

# PROJECT PIPELINE



#MORETHANWATER

The national water infrastructure investment gap is \$82 billion per year

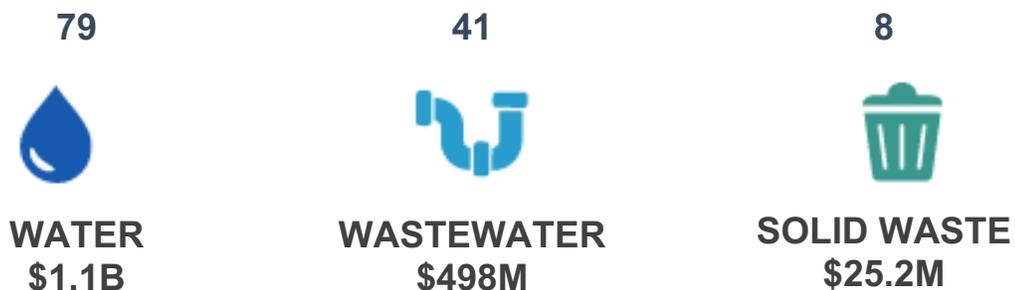
## Infrastructure Week

#TimeToBuild

As part of [National Infrastructure Week, May 14-21](#), this edition of Project Pipeline highlights projects underway to address aging infrastructure and expand systems to meet the region's growing needs. The NTMWD Board of Directors approved more than \$268 million in funding for upcoming projects at the April Board Meeting - one of the largest amounts approved for one month in the District's history. #TimeToBuild

## SNAPSHOT OF ACTIVE PROJECTS

Total number of active projects by service as of May 15, 2018



## Snapshot of Completed Projects

2017	2018 (to date)
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20 WATER - \$57.6M

13 WASTEWATER - \$28.6M

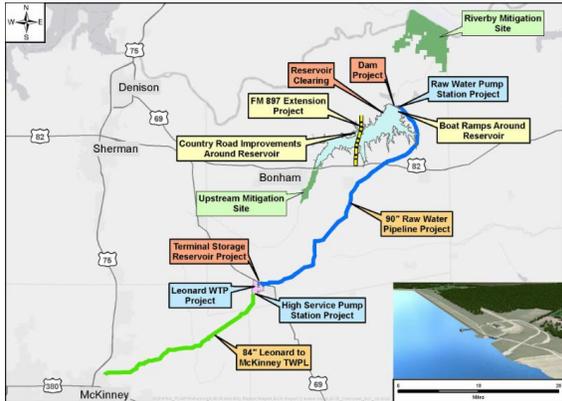
8 SOLID WASTE - \$23.2M

11 WATER - \$34.6M

1 WASTEWATER - \$2.6M

2 SOLID WASTE - \$3.1M

## New Reservoir Update



[click to enlarge](#)

Crews are preparing for major construction activity to begin on our new reservoir this summer. Initial work includes clearing the area for the dam embankment footprint and installation of culverts to cross Bois d'Arc Creek and Honey Grove Creek. Road improvement work will begin on County Road 2715 to allow heavy construction equipment and vehicles to access the dam site for construction. Additionally, Austin Bridge and Road is mobilizing to begin work on the FM 897 road and bridge that will go across the lake.

Follow progress online at [NTMWD.com](http://NTMWD.com).

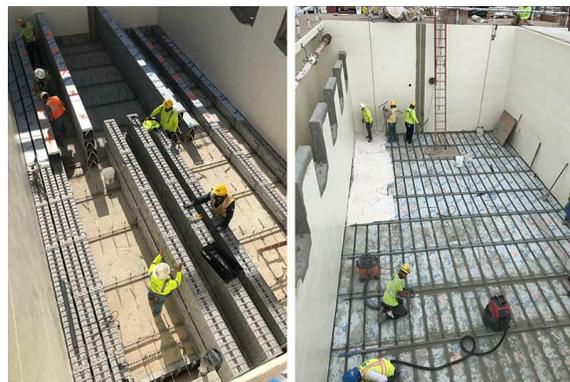
## Project Highlights



### Trinity River Main Stem Pump Station & Pipeline

**WHY:** To increase the capacity of the wetland (East Fork Water Reuse Project) by diverting water from the "main stem" of the Trinity River. The naturally filtered water is then pumped 44 miles to Lavon Lake to supplement our water supplies.

**WHAT:** The project, a 100 MGD pump station and 17-mile/72-inch diameter pipeline to expand the reuse supplies by



### Wylie Water Treatment Plant II Filter Improvements & Conversion to Biologically Active Filtration

**WHY:** To improve water quality by reducing the concentration of assimilable organic carbon during the filtration process

**WHAT:** Part of the ongoing CIP at the Wylie Water Treatment Plant, existing filters are being converted to biologically active filters (BAF). Use of BAF in conjunction with

diverting flows from the river into the wetlands, is well underway and making significant progress.

- Pump station is 65% complete
- Micro-tunneling the river intake pipes through the riverbank has begun
- All pipe is delivered and 13.2 miles of pipeline (80%) has been installed
- 2 vertical turbine pumps (VTP) for the conveyance pump station (CPS) to be delivered in May after witness testing
- The weir box structure at the East Fork Wetland is complete and in operation

**WHERE:** West of Hwy 34 south of Kaufman near the town of Scurry

**WHEN:** Completion expected in 2019

**HOW MUCH:** \$120 million



## Wilson Creek Regional Wastewater Treatment Plant Advanced Treatment and Headworks Improvements

**WHY:** To provide additional peak flow treatment capacity to Plant I

**WHAT:** Adding a BioActflo process for advanced treatment and increased peak flow capacity, expansion of the existing headworks and outfall structure.

**WHEN:** Design began in 2015. Construction began September 2016. Anticipated final completion January 2020.

**WHERE:** Located in Allen, serves cities of Allen, Anna, Fairview, Frisco, Lucas, McKinney, Melissa, Parker, Plano, Princeton, Propser and Richardson

**HOW MUCH:** \$44 Million

ozonation is expected to enhance the removal of organics and improve water quality. The conversion must be done in phases as it requires the plant to be out of service.

- Replacing the filter underdrains
- Installing deeper filter media
- Raising the washwater troughs and gullet walls
- Sandblasting and coating the filter walls
- Replacing 55 valves ranging from 12 - 36 inches in diameter

**WHERE:** Water Treatment Plant in Wylie

**WHEN:** Completion of all Wylie plants expected in 2020

**HOW MUCH:** \$15.7 million



## Wilson Creek Regional Wastewater Treatment Plant Expansion to 64 MGD

**WHY:** To provide additional average daily flow capacity to Plant II

**WHAT:** Adding an eight million gallons per day treatment train (two primary clarifiers, one biological nutrient removal basin, one secondary clarifier, four disc filter units, and one ultraviolet disinfection channel) to Plant II, and replacement of one-half of the existing solids handling building

**WHEN:** Design began in 2016. Construction began October 2017. Anticipated final completion June 2019.

**WHERE:** Located in Allen, serves cities of Allen, Anna, Fairview, Frisco, Lucas, McKinney, Melissa, Parker, Plano, Princeton, Propser and Richardson

**HOW MUCH:** \$53 million



## Rowlett Creek Regional Wastewater Treatment Plant (RWWTP)

**WHY:** The Rowlett Creek RWWTP is being expanded to provide additional peak flow treatment capacity to reduce dependence on transfer force main to the Wilson Creek RWWTP during high flow events.

**WHAT:** Phase I is under construction and it will expand the peak flow capacity from 60 MGD to 77.5 MGD by addition of the following facilities:

- New Membrane Bioreactor (MBR)\* process trains, ultraviolet disinfection and post-aeration facilities for the treatment of 17.5 MGD
- New consolidated headworks including screen and grit facilities for treatment of 77.5 MGD
- New 30 MGD wet-weather pump station
- New 20 MGD lift station to replace the existing Lower Cottonwood Creek Lift Station
- Installation of four standby generators to provide backup power for the Lower Rowlett Creek Lift Station, Lower Cottonwood Creek Lift Station, MBR system, UV system, Plano Lift Station, new headworks.
- New odor control systems
- New electrical equipment including six transformers and new switchgear

**WHERE:** The Rowlett Creek RWWTP is located in the City of Plano (1401 Los Rios Blvd, Plano, TX,75074)

**WHEN:** Construction started on March 2017 and is expected to be completed on March 2020.



## 121 Regional Disposal Facility Sector 5 Excavation and Development

**WHY:** To excavate subgrade to permitted grades so liner system construction may proceed to ensure adequate disposal capacity.

**WHAT:** Excavation of all Austin Chalk and overburden soil in Sector 5 which is required prior to beginning liner system construction of Sectors 5A, 5B, 5C and 5D.

- Excavation of 3.6M cubic yards of Austin Chalk
- Excavation of 700k cubic yards of overburden soil

**WHERE:** Located at the 121 Regional Disposal Facility in Melissa

**WHEN:** Projects began in October 2017 and will end September 2019.

**HOW MUCH:** \$13.7 million to date

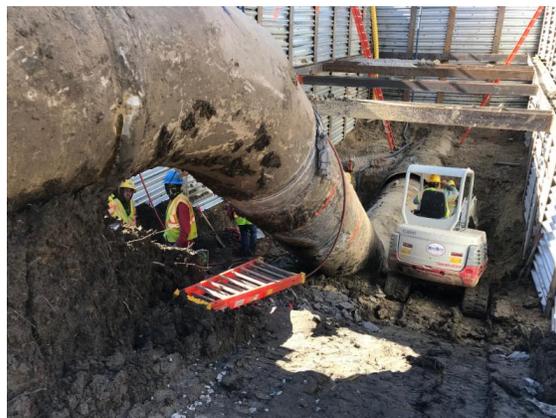
**HOW MUCH:** \$50 million

*\*EXTRA: MBR is an established process that draws water through small membrane tubes to produce consistent and very high quality effluent water for discharge into our streams.*

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## Forney Pipeline Repair

In early 2018, NTMWD crews completed a pipeline repair in Forney at HWY 80 and the East Fork of the Trinity River where a 42-inch diameter pipe had developed a hole that needed to be patched. Increasing the complexity, the pipeline crosses underneath the East Fork of the Trinity River. The work was completed without affecting service, and despite freezing January temps.



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## Doing Business with North Texas Municipal Water District

NTMWD invites talented, experienced and ethical contractors, consultants, and suppliers to bid on design and construction projects that align with their experience and expertise. Visit the [Business Opportunities](#) page of our website to learn more.



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## CORE VALUES - ITRUST

Integrity | Trust | Respect | Unity | Safety | Teamwork

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