



December 2021

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 preparation and building of a 2-mile-long dam embankment, service spillway and raw water intake.

- The Bois d'Arc Lake earthen embankment, soil cement steps and spillway construction are now finished. The road over the top of the dam is being completed.
- Workers are finishing fencing, roadways, power and communications connection and re-vegetation.

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 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.

- Periodic stream monitoring took place twice this year, and maintenance continues in restored areas.
- Crews will plant the last trees this winter to fill gaps in areas previously planted.

Leonard Water Treatment Plant

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

- Work continues on internal parts of the different structures, including communication and other wiring.
- The new electrical substation and power lines on the north side of the Leonard site are now powering portions of the plant.
- Pumps are scheduled for connection and initial testing in 2022.

Raw Water Pump Station and Pipeline

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

- Workers continue site restoration and grading above the completed pipeline.
- Pump and motors are completely installed, aligned and grouted.
- Electrical crews are working on pulling wire all over the pump station site.

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.

- More than 75% of the treated water pipeline has been installed, and work continues to make good headway.
- Work on the pipeline and pump station are on schedule for completion in 2022.

Boat Ramp Areas and Lake Operations Center

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

- The Operations Center is substantially complete. Center staff have started to move in before the building opens to the public.
- The three boat ramps and their parking lot areas, though completed, won't open to the public until the lake is officially open and safe for public use.

For more information, visit www.BoisdArcLake.org



Students Help Document Riverby's Success

Raptors returning to habitat created as part of the extensive environmental restoration done for the Bois d'Arc Lake project are demonstrating the success of these efforts.

Avian biology students from the University of North Texas received a special opportunity to participate in a study to evaluate, track and band birds of prey flocking to the Riverby Ranch mitigation site. Riverby is a 15,000-acre former ranch in its third year of restoration.

"We saw 10 turkey vultures, three or four red-tailed hawks, a couple of harriers and two kestrels within two minutes of turning the corner to Riverby so that was magical. The birds were welcoming us to Riverby," PhD student Kelsey Biles said about the first time her research crew arrived on-site.

With most American raptors declining in population, the chance to study them in an environmentally rich, protected habitat is rare.

Trapping the raptors gave the students valuable experience with key safety and research protocols that will inform future conservation practices—these include how to appropriately handle, measure, take blood samples from and release the birds.

Banding and collecting data by the students and faculty supports a variety of research efforts focused on the conservation of birds of prey, and it provides NTMWD key



A bird of prey is released after being captured and tagged.

information on the success of its environmental improvements. Because raptors represent the top of the food chain, the presence and prevalence of many species indicate a healthy and thriving ecosystem.

With the reduction of grasslands, raptor species are struggling. Birds are seeking refuge at Riverby which indicates a healthy ecosystem at work. Learn more by [viewing this video](#) produced by RES, the mitigation contractor.

Embankment Passes Finish Line

Construction on Bois d'Arc Lake's embankment is complete. Crews finished remaining earth work on the embankment, having placed a total of about 4.9 million cubic yards of dirt to build the dam. Now, the road over the top of the embankment is being completed.

The last concrete pour is also finished. Workers placed:

- About 168,000 cubic yards of soil cement—to prevent erosion of the dam
- About 24,000 thousand cubic yards of conventional concrete for the spillway and other key structures across the site.

Workers are now finishing paving and drainage.

A major step at the site, connection of electricity, should take place in January. Once that occurs, the reservoir will be capable of holding, drawing and pushing out water for treatment.



The completed dam embankment.

Spotlight: Board Visits Bois d'Arc

This past month, NTMWD's Board of Directors got a first-hand look at progress across the Bois d'Arc Lake project.

The board represents member cities and customers who will benefit from water stored in Bois d'Arc Lake. Board members toured the dam and the Lake Operations Center and got an external view of the Leonard Water Treatment Plant.



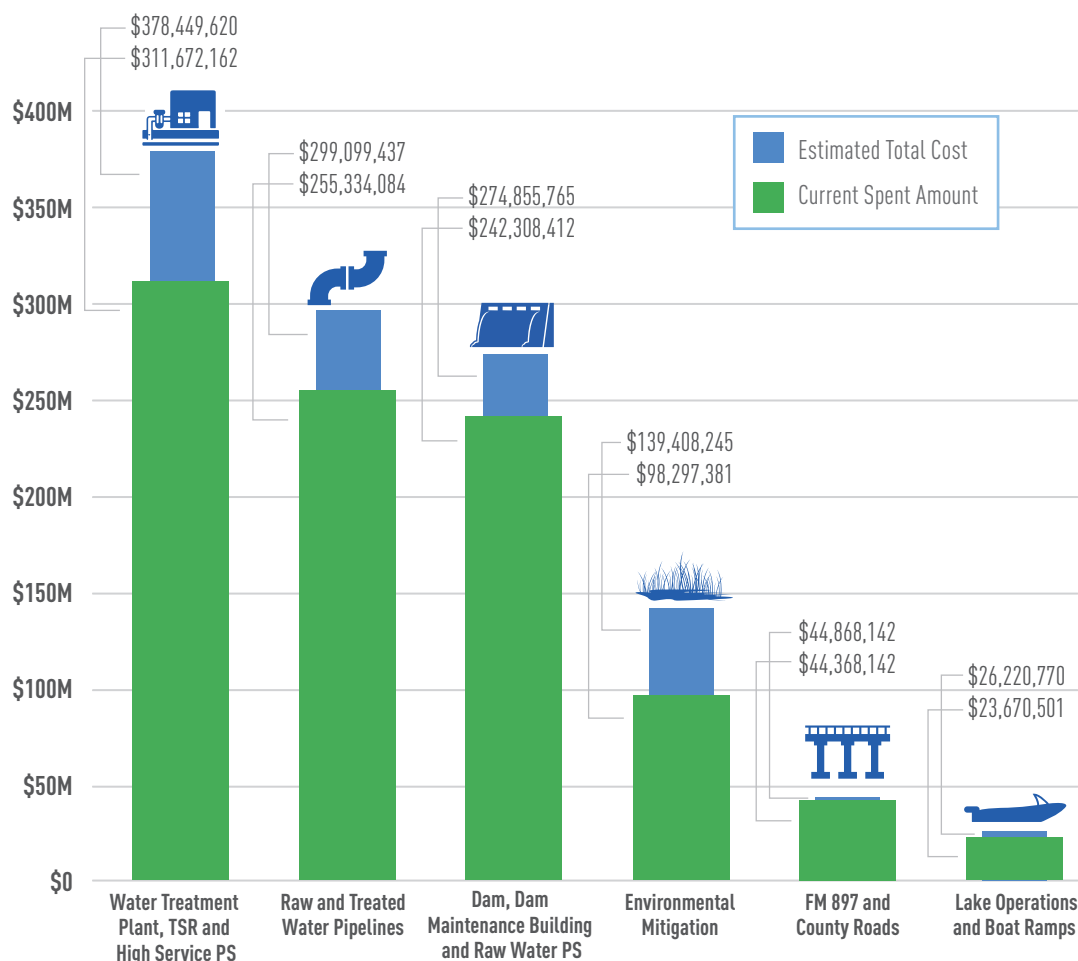
Current Cost Summary

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 that 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.

Budget Status for Bois d'Arc Lake Project – By Each Part
Current Amounts Spent Compared with the Estimated Total Costs*



As of December 1, 2021 *Figures are for construction costs only; do not include all project costs.

TIMELINE FOR PROJECTS

