

August 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.

- Workers are waiting to place the final couple of feet of earth on the dam while work on soil cement is completed (to protect against erosion).
- The spillway's labyrinth weir is in place, so the spillway bridge is the only major concrete construction remaining at the dam. Grass seed is being spread downstream of the dam.

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.

- Newly planted trees and wetland areas are being routinely checked and replanted/improved as needed. Maintenance and final construction work continue on streams and other restoration projects.

Leonard Water Treatment Plant

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

- Crews are installing mechanical equipment, process piping control and electrical components in facilities across the site.
- Workers will finish grading on the east side of the site prior to paving.

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 are continuing to restore grass above the completed pipeline.
- Electrical equipment has been installed, and crews are working on cable trays and cabling the electrical room.

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.

- About 50% of the treated water pipeline has been laid, and work continues to make good headway.
- Precast panels installation on the electrical room above the pump room has been completed. Roofing work will commence soon.

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.

- Interior work will continue in the Operations Center and warehouse based on material delivery schedules.
- All three boat ramps and their parking lot areas are completed but are not yet open to the public.

From Lake to Treatment — Making the Connection

In July, 70 million gallons of Bois d'Arc Lake water were pulled through the pipe and into the terminal storage reservoir at Leonard to see if it would hold water. The pipeline passed this initial hydrostatic test, and all that's left to complete on the pipeline now is restoration above where it was laid.

Two of the key pumps have been installed at the raw water pump station, and workers are now linking the station to the last pieces of pipe. When this is done, there will be a complete connection between Bois d'Arc Lake and the future Leonard Water Treatment Plant.



Workers inside the raw water pump station

Testing the Treatment Process

The terminal storage reservoir is 7-10 feet full with the 70 million gallons of water from testing the raw water pipeline. This fills the storage reservoir to approximately 1/3 of what it can hold—enough to allow for testing of this reservoir's valves and mixers, which will keep water from the lake from becoming stagnant until it can be treated.

This same lake water will be drawn from the terminal storage reservoir and used to test some facilities at the new treatment plant, including the influent pump station, the pretreatment structure, the gravity thickeners and their lagoons.



Overview shot of the terminal storage reservoir

Spotlight: Grassland to Wetland, Plus More Ponds

RES's on-site team is continuing to monitor environmental improvements near Bois d'Arc Lake and adjust as needed. This August, they are creating three additional oxbow ponds in part of the old Bois d'Arc Creek channel to ensure water runs into the new creek bed. To form the ponds, crews are building "plugs," or dams of soil borrowed from four areas previously slated for grassland but now being converted into emergent wetland.

"Because of the restoration we've done, the water table is rising back to where it's supposed to be," explained Daniel Kampfer, Project Superintendent for Bois d'Arc Lake Mitigation.

"We knew these new areas would be wet, but we didn't know they would be this wet."

Group collaboration and additional study have confirmed that the "grassland" areas will make great wetlands instead, so crews have begun moving their soil over to the ponds. "This is a win-win for the project," Kampfer explained. "When we are done, we will reseed the new wetland areas with a native wetland grass mix. We'll also seed the plugs with native upland grasses."

In addition, the RES team is adjusting 300 acres near the future ponds to ensure their new habitat also continues to thrive.

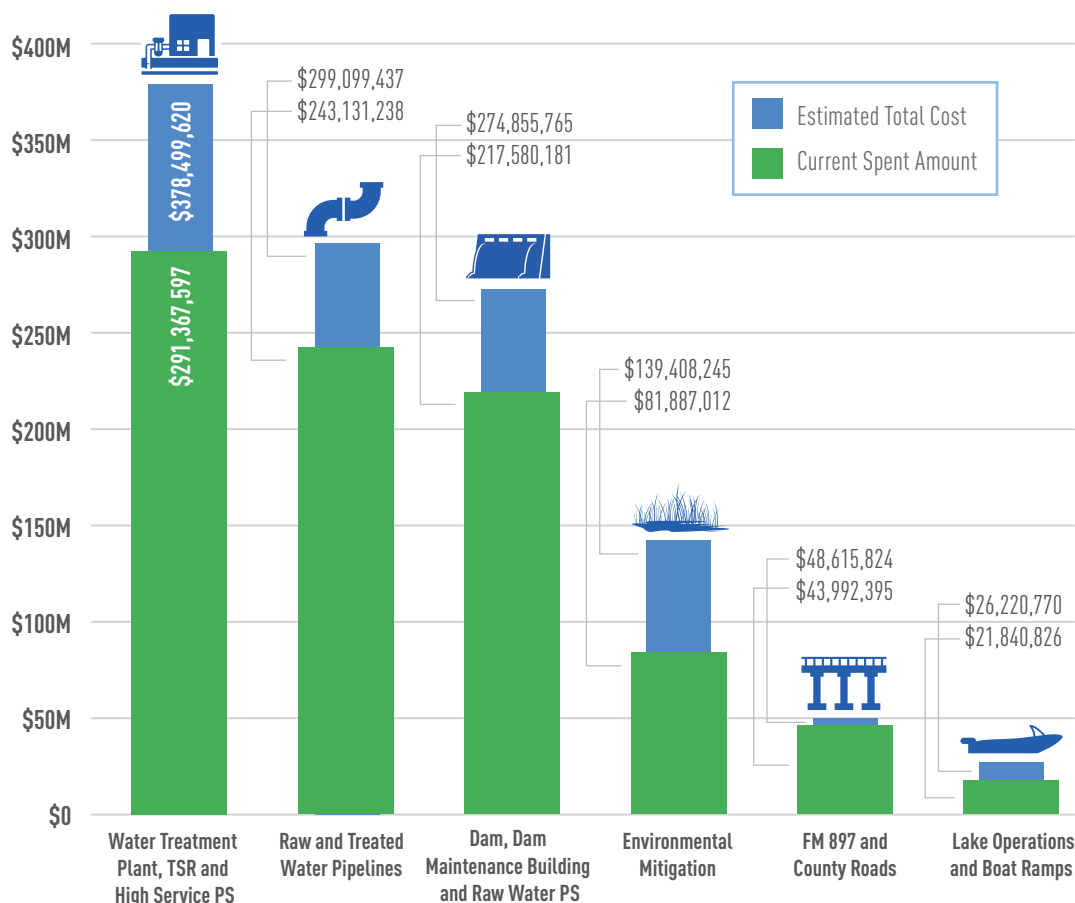
Current Cost Summary

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

TIMELINE FOR PROJECTS

