

TOM MILLER DAM FLOODGATE REPLACEMENT PROJECT

Frequently Asked Questions

1. *What is the Tom Miller Dam Floodgate Replacement Project?*

LCRA is replacing the original floodgates on Tom Miller Dam to help ensure the dam operates reliably and safely for generations to come. The original floodgates were installed during construction of the dam 80 years ago.

The \$9.9 million project continues LCRA's investment in the safety of the dam and marks the second extensive renovation of the dam since it was completed in 1940. LCRA completed major structural improvements to the dam in 2005 as part of a dam modernization project.

During the project, the nine floodgates are being removed one at a time and replaced with newly constructed, custom-made floodgates.

Tom Miller Dam remains capable of responding to floods and water supply needs throughout the project. Floodgates at the dam not impacted by construction at the time remain operational.

2. *Why is the project needed?*

The nine original floodgates were installed during the construction of Tom Miller Dam from 1938-1940. LCRA has maintained the floodgates to meet current standards, but in 2007, a consulting engineering firm performed a detailed inspection of the dam and recommended that some steel members be replaced or reinforced no later than 2020 to meet the latest design standards.

LCRA determined replacing the floodgates, rather than rehabilitating the existing floodgates, was the best option with the lowest safety risk, the lowest environmental risk and the least public inconvenience. Replacing the floodgates takes about 18 months, but rehabilitating the floodgates in place would have taken four to five years.

3. *How are the floodgates being replaced?*

Each of the nine floodgates is being removed one at a time and replaced with a newly fabricated floodgate that meets all current dam safety standards. The new floodgates are being moved to the site on trucks, then moved to the dam via a barge. Work on each floodgate takes about six weeks.

4. *When did the project begin and how long will it take?*

On-site construction began in mid-August 2018 and is expected to be completed in September 2020.

5. *What if there is a flood during the project?*

The dam will remain operational and able to move water downstream for water supply or flood management purposes throughout the project.

While one floodgate is out of service for replacement, other floodgates will remain operational and able to respond to flooding conditions as needed. Though Tom Miller has nine floodgates, the most opened at any one time has been five.

The construction contractor will be in regular communication with LCRA staff and will be made aware of any weather conditions that could require floodgate operations. In the event of a major weather event, the construction barge will be moved away from the dam to a safe location upstream.

6. *How are you getting the materials and equipment to and from the dam?*

A 100-ton capacity crane behind the LCRA Jack Miller Building on Lake Austin Boulevard directly adjacent to Tom Miller Dam moves equipment and the new gates onto a shuttle barge that is moored in Lake Austin. The shuttle barge ferries material for the new floodgates to a construction barge at the dam.

7. *How big are the construction barges?*

The shuttle barge used to move material to the dam is 40 feet by 60 feet and weighs approximately 132,000 pounds.

The construction barge that ferried the construction crane from the Loop 360 park near the Pennybacker Bridge to the dam is 60 feet by 60 feet and weighs approximately 600,000 pounds. A 20 feet by 40 feet office barge supports the construction barge.

8. *Will the project affect boat traffic on Lake Austin?*

Yes. For the safety of boaters, the public and construction personnel, LCRA moved buoys near the dam about 200 feet upstream from the dam on Lake Austin for the duration of the project. This will keep boaters safely out of the construction zone.

9. *Where are the new floodgates being assembled and how are they being transported to the dam?*

The new floodgates are fabricated and partially assembled in Michigan. They are shipped to Austin via truck, then moved to the dam via barge for final installation. The floodgates are designed to require minimum final assembly at the dam site.

10. *How big are the new floodgates?*

Tom Miller Dam has four large floodgates and five smaller floodgates.

The four large floodgates are 51 feet by 20 feet and were shipped in multiple large subassemblies. Each of four large floodgates has been installed and weighs approximately 55,000 pounds.

The five smaller floodgates are 51 feet by 15 feet and also are being shipped in multiple large subassemblies. Each smaller floodgate will weigh approximately 40,000 pounds when installed.

11. *How are the new floodgates being installed?*

Large steel beams called stoplogs isolate the existing floodgate from water in Lake Austin to allow crews to work in a dry area. Once the stoplogs are in place, crews remove the existing floodgate from the dam, and a 140-ton capacity crane on a construction barge places the floodgate pieces on a smaller shuttle barge. The shuttle barge ferries the floodgate pieces to land, where a 100-ton capacity crane behind the Jack Miller Building moves the removed steel onto a truck to be moved off site. The steel from the original floodgates will be recycled.

The crane based on land moves the new floodgate subassemblies from a truck onto the shuttle barge for transport to the construction barge. The crane on the construction barge is used to assemble the new floodgate and place it into position for installation at the dam.

After each new floodgate is tested for leaks and commissioned for operation, the construction barge is moved to the next floodgate to repeat the process until all nine floodgates have been replaced.

12. What hours is construction taking place? Will construction take place on nights and weekends?

Construction is scheduled Monday through Saturday between 7 a.m. and 5 p.m. No construction is planned for Sundays. Heavy truck deliveries of equipment and material are being scheduled for before 7 a.m., Monday through Thursday.

13. What route will construction traffic use?

Heavy equipment and the new floodgates are being staged north of Austin until needed at the dam. Trucks travel to the dam via Mopac (Loop 1) and Lake Austin Boulevard. Trucks are being scheduled to arrive at the dam before Austin morning rush hour traffic.

14. Will the floodgate replacement project be visible to the public?

The project will be visible from homes on Lake Austin, businesses at Oyster Landing or from upstream on Lake Austin behind the buoys and Lady Bird Lake downstream of the dam. For public safety, the area beside and behind the Jack Miller Building near the dam will be fenced off.

15. Is the city of Austin involved in Tom Miller Dam?

LCRA built the dam on property leased from the City of Austin. LCRA operates and maintains the dam pursuant to terms of the lease for the benefit of Austin and the people of central Texas.

16. How big is the dam? How much water can be moved through the dam at once?

The dam is 100.5 feet high and 1,590 feet long. The total discharge capacity of Tom Miller Dam is 108,000 cubic feet per second, or 48.5 million gallons a minute, from four large floodgates, five small floodgates and two hydroelectric generation turbines.

17. Where can I get more information?

Visit lcra.org/tommillerdamproject or submit questions through [ContactLCRA](#).

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