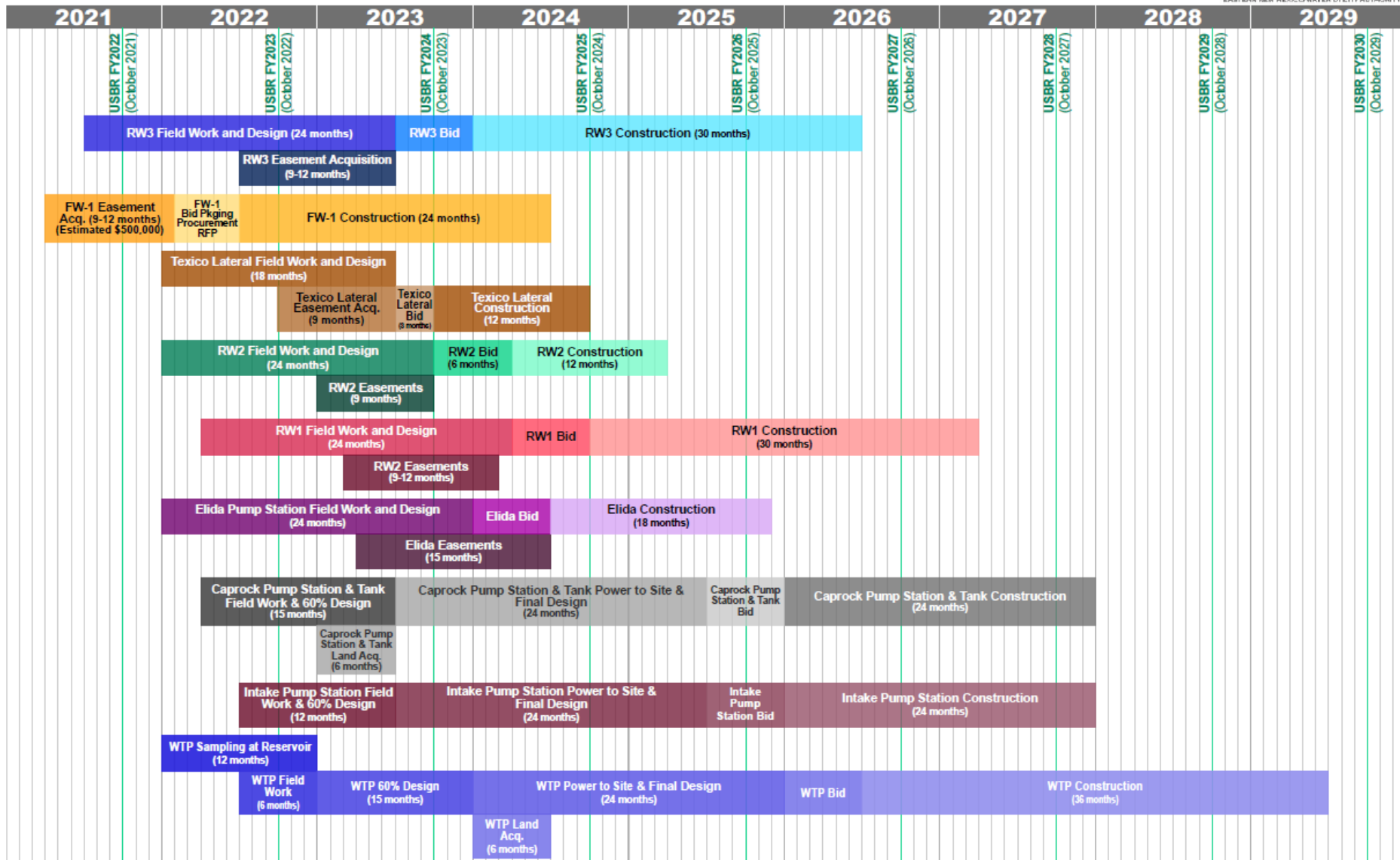
**ENMWUA Funds Include:**

- DWSRLF - \$32M
- DWSRLF - \$15M
- ENMWUA GF - \$1,205,337.66
- WTB WPF-5416 10% Loan portion \$770,827.00
- \*WTB WPF-5667 10% Loan portion \$1,451,052.00





# ENMWUA 5 – Year Schedule



## ➤ Existing Water Supply Facts (Ogallala Aquifer)

- In the last ten years, the number of water supply wells is 2.5 times greater with less capacity. Member communities are drilling deeper wells that yield less water.
- It is estimated that the aquifer only has 7 to 10 years of freshwater production left. These rural communities continually drill wells and place pumps further down to follow the decline, while the deeper supplies, if they exist, grow continually higher in salinity and other contaminants.
- ENMWUA members have expended in excess of \$30 million in groundwater infrastructure the last 10 years on new wells just to maintain a flat demand.

## ➤ Existing Water Supply Facts (Ogallala Aquifer)

- Cannon Air Force Base (Cannon AFB) completed a study in 2012 and concluded that the Base's groundwater supply will be impacted by the end of the decade. To support CAFB's sustainability and viability, the City of Clovis has purchased farmland and water rights surrounding CAFB to protect CAFB's well fields and slow down the rapid aquifer depletion in that area.
- The City of Clovis water supplier, EPCOR, has increased the number of wells from 28 in 2000 (10,000 gpm capacity) to 80 wells in 2021 (76 active) (7,266 gpm capacity). They are currently working to bring additional wells online.
- EPCOR is still seeing an average decline in static water levels between 1.25 and 1.5 feet per year. We continue to look for new well leases and are looking at specific EPCOR owned wells that could be cleaned, rehabilitated and equipped with a slightly larger pump so that production can be optimized. EPCOR also continually monitor each wells performance and saturated thickness yearly capturing GPM's, static water level, running water level and drawdown.

## ➤ Existing Water Supply Facts (Ogallala Aquifer)

- The City of Portales' 2014 Water Plan estimated the City's municipal well field will reach the end of its useful life in 2030.
- According to the City of Portales' 2020 Water Conservation and Use Report, the average usable aquifer thickness at Portales' Blackwater well field in the winter of 2020 was 11.5 feet. Six wells had a negative usable saturated thickness in February 2020. The City of Portales continues to invest in expanding their well field to meet demands. City officials implemented water restrictions early last year that continue today.
- The City of Texico has struggled to meet demand in their community. Rationing of water occurred last summer and continues to this day. City wells are pumping as much air as ground water, In recent years the City of Texico purchased two agricultural wells/water rights because their three existing wells can no longer keep up with demand, even though the communities water use has dropped in recent years due to conservation efforts.

## ➤ Existing Water Supply Facts (Ogallala Aquifer)

- Over the past several years, the New Mexico State Engineer has declared the Eastern New Mexico Rural Water System as an urgent project.

## Sources Cited:

- **Mapping the Aquifer Lifetime in Curry County and Roosevelt County Region** – August 2017 - New Mexico Tech
- **Lifetime Projections for the High Plains Aquifer in East-Central New Mexico**  
July 2017 – Geoffrey C. Rawling and Alex J. Rinehart
- **City of Clovis Master Water Assurance Plan**  
December 2017
- **A Hydrogeologic Investigation of Curry and Roosevelt Counties, New Mexico**  
February 2016  
Geoffrey C. Rawling
- **City of Portales 2021 Water Conservation and Use Report**  
December 2021  
Charles R. Wilson
- **Addressing Water Worries**  
Eastern New Mexico News  
June 11, 2021
- **Southern Curry County Wells Going Dry**  
Eastern New Mexico News  
May 21, 2011
- **Residential Water Shortage in Curry County**  
Eastern New Mexico News  
April 18, 2014

## ➤ Importance of our Partnerships

The State of New Mexico's partnership with the ENMWUA is critical to the completion and success of this project. With the State of New Mexico's 15% match using **Water Trust Board** funding and **Legislative Capital Outlay**, the ENMWUA has made tremendous progress with meeting the 25% non-federal match for this project's design and capital costs. (ENMWUA contributes 10%)

On Behalf of the ENMWUA, we appreciate the State's early support for the project and continued support as we move closer to completion.

*"Partnerships are important to any endeavor. No one person or community can go at it alone. It takes partnerships to succeed."*

**Michael A. Morris**  
**ENMWUA Chairman and Mayor of Clovis**



# Thank You!

**ENMWUA**  
EASTERN NEW MEXICO WATER UTILITY AUTHORITY

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Michael A, Morris, Chairman  
Ron Jackson, Vice-Chairman  
Chris Bryant, Secretary

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Orlando Ortega  
ENMWUA Administrator  
[ortega@enmwua.com](mailto:ortega@enmwua.com)  
575-935-4262