

HIGHLAND LAKES

Flood Operations

The Hill Country and Central Texas are in “Flash Flood Alley,” a region with one of the greatest risks of flash flooding in the United States.

With steep terrain, shallow soil and unusually high rainfall rates, the region is prone to flash flooding. With little or no warning, heavy rains can turn dry creeks into walls of fast-moving water with great destructive potential.

Dams along the Highland Lakes can reduce flood damage downstream of the dams, but they don’t and 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 the Hydromet – a system of 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, funneling 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, but its flood pool can hold an additional 776,062 acre-feet of water.

LCRA conducts flood operations at Buchanan, Inks, Wirtz and Starcke dams according to operating procedures developed by LCRA to manage floods within Federal Emergency Management Agency-designated



Take Action

Stay aware
of changing weather conditions.

Know
your flood risk.

Be prepared to take action
when floods threaten.

Monitor local media
and heed warnings from
your local officials.

**Don't drive through
flooded roads –**
turn around, don't drown.

Stay clear
of flooded creeks and streams.

Stay away
from areas near the Highland
Lakes dams during flooding.

floodplains. FEMA and local officials designate floodplains and control development within floodplains. LCRA operates Tom Miller Dam consistent with an agreement with the City of Austin.

Flood Operations at Mansfield Dam

LCRA makes controlled flood releases from Mansfield Dam in accordance with the Army Corps of Engineers Water Control Manual when Lake Travis rises into its flood pool between 681 and 714 feet msl. Releases are made using any combination of three hydroelectric generating units and 24 floodgates to help protect life and property downstream of Mansfield Dam, and are based on the current level of Lake

Travis, expected inflows, and downstream conditions at Austin, Bastrop and Columbus. This is designed to release floodwaters in a controlled manner that would not make downstream flooding significantly worse.

Should Lake Travis rise above 714 feet msl, water would begin to flow over the Mansfield Dam spillway. At that point, LCRA would make releases based solely on conditions at Lake Travis and would not be limited by downstream conditions.

This has never happened in the history of Mansfield Dam.

Flood Resources

LCRA Website
lcra.org/flood

LCRA's Hydromet
hydromet.lcra.org

LCRA Flood Operations Notification Service (FONS)
lcra.org/fons

Facebook
[@LCRA](https://www.facebook.com/LCRA)

Instagram
[@lowercoloradoriverauthority](https://www.instagram.com/lowercoloradoriverauthority)

X (formerly Twitter)
[@LCRA](https://twitter.com/LCRA)

Local Emergency Officials

NOAA Weather Radio

Area Media

Key Lake Travis Elevations & Maximum Floodwater Discharge Rates Allowed from Mansfield Dam

754 feet msl Top of Mansfield Dam	Discharge Rate: As necessary to maintain the safety of the dam. Downstream Flow Limits: Not limited by downstream conditions.
722 - 754 feet msl 8 ft. above spillway - top of dam	Discharge Rate: As necessary to maintain the safety of the dam. Downstream Flow Limits: Not limited by downstream conditions.
714 - 722 feet msl Top of spillway - 8 ft. above spillway	Discharge Rate: Up to 90,000 cfs. Downstream Flow Limits: Not limited by downstream conditions.
710 - 714 feet msl 4 ft. below spillway - top of spillway	Discharge Rate: Up to 50,000 cfs. Downstream Flow Limits: 50,000 cfs at Austin, Bastrop and Columbus.
683 - 710 feet msl 2 ft. into flood pool - 4 ft. below spillway	Discharge Rate: Up to 30,000 cfs. Downstream Flow Limits: 30,000 cfs at Austin, 45,000 cfs at Bastrop and 50,000 cfs at Columbus.
681 - 683 feet msl Full - 2 ft. into flood pool	Discharge Rate: Up to 7,500 cfs. Downstream Flow Limits: 30,000 cfs at Austin, 45,000 cfs at Bastrop and 50,000 cfs at Columbus.

One cubic foot per second equals 448.8 gallons per minute.