

Targeted Outreach

NCTCOG CRS Users Group Meeting
February 24, 2023

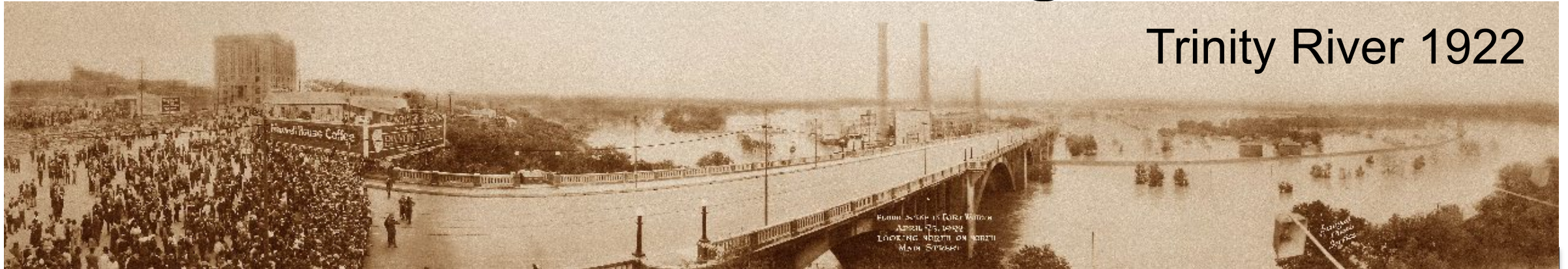
Presented by:

Ben Thompson, P.E., CFM – Professional Engineer, T/PW Stormwater Management

August 2022



Historical Flooding in Fort Worth



Marine Creek 1938



Marine Creek 1942

Figure 1.--FLOOD SCENES ON MARINE CREEK

Upper photograph shows damaging results of April 1942 flood in hardware store on North Main Street. Lower picture shows debris piled up near East Exchange Avenue and North Main Street after April 1942 flood. (Photos courtesy of Fort Worth Star-Telegram.)

May 17, 1949



Overview

- History of CRS in Fort Worth
- Types of Outreach
- Current Efforts
- Community Feedback
- Lessons Learned
- Questions

History of CRS in Fort Worth

- Joined in 2011 as Class 10
- Verification Visit in 2011
 - Improved to Class 8 effective 2012 (official CRS entry date is 10/1/12)
- Verification Visit in 2016
 - Still Class 8
- Verification Visit 2022
 - Improved to Class 7!

Types of Outreach Projects

Activity 330 (200 points max easy to hit)

- General – Can be repeated during the year
- Informational Projects – Counted once a year
- Targeted – Can also be repeated

Table 330-1. CRS topics and example messages.

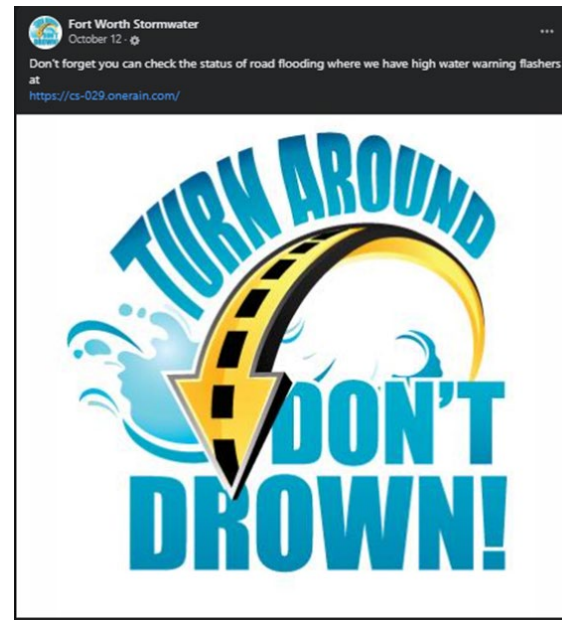
Six Priority Topics	Example Messages
1. Know your flood hazard	Your property is subject to flooding by the Roaring River You are in a repetitively flooded area Call 555-1234 to find out the flood hazard for your property
2. Insure your property for your flood hazard <i>NOTE: At least one project must include a message on this topic</i>	Ask your insurance agent if you are covered for flood damage Renters should buy flood insurance for their contents Take advantage of a low-cost Preferred Risk Policy
3. Protect people from the hazard	Turn around, don't drown Know the flood warning signals: one long blast of the siren means a flash flood along Silver Creek Designate a place where your family can rendezvous after an evacuation order is issued
4. Protect your property from the hazard	Replace your flooded furnace with one elevated above the flood level Store your valuables and insurance papers upstairs in a waterproof container We can help you get a grant to elevate your home. Call us at _____
5. Build responsibly	Get a permit from . . . before you build Don't build or grade within 10 feet from the property line so you don't alter the drainage between homes Use only licensed contractors who know the rules
6. Protect natural floodplain functions	Protect our turtle nesting areas: stay off the beach after sunset Report broken silt fences: they help keep our streams clean Don't trash the river—that's where we get our drinking water
<p><i>* NOTE: All the messages are examples. Communities should develop messages that are pertinent to this flooding conditions.</i></p>	

General and Informational Examples

Live Events



Social Media



Lobby Brochures



330 OUTREACH PROJECTS WORKSHEET

Community: Fort Worth, City of, TX
 CID: 480596

Reviewer: Stephanie Weeks Date: 7/25/2022

330 Outreach Project (OP) Worksheet																				
	Outreach Projects	Points per Topic	Topics Covered						PPI Messages				Times per Year	OP	Multipliers					
			1. Hazard	2. Insure	3. People	4. Property	5. Build	6. Natural	7. PPI Msg 1	8. PPI Msg 2	9. PPI Msg 3	10. PPI Msg 4			PPI?	PPI (OP)	STK?	STK (OP)	OP + PPI + STK	
OP#1	Water Bill Insert-English	2	x	x	x	x							3	24		0.0		0.0	24.0	
OP#2	Water Bill Insert-Spanish	2	x	x	x	x							3	24		0.0		0.0	24.0	
OP#3	Water Bill Insert-English	2	x		x								2	8		0.0		0.0	8.0	
OP#4	Water Bill Insert-Spanish	2	x		x								2	8		0.0		0.0	8.0	
OP#5	Annual RL Letter	6	x	x	x	x	x	x					1	36		0.0		0.0	36.0	
OP#6	Workshops & schools	2	x	x	x	x	x	x					5	60		0.0		0.0	60.0	
OP#7	Social Media Posts	2	x	x	x				x				1	8		0.0		0.0	8.0	
OP#8	Flood Awareness Brochure	1	x	x	x	x	x	x					1	6		0.0		0.0	6.0	
OP#9	Annual RL Letter-SPANISH	6	x	x	x	x	x	x					1	36		0.0		0.0	36.0	
OP#10														0		0.0		0.0	0.0	
OP#11														0		0.0		0.0	0.0	
OP#12														0		0.0		0.0	0.0	
OP#13														0		0.0		0.0	0.0	
OP#14														0		0.0		0.0	0.0	
OP#15														0		0.0		0.0	0.0	
OP#16														0		0.0		0.0	0.0	
OP#17														0		0.0		0.0	0.0	
OP#18														0		0.0		0.0	0.0	
OP#19														0		0.0		0.0	0.0	
OP#20														0		0.0		0.0	0.0	
OP#21														0		0.0		0.0	0.0	
OP#22														0		0.0		0.0	0.0	
OP#23														0		0.0		0.0	0.0	
OP#24														0		0.0		0.0	0.0	
OP#25														0		0.0		0.0	0.0	
OP#26														0		0.0		0.0	0.0	
OP#27														0		0.0		0.0	0.0	
OP#28														0		0.0		0.0	0.0	
OP#29														0		0.0		0.0	0.0	
OP#30														0		0.0		0.0	0.0	
c330 =		cOP:	200.00	+	cFRP:	0.00	=	200.00						ΣOP:	200	ΣPPI:	0.00	ΣSTK:	0.00	200.00

Targeted Outreach

- Two Products
 - “Flood Letter”
 - Foldable mailer and digital copy sent to Big 3
- Different from General or Informational
 - Required for Rep Loss Areas
 - Sent to those who need the information most (pre- and post-disaster)
 - Industries (Big 3) can pass along the message
 - The content is different depending on the audience

Types of Flood Risk

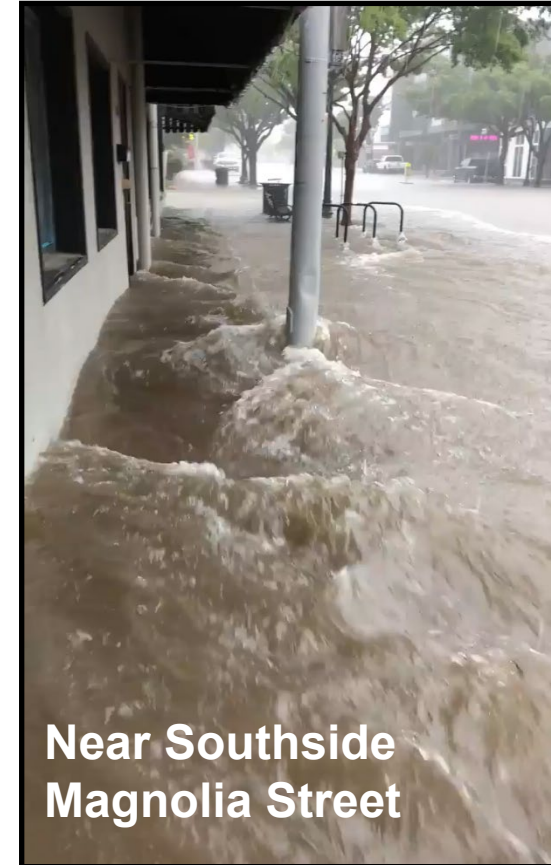
1. FEMA Floodplains

2. Non-FEMA Flood Risk Areas

- More reports of flooding outside FEMA floodplains than inside them
- More flood insurance policies and claims are outside FEMA floodplains
- Flood risk too extensive to mitigate through capital projects



Trinity & Precinct Line



Near Southside Magnolia Street

Flood Insurance	Total Policies & Claims	Policies & Claims In FEMA Floodplains	Policies & Claims <u>Outside</u> FEMA Floodplains
Policies	2488	843	1645
1 Claim	498	141	357
2+ Claims	51	10	41

“Flood Letter” – Sent Annually

- Activity 330 topics
- Activity 360 (assistance and visits)– Entire community or areas with flooding problems
- Who gets it? Entire community costs \$\$\$
 - SFHA (with 50 foot buffer used to flag review for permitting)
 - Rep Loss Areas (mandatory) – Activity 501
 - Known flood prone areas
 - City Flood Risk Areas – Non-FEMA, pull out sources of funding
- Approx. 30,000 to FEMA areas (owners and residents)
- Approx. 7,000 to Non-FEMA Areas



September 15, 2022

RE: FLOOD RISKS AND FLOOD INSURANCE INFORMATION

46 *****AUTO**5-DIGIT 76103 T1 P1
Property Owner or Resident
Any Street
FORT WORTH, TX 76XXX



Property Information:
Any Street
FORT WORTH, TX 76XXX

Dear Property Owner or Resident:

This letter is meant to share flood risk information about your property, or the area nearby. Since flooding and/or flood risk has been identified at or near your property, this letter provides information on the steps you can take now to help you protect yourself and your property before a flood. Information regarding your flood risk can be found on the City's One Address website at <http://oneaddress.fortworthtexas.gov> under the Reference Section.

Flooding is the most common natural disaster and can happen anywhere. Record-breaking rain events like Hurricanes Harvey and Florence are not the only times flooding occurs. In the City of Fort Worth, the majority of our flooding happens due to intense rainfall from localized thunderstorms which may occur at any time of the year.

On the back of this letter is information on how to protect your property from flood risks and accelerate recovery efforts if flooding does occur. If you have any questions regarding your flood risk or would like additional information, please do not hesitate to contact us by calling 817-392-6261.

Sincerely,

Clair C. Davis, P.E., CFM
Floodplain Administrator

TRANSPORTATION AND PUBLIC WORKS DEPARTMENT

STORMWATER MANAGEMENT

THE CITY OF FORT WORTH ★ 200 TEXAS STREET ★ FORT WORTH, TEXAS 76102
817-392-6261 ★ FAX 817-392-8092

Prepare Before a Flood

Being prepared for a flood can not only help save lives, it can also help minimize potential flood damage and accelerate recovery efforts:

- ◆ **Educate yourself:** Contact the City's Stormwater Program at floodplain@fortworthtexas.gov or enter your address at <http://oneaddress.fortworthtexas.gov/> to check your flood risk. Visit www.ready.gov/floods to learn more about flooding and how to protect yourself.
- ◆ **Protect your property:**
 - Clean and maintain the drains around your property, including drain inlets, pipes, drainage ditches, and driveway culverts.
 - Check your home or business for water entry points, such as doors, stairwells and dryer vents. These can be protected with low walls or temporary shields.
 - Install a sewer backup valve to prevent sewer backup flooding.
 - Consider elevating your house above flood levels.
 - Note that some flood protection measures may need a building permit and others may not be safe for your type of building, so be sure to talk to the Development Services Department by calling 817-392-2222.
 - More information can also be found online from Federal Emergency Management Agency (FEMA) www.ready.gov/floods and www.fema.gov/homeowners-guide-retrofitting.
- ◆ **Develop a disaster response plan:** Decide how you will communicate and where to meet up after the flood. Make a list of the things you will need to take with you if you had to leave your home quickly. Create an emergency supply kit including a minimum of three days of food, water, and other supplies. For a full list of supplies for your kit visit www.ready.gov/build-a-kit. Sign up for free emergency alerts sent from City of Fort Worth via text message and email at <https://public.codereadweb.com/CNE/en-US/BF380A05197C> to stay informed.

Get a Flood Insurance Policy

- ◆ Most Homeowner's insurance policies do not cover damage from floods.
- ◆ The City of Fort Worth participates in the National Flood Insurance Program (NFIP) so that any City resident can obtain Federally-backed flood insurance for a home and/or its contents. ***This insurance is available to any resident of the City, whether their home or property is in a Special Flood Hazard Area (SFHA) or not.***
- ◆ The SFHA is the area identified by FEMA as most likely to flood from a 1.0% annual chance flood, sometimes called the "100-year" flood.
- ◆ Flooding can occur anywhere in Fort Worth, not just within the SFHA, and a "100-year" flood can occur more frequently than once every 100 years.
- ◆ Property owners have a 26% chance of their property being flooded at some point during the course of 30 years, the length of a typical mortgage, if they are located within a mapped area of flood risk.
- ◆ If you purchased flood insurance as required by the terms of a mortgage or home improvement loan, it may only cover the building's structure and not the contents, such as your furniture and appliances. Be sure to obtain contents coverage. Contact your insurance agent for more information on rates and coverage.
- ◆ Having flood insurance greatly reduces your out of pocket recovery expenses after a flood. Don't wait for the next flood to buy flood insurance. In most cases, there is a 30-day waiting period before the NFIP coverage takes effect.

Get Financial Assistance for Flood Protection

The City's participation in the NFIP also makes a number of other assistance programs available to you and others if a disaster occurs. These programs and their websites are listed in the following attachment.



Sources of Funding for Flood Mitigation and Disaster Recovery

There are several sources of Federal funding available to help property owners implement flood retrofitting projects and recover from flooding disasters. Following are details, including eligibility information, about these funding sources.

Increased Cost of Compliance Coverage (ICC)

Flood insurance policyholders in Special Flood Hazard Areas (SFHAs) are eligible to receive up to \$30,000 to bring their home or small business into compliance with City floodplain and building code requirements. The National Flood Insurance Program (NFIP) includes Increased Cost of Compliance coverage for all new and renewed Standard Flood Insurance Policies. This coverage helps policyholders cover the cost of meeting certain building requirements associated with repairing or rebuilding their home or small business following a flood. An ICC claim may be paid if the home or small business is either:

- ❑ **Substantially damaged:** A building is considered substantially damaged by flood if the cost of repairing the flood damage equals or exceeds 50 percent of the building's pre-damage market value.
- ❑ **A repetitive loss property:** Under ICC, a building is considered to be a repetitive loss structure when it has had at least two losses over a 10-year period where the cost of repair, on average, equaled or exceeded 25 percent of the building's market value at the time of each flood.

The ICC coverage can be used for elevation, relocation, or demolition projects for residential and nonresidential buildings. The coverage can also be used for floodproofing of non-residential buildings. ICC claims are adjusted separately from the flood damage claim filed under the Standard Flood Insurance Policy. For more information go to www.fema.gov/increased-cost-compliance-coverage.

FEMA Hazard Mitigation Assistance Programs

FEMA's Hazard Mitigation Assistance (HMA) Program administers several programs that provide grant funding for hazard mitigation projects that reduce or eliminate long-term risk to people and property from natural hazards and their effects. All mitigation projects must be cost effective and technically feasible, and meet Environmental Planning and Historic Preservation requirements in accordance with HMA Program requirements. These programs comply with local, State, or national building codes, standards, and regulations. States, Territories, federally recognized Indian Tribal governments, and communities are eligible and encouraged to take advantage of funding provided by the following HMA Programs in both the pre- and post-disaster timeframes. While individuals and businesses are not eligible to apply directly, local communities may apply on their behalf:

- ❑ **Hazard Mitigation Grant Program:** The Hazard Mitigation Grant Program (HMGP) provides grants to implement long-term hazard mitigation measures after a major disaster declaration in a given State. The purpose of HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during recovery from a disaster. (www.fema.gov/hazard-mitigation-grant-program)

Sources of Funding for Flood Mitigation and Disaster Recovery

- ❑ **Building Resilient Infrastructure and Communities (BRIC):** Support for states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program. (<https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>)
- ❑ **Flood Mitigation Assistance Program:** The Flood Mitigation Assistance (FMA) Program provides grants for certain flood mitigation projects to reduce or eliminate flood risk to buildings, manufactured homes, and other structures that are currently NFIP insured. (www.fema.gov/flood-mitigation-assistance-grant-program)

Eligible flood mitigation activities that may be funded by the HMA Programs include: property acquisitions and structure demolition/relocation, structure elevation, dry floodproofing of historic residential structures and non-residential structures, minor localized flood reduction projects, mitigation reconstruction, structural retrofitting of existing buildings, and non-structural retrofitting of existing buildings and facilities. Note that dry floodproofing of non-historic residential structures, wet floodproofing, floodwalls, and levees are not eligible projects under HMA.

In general, HMA funds provide up to 75% of the project cost. The remaining 25% must be derived from non-Federal sources which in some cases can be contributed to by the state or local government. For more detailed information go to www.fema.gov/hazard-mitigation-assistance.

Small Business Administration (SBA) Disaster Assistance Program

SBA disaster assistance program helps with long-term, low-interest rebuilding and repair of damaged property. SBA provides disaster loans to businesses of all sizes, private non-profit organizations, homeowners, and renters to help recovery after a disaster. SBA disaster loans can be used to repair or replace the following items damage or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.

The amount the SBA will lend depends on the cost of repairing or replacing your items, minus any insurance settlements or grants. Loan terms are determined on a case-by-case basis, dependent upon each borrower's ability to repay.

In Presidentially declared disasters, residents and business owners can begin the disaster application process by registering online with the Federal Emergency Management Agency at www.fema.gov or by calling FEMA at 1-800-621-FEMA (3362). For more information about SBA disaster assistance plus disaster preparedness for individuals and businesses visit: www.sba.gov.

What you can do

- ❑ Each program has a different Congressional authorization and slightly different rules. Check the websites and read up on the details of the funding programs that are appropriate for your situation. For example if your state has not been declared a Federal disaster area for some time, look at grants that have annual application procedures, not HMGP.
- ❑ Talk to your local planning, building, floodplain management, or emergency management official to see if your community is interested in applying for a grant for properties like yours.
- ❑ Keep your flood insurance policy in force. Several grants and ICC only fund properties that currently have a flood insurance policy.

Sources include: Hazard Mitigation Assistance Unified Guidance, 2015; www.fema.gov and www.sba.gov. En español, la visita www.fortworthtexas.gov/escorrenia-en-la-mira O para solicitar una copia en español, llame at 817-392-2782.

Big Three – Most common users of the service

- Real Estate Agents
 - Greater Fort Worth Association of Realtors
- Lenders (banks, credit unions)
 - Fort Worth Mortgage Bankers Association
 - Tarrant County Bankers Association (current)
- Insurance Agents
 - State database filtered by flood insurance

Why Send to the Big Three?

- Save Money (newsletter)
- Inform those who benefit most and who can pass this along to their customers
- Get Points
 - Flood Information – Activity 320
 - Various Topics – Activity 330
 - Flood Protection Assistance – Activity 360
 - No Dumping – Activity 540





Transportation & Public Works Department
City of Fort Worth
200 Texas St
Fort Worth TX 76102

PRESORTED
STANDARD
US POSTAGE
PAID
FORT WORTH TX
PERMIT NO. 2070



Open Space Conservation Program

The mission of the Open Space Conservation Program is to Conserve high-quality natural areas as the city grows to provide environmental benefits and recreational opportunities that support economic development and enhance the livability and desirability of Fort Worth. The City of Fort Worth partnered with the Trust for Public Land to create an online mapping tool to identify high priority natural areas for preservation. To learn more about the program and view the online prioritization tool, visit: FortWorthOpenSpace.org

If you are a landowner interested in donating or selling your land for conservation, please contact us at OpenSpace@fortworthtexas.gov.



Turn around don't drown

Just a few inches of fast-moving flood water can knock over an adult and carry away most vehicles, including large SUVs.

Vehicles approaching water-covered roadways are unlikely to know the depth of the water or the condition of the pavement. This is especially true at night, when vision is more limited. Play it smart, play it safe. Whether driving or walking, avoid a flooded road by following this simple advice: Turn Around Don't Drown.

Useful Websites:

<https://www.fortworthtexas.gov/departments/tpw/stormwater> • www.floodsmart.gov • www.fema.gov • www.weather.gov Para solicitar una copia en español, llame al 817-392-6261.

Flood Awareness

NEWSLETTER

Stormwater Management in Fort Worth

The city's Stormwater Management Program is tasked with protecting people and property from harmful stormwater runoff.

So how is that accomplished? By maintaining the city's existing stormwater infrastructure, mitigating hazards through capital projects, warning residents about the hazards and reviewing development for compliance with city standards so flooding and erosion hazards can be minimized.

All rivers, streams, tributaries, and ditches – regardless of size – have the potential to flood. In Fort Worth, major sources of flooding include the Clear Fork Trinity River, West Fork Trinity River, Mary's Creek, Marine Creek, Village Creek, Dry Branch Creek, Big Fossil Creek, Little Fossil Creek, Sycamore Creek and White's Branch. Hazardous flooding away from larger creeks and channels is also frequent within the City as stormwater runoff drains from upstream areas toward larger streams and channels.

Flood facts

- Flooding is the number one natural disaster in the United States.
- In an average year, flooding and flash flooding result in more deaths than tornados.
- Almost 80 percent of the repetitive loss claims in the City were from properties located outside FEMA's Special Flood Hazard Area (SFHA).
- Flooding in Fort Worth is typically produced by heavy rainfall from frontal type storms that occur during the spring and fall.
- Flash flooding is the most common type of flooding in Fort Worth.
- Over the life of a 30-year loan, a home, if located in a high-risk flood area, is more likely to be damaged by flood than by fire.
- The average premium for flood insurance is \$700 a year. The average claim in the past five years was nearly \$42,000.



Let the City help

The city's Stormwater Management staff can assist in determining flood risks or obtaining documents. Contact a department representative at 817-972-6261 or stormwaterCS@fortworthtexas.gov to help with the following:

- Determining the flood zone and flood risk for your property.
- Historical flood occurrences in your neighborhood.
- Availability of flood insurance and where to purchase a policy.
- Provide current FEMA Flood Insurance Rate Map (FIRM)
- Determination of Base Flood Elevations (BFE), floodway, flood zone, and flood depth for your property.
- Site visits to review flooding, drainage and stormwater problems, and provide one-on-one suggestions to property owners.
- Building requirements and the Floodplain Development Permit process.
- Copies of as-built Elevation Certificates, when available.
- Guidance on flood mitigation techniques such as elevating, relocating or removing repetitive flood loss structures.
- Information on retrofitting techniques such as installation of barriers and floodwalls to reduce potential flooding of structures.

Know the flood risk

Everyone is at risk – even those who do not live or work close to rivers and lakes. Floods occur as a result of heavy rains, overloaded drainage systems, land development runoff and many more reasons. Just one inch of water can cause tens of thousands of dollars of damage to homes or businesses and its contents.

FEMA uses different flood zones on the Flood Insurance Rate Maps (FIRMs) to designate flood risk. Knowing the flood risk is the first step to being prepared when future floods occur.

- To find your location on the FEMA Flood Insurance Rate Map (FIRM) visit the FEMA Flood Map Service Center (MSC) at <https://msc.fema.gov> and enter the address to search. Use the MSC to view, print and download flood maps, access a range of other flood hazard products and take advantage of tools to better understanding flood risk.
- The city's One Address website at oneaddress.fortworthtexas.gov can be used to identify FEMA and non-FEMA flood risks around specific locations. For more information about flood risk email stormwaterCS@fortworthtexas.gov.

Protect what matters

Before a Flood	During a Flood	After a Flood
Purchase Flood Insurance.	Do not drive through floodwater.	Check for structural damage to buildings.
Make an emergency plan.	Move to upper floors of your home or climb to higher ground.	Document all damages.
Document belongings.	Don't walk through flowing water.	Remove all wet items.
Store valuable items (computers, family photos, heirlooms, etc.) at higher locations in your home.	Listen for emergency updates.	Get a Floodplain Development Permit and Building Permit before making any repairs.
Sign-up for emergency messages for Fort Worth at fortworthtexasalerts.gov	Turn off electricity at the main power switch and shut off water and gas.	Contact your insurance agent and file a flood insurance claim.

The city's Stormwater Management Field Operations crews work hard to maintain the drainage systems throughout the city. By ordinance, it is illegal to dump any type of debris into a stream, river or drainage ditch. This debris becomes entangled in culverts, bridges, shallow streambeds or ditches and impedes drainage causing damage and/or flooding. Residents should keep drainage ditches on their property free of debris, foliage and vegetation that would impede the flow of water.

Report debris dumping to the city's Code Compliance Department by calling 817-392-1234.



Purchase flood insurance



Flood insurance is highly recommended for all residents and business owners within Fort Worth whether located within a high-risk area or not. Most standard homeowner policies do not cover flood damage. Only a flood insurance policy can provide coverage for losses caused by a flood. Because the City participates in the National Flood Insurance Program (NFIP), all property owners, renters and business owners can purchase flood insurance. Some people have purchased flood insurance. Usually these policies just cover the cost of the building's structure and not the contents. During the kind of flooding that happens in Fort Worth, there is usually more damage to furniture and contents than there is to the structure. Don't wait until after flooding happens to buy flood insurance.

Currently, the City has a Class 7 rating in the Community Rating System (CRS) which results in up to a 15 percent discount in flood insurance premiums to property owners who live within a high-risk flood area and up to a five percent discount in flood insurance premiums for property owners who live outside the high-risk flood areas. If residents live in a low- to moderate-risk area, they might be eligible for the low-cost Preferred Risk Policy (PRP), which includes coverage for buildings and its contents. Don't wait for the next flood to buy insurance – there is a 30-day waiting period before the insurance policy takes effect.

Mandatory Flood Insurance Requirement

If a property is within a FEMA identified high-risk flood area and carries a mortgage from a federally regulated or insured lender, the lender is legally mandated to require flood insurance on the property. This requirement affects loans and grants for the purchase, construction, repair or improvement of any publicly or privately owned buildings in the SFHA. A lender may require the borrower to hold flood insurance at any time even if the property is within a moderate to low-risk area.

Flood insurance is offered through the NFIP but policies are sold and administered by private insurance companies. Contact an insurance agent to purchase a policy today.

Visit FloodSmart.gov or call 1-800-427-2419

to learn how to prepare for floods, about the benefits of flood insurance and how to purchase a flood insurance policy.

Protect property now



Rather than wait for a flood to occur, act now to protect property from flood damage. There are a wide-range of flood protection measures for buildings that can eliminate or reduce the risk of future flood damage. Methods include retrofitting, grading a yard, correcting local drainage problems and emergency measures such as moving furniture or placing sandbags around the structure. While recent regulations have made new homes less prone to flooding, many existing structures remain susceptible. Retrofitting means modifying a building that is subject to flooding to prevent or minimize flood damage. Retrofitting measures include:

- Relocating structures to higher ground to reduce exposure to flooding.
- Elevating structures above flood levels.
- Elevating heating and hot water systems, and washers and dryers on a platform above the flood level.
- Relocating electrical panels and utilities above the flood level.
- Constructing barriers like floodwalls or berms to restrain floodwaters.
- Dry floodproofing by sealing the structure to prevent floodwaters from entering.
- Wet floodproofing by making portions of the structure resistant to flood damage and allowing water to enter during flooding.

Build responsibly.

Before beginning any construction (new development, addition, remodel, fill, grading, etc.) on properties, contact the city's Development Services Department at 817-392-2222 for advice on requirements.

Get a floodplain development permit before building.

Permits ensure structures are protected from damage and that construction projects do not cause flooding issues for existing properties. The city's floodplain ordinance requires all new residential structures or additions located within the SFHA have a minimum finished floor elevation above the base flood elevation (BFE). All non-residential structures or additions within SFHA must be elevated or floodproofed above the BFE.

Know the substantial improvement requirements.

If the cost of reconstruction, rehabilitation or other improvements to a building equals or exceeds 50 percent of the current market value, the structure must meet the same requirements as those of a new building. Substantially damaged buildings must meet the same requirements upon reconstruction. Improvement requirements are addressed during the floodplain development permitting process.

Flood Warning System



The City of Fort Worth Flood Warning System is designed to provide real-time flood warning risk levels, in order to protect people from hazardous flood conditions. Residents can see real-time flood warning information at monitored hazardous roadway overtopping locations. The Flood Threat link shows whether the road crossing is experiencing no known threat ("NONE"), potential conditions for flooding ("CAUTION"), or has overtopped ("AVOID"). For more information please visit www.fortworthtexas.gov/floodwarning/.

Why protect floodplains?

The City of Fort Worth is a beautiful place to live, work and play. The floodplains and adjacent waters are important assets that form complex physical and biological systems. Preserving floodplains in their natural state provides open space areas for parks, bike paths and wildlife conservation. Floodplains reduce the severity of floods by conveying stormwater runoff, providing flood storage and conveyance, reducing flood velocities, and flood peaks and minimizing sedimentation. The natural vegetation in the floodplain improves the water quality of the lakes and rivers of Fort Worth by slowing down stormwater runoff, which allows sediments and other impurities to settle out.

Tarrant County Flood Map Changes Coming Soon

FEMA is in the process of completing a physical map revision (PMR) which updates the floodplains for several streams within Fort Worth. These maps went to Preliminary status in November 2020. View mapping at <https://msc.fema.gov/fmcr>.

The City actively works with FEMA to update flood studies to reflect the changing conditions as the city grows and also utilizes advancements in technology and methodologies. Once finalized, the new maps will be used by lenders to determine flood insurance requirements.

Community Feedback

- Feedback usually comes in as phone calls for a month or two after sending the letters, usually older residents
- Spam?
- “Why am I getting this letter?”
- “I don’t need insurance!” (Buffer, CFRA, RLA)
- “I haven’t owned this house for over a year.”
- Please tell me more about flood insurance
- What can I do to make my home not flood?
- Am I in a flood zone?
- Almost no feedback from Big 3

Lessons Learned (so far)

- We're still learning!
- Ask for examples from Stephanie and other communities
- Leverage other departments if possible (water bill insert)
- Combine RLA letter with other targeted outreach
- Double your points with a Spanish version of the same thing
- Details! Squeeze in as much as you can. Reviewers look for specific language.
- Addresses aren't perfect

Questions?