#### **Take Action**

- Stay aware of changing weather conditions.
- Know your flood risk and be prepared to take action when floods threaten.
- Monitor local media and heed warnings from your local officials.
- Don't drive through flooded roads.
- Stay clear of flooded creeks and streams.
- Stay away from areas near the Highland Lakes dams during flooding.

#### **Key Resources**

- www.lcra.org
- Flood Operations Report: floodstatus.lcra.org
- LCRA's Hydromet: hydromet.lcra.org
- LCRA Flood
   Operations
   Notification Service:
   www.lcra.org/fons
- Twitter: @LCRA
- Facebook: lowercoloradorivera uthority
- NOAA Weather Radio All Hazards broadcasts: AM 1610 around the Highland Lakes and AM 1670 downstream of Austin

#### May 2023



# **Highland Lakes Flood Operations**

The National Weather Service calls the Hill Country and Central Texas "Flash Flood Alley." With steep terrain, shallow soil and unusually high rainfall rates, the region has one of the greatest risks of flash flooding in the United States. With little or no warning, heavy rains can turn placid creeks into walls of fast-moving water with great destructive potential.

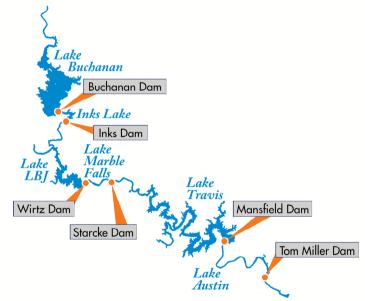
Dams along the Highland Lakes can reduce flood damages downstream of the dams, but they can't prevent all floods. During a flood, LCRA operates the dams to reduce the intensity of flooding downstream by managing the flow of floodwaters through the Highland Lakes.

LCRA hydrologists constantly monitor weather conditions, forecasts and more than 275 river and weather gauges along the Highland Lakes and lower Colorado River to stay aware of changing conditions.

## The Highland Lakes system

When storms drop heavy rain in the Highland Lakes watershed, the Colorado River and its tributaries swell, sending water into the lakes. Rain upstream of Mansfield Dam flows into lakes Buchanan, Inks, LBJ, Marble Falls and Travis. LCRA moves floodwaters from the upper lakes downstream to Lake Travis through a chain of dams.

Mansfield Dam is the only dam along the Highland Lakes specifically designed to hold back floodwaters, and Lake Travis is the only one of the Highland Lakes



with room to temporarily store floodwaters. The lake is considered full at 681 feet above mean sea level (feet msl), but its flood pool can hold an additional 776,062 acre-feet. LCRA controls the release of floodwaters through Mansfield Dam using any combination of three hydroelectric generating units and 24 floodgates to help protect life and property downstream of Mansfield Dam.

LCRA conducts flood operations at Buchanan, Inks, Wirtz and Starcke dams according to a 1990 agreement between LCRA and the Federal Emergency Management Agency (FEMA). LCRA conducts flood operations at Mansfield Dam according to the Army Corps of Engineers Water Control Manual for Mansfield Dam and Lake Travis.

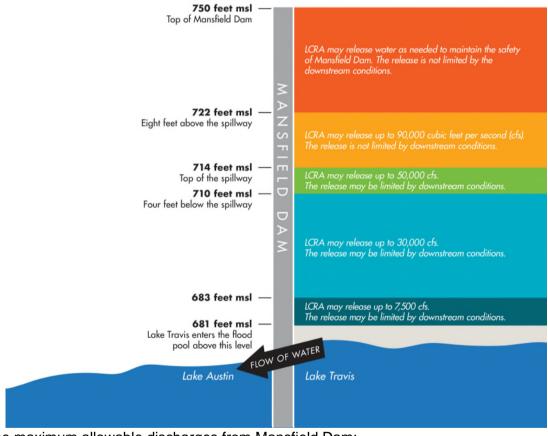
## **Highland Lakes Flood Operations**

### Flood operations at Mansfield Dam

In accordance with the Water Control Manual, LCRA makes controlled flood releases from Mansfield Dam when Lake Travis rises into its flood pool between 681 and 714 feet msl. Releases are based on the expected level of Lake Travis, and expected river levels at Austin, Bastrop and Columbus.

Should floodwaters push the level of Lake Travis above 714 feet msl, water would begin to flow over the Mansfield Dam spillway. At that point, LCRA would make releases based solely on the expected level of Lake Travis. These releases would not be limited by downstream conditions. This has never happened in the history of the Mansfield Dam.

## **Key Lake Travis elevations during floods**



The maximum allowable discharges from Mansfield Dam:

- 30,000 cubic feet per second (cfs) when Lake Travis is forecast not to exceed 710 feet msl.
- 50,000 cfs when Lake Travis is forecast to reach between 710 and 714 feet msl.
- 90,000 cfs when Lake Travis is forecast to reach between 714 and 722 feet msl.
- As necessary to protect the dam when Lake Travis is above 722 feet msl. (One cubic foot per second equals 448.8 gallons per minute.)

