

September 2020

# MONTHLY PROGRESS REPORT



BOIS  
D'ARC  
LAKE

Bois d'Arc Lake is located northeast of Bonham in Fannin County. Project construction began on the 16,641-acre reservoir in May 2018. The lake and other projects will be able to initially treat and deliver up to 70 million gallons of water daily starting in 2022. This report provides a monthly recap of construction progress and accomplishments.

## Project Overview

### Dam and Reservoir

Construction includes the foundation preparation and construction of a two-mile long dam embankment, service spillway and raw water intake.

- Work continues on the dam and reservoir area.
- Soil cement is being placed to provide erosion protection on the lake-facing side of the dam.
- Crews continue to pour concrete to finish the dam's spillway and last parts of the intake structure.

### FM 897 and County Roads

Around 11 miles of county and state roads and bridges in Fannin County are being improved or constructed.

- FM 897 and all county roads are now complete and open to traffic.

### Mitigation

Improvements are being made to more than 17,000 acres to mitigate for loss of habitat and impacts to local streams from construction of the lake.

- Workers continue to restore streams, work on ponds and emergent wetlands and mow between trees.
- Some flooding last month slowed rehabilitation of Willow Branch Creek, but crews are addressing impacts and continuing restoration.

### Leonard Water Treatment Plant

Construction includes a storage reservoir and five-step water treatment plant.

- In addition to pouring concrete for the different treatment structures, workers are now installing electrical infrastructure and arranging treatment and pumping equipment onsite.

### Raw Water Pump Station and Pipeline

These will pump water out of the reservoir and carry it 35 miles to the new treatment plant.

- Crews continue to build and place panel walls and electrical at the pump station.
- Pipes have begun to be installed in the pump station to move water out for treatment.
- Crews continue pipeline installation in three different locations, and have installed almost 80%. The current goal for completion is the end of this year.

### Treated Water Pump Station and Pipeline

A pump station and 25 miles of new pipe will transport the treated water to the existing NTMWD regional water system.

- Pieces of pipeline continue to be delivered, and tunneling for the pipe is concluding. Crews plan to begin installing it in October.
- The plan is to begin laying the pipe in October.

### Boat Ramp Areas and Lake Operations Center

NTMWD is building three public boat ramps, a dam maintenance building and a Lake Operations Center for administrative operations and recreational and educational activities.

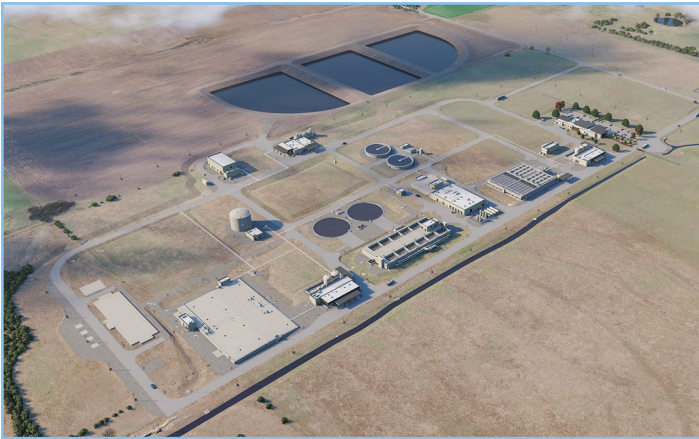
- The roofing and outside work on the Center are nearly complete.
- Construction continues on the warehouse and bunkhouse near the lake.
- Concrete has been poured for all the boat ramps, the boat dock piers are all installed and the restrooms completed.

## The 1000-acre View: Leonard Water Treatment Plant

It might not be the first thing that comes to mind, but NTMWD's newest plant is central to the "why" behind Bois d'Arc Lake. "Delivering the treated water is the goal of this whole project, and the treatment plant is what makes that happen," explains Aliza Caraballo, Leonard Water Treatment Plant Project Manager.

Building the plant is like putting together a behemoth puzzle—the huge project has countless pieces that all connect. Each one must be individually poured and covered, and its equipment installed. Then it must be rigorously tested before it is connected with the others. Aliza's crews will spend over half their time just testing that each part is ready to go!

Thanks to persistence and teamwork, the project should be finished next fall in an astounding, two-year timeframe. The goal: it will be online to deliver water from Bois d'Arc Lake in 2022.



*How the Plant Was Designed to Look*



*Picture of the Actual Plant Under Construction*

## Through the Magnifying Glass: Key Puzzle Pieces



### 1. Terminal Storage Reservoir

The terminal storage reservoir holds the water before it is pumped into the plant for treatment. It will be able to hold 210 million gallons, enough water to fill more than 300 Olympic-size swimming pools! **It will be finished in the next few months.**



### 2. Leonard Plant Operations Center

This center will be the brain of the future treatment plant. It includes the control room, where the whole treatment process can be run from one chair. There is also a water quality laboratory used to quickly test samples to optimize treatment and a mechanics shop to perform maintenance and repairs.

**Most of the building is now finished and just needs to be drywalled on the inside.**



## Through the Magnifying Glass: Key Puzzle Pieces (continued)



### 3. Ozone Treatment

Ozone is one of the most powerful disinfectants available, and it is the primary disinfectant that will clean water at the Leonard plant. **The ozone generators and oxygen tanks have arrived at Leonard and are being stored in crates until the building has electricity.**



### 4. Influent and High Service Pump Stations

There are two buildings that house pumps on the Leonard plant site. The first one is a smaller influent pump station that will help water move through the plant. The larger high service pump station will push water from the treatment plant through the pipeline to NTMWD communities.

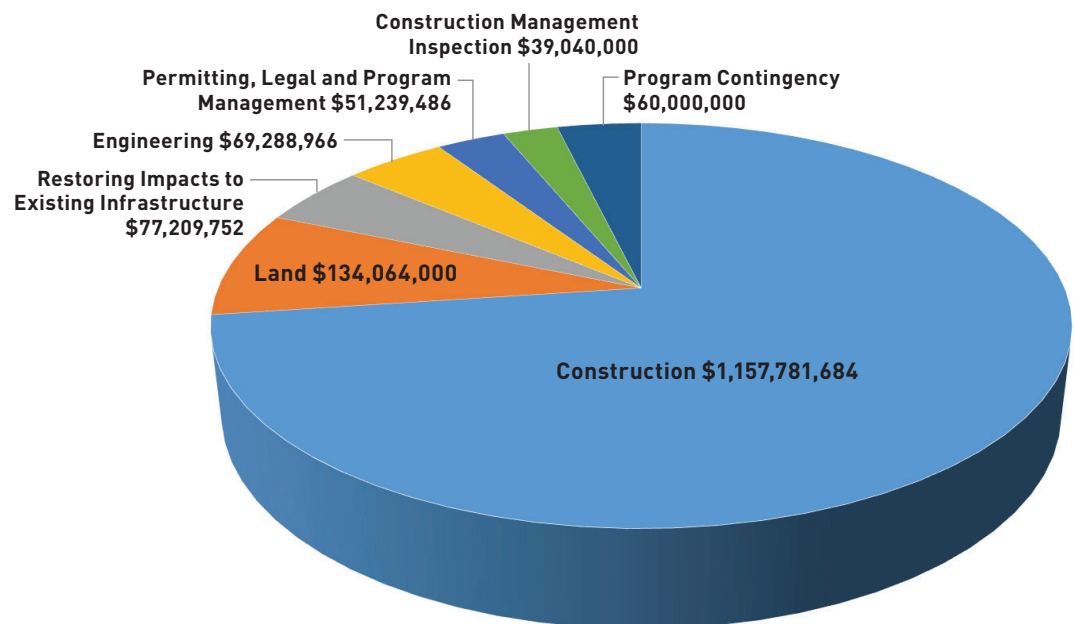
**Both are being walled in, and their pumps/ pipes are being delivered and connected.**

## Current Cost Summary

Bois d'Arc Lake planning, permitting and construction is an important investment for North Texas.

**Bois d'Arc Lake and other projects are estimated to cost approximately \$1.6 billion. These costs will be shared by the up to 80 communities who receive water from NTMWD. The Texas Water Development Board has approved \$1.47 billion for these projects through the State Water Implementation Fund for Texas (SWIFT) program, which is anticipated to save NTMWD and its cities over \$230 million in interest.**

### Total Budget Breakdown



As of September 1, 2020

# TIMELINE FOR PROJECTS

