

October 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 last 20,000 cubic yards of earth are now being placed on the dam embankment. Crews continue to alternate between placing soil and pouring concrete and are still on track to finish in the next three weeks.
- The spillway's weir and bridge are now complete.

### 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.

- Crews are grading the site for pavement to be poured.
- Workers are installing pipes to carry chemicals from their storage tanks to various treatment structures.
- The new electrical substation and power lines on the north side of the Leonard site are now powering portions of the plant.

### 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 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.

- About 60% of the treated water pipeline has been installed, and work continues to make good headway.
- Construction continues on the pump station, with the installation of control panels, lights, piping and valves.

### 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.

- Final finishes and furniture are being completed and installed in the Operations Center.
- All three boat ramps and their parking lot areas are completed but are not yet open to the public.

For more information, visit [www.BoisdArcLake.org](http://www.BoisdArcLake.org)



## Pipeline Protection— Keeping Corrosion at Bay

Steel water pipelines are designed to last approximately 50 years, and cathodic protection and other corrosion protection measures are added to increase life expectancy to 75 years. Pipes are buried in soil and wet conditions, which can be highly corrosive. For this reason, both the new raw and treated water pipelines have:

- 1) An outside polyurethane coating to protect them from the corrosive nature of the soil.
- 2) A mortar lining to protect them from rusting, strengthen the pipelines and help water flow through them efficiently.
- 3) Test stations installed along the pipelines to help monitor and track corrosion rates. “This also helps NTMWD regularly check and maintain the pipeline over its life,” explains Construction Manager Winston Silvia, who oversees the pipeline installations.

With these and the District’s proactive maintenance measures in place, both pipelines can begin service with a long life expectancy.



*By the time pipe is laid out to be installed, it is already properly coated and lined to carry water from Bois d’Arc Lake to treatment, then to homes and businesses across North Texas.*



*This test station monitors whether the underground pipeline is working well and has no corrosion.*

## Electricity is Coming to Leonard Water Treatment Plant

Earlier this month, NTMWD and Fannin County Electric Cooperative (FCEC) teams completed the North Loop of overhead, 25-kilovolt power lines around the site. They also finished testing all the major electrical equipment on-site.

After the 25kV loop was tested and energized, NTMWD crew members powered up the transformer at the ozone facility, which also provides electricity for the filter facility and reclaim basins.

## Spotlight: Checking in on Bois d’Arc Creek

This October, NTMWD collaborated with its contractor Freese and Nichols and the U.S. Army Corps of Engineers to conduct a second round of biological monitoring of Bois d’Arc Creek (the first round was conducted in August). The monitoring is part of the District’s permit requirements.

During monitoring, scientists count the types and amounts of fish and aquatic insects to develop a picture of the creek’s overall health and its ability to support aquatic life. They catch and release various types of fish—including channel catfish, white crappie and bass—and record the quality of their habitat (see image to right). Preliminary results from the samplings show that the creek continues to support a diverse community of fish and insects. The creek will again be monitored in the third, fifth and 10th years since the lake began to fill.



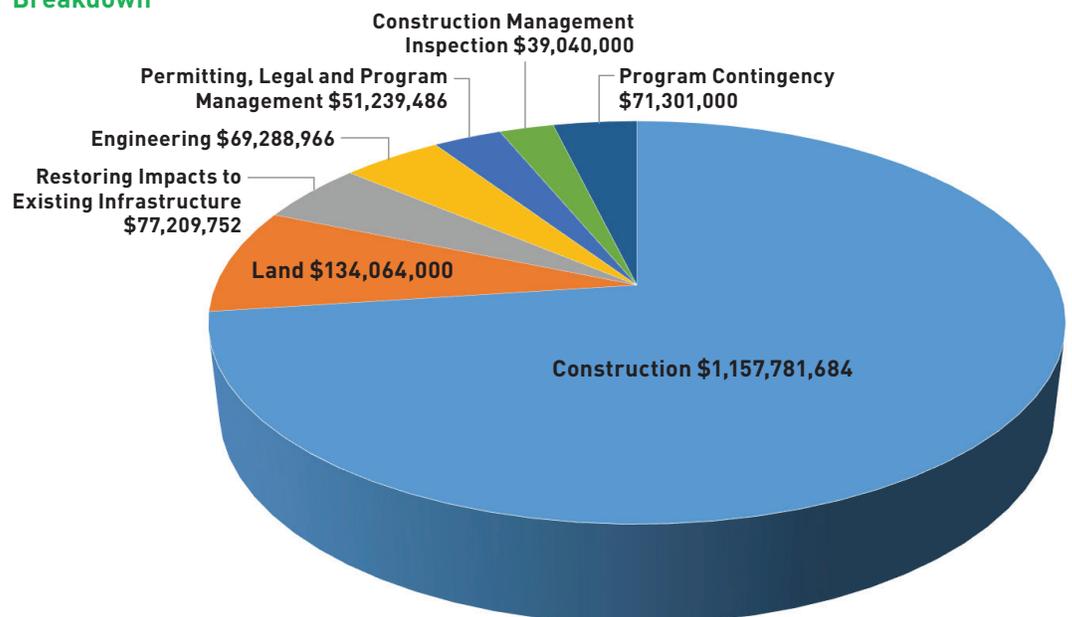
Scientists count fish types and numbers in Bois d’Arc Creek as part of the required monitoring.

## 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 communities who receive water from NTMWD.**

### Total Budget Breakdown



# TIMELINE FOR PROJECTS

