

# What You Need to Know About Flooding and Floodplain Management in the City of Pearland

## INTRODUCTION

The City of Pearland is dedicated to minimizing the loss of life and property that is associated with flooding events. Education and prevention are valuable and proven tools that help communities become resistant to these natural disasters. The City of Pearland recognizes that its entire community is susceptible to flooding, not just those structures located within Special Flood Hazard Areas (SFHAs). The following information has been provided to help inform property owners located within the SFHA, flood prone areas and all property owners within the City.

## FLOOD HAZARD

The purpose of this notification is to inform you of flood hazards associated with our local drainage-ways (Cownt Creek, Mary's Creek, Hickory Slough, Clear Creek, and local drainage ditches) and suggest possible actions you can take to protect yourself and your property. The City of Pearland has occasionally experienced flooding from these sources in the past. In addition to normal rainfall, we are often inundated by rain from Tropical Depressions, Storms, and Hurricanes producing total amount of rainfall exceeding normal design rainfall adopted for the design of drainage system. Some of the events where portions of the City have experienced flooding in the past include Tropical Storm Claudette in 1979, heavy thunderstorm activity in 1994 and 1998, Tropical Storm Allison in 2001, and Hurricane Harvey in 2017 along with other heavy rainfalls in 2006, 2008, 2009, and 2015.

It is important that you know and understand the source of flooding to be prepared and take necessary precaution prior to flooding. FEMA has mapped all of the City's primary drainage systems such as Clear Creek, Hickory Slough, Mary's Creek, and Cownt Creek. Each of these creeks has its own Flood Hazard Area which is depicted in the FEMA Flood Insurance Rate Map (FIRM). These FEMA flood maps are made available at various locations in the City such as the Library at 3522 Liberty Dr., City Secretary Office at 3519 Liberty Dr., and Engineering, Projects, & Public Works department at 2016 Old Alvin Rd. In addition, the information can also be found on the Pearland website at [Floodplain Management | City of Pearland, TX \(pearlandtx.gov\)](http://Floodplain Management | City of Pearland, TX (pearlandtx.gov)). If you have any question or need help to understand flood map, please feel free to give a call at 281.652.1637 or stop by the Engineering Department.

## FLOOD SAFETY

There are many ways to keep your home and family safe from flooding. Some of these include:

- Know the flood warning procedures.
- Plan escape routes to higher ground and safe shelters.
- During heavy rainfall, monitor the level of water in any local drainage channels. Stay tuned to radio or TV for possible flood warnings.
- Evacuate the flood hazard area in times of impending flood or when advised to do so by the police or fire departments.
- Do not attempt to cross a flooding channel on foot or by car. Additional guidelines are available through the Turn Around, Don't Drown campaign, see [weather.gov](http://weather.gov).
- If your car stalls in high water, abandon it immediately and seek higher ground.
- Stay away from power lines and electrical wires.
- Keep children away from flood waters, ditches, culverts and storm drains.

## FLOOD INSURANCE

The purchase of federal flood insurance is highly recommended for all properties, whether in the floodplain or not. Basic homeowner's insurance policies don't cover damage from floods. The City of Pearland participates in the National Flood Insurance Program (NFIP) which means that federally subsidized flood insurance is available to everyone in the City. Property owners can insure their buildings and contents and renters can insure their possessions. Remember there is a 30-day waiting period before a policy becomes effective and that the policy must be renewed every year. For more details, call your insurance agent, or visit [floodsmart.gov](http://floodsmart.gov).

## PROPERTY PROTECTION

Rather than wait for a flood to occur, you can act now to protect your property from flood damage. Various alternatives are available to help minimize flooding, including retrofitting, elevation of structures, and flood protection barriers and systems. You can learn more about retrofitting and property protection measures, including emergency measures, by visiting the Brazoria County Public Library located at 3522 Liberty Dr., Pearland where FEMA documents are available on this subject. Some of the simplest measures for protecting your property from the kind of flooding that occurs in Pearland include the following:

- Ensure that landscape areas and other areas around your home are graded or sloped to drain away from the building. This can prevent water from pooling around your foundation.
- Keep drainage swales (shallow ditches) between your lot and your neighbor's clean and free of obstructions. These swales are typically the only way that water can get out of your backyard.
- Keep storm sewer inlets clean and free of debris. Do not blow leaves or grass down the street and into storm drain inlets. This clogs the system and causes backups to flood low areas.

## NATURAL AND BENEFICIAL FUNCTIONS

The term "floodplain" often carries a negative connotation because of past experiences with flooding; however, the natural characteristics of a floodplain provide beneficial functions as well. Floodplains serve to protect the value of our water resources, living resources, and cultural resources. They protect natural flood storage and conveyance, water quality maintenance, and groundwater recharge. In our creeks and bayous, they also provide for breeding, nursery, and feeding grounds for fish and wildlife, as well as a source of nutrients for nearby wetlands.

## FLOOD WARNING SYSTEM

The City has the following programs in operation in the event of a major flooding: Through the [Office of Emergency Management | City of Pearland, TX \(pearlandtx.gov\)](http://Office of Emergency Management | City of Pearland, TX (pearlandtx.gov)) website, citizens can read updates and sign up to receive e-mail and possibly text message alerts during emergency situations. Please remember, whether driving or walking, anytime you come to a flooded road, TURN AROUND, DON'T DROWN! Additionally, the city works directly with the various homeowner associations throughout emergency warning and recovery processes. The City provides news through its municipal television station – Comcast channel 16 and AT&T U-verse channel 99 - which also streams on the city website.

The Citizens are encouraged to use the Harris County Flood Warning System available on the City website to check the amount of rainfall and real time flood elevation for various drainage systems such as Clear Creek, Hickory Slough, Mary's Creek, and Cowards Creek.



Be safe when it comes to weather.  
For important, life-saving weather information, visit

[www.srh.weather.gov](http://www.srh.weather.gov)



[pearlandtx.gov](http://pearlandtx.gov)

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## FLOODPLAIN DEVELOPMENT PERMIT REQUIREMENTS

The City of Pearland has a Flood Damage Prevention Ordinance that requires a Development Permit for building, excavation, filling, paving, grading, or otherwise developing in the floodplain. A Development Permit submittal must contain a Grading Plan. The Grading Plan must show existing topographic information, all proposed development work, and be signed and sealed by a registered Professional Engineer.

Contact the Community Development Department or visit our website at [Community Development | City of Pearland, TX \(pearlandtx.gov\)](#), prior to any such development to obtain permits and information. Citizens should also report any illegal floodplain development to our floodplain management office at 281.652.1637. Please note that all of the buildings constructed in 100-year floodplain requires Elevation Certificate (EC) to be eligible for flood insurance. The City requires an EC for all new building within 100-year floodplain.

## SUBSTANTIAL DAMAGE/IMPROVEMENT REQUIREMENTS

What is substantial improvement? The National Flood Insurance Program (NFIP) requires that any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement, must conform or meet the same construction requirements as a new building and be constructed above the minimum Base Flood Elevation (BFE) listed on the City of Pearland Flood Insurance Rate Map (FIRM).

What is substantial damage? Substantial damage means damage of any origin sustained by a building or structure when the cost of restoring the building to its pre-damaged condition would equal or exceed 50% of the market value of the building before the damage occurred. Substantial damage is determined regardless of the actual repair work performed.

The City of Pearland requires by ordinance that any substantial improvement or substantial damage improvement must have a building permit. Permit information can be obtained at the Permit Department located at City Hall Annex, 3523 Liberty Dr. or by calling 281.652.1638.

## DRAINAGE SYSTEM MAINTENANCE

It is illegal in the City of Pearland to dump any type of debris into a storm sewer inlet, ditch, creek, bayou, or other drainage way. Maintenance and cleanout of the major creeks and ditches are performed by Brazoria Drainage District No. 4 whereas the maintenance of storm sewer system and roadside ditches within the road Right of Way is performed by the Public Works Streets and Drainage Department. Citizens that notice dumping or maintenance needs in drainage ways should contact one of these entities:

- Public Works Department – 281.652.1900
- Brazoria County Drainage District No. 4 – 281.485.1434
- Harris County Flood Control District – 713.684.4000

## FLOOD PROTECTION ASSISTANCE

Concerned citizens and the general public can obtain information on flood protection assistance from the City of Pearland (ask for the floodplain manager) by calling 281.652.1637.

## IMPORTANT USEFUL WEBSITES

- [City of Pearland, TX | Home \(pearlandtx.gov\)](#)
- [USGS.gov | Science for a changing world](#)
- [The Brazos River Authority > Home](#)
- [National Weather Service](#)
- [The Association of State Floodplain Managers, Inc. | ASFPM \(floods.org\)](#)
- [Texas Floodplain Management Association \(tfma.org\)](#)

If you want to know if a property is in the Special Flood Hazard Area, check our website at [City of Pearland GIS \(pearlandtx.gov\)](#).

Feel free to call the City of Pearland Engineering Department at 281.652.1637 for all of your floodplain questions.



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