

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 stripping/clearing soil and vegetation to build a two-mile-long dam embankment and service spillway (to return overflow water to Bois d'Arc Creek).

- Work is underway to build both sections of the dam up to the same height.
- Crews continue to pour concrete for the dam's intake structure, to move water from the lake, and spillway, to release excess water back into Bois d'Arc Creek.

FM 897 and County Roads

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

- Crews completed the eighth pour of deck concrete (out of 20 total) for the FM 897 bridge across the future Bois d'Arc Lake.
- Construction on the supporting structure for FM 897 is more than halfway finished. Work also continues on roadway sections on either side of the bridge.
- Work on county roads is well underway.

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.

- Crews plan to plant 1.6 million trees this spring bringing the total number to 3 million.
- Workers continue to restore streams, seed/plant grasses and other plants, create future emergent wetlands and ponds and cut ditches for irrigation pipelines.

Leonard Water Treatment Plant

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

- Buildings across the site are beginning to take shape, including the plant's terminal storage reservoir.
- The total project in Leonard is more than 30% complete.

Raw Water Pump Station and Pipeline

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

- Crews continue pipeline installation.
- Crews have completed the major structure of the pump room and will complete the roof in the next month or two.

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.

- The treated water pipeline is slated to break ground later this spring.
- Pump station excavation is complete. Crews are beginning to work on the building's foundation.

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.

- Excavation on the ramps and center is underway.
- Backfill on building pads at the Lake Operations Center is underway.
- Work on in-ground utilities and overhead electric is ongoing at the Lake Operations Center.



Environmental Mitigation

RES, the mitigation contractor for the project, has started planting trees again early this year, with a record of 60,000 planted by 24 workers in one day mid-January. Last year 1.4 million trees were planted, and many of these are already displaying good upper growth. The contractor's goal is to plant 1.6 million of the project's remaining 3.6 million trees by this March. The 2 million remaining trees will be planted next season (winter 2020/2021).

Additional mitigation continued over the winter includes:

- Restoring streams that were straightened for agricultural uses to their more curved, natural state.
- Planting native grasses and "live stakes," branches cut from other trees, to take root and support the new stream banks.



Crews start to plant second wave of trees at Bois d'Arc Lake mitigation site.

- Constructing ponds, future emergent wetlands and ditches with irrigation lines to water new trees from the future reservoir.
- Hauling cleared tree branches and leaves from the reservoir footprint to the mitigation site for animal habitat and concrete debris from the mitigation site to the reservoir to create fish habitat.



Work is well underway on the raw, or untreated, water pump station at Bois d'Arc Lake to push reservoir water through 35 miles of pipe to treatment in Leonard.

Raw Water Pump Station

- The station's pump room structure structure, including its walls, are almost complete (scheduled to be done in February.)
- After walls are complete, beams will be installed in the building's roof.
- Finally, crews will pour the roof and install the pumps later this year.

Quick Station Stats:

- 3 pumps and up to 90 million gallons of water per day (MGD) when first completed.
- 9 total pumps and up to 236 MGD when fully built out.



Terminal Storage Reservoirs — What Are They?

In addition to Bois d'Arc Lake, which will provide long-term water storage, two smaller terminal storage reservoirs will be constructed to store lake water that has been pumped to the Leonard Treatment Plant site. These smaller reservoirs will hold the water until it goes through the treatment process.

Each reservoir will hold 210 million gallons, or enough water to fill 318 Olympic-size swimming pools.

Most of the excavation/dams needed for the first reservoir was completed last month. Crews are now placing pipes and concrete. The second reservoir will be constructed at a later date.

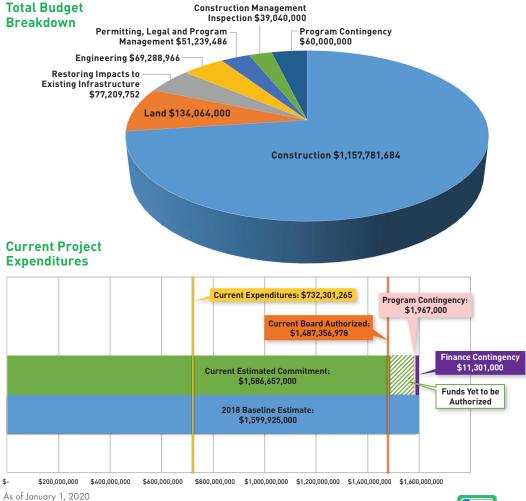


Crews are constructing the reservoirs to store water temporarily before it enters the Leonard Treatment Plant.

The planning, permitting, designing, land purchasing and constructing of Bois d'Arc Lake and other projects is an important investment for the future of 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.

This pie chart offers a breakdown of the total budget for the reservoir and other projects, and the bar chart shows current expenditures.



TIMELINE FOR PROJECTS



2003

Planning and Permitting Process Begins

JUNE 2015

TCEQ Issues State Water Use Permit

FEBRUARY 2018

Army Corps of Engineers Issues 404 Permit and Record of Decision



NOVEMBER 2018

Leonard Water Treatment Plant Construction Begins



AUGUST 2018

Environmental Mitigation Work Begins



MAY 2018

Roadway/FM 897 Construction Begins



MAY 2018

Dam and Reservoir Construction Begins



SPRING 2019

Raw Water Pipeline Construction Begins



FALL 2019

Boat Ramps and Recreational Facilities Construction Begins



SPRING 2020

Treated Water Pipeline Construction Begins



SUMMER 2020

Roadway/FM 897 Construction Complete



SUMMER/FALL 2021

Raw Water and Treated Water Pipelines Complete



FALL 2020

Reservoir Impoundment Begins



FALL/WINTER 2020

Dam Substantially Complete



SUMMER 2020

Boat Ramps and Recreational Facilities Complete



FALL 2021

Leonard Water Treatment Plant Complete



SPRING 2022

Water Delivery Scheduled to Begin

SPRING 2023

Environmental Mitigation Complete/Full Monitoring and Maintenance Begins

