

Flood Hazard Update for Areas Between Buchanan Dam and Inks Dam

Frequently Asked Questions

BACKGROUND: Buchanan Dam is an approximately 2-mile-long dam that creates Lake Buchanan. The dam has 37 floodgates arranged in three sections (the seven-gate, 14-gate and 16-gate sections), and an overflow spillway. Water released through the floodgates or the overflow spillway does not flow directly into Inks Lake, but rather flows over land from Buchanan Dam to Inks Lake.

The Federal Emergency Management Agency publishes Flood Insurance Rate Maps (FIRMs) of flood hazard areas. Communities use the FIRMs to determine flood insurance needs and to regulate development in flood hazard areas. The current FIRMs for residential areas below the 14-gate and 16-gate sections and overflow spillway of Buchanan Dam are not based on detailed analysis and show only approximate boundaries of the flood hazard areas.



NEW INFORMATION: With the approvals of Burnet and Llano counties, LCRA commissioned a floodplain study using updated digital terrain data and flood modeling methods. The model results were consistent with observations during floods in 2016 and 2018. The study more accurately defined the boundaries of the flood hazard areas and calculated how high flood waters could rise when floodgates at Buchanan Dam are open or when water is flowing over the spillway. The study also identified a floodway along the length of Inks Lake, between Buchanan Dam and Inks Dam, for the first time. (See question 5 for more information on the floodway.)

The results of the study better identify existing flood hazards and will result in changes to the floodplain boundaries in areas between Buchanan Dam and Inks Lake, moving some areas into the floodplain for the first time and some areas out. FEMA will use the information to correct the boundaries of the existing floodplain on its FIRMs. The updated maps will provide FEMA, property owners and county officials with the best available information about flood hazards in areas between Buchanan Dam and Inks Dam.

1. What specific information came from the LCRA study?

The new floodplain study supplements existing FEMA-approved studies and maps. LCRA submitted the information to FEMA, which will use it to update flood maps in two areas:

- The north side of Inks Lake in Burnet County, where water flows from the 14-gate and 16-gate sections and the spillway of Buchanan Dam to Inks Lake. The new information better identifies where water will flow and for the first time identifies how high the water will rise during 50-, 100- and 500-year floods. This will result in changes to the floodplain boundaries.
- Along the length of Inks Lake in Burnet and Llano counties, from Buchanan Dam to Inks Dam. The new study identifies a floodway in this area for the first time. (See question 5 for more information on the floodway.)

Maps of the proposed changes are available at www.lcra.org/floodhazardupdate.

2. Does the new study affect any areas other than those between Buchanan Dam and Inks Dam?

No.

3. Why do people who own property below the Buchanan Dam floodgates and spillway need the new information?

The existing FIRMs for residential areas below Buchanan Dam are not based on detailed analysis and have only approximate information about significant flood hazards for people living in these areas. The new study provides property owners in residential areas below Buchanan Dam with more accurate information about their flood risks so they can better prepare for flooding.

4. Is the new study going to result in changes to existing floodplain boundaries?

Yes. Upon final approval, FEMA will use the new information to update the floodplain boundaries, moving some areas into the floodplain and some areas out of the floodplain, to more accurately reflect existing conditions.

5. What is a floodway?

Floodwater passes through the floodplain as it moves downstream. Obstructions in the floodplain take up volume within the channel that the floodwaters otherwise could occupy.

A floodway is the central part of the 100-year floodplain, where flows are stronger and faster. The floodway should be kept free of new obstructions to allow the 100-year flood to pass. Local floodplain administrators use the floodway designation to regulate development of property and limit future increases in floodplain levels. Read more about how FEMA defines a regulatory floodway at [fema.gov/glossary/floodway](https://www.fema.gov/glossary/floodway).

On Inks Lake, the floodway includes the central channel of the lake and some portions of adjacent land that are within the 100-year floodplain.

6. What effect will the updated flood hazard information have on my property?

Contact your local floodplain administrator for information about specific property:

- Burnet County Development Services at inspect@burnetcountytexas.org or 512-715-5260.
- Llano County Permitting at floodadmin@co.llano.tx.us or 325-247-2039.

7. What is a Letter of Map Revision, or LOMR?

LCRA submitted the new data to FEMA in the form of a Letter of Map Revision, or LOMR. A LOMR is an application to revise a Flood Insurance Rate Map that identifies a community's flood risk areas. Revisions may include changes to flood insurance risk zones, floodplain or floodway boundaries, features shown on the map (such as roads or buildings), or 100-year flood elevations.

8. What process did LCRA follow to develop the LOMR?

With approvals from Burnet and Llano county officials, LCRA studied flood hazards in the area from Buchanan Dam to Inks Dam. LCRA submitted a draft LOMR to the counties for review and approval. After Burnet and Llano counties each accepted the draft, LCRA submitted the LOMR to FEMA in September 2017. FEMA completed its technical review of the LOMR in July 2018, with final approval pending administrative updates to Llano County's floodplain ordinance, notification of affected property owners and completion of an appeals period. Llano County updated its ordinance in September 2019.

9. What are the next steps in the LOMR process?

After notification letters are sent to affected property owners in September 2020, FEMA will publish public notices of the LOMR twice – about one week apart – to provide the public a chance to review the maps. Affected property owners and the public will have 90 days from publication of the second notice to appeal the technical basis of the proposed map revisions.

The LOMR will revise Flood Insurance Rate Map panels 48299C0250C, 48299C0375C, 48053C0475F, 48053C0300F and 48053C0450F along Inks Lake downstream of Buchanan Dam. The current Flood Insurance Rate Map panels may be viewed and downloaded from the FEMA Flood Map Service Center at <https://msc.fema.gov/portal/advanceSearch> by entering the panel number in the Product ID field and clicking the Search button.

The revised maps will become effective 30 days after the appeal period ends and all technical appeals are resolved.

10. How can I get copies of technical information for the LOMR?

For copies of technical information for the LOMR, contact LCRA at Buchanan-Inks-LOMR@lcra.org.

11. Does the new floodplain study change FEMA's estimate of flood heights along the Highland Lakes during a 50-year, 100-year or 500-year flood?

No. The new study does not change FEMA's estimate of flood heights along the Highland Lakes during any flood, but it provides a more accurate look at where the water will flow and how high it will rise between Buchanan Dam and Inks Lake than was known in the past. FEMA estimates a 100-year flood at Buchanan Dam would cause Lake Buchanan to rise slightly above the spillway to 1,020.74 feet above mean sea level, and a 100-year flood at Inks Dam would cause Inks Lake to rise above the spillway to 901.39 feet above mean sea level.

12. How much floodwater could be released from Buchanan Dam?

Buchanan Dam can discharge about 348,000 cfs, with all 37 floodgates open, when Lake Buchanan is full at 1,020 feet msl. The maximum discharge from Buchanan Dam was about 192,000 cfs, with 22 floodgates open at once, during the historic flood of July 1938. During this flood, Lake Buchanan rose slightly above the spillway to a maximum of 1,020.48 feet msl.

13. Will the floodplain maps affect LCRA rules related to the Highland Lakes Watershed Ordinance, On-Site Sewage Facilities or docks and marinas?

No changes to LCRA rules are expected.

14. Where can I get more information?

Contact LCRA at Buchanan-Inks-LOMR@lcra.org for technical questions about the study, and visit www.lcra.org/floodhazardupdate for floodplain maps and more.

Contact Burnet or Llano county floodplain administrators for questions regarding floodplain management regulations and impacts on properties in those jurisdictions:

- Burnet County Development Services at inspect@burnetcountytexas.org or 512-715-5260.
- Llano County Permitting at floodadmin@co.llano.tx.us or 325-247-2039.