

# What You Need to Know About Flooding and Floodplain Management in Missouri City

## INTRODUCTION

The City of Missouri City 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 Missouri City 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 also all property owners within the City of Missouri City.

## FLOOD HAZARD

The purpose of this notification is to inform you of flood hazards associated with our local drainage-ways (Oyster Creek, Stafford Run, Mustang Bayou, and local drainage ditches) as well as the Brazos River, and suggest possible actions you can take to protect yourself and your property. Missouri City 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 which can produce localized flooding due to storm sewer backups and poor surface drainage. Some of the events where portions of Missouri 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 recent heavy rainfalls in 2003 and 2006.

Missouri City has FEMA floodplain maps that designate flood zones within the city. The maps are available for viewing on our website at [www.missouricitytx.gov](http://www.missouricitytx.gov) or from 8 a.m. to 5 p.m. at the Department of Public Works within City Hall at 1522 Texas Parkway. If you would like a flood zone determination, you may call the floodplain manager in the Department of Public Works at 281-403-8500.

## 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 <http://www.srh.noaa.gov/tadd/index.htm>.
- 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 Missouri City 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. Call your insurance agent, or visit [www.floodsmart.gov](http://www.floodsmart.gov) for more details.

## 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 Missouri City Branch Public Library, 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 Missouri City 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.



Be safe when it comes to flooding.  
For important, life-saving safety rules, go to  
[www.srh.weather.gov](http://www.srh.weather.gov)

### 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 missouricityready.com website, citizens can read updates and sign up to receive e-mail and possibly text message alerts during emergency situations. Additionally, the city works directly with the various homeowners associations throughout emergency warning and recovery processes. The City provides news through its municipal television station – MCTV 16 which also streams on the city website. Within the region, KTRH and KPRC (AM 740 and AM 950) provide current weather information for the Houston area, including Missouri City.

### FLOODPLAIN DEVELOPMENT PERMIT REQUIREMENTS

Missouri City 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 Planning Department or visit our website at [www.missouricitytx.gov](http://www.missouricitytx.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 281-403-8500.

### 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 Missouri City's 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 Missouri City requires by ordinance that any substantial improvement or substantial damage improvement must have a building permit. Permit information can be obtained at the Planning Department located at City Hall or by calling (281) 403-8600.

### DRAINAGE SYSTEM MAINTENANCE

It is illegal in the City of Missouri City to dump any type of debris into a storm sewer inlet, ditch, creek, bayou, or other drainageway. Maintenance and cleanout of these systems is performed by several different entities including the City of Missouri City, Municipal Utility Districts (MUDs), the Fort Bend County Drainage District (FBCDD), and the Harris County Flood Control District (HCFCD). Citizens that notice dumping or maintenance needs in drainageways should contact one of these entities.

- City of Missouri City – 281-403-8500
- Fort Bend County Drainage District – 281-342-0141
- 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 Missouri City's Department of Public Works (ask for the floodplain manager) by calling (281) 403-8500. Flood protection assistance provided by the City of Missouri City is site-specific flood and flood related data, data on historical flooding in the neighborhood and similar information so inquirers can relate the flood threat to their problems. The City can help with the following issues:

- Provide a list of names of contractors and consultants knowledgeable or experienced in retrofitting techniques and construction.
- Make site visits to review flooding, drainage and sewer problems and provide one-on-one advice to property owners.

### IMPORTANT USEFUL WEBSITES

- [www.missouricitytx.gov](http://www.missouricitytx.gov); [www.missouricityready.com](http://www.missouricityready.com)
- [www.fema.gov](http://www.fema.gov)
- [www.usgs.gov](http://www.usgs.gov)
- <http://waterdata.usgs.gov/usa/nwis/uv?08114000>
- [http://www.brazos.org/USGSGaugingSystemOld.asp#Lower Basin](http://www.brazos.org/USGSGaugingSystemOld.asp#Lower_Basin)
- [www.nws.noaa.gov](http://www.nws.noaa.gov)
- [www.floods.org](http://www.floods.org)
- [www.tfma.org](http://www.tfma.org)