



North Texas Municipal Water District

SISTER GROVE REGIONAL WATER RESOURCE RECOVERY FACILITY

REGIONAL SERVICE THROUGH UNITY...MEETING OUR REGION'S NEEDS TODAY AND TOMORROW

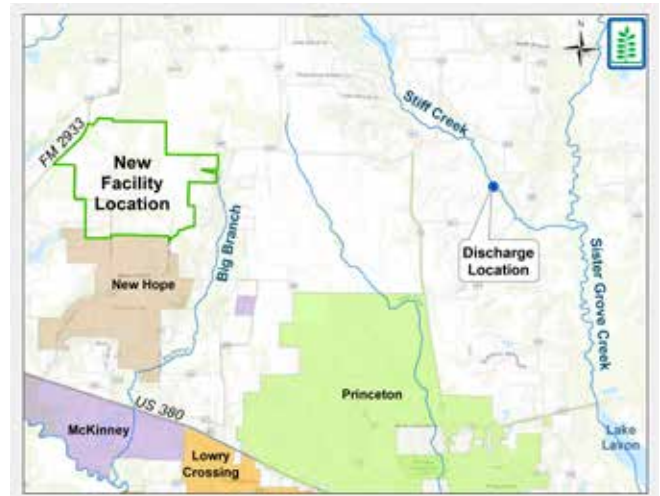
North Texas Municipal Water District

Administration Building
501 East Brown St.
P.O. Box 2408
Wylie, TX 75098

972.442.5405
www.NTMWD.com

The North Texas Municipal Water District (NTMWD) provides wastewater treatment services to **1.3 million people across 24 communities** in the North Texas region. Some of the **fastest growing communities in the nation** are located in the northern part of the NTMWD service area. To continue reliably serving these thriving communities, **we must plan for the future.**

To meet the growing needs in the northern part of our regional system, the **Sister Grove Regional Water Resource Recovery Facility (RWRRF) is being constructed.** Following a thorough evaluation to identify a suitable location for the facility in 2016 and 2017, NTMWD purchased 1,000 acres of land approximately 1.1 miles east and 0.17 miles south of the FM 2933 and County Road 336 intersection.



In February of 2020, the Texas Water Development Board (TWDB) approved \$459 million in low-interest state funding for the Sister Grove RWRRF. The TWDB Clean Water State Revolving Fund (CWSRF) **Program financing is expected to save \$212.8 million in interest costs on this project.**

In April of 2020, NTMWD received its wastewater permit from the Texas Commission on Environmental Quality (TCEQ). Construction began in Fall 2020.

What is a Water Resource Recovery Facility?

Water Resource Recovery Facilities provide wastewater treatment prior to discharging into a body of water. These facilities are a critical element in maintaining the health of our watersheds. NTMWD is voluntarily implementing a watershed protection plan to further safeguard the Lavon Lake watershed with increasing urbanization in the area.

Why do we need the new Sister Grove Regional Water Resource Recovery Facility?

Currently 700,000+ people are served by two facilities and projected growth will exceed the existing facilities serving Collin County by 2023.

Sister Grove Regional Water Resource Recovery Facility at a glance:

- Located on 1,000 acres near the FM 2933 and CR 336 intersection
- Operations will begin at 16 million gallons per day (MGD) for the annual average daily flow (AADF) and 64 MGD peak flows
- Phases 1 & 2 will be built for 32 MGD AADF and 128 MGD peak flows
- Currently permitted to 64 MGD AADF; Master Planned for 128 MGD AADF
- NTMWD received TCEQ permit in April 2020
- \$459 million low-interest funding from the TDWB; Expected to save \$212.8 million for NTMWD and those we serve
- A discharge location was identified based on proximity and operational factors
- Will include advanced treatment and odor control technologies



WATER



WASTEWATER



SOLID WASTE

Blending into the Surrounding Community

NTMWD is building the new Sister Grove facility to **visually integrate into the local community** using landscaping and berms to screen various aspects and for those more visible structures, designing architecture compatible with community surroundings. NTMWD will also design to **mitigate and minimize local impacts due to odor, noise or light** from the facility. Advanced treatment and odor control technologies will be used. Additionally, noise can be mitigated with the use of sound enclosures or buildings around specific equipment or processes. Use of modern LED (warm-white lighting), downward facing lights, and noncritical lighting that is motion activated can reduce lighting effects to nearby areas.



NTMWD's Wilson Creek facility is a great example of how a water resource recovery facility can integrate into the surrounding community. The facility (shown above) is designed to blend with neighboring rural residential structures by having structures visible to the public modeled after nearby farm buildings, in keeping with the neighborhood aesthetic. This new facility will follow a similar approach to blend with the neighboring community.

Protecting & Mitigating Environmental Impacts

Protecting water resources and preserving the natural environment is a high priority. Similar NTMWD facilities operate in this same manner and **discharged water is typically of higher quality than naturally existing water** in creeks and streams. As our team determined the location of the facility and its outfall location, a site was selected to minimize impacts on area streams and Lavon Lake. The Sister Grove facility will be built to maintain the natural surroundings at the outfall location. As the project continues, NTMWD will:

- Comply with all local, state and federal environmental protection requirements from design through operations
- Engage and inform area communities throughout facility planning, construction and operation
- Treat recovered water resources to high quality in compliance with TCEQ requirements

Project Timeline

Based on the projected wastewater flows, NTMWD must have the facility operating in 2023. The following timeline shows approximate dates of completion for various project phases.

Site Analysis
2016 - 2017

Facility Design
2018 - 2020

TCEQ Permitting
2018 - 2020

Construction
2020 - 2023

Operations
2023 and onward

Communication and Progress Updates

NTMWD held two public meetings on this project, and District staff spoke about the project at both McKinney and New Hope city council meetings. Additionally, District staff had an informational booth on the project at New Hope's National Night Out events in 2018 and 2019.

NTMWD continues to inform and update the community during all step of this project, from construction through operations. Our team will:

- Work with community members to plan for and reduce impacts due to construction
- Communicate regularly on planning, construction and operations
- Provide updates to the cities of McKinney, Princeton and New Hope
- Provide updates on the NTMWD website and social media channels

HAVE QUESTIONS?

Contact us at 972-442-5405 or
projects@ntmwd.com