



# HOUSTON PUBLIC WORKS CHAPTER 19 FLOODPLAIN ORDINANCE SUMMARY

## SUMMARY

The City of Houston is considering [revisions to Chapter 19](#) to ensure new dwellings are built high enough to save lives and property in the event of flooding. Chapter 19 regulates flood protection in specific areas.

## APPROACH

The City of Houston will reduce the risk of flood loss for future development and redevelopment by ordinance revisions, new regulations, building codes and design guidelines. Existing development will be improved through capital improvement projects, buyouts, home elevations and demo-rebuilds.

## RECOMMENDATIONS

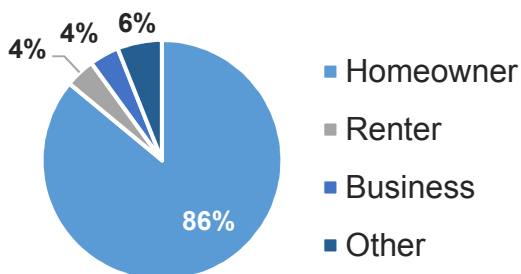
Houston's current code only applies to property in the 100-year floodplain and protects one foot above 100-year flood elevation. The proposed revisions would include property in the 500-year floodplain and protect two feet above 500-year flood elevation. It would also include no net fill in the 500-year floodplain.

## MORE INFORMATION + PUBLIC INPUT

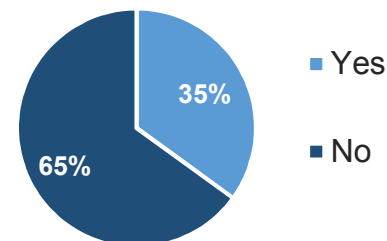
More information is available at [www.houstonrecovers.org/houston19](http://www.houstonrecovers.org/houston19)

Public input on [proposed changes to Chapter 19](#) closed Monday, March 5, 2018.

**2,800+** responses received via survey.



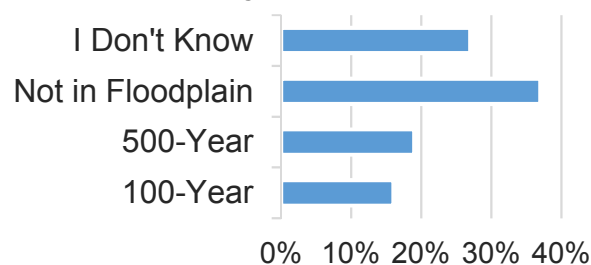
Property Flooded in Harvey



Top Five Zip Codes to Respond

77079	409
77345	317
77339	256
77096	113
77025	95

Property in Floodplain



## TIMELINE

**Monday, March 5, 2018, 5 p.m.** – Public input closed

**Thursday, March 15, 2018** – Draft ordinance posted

**Wednesday, March 21, 2018** – Draft ordinance presented to Council for vote



## HOUSTON PUBLIC WORKS CHAPTER 19 FLOODPLAIN ORDINANCE SUMMARY

### FREQUENTLY ASKED QUESTIONS

#### **What is the floodplain and how do I know if I am in one?**

The 100-year floodplain is land that is predicted to flood during a 100-year storm (13-14 inches of rain in 24 hours) and has a 1% chance of occurring in any given year. The 500-year floodplain has a 0.2% chance of occurring (17-19 inches of rain in 24 hours). 31% of Houston is in the 100-year floodplain. To see if you are in the floodplain visit: <http://www.harriscountyfemt.org/>

#### **Would changes to Chapter 19 impact my existing property?**

Changes would NOT impact existing property in the 500-year floodplain unless an addition exceeding 1/3 the total footprint of the structure is added. Changes would NOT impact existing property in the 100-year floodplain unless the property is substantially improved, an addition of any size is added, or the property is substantially damaged in a future flood event.

#### **Does Chapter 19 impact anyone outside the 100-year or 500-year floodplain?**

This Ordinance does not apply outside the 100-year or 500-year floodplain. However, land outside the floodplain can still be at risk of flooding and land inside the floodplains may flood more often. The City of Houston is actively looking at ways to reduce the risk of flood loss and protect dwellings outside the 500-year floodplain that is not included in Chapter 19.

#### **Does the City plan to redraw existing floodplains based on current flood data?**

Harris County Flood Control District in partnership with FEMA is the lead on redrawing floodplain maps in Harris County.

#### **What else is being done to prevent flooding?**

The City of Houston is working with the county, state and federal government on funding and approvals for bayou expansions, a third reservoir in Houston and more floodwater retention/storage strategies.

#### **Why two feet?**

Current regulations are not protective enough. 31% of homes built in the 100-year floodplain under the current rules flooded in Harvey. In addition, the City's study shows 84% of structures in the 100 and 500-year floodplains would not have flooded if the proposed changes were in place prior to Harvey.

#### **How many buildings are currently in the 100-year and 500-year floodplain?**

	100-Year Floodplain	500-Year Floodplain
<b>Parcels with Buildings</b>	87,273	77,611
<b>Parcels with no Buildings</b>	13,973	8,128
<b>Total Parcels of Land</b>	101,246	85,739



## **HOUSTON PUBLIC WORKS CHAPTER 19 FLOODPLAIN ORDINANCE SUMMARY**

### **Why did the City of Houston let so many structures be built in the flood plains?**

The 100-year floodplain was identified, mapped and classified in 1981, after 79% of the structures were built.

### **Will this impact the overall cost of new homes in the future?**

Elevation to new construction is estimated to cost slightly more than traditional slab on grade. Building higher means construction would cost slightly more, but the potential cost for future damage from flooding would be much higher.

### **Will this impact the cost of flood insurance or value of existing homes?**

Proposed changes will not impact the cost of flood insurance for existing homes. According to the FEMA Flood Insurance Manual, elevating a home to the 500-year +2 feet as compared to the 100-year flood elevation +1 foot will save about 30% on flood insurance premiums.

### **What is net fill and why is zero net fill important?**

Net fill is the amount of solid building materials such as soil, dirt or concrete added to a property as compared to the amount of building materials removed. Zero net fill is important because it protects the area in the floodplain available to store flood water and maintains neighborhood drainage patterns. This will help prevent run-off from new property to existing property.

### **What will be done to enforce changes?**

New construction requires city permits, which will be given only to structures in compliance with city codes. The city has the legal power to stop construction that violates the codes.

### **What is the difference between impacted and flooded?**

**Impacted** = suffered damage from wind, rain or floodwaters during Hurricane Harvey.

**Flooded** = suffered damage from rainwater or floodwaters during Hurricane Harvey.