NORTH TEXAS MUNICIPAL WATER DISTRICT

Regional Service Through Unity… Meeting our Region's Needs Today and Tomorrow



BOIS D'ARC RESERVOIR

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Greater Texoma Association of Realtors

January 14, 2019



HISTORY OF NTMWD

10 Original Member Cities

Farmersville, Forney, Garland, McKinney, Mesquite, Plano, Princeton, Rockwall, Royse City, and Wylie

"We decided we were all in this together. We couldn't do it separately."

- **1951 – Created by Texas Legislature to Provide Water Service**
- **1956 – Began Providing Treated WATER to Member Cities**
- **1970s – Expanded to WASTEWATER Service**
- **1973 – Richardson added as Member City**
- **1980s – Expanded to SOLID WASTE Service**
- **1998 – Allen added as Member City**
- **2001 – Frisco added as Member City**

NORTH TEXAS MUNICIPAL WATER DISTRICT



REGIONAL PROVIDER: WATER, WASTEWATER, SOLID WASTE

NORTH TEXAS MUNICIPAL WATER DISTRICT

BY THE NUMBERS

DID YOU KNOW?



SERVE up to **80** COMMUNITIES
75 Daily basis
15 Emergency basis

Service area of 2,200 square miles in 10 counties

Serving 1.7 million people in one of the fastest-growing regions in the country

14 WATER PUMP STATIONS

6 WATER TREATMENT PLANTS
806+ MGD Capacity
(million gallons/day)

575+ MILES
WATER TRANSMISSION PIPELINES

250+ MILES
LARGE-DIAMETER WASTEWATER PIPELINES

13 WASTEWATER TREATMENT PLANTS

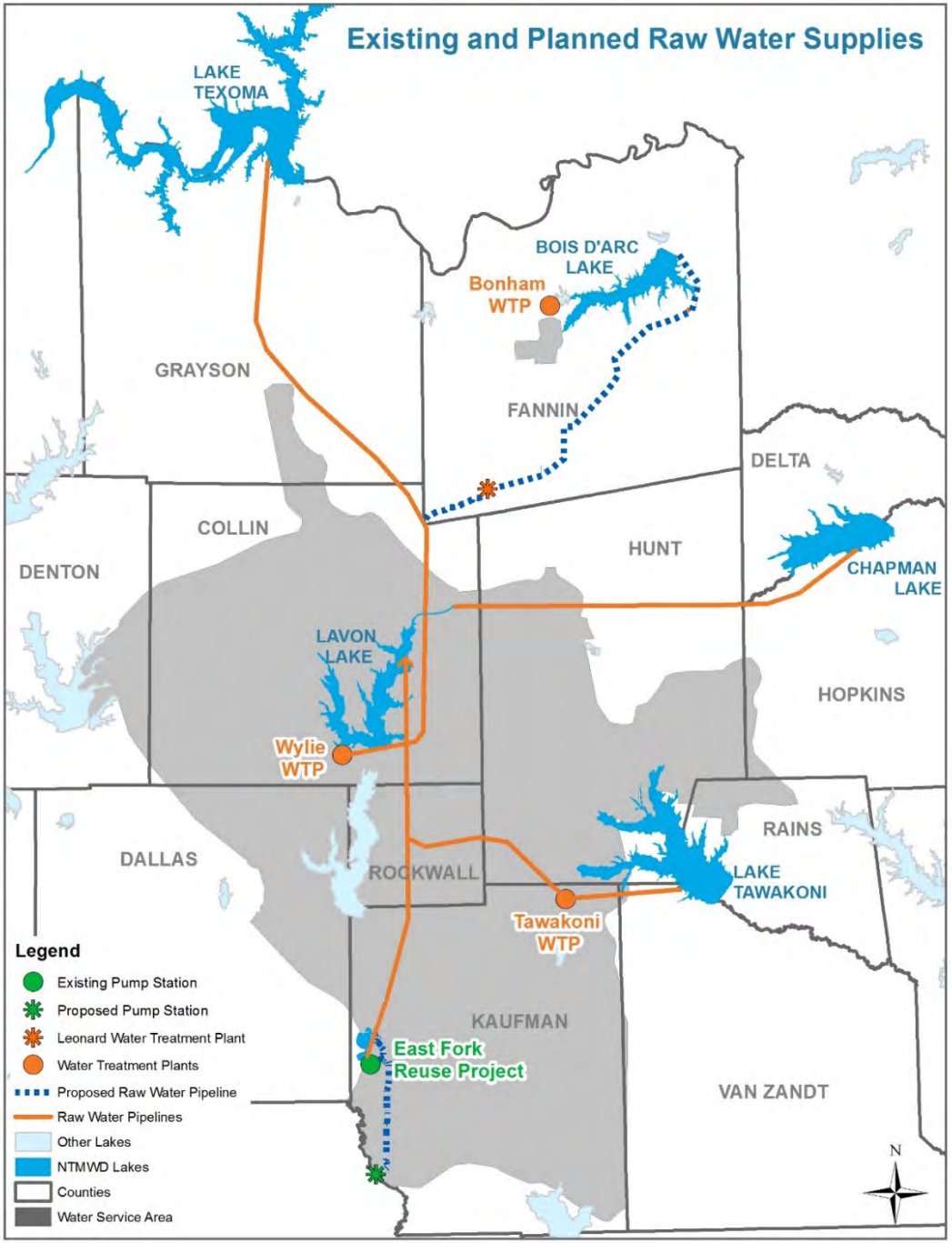
151+ MGD
WASTEWATER TREATMENT CAPACITY
MGD (million gallons/day)

3 TRANSFER STATIONS
up to 3,295 tons of solid waste/day

985,000+ tons/year accepted at landfill

NORTH TEXAS MUNICIPAL WATER DISTRICT

Raw Water Supplies



Existing:

- Lavon Lake
- Lake Texoma
- Lake Tawakoni
- Chapman Lake
- Reuse/Wetland

In Progress:

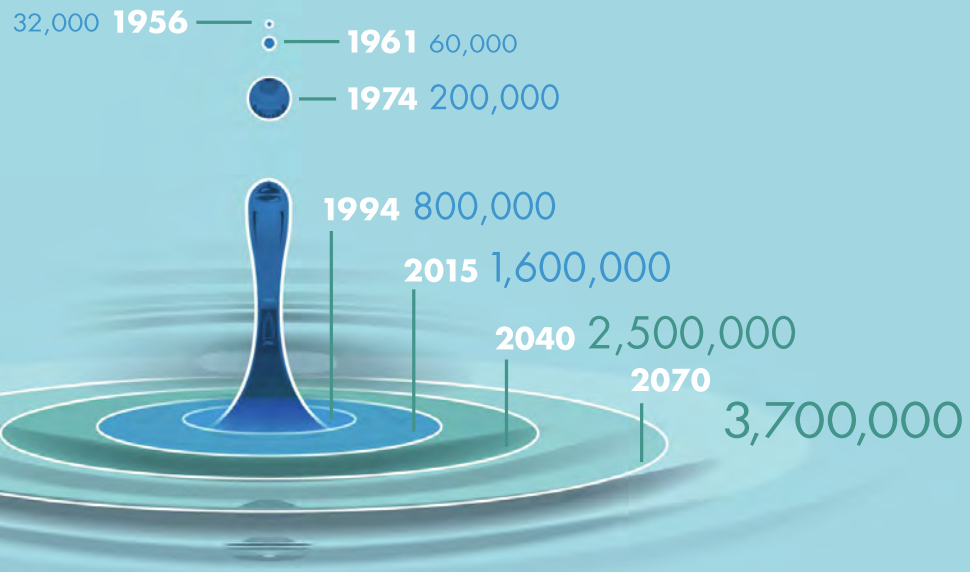
- Bois d'Arc Lake



Population projected to double

SERVING A GROWING REGION

NTMWD TOTAL POPULATION: HISTORICAL AND PROJECTED





WATER SUPPLY PLANNING: FUTURE SOURCES

Conservation and Reuse = 23%

New Sources, Reservoirs = 24%

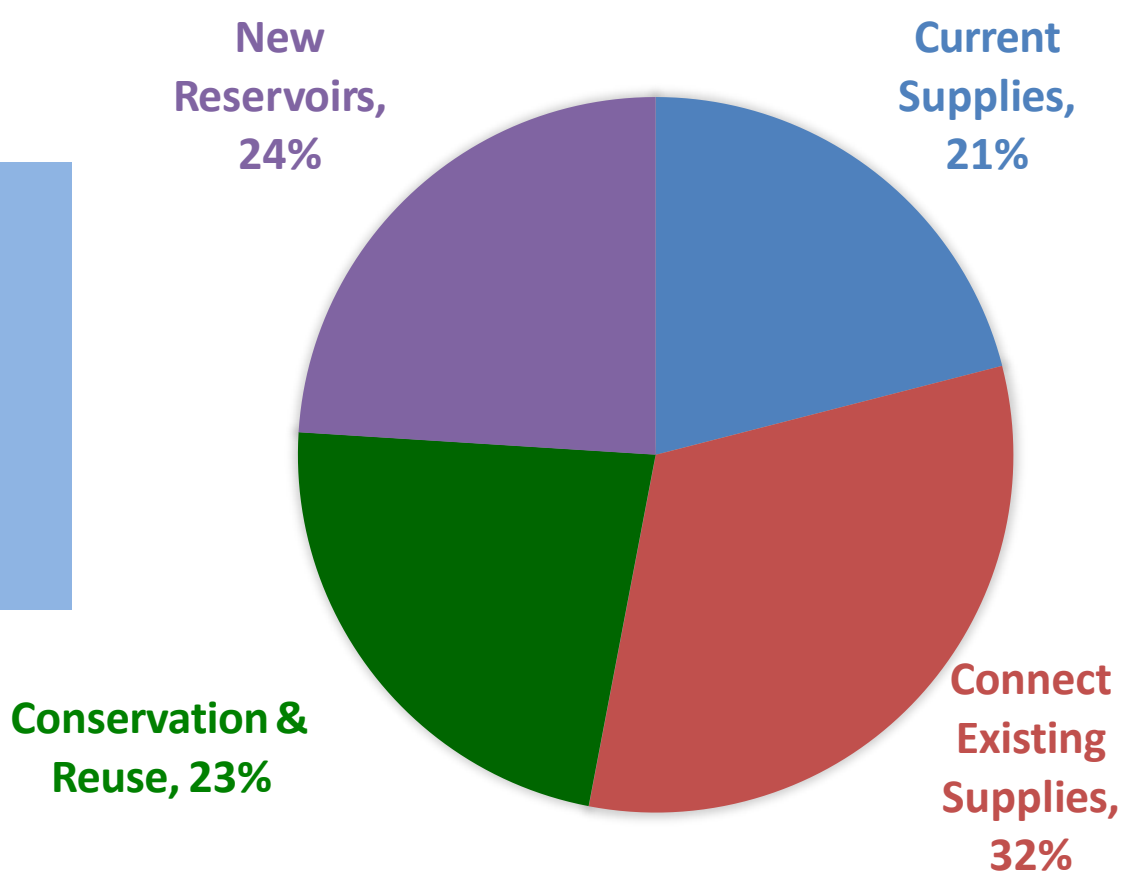


Chart represents NTMWD supplies in 2070
Source: 2016 Region C Water Plan

NORTH TEXAS MUNICIPAL WATER DISTRICT



BOIS D'ARC LAKE

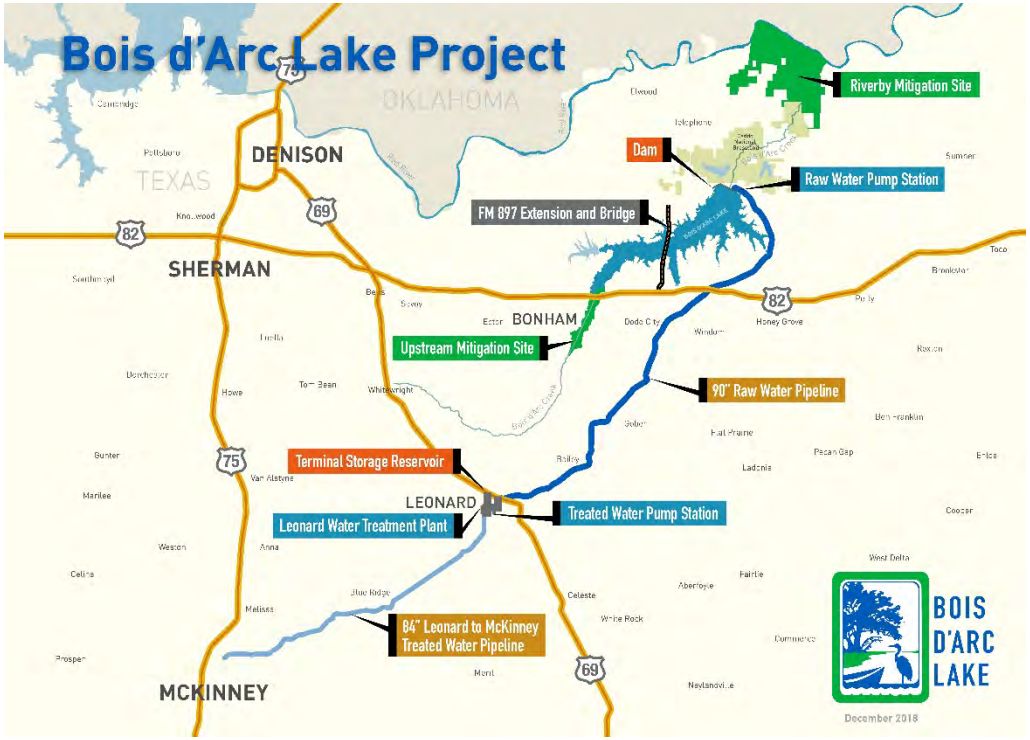
- Decade+ of planning, permitting
- Surface Area: 16,641 acres
- Supply: Firm Yield of 108 MGD
- Average/ Max Depth: 22/70 ft
- Lake Elevation: 534 ft mean sea level
- Owner & operator: NTMWD
- Cost Estimate: $1.6B
- Permitting:
  - TX Water Rights – received June 2015
  - USACE Section 404 – received Feb. 2018
- Construction began May 2018
- Water delivery expected in 2022



First major reservoir to be constructed in Texas in nearly 30 years

Bois d'Arc Lake: Key Components & Other Infrastructure

1. Dam and intake structure for reservoir
2. 35-mile raw water pipeline
3. $50 million road projects
4. Mitigation area (over 17,000 acres)
5. New water treatment plant, pump station, terminal storage reservoir
6. 25-mile treated water pipeline





NORTH TEXAS MUNICIPAL WATER DISTRICT



BOIS D'ARC LAKE DAM AND RESERVOIR

Clearing the Dam Footprint
August 2018



Excavating the Raw Water Pump Station
December 2018



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BOIS D'ARC LAKE DAM AND RESERVOIR

Intake Tower Slab Framework
December 2018



Installing Rebar at Intake Tower Slab
January 2019



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BOIS D'ARC LAKE DAM AND RESERVOIR

90-inch Pipe for Raw Water Pipeline
December 2018



Placing 90-inch Pipe
December 2018



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FM 897 BRIDGE

Clearing Trees
July 2018



Pouring Columns
August 2018



NORTH TEXAS MUNICIPAL WATER DISTRICT



FM 897 BRIDGE

First Set of Beams Placed
September 2018



January 2019



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FANNIN COUNTY ROADS

Prep Work on CR 2985
January 2019



Bridge Work on CR 2625
January 2019



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LEONARD WATER TREATMENT PLANT SITE

October 2018
Looking North



December 2018
Looking East



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LEONARD WATER TREATMENT PLANT SITE

Scraping the Soil
December 2018



Excavating the Clearwells
December 2018



NORTH TEXAS MUNICIPAL WATER DISTRICT



ENVIRONMENTAL IMPROVEMENTS

- **Environmental mitigation on more than 17,000 acres in two locations**
  - Largest permittee-responsible ecological mitigation project in nation
  - Over 8,500 acres of wetland restoration and enhancement
  - Planting approx. 5 million trees
  - Restoring or enhancing over 3,200 acres of native grasslands; 2,600 acres of forests
  - Improving over 70 miles of local streams



NORTH TEXAS MUNICIPAL WATER DISTRICT



RIVERBY RANCH MITIGATION SITE

Trees Delivered and Stacked
January 2019



Tree Species Mixed and Ready for Planting
January 2019



NORTH TEXAS MUNICIPAL WATER DISTRICT



RIVERBY RANCH MITIGATION SITE

Tree Planting Crew
January 2019



Tree Planting Crew
January 2019





TIMELINE

Dam/Reservoir Construction (2018-2021)

Roads and Boat Ramps/Recreation (2018-2020)

WTP and Pump Station (2018-2021)

Mitigation (2018-2023)

Pipelines (2019-2021)

Reservoir Fills (Fall 2020-2022)



BOIS D'ARC LAKE BENEFITS

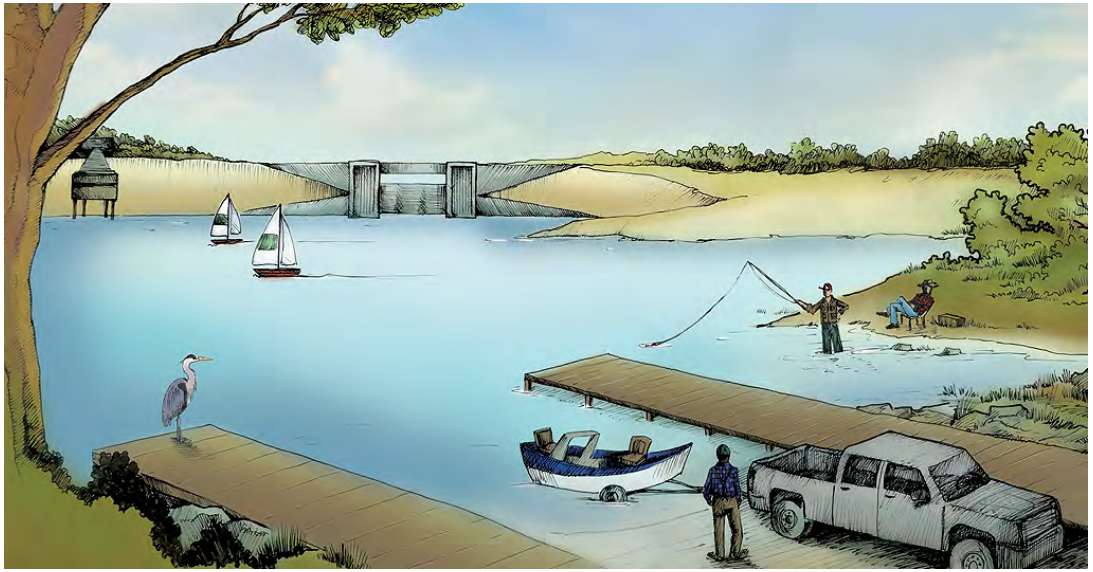
- **Supply water to the District's members/customers including Bonham**
  - Possibility to serve other Fannin County communities
- **Major recreation amenity**
  - 3 Public Boat Ramps
  - TPWD Fisheries
- **Supports economic growth**
  - $509 million economic activity in Fannin Co. during construction
    - $682 million five county region
  - $166 million annually economic activity after completion
  - $81 million annually economic activity from new residents





BOIS D'ARC LAKE BENEFITS

- **2,400 new, long-term jobs in Fannin County**
- **3,200 new homes over 30 years**
  - 1,100 new full-time
  - 2,100 vacation/weekend/second
- **Projected Tax Impacts**
  - $1.9 million net gain county property taxes
  - $3.9 million net gain school districts
  - $303,000 annually retail sales tax
  - $183,000 annually hotel occupancy tax



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News Stream Project Pipeline

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