# Mary Rhodes Pipeline and Pumping System Improvements



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#### Mary Rhodes Pipeline (MRP) I

- 101-mile-long pipeline running from Lake Texana near Edna, Texas to the O.N. Stevens Water Treatment Plant
- Construction started in 1997, completed in 1998
- Mary Rhodes Pipeline (MRP) II
  - 42-mile-long pipeline that ties into MRP Phase I at the West Delivery Pump Station
  - Construction started in 2014, completed in 2016





# MRP I and II Water Sources





# Lake Texana/LNRA

MRP I

Contract Minimum Amount Take or Pay: 31,440 acre-ft. Interruptible A (if available): 4,500 acre-ft. Interruptible B (if available): 7,500 acre-ft.

### **Colorado River**

MRP II Run of the River Water Rights: 35,000 acre-ft.



### MRP Condition Assessment

- Completed May 2024
  - MRP is performing satisfactorily
  - Pipe pressure exceedance areas have been identified
  - Past failures are typically associated with access points, air relief valves, joints
  - Erosion areas reducing the cover over the pipeline have been identified at various water crossings
  - Varying soil corrosivity conditions exist throughout the length of the pipeline and current cathodic upgrades should continue as planned
  - Pump station upgrades are needed and should continue as planned
- Started Operation of the MRP at Schedule 3 (55 MGD) pumping on June 24, 2024
- Since initiating Schedule 3 pumping operations the MRP has provided an additional 2.5 BG of water to the system



#### Next Steps

Operate the MRP at Schedule 4 pumping through the completion of three separate projects

- AEP upgrades to Bloomington and Woodsboro pump stations
- MRP System Improvement Project
- Installation of combination air/vacuum valves



Bloomington Pump Station



Woodsboro Pump Station



### AEP Upgrades

- Installation of additional transformers at both Bloomington and Woodsboro Pump Stations
- Installation of recloser and other electrical supply equipment at both the Bloomington and Woodsboro Pump Stations





## MRP System Improvement Project

#### **Bloomington Pump Station**

- Additional horizontal split-case centrifugal pump
- Two variable frequency drives
- Electric motor valve actuators
- Electro-magnetic flow meter with concrete vault
- Low voltage emergency generator
- HVAC improvements
- Instruments and control programming for new pump, pump control valves and flow meters

#### Woodsboro Pump Station

- One variable frequency drive
- Electric motor valve actuators
- Electro-magnetic flow meter and concrete vault
- Low voltage emergency generator
- HVAC improvements
- Instruments and control programming for new pumps, pump control valves and flow meters
- Additional horizontal split-case centrifugal pump



### Air/Vacuum Valve Installation

Installation of seven combination air relief/vacuum valves along the MRP







### Summary

- AEP upgrades
  - Complete
- Air/Vacuum valve installation
  - Projected substantial completion date is March 2025
- Pump Station Improvement Project
  - Projected substantial completion date is December 2025



CCW and LNRA continue to coordinate and work together to begin Schedule 4 pumping operations mid-March 2025



# Thank you!

