

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 preparation and building of a two-mile long dam embankment, service spillway and raw water intake.

- Crews are placing the last 170,000 cubic yards of soil
  on the dam before water is impounded, or captured (an
  additional 300,000 will be placed to finish the dam after
  this occurs).
- Crews are wrapping up the last of their work on the spillway and continuing to build the electrical and storage building on top and access bridge for the intake structure.

### FM 897 and County Roads

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

• FM 897 and all county roads are now 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.

- Improvements to the Willow Branch Creek are finished.
- Workers are preparing the upper Bois d'Arc Creek mitigation area for tree plantings this winter, with plantings scheduled to begin this month.

#### **Leonard Water Treatment Plant**

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

- Crews are installing mechanical equipment, process piping and tanks in facilities across the site.
- In the next two weeks, installation will begin on the power poles from the substation to the plant site.

#### **Raw Water Pump Station and Pipeline**

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

- Over 96% of the pipeline is now installed.
- Most of the pipe is laid. Workers will begin testing the pipe and restoring vegetation in the next month or two.
- Topsoil placement and property surface restoration on the Right-of-Way (ROW) are still in progress.
- Crews continue to build and place pipes and electrical at the pump station.

#### **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.

- Pipe continues to be laid. As the Raw Water Pipeline is completed, construction crews will transition to increase the speed of this pipeline's installation.
- Additional walls and the central pipes of the pump station are being installed. Crews are also waterproofing the building.

#### **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.

- Crews are currently waterproofing the windows of the Operations Center and installing sheetrock and electrical inside. Half of the center's parking lot is now finished.
- Construction continues on the warehouse and other NTMWD facilities and recreation projects near the lake.



# Reservoir & Dam in Home Stretch:

The dam is only one to two vertical feet away from where it needs to be in order to start impounding (or holding) water. But building it up these few feet actually requires an impressive 170,000 cubic yards of dirt across the whole dam – equal to over 50 Olympic-sized swimming pools of soil.

After this initial level is reached, the lake can begin to fill with water. This important milestone is scheduled for March of this year. Additional soil will still need to be added to complete the dam (about 16 more ft. up and 445,000 cubic yards total). Work will also continue on the:

- Spillway (that will release excess water from the lake back to Bois d'Arc Creek).
- Labyrinth weir (that will control release of water through the dam).
- Intake structure (that will collect water to be taken for treatment), including its access bridge.
- Pouring concrete for some additional structures and around the dam.
- Roads and drainage.



Lake Spillway with dam in the background.

# Pipelines Making Breakthroughs:

Raw Water Pipeline – The installation of this pipeline is wrapping up (over 96% finished) and will be complete in the next month or two. More than 33 miles have been installed. Only 6,500 ft. are left, but these sections are more complex and will require some additional time to complete.

**Treated Water Pipeline** – Construction crews just broke out the other side of the tunnel under the Trinity River. This ½ mile tunnel is the longest one being dug for this pipeline.

The total pipeline project is pushing forward quickly with:

- 90% of the tunnels are complete.
- About one mile of pipe has been laid.



Shaft where the Treated Water Pipeline tunnel broke through to other side of Trinity River.



# Spotlight: Key Visit Unlocks Funding for Terminal Storage Reservoir

Representatives from the Texas Water Development Board (TWDB) visited the Terminal Storage Reservoir (TSR) site on Jan. 20th to perform their substantial completion inspection. TWDB has approved \$1.477 billion in low interest State Water Implementation Fund for Texas (SWIFT) funding for Bois d'Arc Lake and associated projects, which is anticipated to save NTMWD and ratepayers over \$240 million in financing costs. Along with other documentation and paperwork, this inspection is one of the final items needed to approve the board's funding.

Some work on the TSR is still in process, but the majority is now finished. All work is expected to wrap up in the next 2-3 months.



# **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.

#### Total Budget Breakdown



As of January 1, 2021



### **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



#### **WINTER 2021**

Boat Ramps and Recreational Facilities Complete



#### **FALL 2021**

Leonard Water Treatment Plant Testing Begins



#### **SUMMER 2021**

Raw Water Pipeline Complete



#### **SUMMER 2021**

Dam Substantially Complete



#### **SPRING 2021**

Reservoir Impoundment Begins



#### **WINTER 2022**

Treated Water Pipeline Complete



#### **SPRING 2022**

Water Delivery Scheduled to Begin

#### **SPRING 2023**

Environmental Mitigation Complete/Full Monitoring and Maintenance Begins

