

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 2-mile-long dam embankment, and the service spillway (to return overflow water to Bois d'Arc Creek).

- Concrete pours continue for the walls of the intake tower (which moves water from the lake to where it can be pumped out for treatment).
- Crews have completed brush/fence removal and clearing on available lands.

FM 897 and County Roads

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

- Crews have begun laying deck panels on a portion of the new FM 897 bridge.
- Work continues on moving earth for FM 897, with significant work on the section north of the bridge to prepare it for paving.
- Bridge substructure, embankment and other work are well underway on multiple county road locations.

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.

- Started planting native grassland cover crops in Section 1, and prepared Section 5 for native grassland restoration.
- Continued stream construction in Section 2.

Leonard Water Treatment Plant

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

- Soil removal and grading is almost complete. Excavation of the sediment drying lagoon and access road construction continue
- Crews have poured initial foundation slabs for several of the plant's structures.
- As the soil removal/excavation for every structure has been completed, each site has been handed over to its lead contractor to begin construction.

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.

- Excavation for the raw water pump station is complete.
- The first concrete pours are underway for the raw water pump station.
- Tunneling and other preparations for the raw water pipeline continue.

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.

• Excavation for the Treated Water Pump Station has started. Structural work to commence in the next few months.

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.

- Design work is complete for the operations center and boat ramps.
- Working on procurement process to start contracting the work soon.



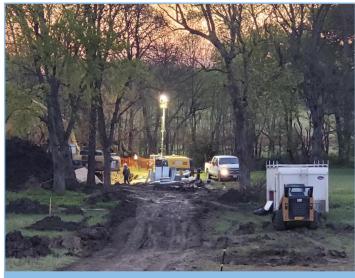
Raw Water Pump Station and Pipeline Construction

Accomplishments

- Crews are working around the clock to dig the needed tunnels for the raw water pipeline. Over 25% of tunneling is complete.
- 10 of 33 concrete pours have been completed at the raw water pump station (about 12% of the concrete for this pump station).

Up Next

- Segments of pipe will begin arriving on site this month.
 Crews will start stringing the pipe end-to-end on the ground, above where it will be installed.
- Crews will install the first piece of raw water pipeline in late July/early August.
- Over the next year, crews will string and trench the remaining 35 miles of pipeline. Approximately 3,800 total segments of pipe will be laid between the lake and Leonard Water Treatment Plant.



The entrance to a tunnel where crews are working 24 hours a day so they can begin to install the raw water pipeline this summer.

Dam and Reservoir Construction Work

Accomplishments

- Clearing work has finished and crews have demobilized until later this summer.
- Crews have completed initial pours of concrete for the spillway.
- Work continues on the dam, which currently stands 17 feet tall and about 500 feet wide. It will gain height quickly as crews build the walls up from its thicker foundation.
- 27% (2,260 cubic yards) of the concrete for the Intake Tower has been placed.

Up Next

- Crews will return to the site to work on additional clearing late summer with all clearing completed by spring 2020.
- In late 2019, workers will connect the east and west dam embankments and temporarily divert Bois d'Arc Creek through the completed intake structure.





Bois d'Arc Lake Project Wins Award

The Bois d'Arc Lake Project received the <u>Celebrating</u> <u>Leadership in Development Excellence (CLIDE) Award</u> for Special Development this June for its exemplary environmental stewardship.

Every other year the Center of Development Excellence of the North Central Texas Council of Governments selects and announces recipients of the CLIDE Awards. The awards encourage innovative development projects and practices that will help accommodate expected growth and ensure a sustainable North Texas for generations to come.

PICTURED: (Front row) Ellen Musallam, P.E., NTMWD Water Operations Engineer; Jennifer Stanley, NTMWD Bois d'Arc Lake Manager; Aliza Caraballo, P.E., NTMWD Bois d'Arc Lake CMAR 3 Project Manager

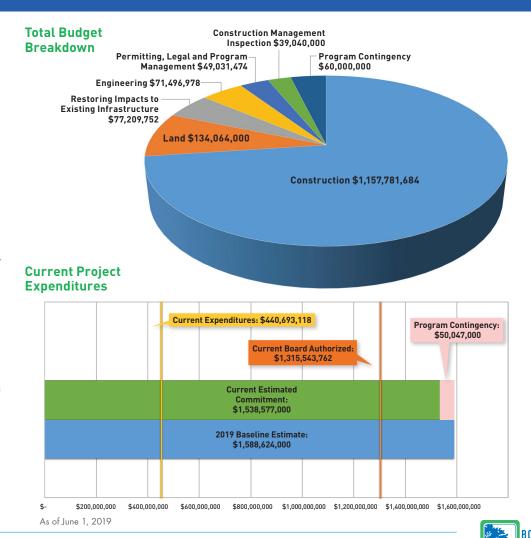
(Back row) Fernando Costa, CLIDE Awards Presenter; Jeff Payne, P.E., Freese and Nichols Principal/Vice President; Jeff McKito, NTMWVD Public Relations Specialist; Mike Rickman, NTMWD Deputy Director – Operations and Maintenance; Jack May, NTMWD Board of Directors; Brian Coltharp, P.E., Freese and Nichols President and CEO; Kevin Strength, 2018-2019 NCTCOG President



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.



D'ARC

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

Treated Water Pipeline Construction Begins



FALL 2019

Boat Ramps and Recreational Facilities Construction Begins



SUMMER 2020

Roadway/FM 897 Construction Complete



SUMMER 2021

Raw Water and Treated Water Pipelines Complete



FALL 2020

Reservoir Impoundment Begins



FALL 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

