

Atlas 14

UNDERSTANDING AUSTIN'S FLOOD RISK

Zoning and Platting Commission

August 7, 2018

Overview

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- ▶ Rainfall Data Changes
- ▶ Regulation Revision Options
- ▶ Recommended Code Amendments
- ▶ Impacts to Residents
- ▶ Next Steps

NOAA Atlas 14 - Background

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- ▶ Nationwide study of rainfall intensities
- ▶ Partners:
 - ▶ **Federal:** National Weather Service, U. S. Army Corps of Engineers, Federal Highway Administration
 - ▶ **State/Local:** TxDOT, Harris County Flood Control District, City of Austin, et al.



Rainfall Depth Changes (Preliminary)

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Recurrence Interval	Current Rainfall Depth in inches	Atlas 14 Rainfall in inches
25-year	7.6	Almost 10
100-year	10.2	Up to 13+
500-year	13.5	Not yet available

City-wide Atlas 14 Impacts

- Approximate **number of buildings in floodplain** (excluding Colorado River floodplain)

Area	Current 100-Year	Current 500-Year	Difference	% Increase
City Limits	3,702	6,533	2,831	76%

- Approximate **percent of area in the floodplain** (excluding Colorado River floodplain)

Area	Current 100-Year	Current 500-Year	% Larger
City Limits	7%	9%	26%

Regulation Revision Options

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- ▶ Do Nothing
- ▶ Wait to change regs until floodplain studies are final
- ▶ Update regs now using currently available data

Regulation Revision Options

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▶ Do Nothing

- ▶ Disregard Atlas 14 and maintain current regs
- ▶ Doesn't protect residents from flood hazards based on new understanding of flood risks

Regulation Revision Options

- ▶ Wait to change regs until floodplain studies are updated
 - ▶ Updating floodplain studies will take a minimum of two years
 - ▶ Life/safety implications are too significant to delay
 - ▶ WPD will initiate floodplain study updates immediately

Act Now to Revise Regulations

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- ▶ Update regs using currently available data
 - ▶ Provides immediate protection and vital information to residents
 - ▶ Uses readily available, valid data

Recommended Code Amendments

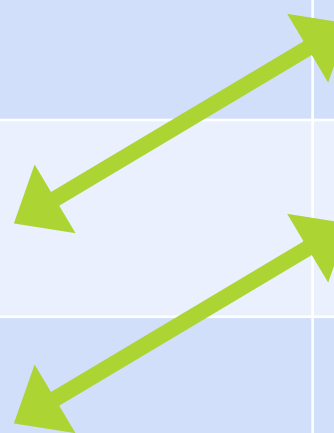
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- ▶ Revise floodplain definitions
- ▶ Redevelopment exception
- ▶ Colorado River exception
- ▶ Change minimum freeboard to 2 feet

Proposed Code Amendment

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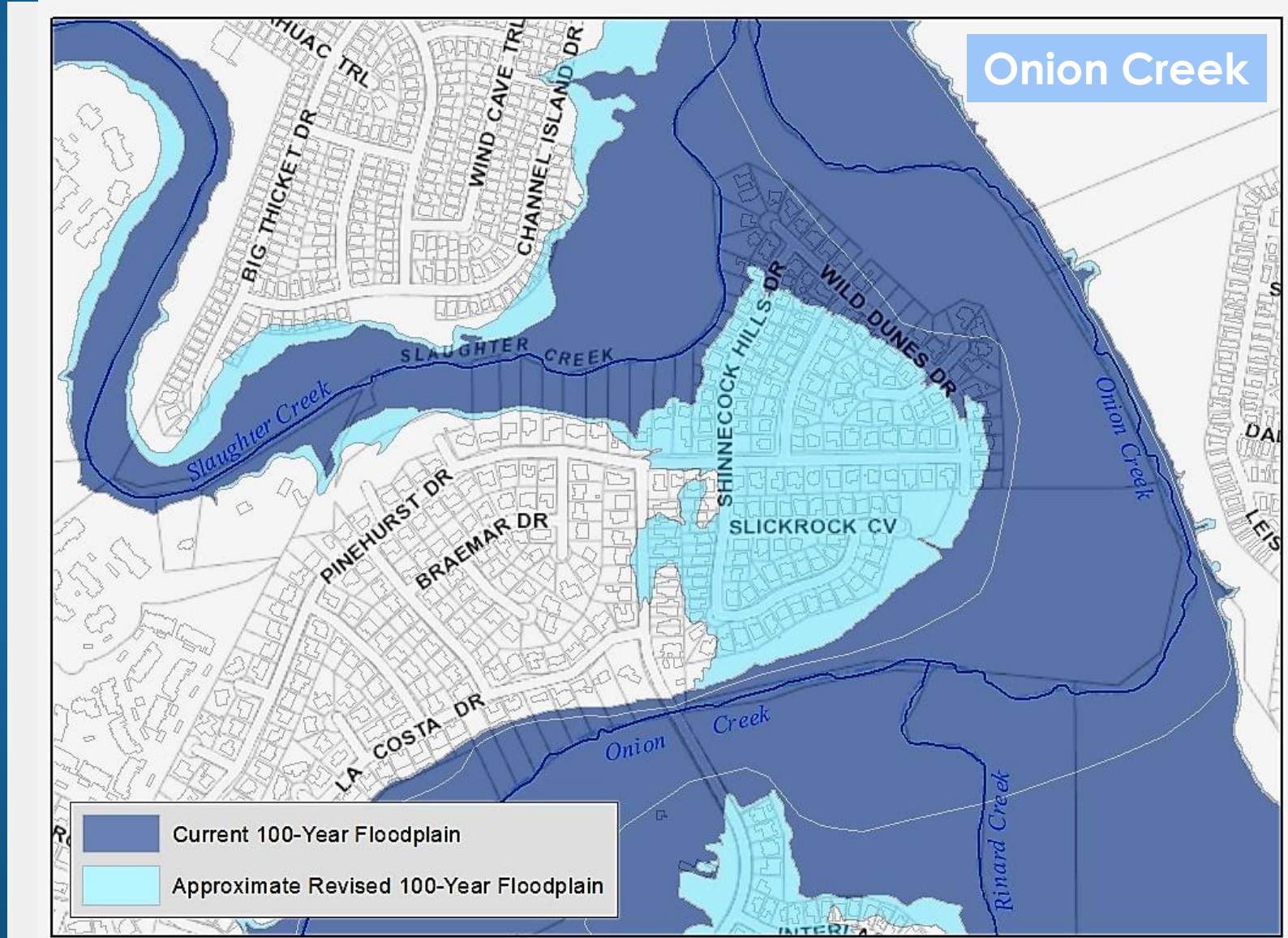
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Revise floodplain definitions

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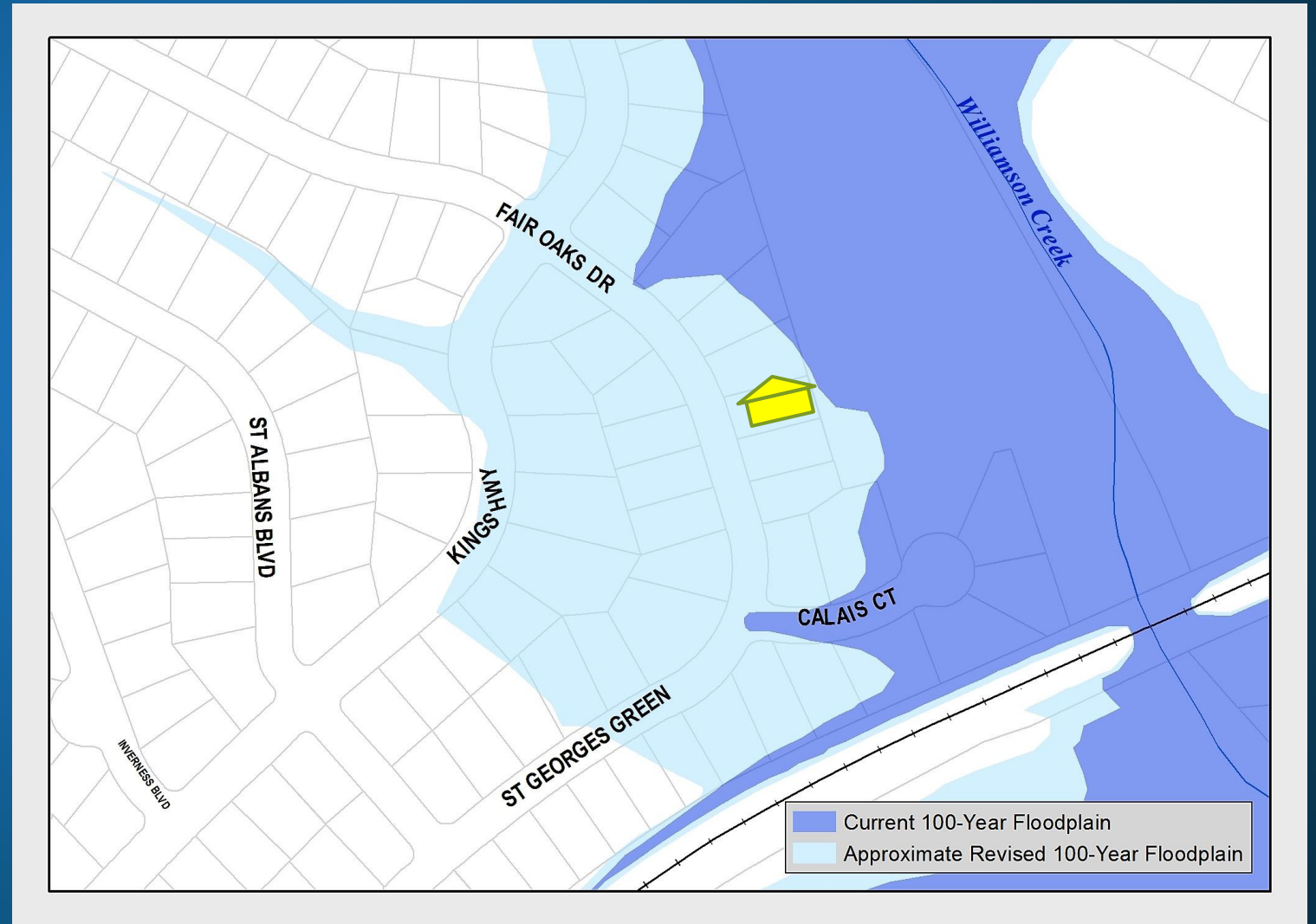
- ▶ **100-year =**
Atlas 14 100-year
or FEMA 500-year
- ▶ **25-year =**
Atlas 14 25-year or
fully developed
100-year



Revise floodplain definitions

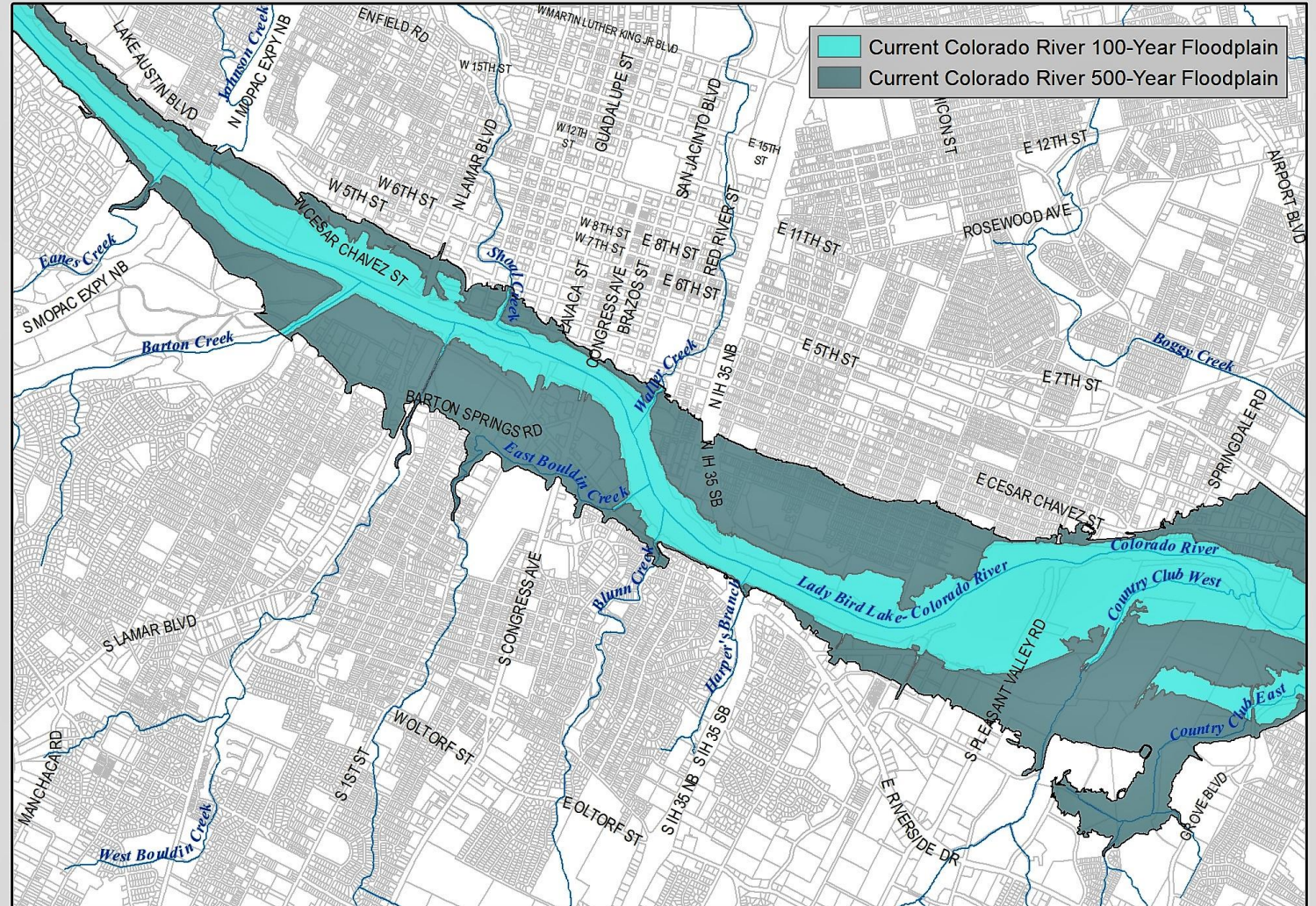
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- ▶ Encroachment
 - ▶ Must satisfy floodplain rules
- ▶ Safe access
 - ▶ Access path min. 1-ft above
- ▶ Freeboard
 - ▶ Min. 2-ft above



Colorado River Floodplain

► **Maintain** current
100-year
floodplain along
Colorado River



Revise floodplain definitions – Why?

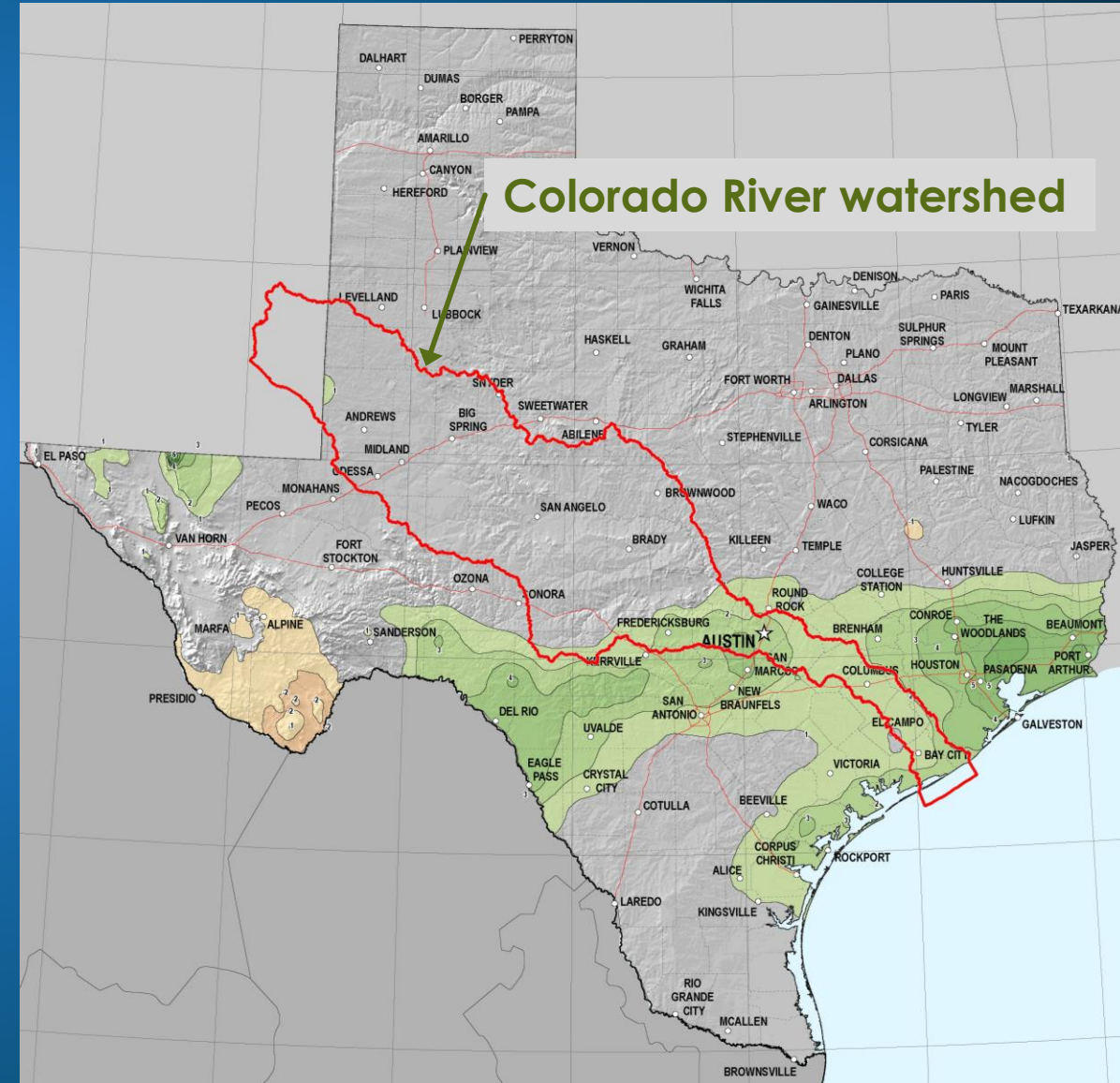
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- ▶ Inform public of current understanding of flood risk
- ▶ Current, valid 500-year is approximate new 100-year

Revise floodplain definitions – Why?

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- Atlas 14 changes not expected to significantly affect Colorado River watershed upstream of Austin



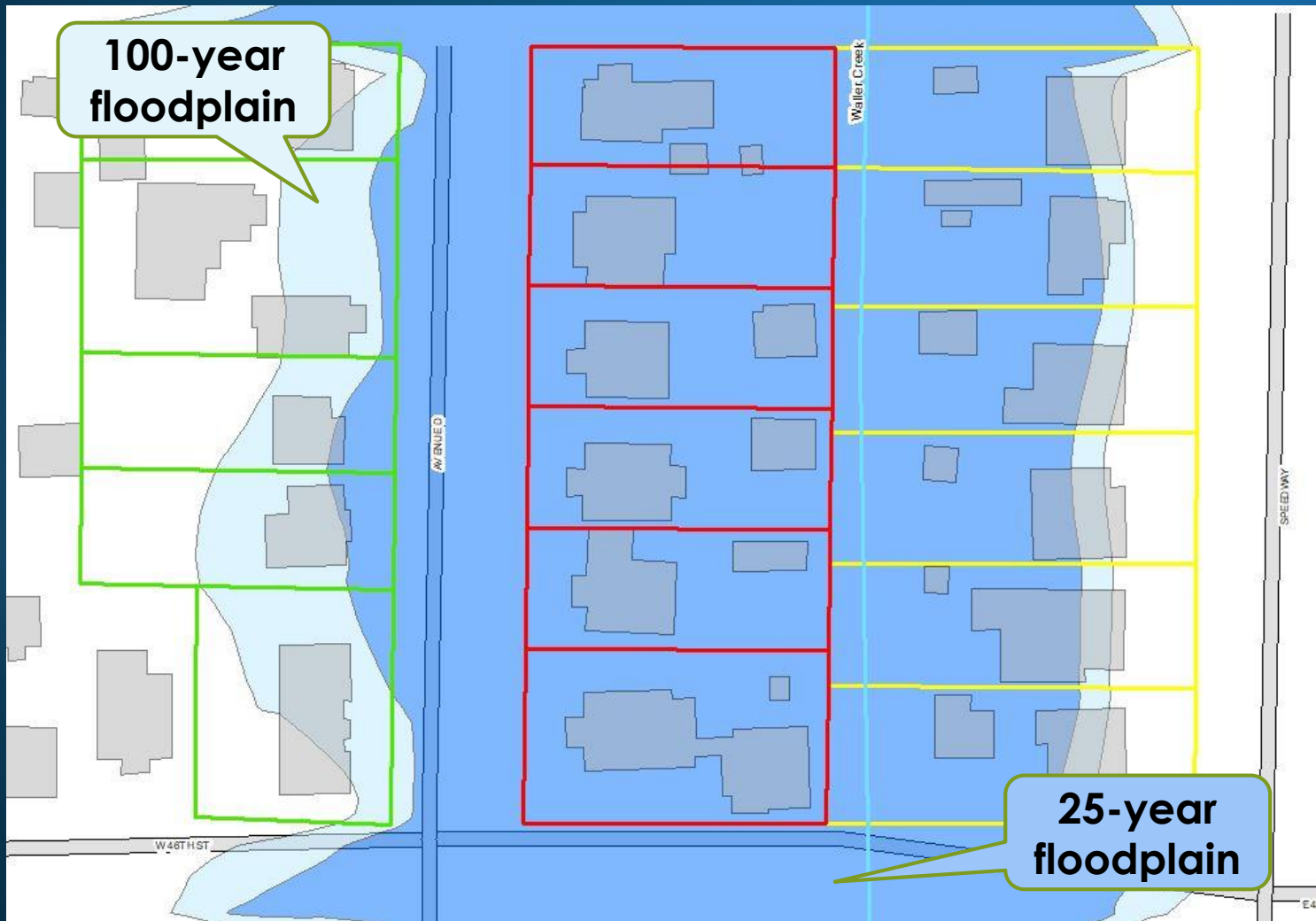
Redevelopment exception

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- ▶ A residential building in the 25- or 100-year floodplain can be redeveloped as long as:
 - ▶ Above 100-year floodplain by 2 feet
 - ▶ Does not increase number of dwelling units
 - ▶ A maximum gross floor area that is the larger of existing or 2,200 square feet
 - ▶ Still requires no adverse flooding impact – waives safe access

Redevelopment exception

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Under current rules:

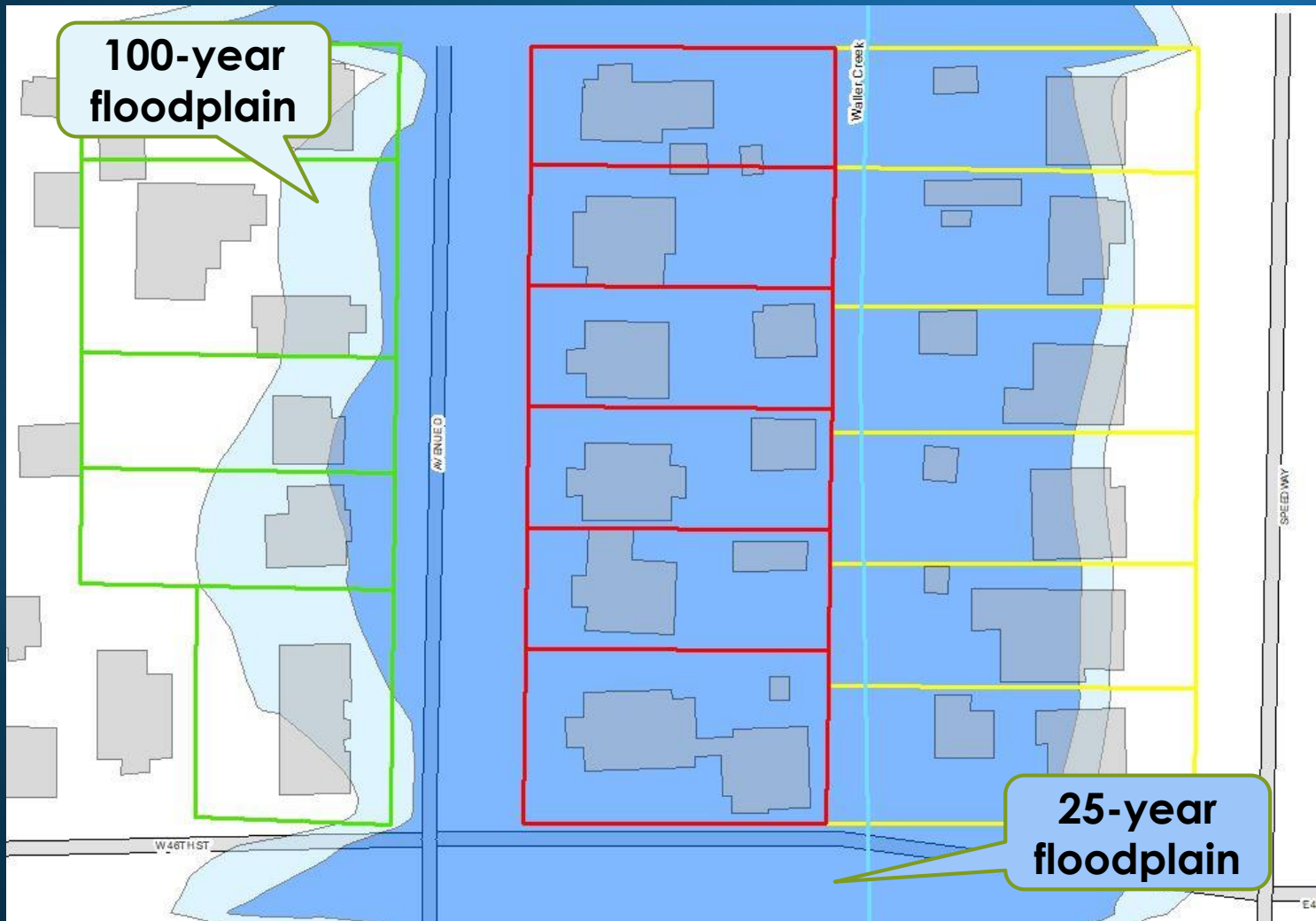
Properties in **green** likely to redevelop under the pre-1983 exception

Properties in **yellow** likely to redevelop with an administrative variance

Properties in **red** require a Council variance to redevelop

Redevelopment exception

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Under new rules:

All properties have same opportunity to redevelop with a size limitation and elevated finished floor under an exception

Flood risk will be reduced in all cases

Redevelopment exception

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- ▶ How does this apply to additions?
 - ▶ If the home meets freeboard and the proposed total gross floor area doesn't exceed the size limitation, then it may be approved under this exception

Redevelopment exception

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- ▶ How does this apply to renovations?
 - ▶ If the renovation is not a substantial improvement, then it may be approved under the existing code
 - ▶ If the renovation is a substantial improvement and the home meets freeboard, then it may be approved under this exception

Redevelopment exception – Why?

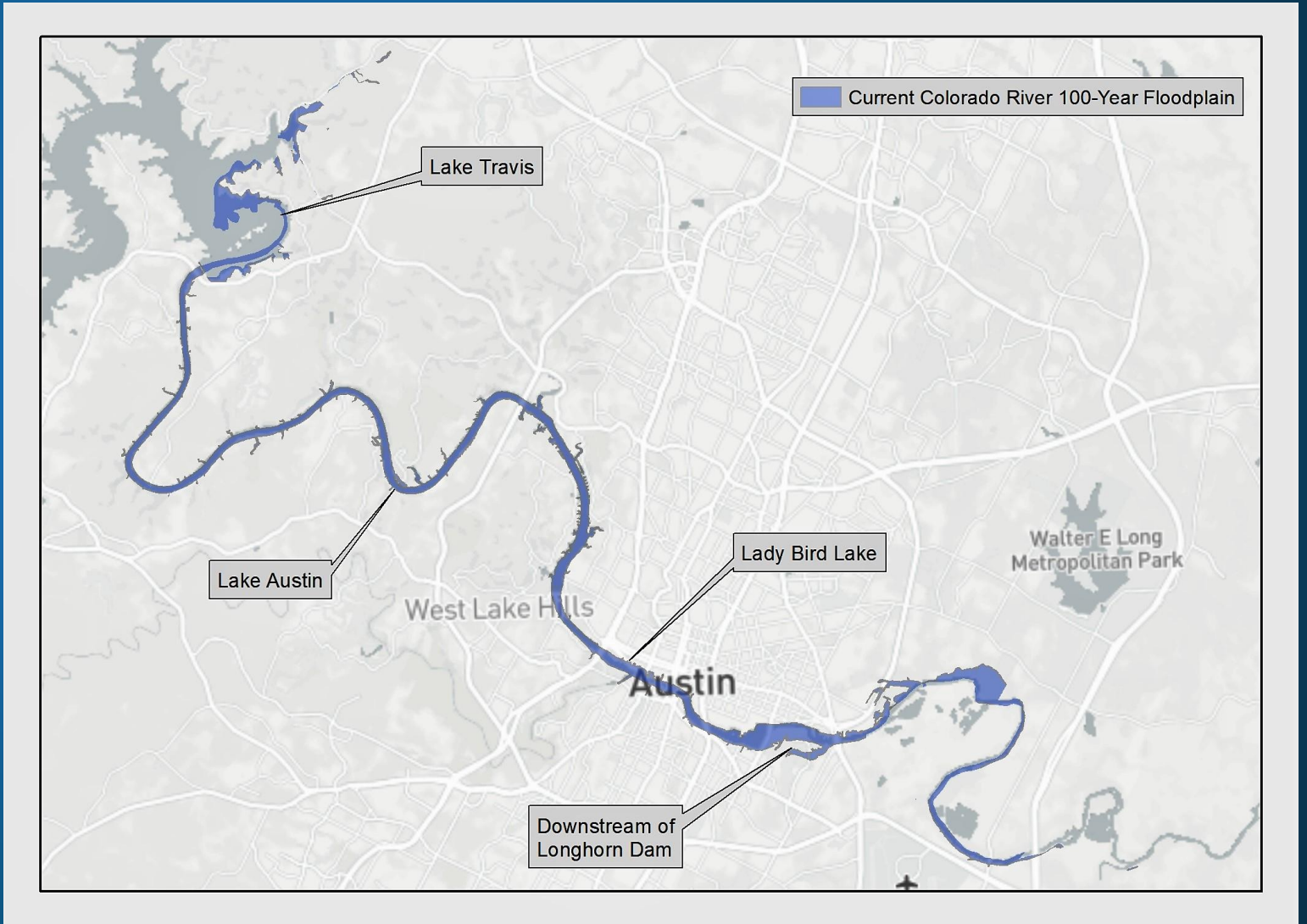
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- ▶ Incentivizes redevelopment while reducing flood risk
- ▶ Over time reduces the number of buildings at risk of flooding
- ▶ Simplify code
- ▶ 2,200 sq. ft. is median single-family new home size in Austin from the last 20 years

Colorado River exception

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- ▶ **Expand** 100-year encroachment exception to include Lake Austin and Lake Travis
- ▶ **Maintain** prohibiting encroachment on 25-year floodplain



Colorado River exception – Why?

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- ▶ Colorado River flooding is not expected to happen in a “flash”
- ▶ Simplify code
- ▶ Still requires no adverse impact and freeboard – waives safe access



Minimum freeboard to 2 feet

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- ▶ Minimum height between building's lowest floor and 100-year floodplain
- ▶ More than 140 Texas communities have freeboard of 2 feet or higher



Minimum freeboard to 2 feet – Why?

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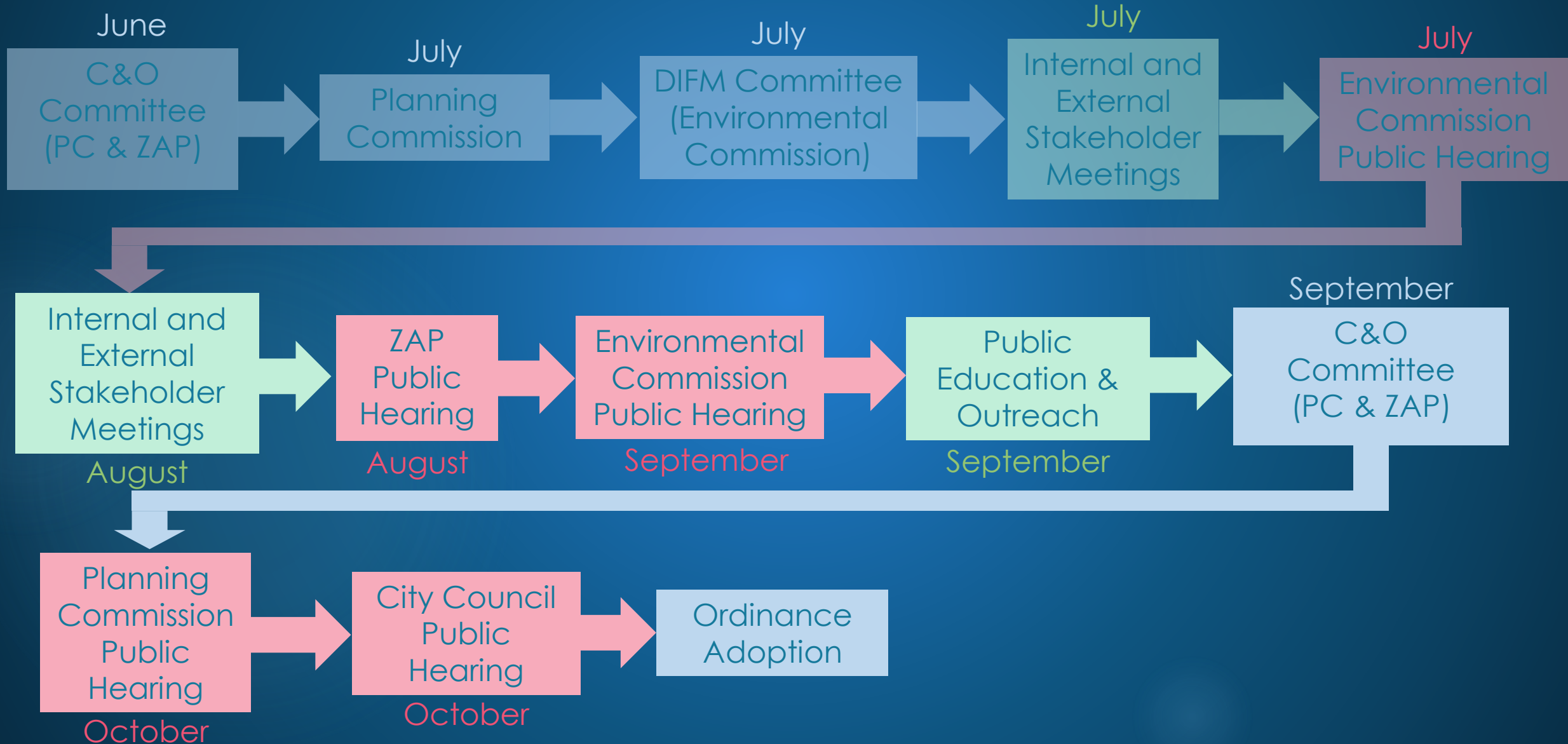
- ▶ Freeboard is the single-most effective means for reducing flood risk to a building in the floodplain
- ▶ Simplify code – current freeboard requirement for administrative floodplain variances and Central Business Area exception is 2 feet, elsewhere it's 1 foot
- ▶ Reduced flood insurance costs

Atlas 14 Impact to homeowners

- ▶ New understanding of flood risk
- ▶ Property values
- ▶ Affordability Impact Statement
- ▶ Flood insurance changes at least 3 years away
 - ▶ Rates may go up
 - ▶ Insurance requirements may change
 - ▶ Talk to an insurance agent now
- ▶ See impacts at **ATXfloodpro.com**

Code Amendment Process and Timeline

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Next Steps

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- ▶ Public Hearings & Stakeholder Meetings
 - ▶ Check [AustinTexas.gov/atlas14](https://austintexas.gov/atlas14) for details
- ▶ Public Education & Outreach
 - ▶ Post cards to properties in 100/500-year floodplains
 - ▶ Geographically based public meetings
- ▶ WPD staff to determine application of rainfall values for Austin area (Oct-Dec 2018)
- ▶ Rules change process – DCM (Q2 or Q3 of FY 2019)
- ▶ Re-mapping of Austin floodplains (2019 – 2021)

Follow our progress at:
AustinTexas.gov/atlas14

Contact us at:
Atlas14@AustinTexas.gov
Floodplain Hotline 512-974-2843

View floodplains at:
ATXfloodpro.com