

August 2019

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 stripping/clearing soil and vegetation to build a 2-mile-long dam embankment and service spillway (to return overflow water to Bois d'Arc Creek).

- Crews continue to add fill to the reservoir's embankment, intake tower walls and conduits (that move water out for treatment), spillway (to release overflow back to Bois d'Arc Creek) and other necessary trench work.
- Clearing of trees/brush from the reservoir area finished for the summer.

FM 897 and County Roads

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

- Crews continue laying and pouring deck panels on a portion of the new FM 897 bridge.
- Work continues placing substructure/columns and moving earth for FM 897 — all drill shafts should be completed in August.
- Crews are well underway on building bridges and paving for county roads, with several near completion.

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.

- Work continues to restore streams, care for grassland cover crops, create future emergent wetland areas and install ground water monitoring wells to measure mitigation results.

Leonard Water Treatment Plant

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

- Last month workers broke ground on the terminal storage reservoir to hold water on site before treatment.
- Crews are pouring concrete for all structures on site.

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.

- Crews laid the first stick of raw water pipeline last month.
- Concrete and steel reinforcements are being placed for the raw water 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.

- Excavation for the treated water pump station is more than halfway finished. Structural work to commence in the next few months.
- Final designs and permitting for the treated water pipeline to move water to customers is underway.

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.

- Procurement and evaluation of bids for future work on the boat ramps and office/center facilities has been completed.
- The NTMWD Board will review the proposed contracts in August. If approved, construction on the operations center and boat ramps could begin this fall.

Raw Water Pump, Pipeline and Terminal Storage Reservoir

Accomplishments

- Work continues on adding piping, concrete and steel reinforcements at the raw water pump station, which will move untreated water out for treatment.
- Last month, workers laid the first segment of raw water pipeline to move untreated water from Bois d'Arc Lake to where it can be treated in Leonard. Four to five crews of around 10 workers each will be working daily to lay the 35 total miles of pipeline.
- Crews also recently broke ground on the terminal storage reservoir needed to store water before treatment at the Leonard Water Treatment Plant. Earthwork in the bottom of the future reservoir is currently underway.



Walls, pipes and pieces taking shape at the lake's raw water pump station.



Groundwork underway on the terminal storage reservoir at Leonard Water Treatment Plant site.

Up Next

- Workers will begin constructing the embankment (earthen dam) to hold water in the terminal storage reservoir.
- The raw water pump station construction will continue and the pipeline will continue to be laid through the fall.

Mitigation Work

Accomplishments

- Work continues to reshape rivers with longer bends (to improve their overall health). Crews have also baled 2,200 square bales of hay to place along and in designated streams. This will help prevent erosion and help crews construct mid-stream wildlife structures.
- Digging is underway to create the depressions for emergent wetland ponds. These various areas will fill with water over time, after which wetland vegetation will be planted.
- Crew members are installing around seven new shallow ground water monitoring wells to conduct initial wetland/habitat monitoring (for initial data points).



Depressions, berms and ponds constructed for future wetland areas at the mitigation site.



Crew members install groundwater monitoring wells to measure the future positive impact of mitigation.

Up Next

- Various mitigation work will continue into the fall.
- Trees will be planted in November.

Project Spotlight: Crews Lay First Pipe for Raw Water Pipeline from Bois d'Arc Lake

Last month, crews with Garney Construction and Oscar Renda Contracting installed the first section of pipeline in Fannin County. The 3.5-mile, 90-inch pipe will move untreated water from Bois d'Arc Lake to the Leonard Water Treatment Plant under construction. When completed, it will be able to carry up to 236 million gallons of water every day. Crews are currently working to lay the sections of pipe, each around 50 ft. long and 25,000 lbs.

"It's no small job," explained Fain Butler, Assistant Construction Manager for the Bois d'Arc Lake project. "Four to five crews will be working simultaneously to lay the approximately 3,696 pieces of pipe. That's around 15 per day." Installation will continue until summer 2021.

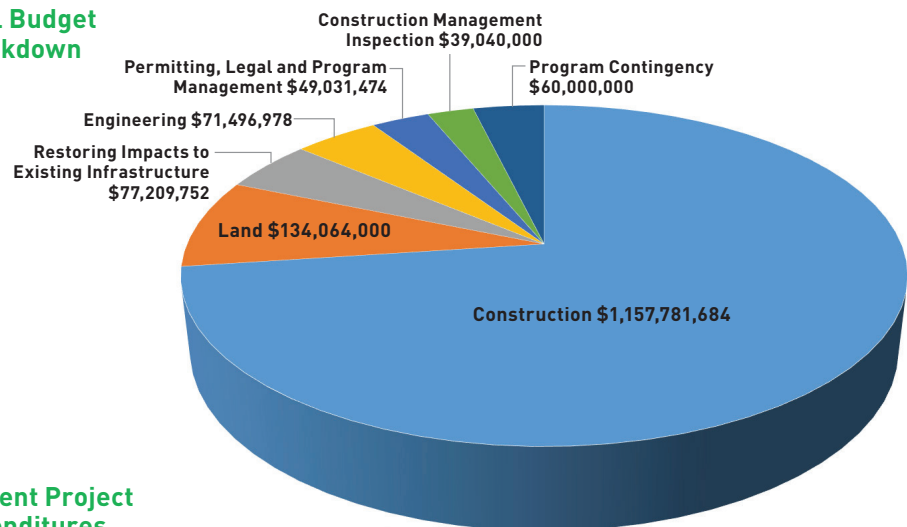


The planning, permitting, designing, land purchasing and constructing of Bois d'Arc Lake and other projects is an important investment for the future of North Texas.

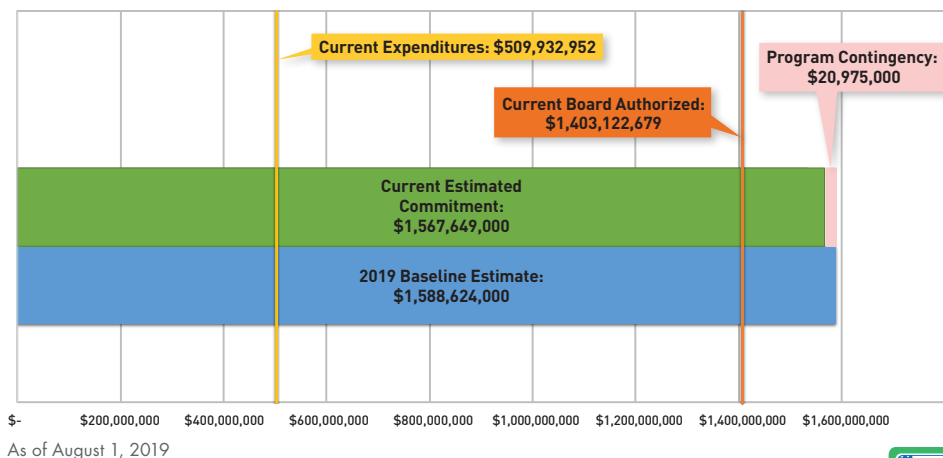
Bois d'Arc Lake and other projects are estimated to cost approximately \$1.6 billion. These costs will be shared by the up to 80 communities who receive water from NTMWD. The Texas Water Development Board has approved \$1.47 billion for these projects through the State Water Implementation Fund for Texas (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.

Total Budget Breakdown



Current Project Expenditures



TIMELINE FOR PROJECTS

