

NORTH TEXAS MUNICIPAL WATER DISTRICT

Securing Your Water Future: The North Texas Municipal Water District Story

Association of Western State Engineers Annual Meeting
October 3, 2019

LAKE ГЕХОМА Pump Station Bois d'Arc Pump Station BOIS D'ARC Grayson Fannin Leonard CHAPMAN Collin LAKE Hunt Denton Chapman LAVON **Pump Station** LAKE Wilson Creek **Regional WWTP** Hopkins Tawakoni Intermediate Rains Pump Station Dallas LAKE Rockwall Legend TAWAKONI Leonard Water Treatment Plant Lake Tawakoni Tawakoni Water Treatment Plants **Pump Station** WTP Wastewater Treatment Plant Kaufman Proposed PS **Existing Pump Station** East Fork Water --- Proposed Raw Water Pipeline Reuse Project Raw Water Pipelines Van Zandt Wetlands Proposed Lake NTMWD Lakes Main Stem Other Lakes **Pump Station** Counties Water Service Area

NTMWD Fast Facts

13 member cities

80 communities served

2,200 square mile service area

Takes more than

2 hours to drive
across

1.8 million

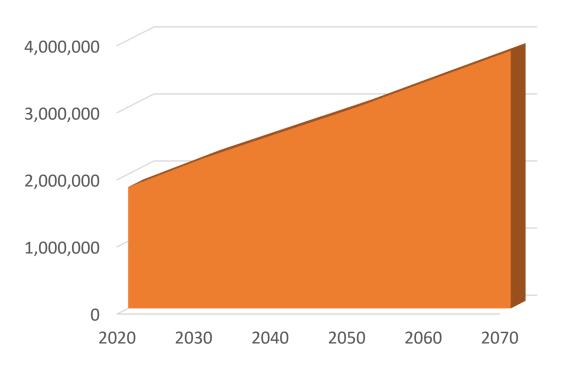
people served today

Population expected to more than double over the next 50 years

3.8 million

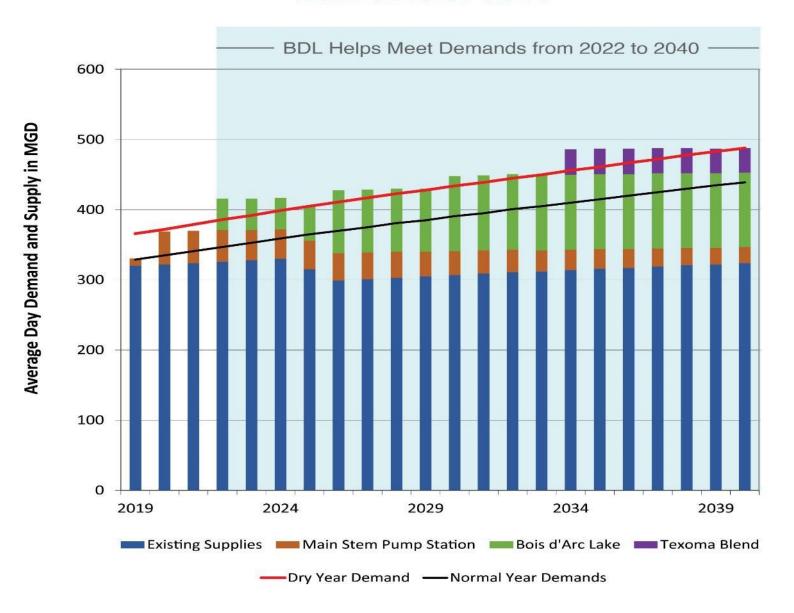
people served by 2070







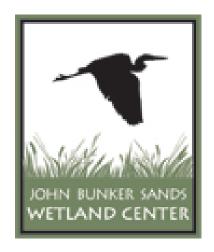
Water Demand and Supply Projections from 2019 to 2040

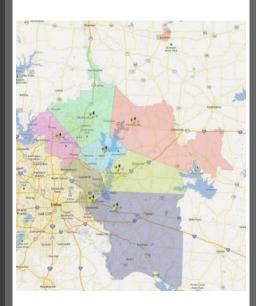


NTMWD Ongoing Conservation

- Award Winning Education Program (Water IQ)
- Year Round No More than Twice- Per-Week conservation measure











Main Stem Pump Station + East Fork Water Reuse Project

- Indirect reuse project
- Supplies approximately 91 MGD
- Blended with Lake Lavon Supplies







- First major reservoir to be built in Texas in nearly 30 years
- 16,641 acres, Firm Yield is 108 MGD
- 2003 Feasibility Study
- 2006 Permitting Begins
- 2015 Texas State Water Right received
- 2018 USACE 404 permit received
- 2019 Construction on all components underway



Bois d'Arc Lake Mitigation Project

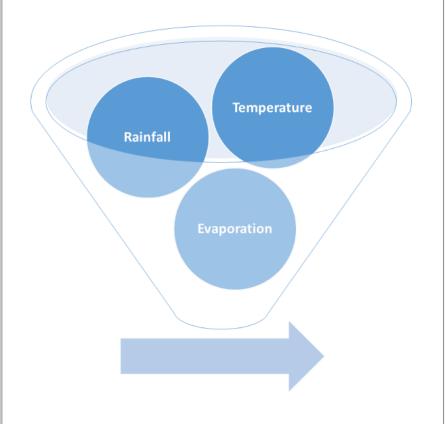
Fannin County, Texas

- Restoring and enhancing approximately 70 miles of stream
 and 15,000 acres of aquatic and terrestrial habitat
 - 2,500 acres of emergent wetlands
 - 6,000 acres of forested wetlands
 - 3,300 acres of native grassland
 - 1,500 acres of riparian woodlands
 - 1,200 acres of upland forest
- 20-year project with 3-year construction schedule and 17year monitoring and maintenance

Planting ~ 5 million trees in 3 years 1.6 M planted winter 2018-2019









Reservoir Inflow and Water Supply

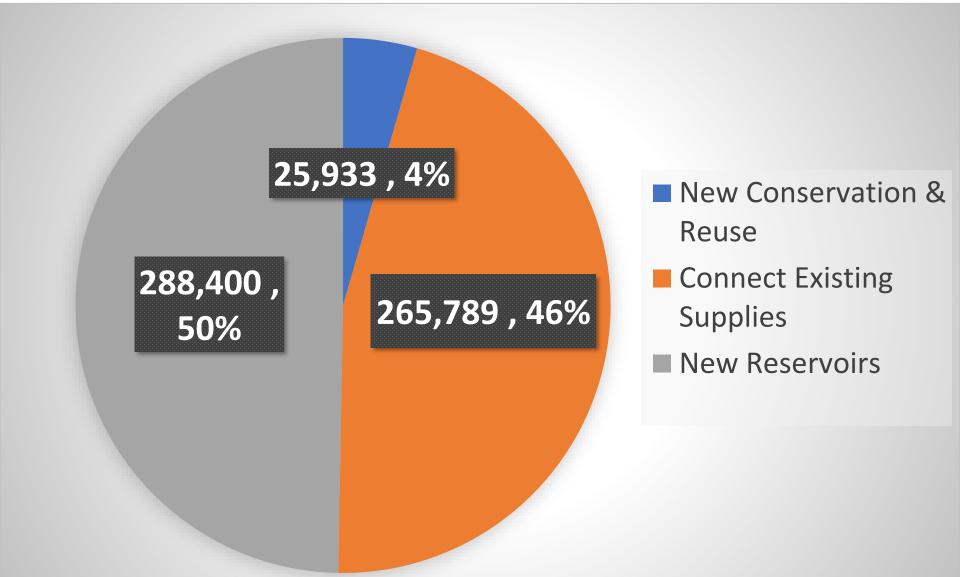


Water Demand



Wastewater Return Flows

NTMWD 2070 Additional Supply by Type (Acre-Feet per Year)



NTMWD Long-Range Water Supply Plan





