



MEMORANDUM

TO: Mayor and Council

FROM: José M. Guerrero, P.E., Interim Director
Watershed Protection Department

DATE: June 26, 2019

SUBJECT: Atlas 14 Code and Drainage Criteria Changes

The purpose of this memo is to provide a summary of actions to date and the path forward for proposed Land Development Code (LDC) and Drainage Criteria Manual (DCM) changes in response to the Atlas 14 rainfall intensity study. This summary is being provided to you in advance of the next phase of stakeholder and board and commission engagement on proposed ordinance changes and the initiation of stakeholder engagement and the rulemaking process for DCM revisions.

Atlas 14 Summary

The floodplain regulations in the LDC give the City authority to regulate development and redevelopment activity in the 25-year and 100-year floodplains, which are determined through engineering studies of individual watersheds. A key element in defining these floodplains is the rainfall intensity for the 25-year and 100-year storms, which are derived from a statistical analysis of historic rainfall records. A publication by the National Oceanic and Atmospheric Administration called Atlas 14, which was finalized in the fall of 2018, provides an update of this analysis with additional rainfall records through 2017. In the Austin area, the results show increases in the 25-year and 100-year rainfall intensities of up to 30 percent. With this new information, the Watershed Protection Department (WPD) is undertaking a program to re-study and re-map the City's regulatory floodplains using the new Atlas 14 information. It is anticipated that these studies will require two to three years to complete and that the new maps will then be submitted to the Federal Emergency Management Agency for approval as new flood insurance maps.

Land Development Code Changes

WPD floodplain managers recommend an interim change in LDC definitions for the 25-year and 100-year floodplains. Fortunately, existing pre-Atlas 14 floodplain maps are a good interim proxy for what will eventually become new maps based on Atlas 14 data. The proposal would define the updated 25-year floodplain as the pre-Atlas 14 100-year floodplain and would define the updated 100-year floodplain as the pre-Atlas 14 500-year floodplain. With our new understanding of flood risk, the goal of the LDC changes is to prevent development in areas now considered at risk and in areas with a greater flood risk than previously thought. Once floodplain

maps have been updated to incorporate Atlas 14 data, those maps will replace the interim maps for the 25-year and 100-year floodplains.

In addition to the interim redefinition of regulatory floodplains, WPD is proposing three other revisions to the City's floodplain regulations. They are:

- A new residential redevelopment exception to incentivize private investment to reduce the flood risk of existing residential buildings;
- Extension of the existing Colorado River exception to Lake Austin and portions of Lake Travis within the City's jurisdiction; and
- Increasing the required freeboard (distance above the floodplain) for buildings to two feet above the 100-year floodplain.

Over the past year we have conducted a robust public and stakeholder outreach and engagement process that has included postcards mailed to approximately 24,000 residences in the pre-Atlas 14 100-year and 500-year floodplains and nearly 80 stakeholder meetings with approximately 2,100 attendees that included the general public, environmental community, and various stakeholder groups such as the Austin Neighborhoods Council, Real Estate Council of Austin, Home Builders Association, and other engineering and architectural professional groups. WPD staff have also briefed the Environmental Commission, Zoning and Platting Commission, and the Codes and Ordinances Joint Committee.

Drainage Criteria Manual Changes

Along with the proposed ordinance changes, the City's DCM must be revised to reflect the new Atlas 14 rainfall values that are used in engineering calculations for various types of drainage infrastructure (e.g., detention and water quality ponds, engineered drainage channels, and storm drain pipes). When we started the code revision process for floodplain regulations we initially thought that there would be a lag of six to 12 months between action on code changes and adoption of DCM revisions. With the shift in the schedule for action on code changes, the DCM revision process will now occur concurrently with an anticipated lag of only two to three months between adoption of code revisions by Council and the effective date of DCM changes. This convergence of timelines will enable a more comprehensive dialogue with stakeholders with respect to our overall approach to adapting City policy to Atlas 14.

Timeline

Note that we originally proposed Council action on the proposed code changes this spring but delayed action to allow additional time for stakeholder input on the first draft of the proposed code changes. Key milestones and the approximate timeline for next steps in the ordinance and rulemaking processes are:

- June 2019 - Release of the second draft ordinance for floodplain regulation amendments and release of the initial draft of DCM revisions; internal inter-departmental stakeholder engagement on both the proposed ordinance and DCM revisions.
- July 2019 - External stakeholder engagement on proposed code and criteria changes.
- August 2019 - Board and commission public hearings on and consideration of the proposed ordinance.
- September 2019 - Initiation of the rulemaking process for proposed DCM revisions.

- October 2019 - Council consideration of the proposed ordinance.
- December 2019 - Adoption of DCM revisions.

If you have any questions about the processes or timelines for code and criteria revisions, please do not hesitate to contact me, Kevin Shunk (COA Floodplain Administrator) at 974-9176 or kevin.shunk@austintexas.gov, or Mike Personett (WPD Assistant Director) at 974-2652 or mike.personett@austintexas.gov.

cc: Spencer Cronk, City Manager
Assistant City Managers
Department Directors