National Flood Insurance Program (NFIP) for Real Estate Professionals





Joshua Oyer, CFM

Outreach Specialist

NFIP State Coordinator's Office at the Texas Water Development Board

Outline

- Introduction to the National Flood Insurance Program (NFIP)
- FEMA Floodplain Maps
- Floodplain Management
- Flood Insurance
- Legal Considerations

Texas Flood Facts

As a real estate professional, why should you care about flood risk?

- Over \$6.7 billion in paid flood insurance claims since 1978 (second in the nation).
- Leads the nation in flood deaths every year.
- In the last 10 years, Texas has had 9 flood-related presidentially declared disasters.



Guadalupe River flood waters, April 15, 2016. Courtesy of the Seguin Gazette.

Areas of Texas Flooding



Arid regions with poor drainage

Areas of Texas Flooding





Coastal Areas

Areas of Texas Flooding



Image courtesy of FEMA

Hill Country (a.k.a. Flash Flood Alley)







National Flood Insurance Program (1968)

Intent: to reduce future flood damage through community floodplain management regulations and provide affordable insurance to property owners.

Provides insurance to property owners in participating communities.

Three main components:

- Insurance
- Floodplain management
- Risk identification



Flood Insurance:

The National Flood Insurance Program provides federally-backed flood insurance to property owners.

- To get NFIP flood insurance you must live in a community that participates in the program.
- You do NOT have to be in a FEMA designated floodplain.
- Insurance rates are based on the level of risk to the structure.



Floodplain Management (Communities):

To be eligible to participate in the NFIP a community must adopt, at a minimum, the federal minimum standards for development in the floodplain.

Some of the requirements include:

- Floodplain development permits
- New construction must be elevated to at or above the Base Flood Elevation (BFE)
- No-rise studies in floodway



Risk Identification:

FEMA produces maps to identify areas of flood risk called Flood Insurance Rate Maps, or FIRMs. They also produce Flood Insurance Studies (FIS).

- The FIRM shows you the areas that are subject to your local flood damage prevention ordinance.
- The level of detail on your FIRM determines the requirements of your regulations.
- Your FIS is used for BFE determinations.

FEMA Floodplain Maps

- FEMA Map Service Center
 - Flood Insurance Rate Map (FIRM)
 - FIRMette
- www.RiskMAP6.com
- Letter of Map Change
 - Letter of Map Amendment (LOMA)
 - Letter of Map Revision (LOMR)
 - Letter of Map Revision based on fill (LOMR-F)

100 Year (1% chance) Flood



The BASE FLOOD!



A **one-hundred-year flood** is a flood event that has a 1% probability of being equaled or exceeded in any given year.

Common Terminology

Special Flood Hazard Area (SFHA) – "The Floodplain":

Area inundated in the base flood, as estimated by FEMA.

Base Flood Elevation (BFE):

Estimated level floodwater is anticipated to rise to during a base flood.

Flood Insurance Rate Map (FIRM):

Maps produced by FEMA to identify areas of flood risk.

Floodway:

Area where floodwaters move faster and with greater velocity. Special regulations apply.

Defining Flood Risk Zones



FEMA Map Service Center: www.msc.fema.gov









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MSC Products and Tools

Hazus

LOMC Batch Files

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MSC Frequently Asked Questions

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FEMA Flood Map Service Center : Welcome!

Looking for a Flood Map? @

Enter an address, a place, or longitude/latitude coordinates:

Enter an address, a place, or longitude/latitude coordinates

Search

Looking for more than just a current flood map?

Visit Search All Products to access the full range of flood risk products for your community.



About Flood Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

Announcements

Risk MAP Customer and Data Services (CDS) released a Service Pack for the FEMA Flood Map Service Center (MSC) on January 30th to improve file download capabilities. With this release, only HTTP download capabilities were deployed, so users will only be able to complete direct downloads of Hazus state datasets and Letter of Map Change (LOMC) Batch Files. For more information about direct vs. managed download capabilities, read through slides 7-8 of the Hazus Online Download Tutorial.

Browser Configuration — To access all functionality of the MSC, Internet Explorer users should confirm Compatibility View is not enabled. In addition, users of Internet Explorer 9 and 10 should first take the following steps before using the MSC:

- 1. Open Internet Options under the Tools Menu
- 2. Click the Advanced tab
- 3. Scroll down to Security and confirm the following items are checked: "Use TLS 1.1" and "Use TLS 1.2"





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The buttons below let you view and print the selected flood map, download the flood map image, open an interactive flood map (if available), or expand the search to all products to view effective, preliminary, pending, or historic maps, and risk products for the community. The locator map shows flood map boundaries in your area of interest. You can choose a new flood map by clicking elsewhere on the locator map or entering a new location in the search box.

Search Results—Products for HOUSTON, CITY OF

The flood map for the selected area is number **48201C0885M**, effective

number **48201C0885M**, effective on **01/06/2017**



Show **all products** for this area



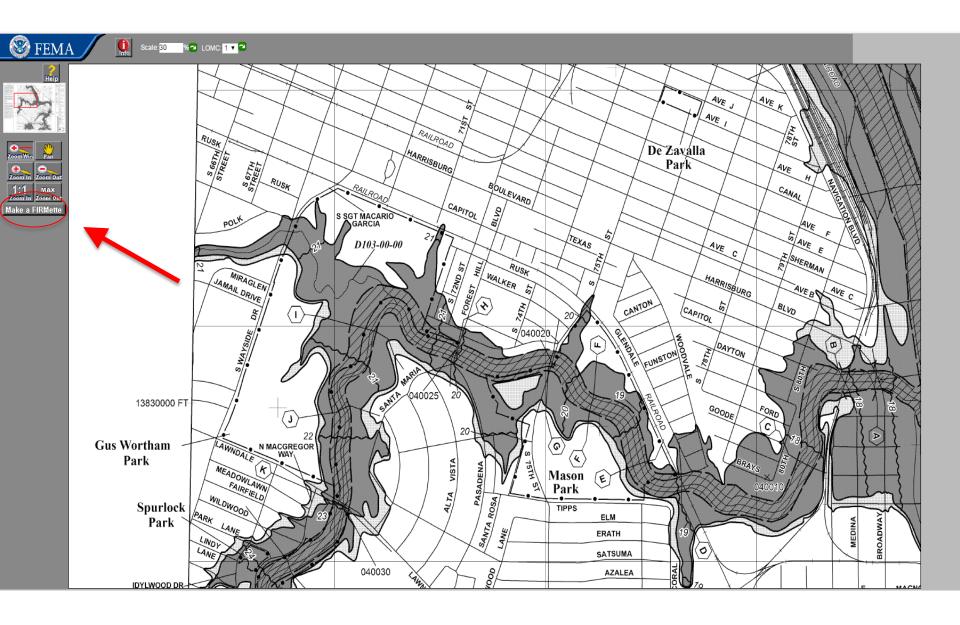
Letters of Map Change 🛭

- Revisions (0)
- Amendments (1)
- Revalidations (1)

Locator Map



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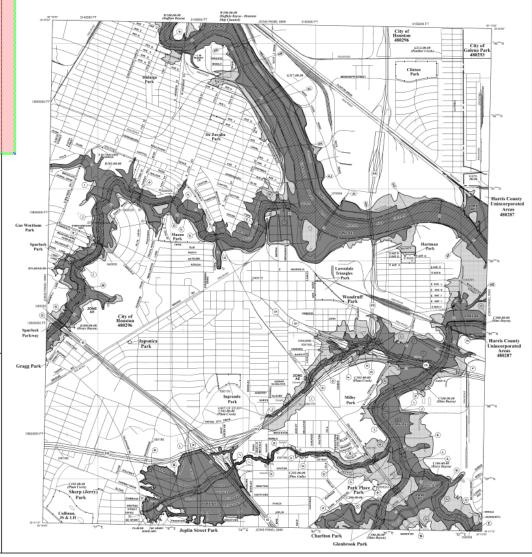


Letter 8.5x11 Legal 8.5x14 Tabloid 11x17 Print Area

Title Block



NOTES TO USERS

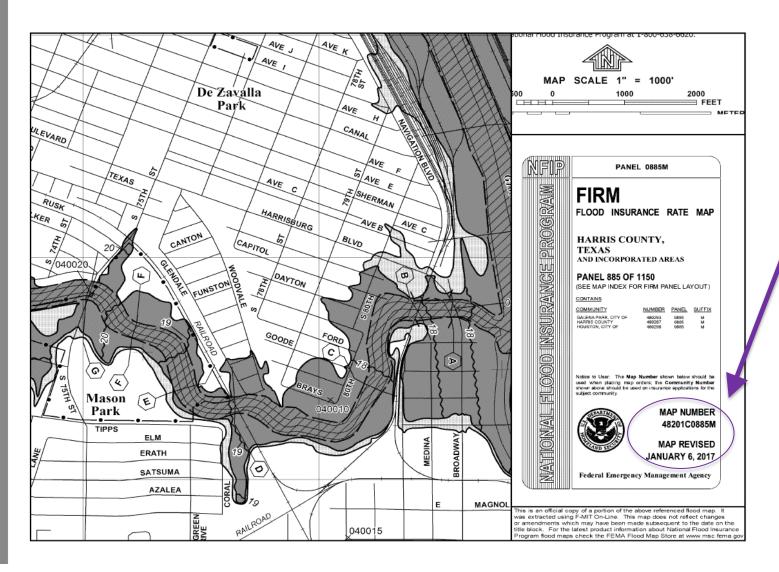




LEGEND













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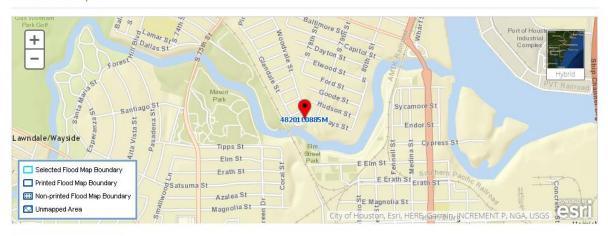
Show **all products** for this area



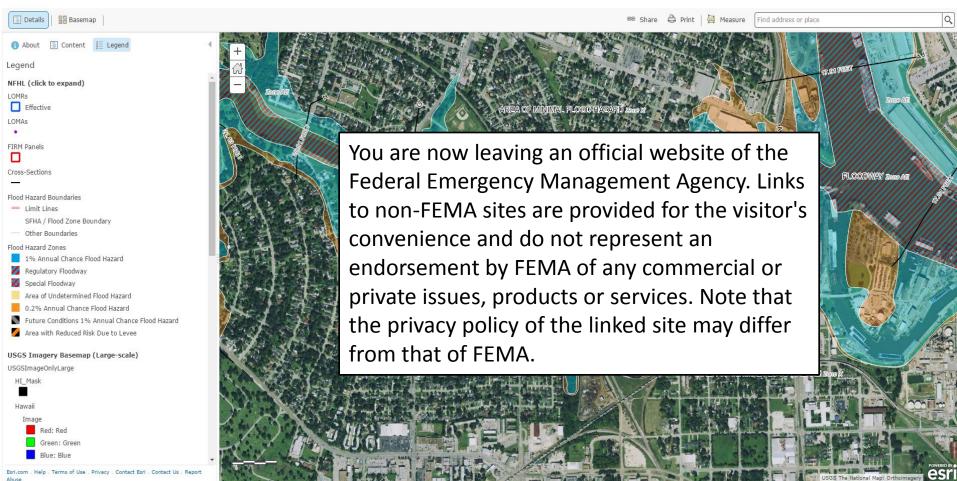
Letters of Map Change ②

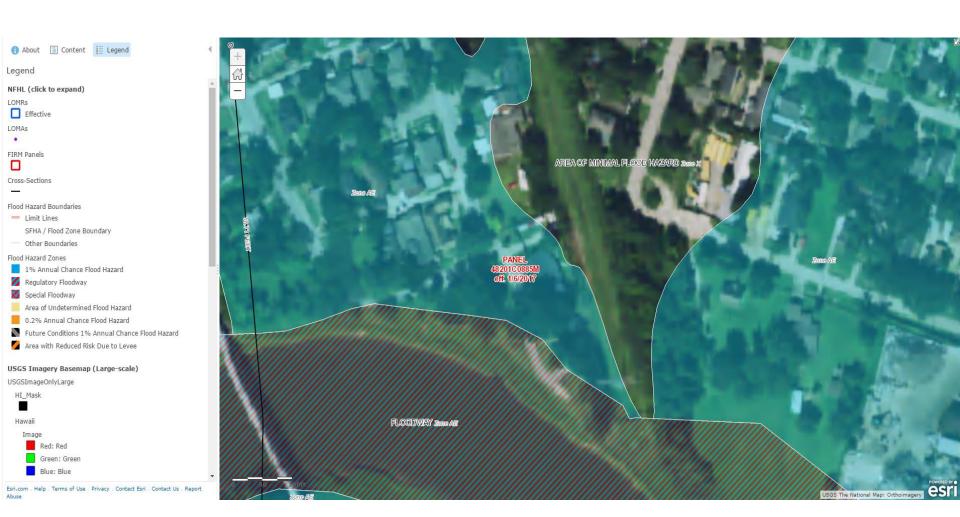
- Revisions (0)
- Amendments (1)
- Revalidations (1)

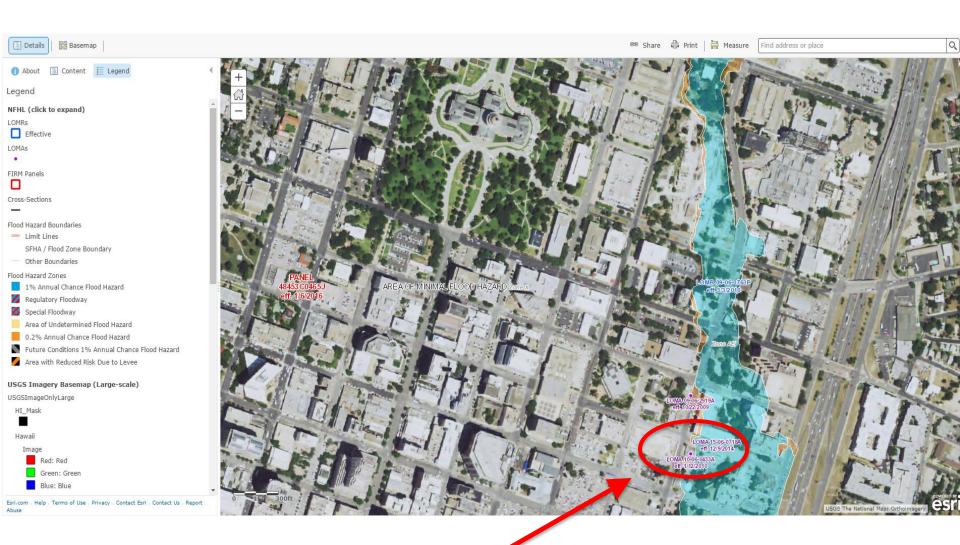
Locator Map



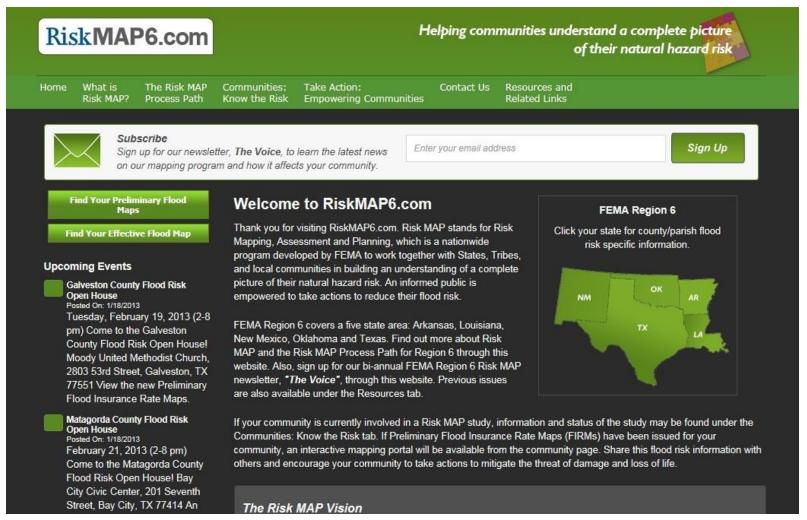
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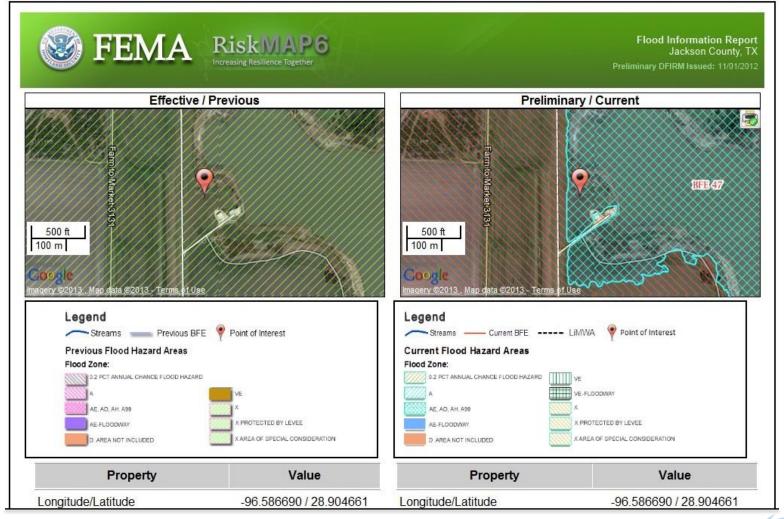




Upcoming Map Revisions www.RiskMAP6.com



Upcoming Map Revisions www.RiskMAP6.com



Letter of Map Change

Acronym	Stands For	Purpose	Application
LOMA	Letter of Map Amendment	A letter from FEMA stating that an existing structure or parcel of land that has not been elevated by fill (on natural grade) would not be inundated by the base flood.	MT-EZ MT-1
LOMR-F	Letter of Map Revision (based on fill)	A letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.	MT-1
LOMR	Letter of Map Revision	A letter from FEMA officially revising the current NFIP map to show changes to floodplains, floodways, or flood elevations (see 44 CFR Ch. 1, Parts 60, 65, and 72).	MT-2
PMR	Physical Map Revision	One or more map panels are physically revised and republished, incorporating changes to floodplains, floodways, or flood elevations.	

https://www.fema.gov/letter-map-changes

Floodplain Management

- Federal Regulations
- Local Ordinances
- Elevation Certificates
- Substantial Damage and Substantial Improvement

Common Terminology

Pre-FIRM:

A building for which construction or substantial improvement occurred on or before December 31, 1974, or before the effective date of the community's initial FIRM.

• Freeboard:

An additional height above the BFE that may provide a level of protection.

Substantial Damage and Substantial Improvement

Substantially Damaged: damaged to the point where repair costs are equal to or greater than 50% of the structure's original value

Substantially Improved: Improvements (additions, remodels, etc.) cost equal to or greater than 50% of the structure's original value.

Local Permitting

All development within the regulatory floodplain (SFHA) requires a permit.

Development includes:

- New construction or a substantially improved structure,
- Placing a manufactured home,
- Mining, dredging, filling, grading or excavating,
- Roads, bridges and culverts,
- Altering or relocating stream channels,
- Travel trailers placed on site for more than 180 days, and
- Storage of materials including gas or liquid storage tanks.

Local Ordinances

Residential Construction

"All new construction and substantial improvement of any residential structure **shall have the lowest floor** (including basement), elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in Article 4, Section C (1) a., is satisfied." – FEMA Model Ordinance

Some communities have higher standards.



By following local building codes and elevating above the BFE, this structure in Massachusetts avoided damage during the 2006 Mother's Day Floods. A neighboring building, built prior to code adoption, had 1.5 feet of flood water. *Photo credit to Darby Duffin, FEMA (2006)*

Local Ordinances

Nonresidential Construction

"New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator."

Main Points:

- Non-residential can be elevated OR dry floodproofed.
- Dry floodproofing must be certified by a professional engineer or architect.

Again, some communities have higher standards.

Local Ordinances

Machinery and equipment

"All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding."



Elevated AC unities in Sea Bright, NJ. This home was hit by Hurricane Sandy but only suffered minor damage due to mitigation steps taken during construction. Photo courtesy of FEMA, Feb 2013.

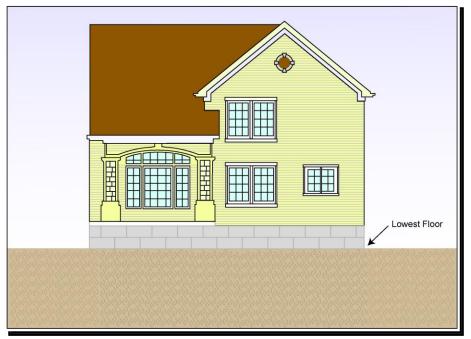
Local Ordinances

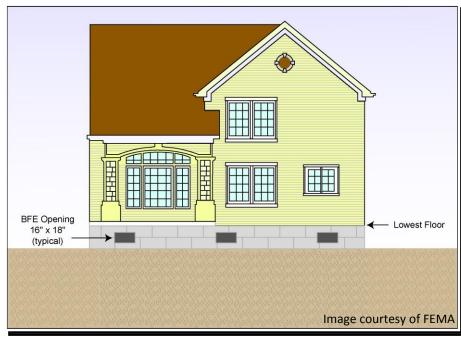
Enclosures

Must be:

- used solely for parking of vehicles, building access or storage,
- designed to automatically equalize hydrostatic flood forces,
- certified by a registered professional engineer or meet or exceed the following minimum criteria:
 - at least two openings with net area being at least one square inch for every square foot of enclosed area,
 - the bottom of all openings shall be no higher than one foot above grade.

Lowest Floor: Crawl-Space Foundation





Lowest floor without vents

Lowest floor with vents



Enclosures



Collapsed foundation walls, Zone AE. Photo courtesy of FEMA.

Floodways

Floodways:

- Encroachments are prohibited
 - unless it has been demonstrated through an Hydrologic and Hydraulic study that the proposed encroachment would not result in any increase in the BFE.
- Subject to all other SFHA regulations
- If encroachment does result in increased BFE,
 LOMR is needed, including completion of a CLOMR prior to beginning construction.

Elevation Certificates



NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

2015 EDITION

LE\	ATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 20			
MPOF	RTANT: In these spaces, copy the corresponding in	formation from Sec	tion A.	FOR INSURANCE COMPANY US			
Buildir	ng Street Address (including Apt., Unit, Suite, and/or Bl	ldg. No.) or P.O. Rout	e and Box No.	Policy Number:			
City	State	ZIP (Code	Company NAIC Number			
	SECTION C - BUILDING ELEV	ATION INFORMAT	ION (SURVEY RE	EQUIRED)			
C2.	Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction A new Elevation Certificate will be required when construction of the building is complete. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a—h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: Vertical Datum: Indicate elevation datum used for the elevations in items a) through h) below.						
	☐ NGVD 1929 ☐ NAVD 1988 ☐ Other/So						
	Datum used for building elevations must be the same a		FE.	Check the measurement used.			
	a) Top of bottom floor (including basement, crawlspace) b) Top of the next higher floor c) Bottom of the lowest horizontal structural member (d) Attached garage (top of slab)			feet meters feet meters feet meters feet meters feet meters			
	e) Lowest elevation of machinery or equipment servic (Describe type of equipment and location in Comm	ing the building ents)		feet meters			
	f) Lowest adjacent (finished) grade next to building (L	AG)		feet meters			
	g) Highest adjacent (finished) grade next to building (l	HAG)		feet meters			
	Lowest adjacent grade at lowest elevation of deck structural support	or stairs, including		feet meters			
	SECTION D - SURVEYOR, E	NGINEER, OR ARC	HITECT CERTIF	ICATION			
I cer state	certification is to be signed and sealed by a land surve tify that the information on this Certificate represents m ment may be punishable by fine or imprisonment unde	by best efforts to interper 18 U.S. Code, Sect	oret the data availa ion 1001.	ble. I understand that any false			
Wer	e latitude and longitude in Section A provided by a licer	nsed land surveyor?	☐Yes ☐ No	Check here if attachments.			
Certi	fier's Name	License Number					
Title							
Com	pany Name			Place			
Com	party Name			Seal			
Addr	ess			Here			
City		State	ZIP Code				
Sign	ature	Date	Telephone	Ext.			
Copy	all pages of this Elevation Certificate and all attachments	s for (1) community of	icial, (2) insurance	agent/company, and (3) building ow			
	ments (including type of equipment and location, per C						
Com	ments (modeling type of equipment and rocation, per o	z(c), ii applicable)					



42

Hire a Surveyor for ECs

	☐ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source:			
Da	tum used for building elevations must be the same as that used for the BF		01	
		'	Cneck the me	asurement used.
a)	Top of bottom floor (including basement, crawlspace, or enclosure floor)		feet	meters
b)	Top of the next higher floor		feet	meters
c)	Bottom of the lowest horizontal structural member (V Zones only)		feet	meters
d)	Attached garage (top of slab)		feet	meters
e)	Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)		feet	meters
f)	Lowest adjacent (finished) grade next to building (LAG)		feet	meters
g)	Highest adjacent (finished) grade next to building (HAG)		feet	meters
h)	Lowest adjacent grade at lowest elevation of deck or stairs, including structural support		feet	meters

Substantial Damage/Improvements

Generally, all structures that have been **substantially damaged** or undergoing **substantial improvements** are required to be brought into compliance with the NFIP.

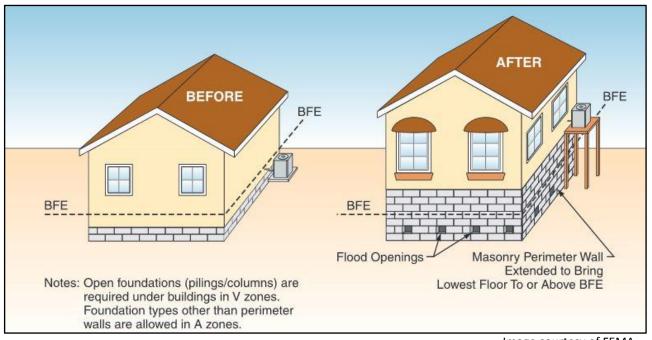


Image courtesy of FEMA



Flood Insurance

Insurable through the NFIP:

- Structures in the course of construction
- Regular policy available once structure has two or more outside rigid walls and a fully secured roof, affixed to a permanent site
- Manufactured homes built on a permanent chassis and affixed to a permanent foundation
- A travel trailer without wheels, built on a chassis and affixed to a permanent foundation that is otherwise properly regulated under other ordinances and laws
- Contents of structure (available to owners and renters)

Flood Insurance

NOT insurable through the NFIP:

- Buildings completely over water
- Unanchored manufactured homes
- Motorized vehicles
- Gas and liquid storage tanks outside buildings
- Buildings principally below ground
- Machinery and equipment out in the open
- Swimming pools, hot tubs, etc.

Rate Comparison Table



EXAMPLE FLOOD INSURANCE PREMIUM COMPARISONS*

Pre- /Post- FIRM ¹	Dwelling Type & # of Floors	Amount of Coverage Build/Content (in thousands)	Deductible ² Build/Content	Flood Zone	Elevation Difference of Lowest Floor and BFE (Feet)	Cost of Flood Insurance ³ (without HFIAA surcharge)
Pre-	Primary Single Family/ One Floor/ No Basement	\$200/\$80	\$2,000/\$2,000	A1-30, AE, AO, AH, A	Not Needed (Pre-FIRM)	\$3,467
Pre-	Primary Single Family/ Without Enclosure	\$200/\$80	\$2,000/\$2,000	V1-V30, VE	Not Needed (Pre-FIRM)	\$7,221
Pre-	Primary Single Family/ With Enclosure	\$200/\$80	\$2,000/\$2,000	V1-V30, VE	Not Needed (Pre-FIRM)	\$9,885
Pre-	Primary Single Family/ One Floor/ No Basement	\$200/\$80	\$1,250/\$1,250	D	Not Needed	\$3,392
Pre- or Post-	Single Family/ One Floor/ No Basement	\$200/\$80	\$1,250/\$1,250	B, C or X	Not Needed	\$2,033 Standard Rates
Pre- or Post-	Single Family/ One Floor/ No Basement	\$200/\$80	\$1,250/\$1,250	B, C or X	Not Needed	\$441 Preferred Risk Policy (PRP) ⁴
	Single Family/ One Floor/ No Basement	\$200/\$80	\$1,250/\$1,250	A1-30, AE	+4	\$570
					+3	\$591
					+2	\$710
Post-					+1	\$1,073
					At BFE	\$2,136
					-1	\$4,786
	Single Family/ Without Obstruction	t \$200/\$80 ⁵			+4 or more	\$3,098
					+3	\$3,470
Post-			\$1,250/\$1,250	V1-V30, VE	+2	\$4,836
1981					+1	\$6,543
					At BFE	\$8,319
					-1	\$10,205
	Single Family/ With Obstruction	\$200/\$805	\$1,250/\$1,250	V1-V30, VE	+4 or more	\$5,526
Post-					+3	\$6,078
1981					+2	\$6,824
1001					+1	\$7,914
					At BFE	\$9,593
					-1	\$12,022

^{*}Note: These are example premiums only. Consult your insurance agent for a premium specific to your property.

Pre-FIRM - Construction before the effective date of the initial FIRM for the community

The premiums shown are based on a standard deductible. Additional deductible options are available up to \$10,000.
Rates are as of April 1, 2016; premiums include the Federal Policy Fee, Increased Cost of Compliance Fee, and Reserve Fund Assessment.

These <u>do not</u> include the HFIAA surcharge (\$25 for primary residence; \$250 for all other buildings) nor any CRS discount.

⁴ Preferred Risk Eligibility: Check the *Flood Insurance Manual* for PRP rating options and eligibility rules.

⁵ Rates based on the building being insured for 75% or more of replacement cost.

Rate Comparison Table

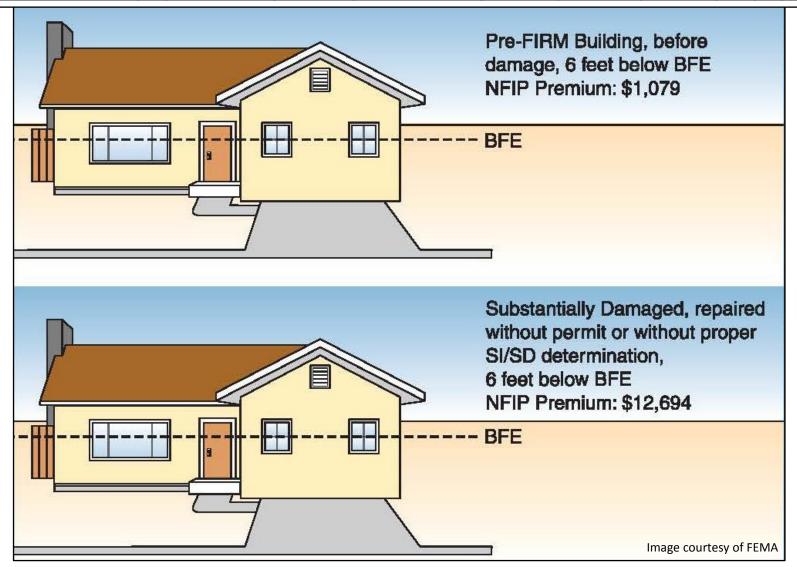
NATIONAL FLOOR

EXAMPLE FLOOD INSURANCE PREMIUM COMPARISONS*

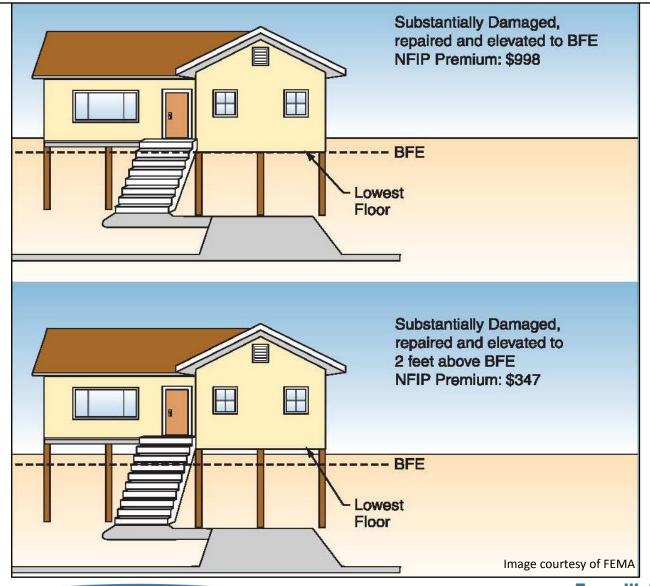
Pre- Pos	I ()no Floor/	\$200/\$80	\$1,250/\$1,250	B, C or X	Not Needed	\$441 Preferred Risk Policy (PRP)⁴
		\$200/\$80	\$1,250/\$1,250	A1-30, AE	+4	\$570
	Single Femily/				+3	\$591
Pos	Single Family/ t- One Floor/				+2	\$710
FUS	No Basement				+1	\$1,073
	140 Daschieft				At BFE	\$2,136
					-1	\$4,786
		\$200/\$805	\$1,250/\$1,250	V1-V30, VE	+4 or more	\$3,098
	Single Family/				+3	\$3,470
Pos	\\\/ithout				+2	\$4,836
198	1 Obstruction				+1	\$6,543
	Obstruction				At BFE	\$8,319
					-1	\$10,205
		\$200/\$805	\$1,250/\$1,250	V1-V30, VE	+4 or more	\$5,526
Pos	t- Single Family/				+3	\$6,078
198	, ,				+2	\$6,824
130	Obstruction				+1	\$7,914
					At BFE	\$9,593
					-1	\$12,022

*** Note: These are example premiums only. Consult your insurance agent for a premium specific to your property ***

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Flood Insurance Takeaways

- If property currently has a flood insurance policy, do not let it lapse – rates can increase.
- If there is an Elevation Certificate available, get it from the seller to save the fee for a new one.
- Insurance is available at much lower rates when outside the floodplain as a "preferred risk policy."
- About 25% of flood insurance claims are from structures outside the floodplain.
- There are specific definitions for primary or secondary residences for insurance rating.
- Federally-regulated lenders cannot make, extend, increase, or renew a loan without flood insurance if structure is in the floodplain.

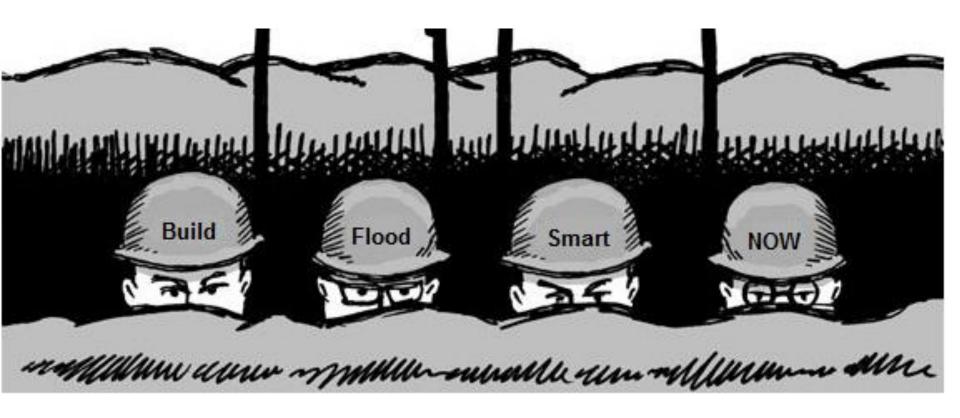
Legal Considerations

The Seller's Disclosure in the Texas Property Code section 5.008 is the main mechanism for making the potential buyer aware of floodplains present on the property.

Some NFIP communities have the requirement of notice of floodplain on property adopted into their local ordinance.

How does this relate to you?

The "Front Lines" of Flood Protection



Resources

- www.texasflood.org
- FEMA Map Service Center: <u>www.msc.fema.gov</u>
- Google Earth kmz layer:

https://hazards.fema.gov/femaportal/wps/portal/NFHLWMSkmzdownload

- Flood Insurance Manual: https://www.fema.gov/flood-insurance-manual
- https://www.fema.gov/letter-map-changes
- FEMA Resource and Document Library
- www.RiskMAP6.com

Additional training:

www.TFMA.org

Contacts at TWDB

Joshua Oyer, CFM

NFIP Program Specialist

512-936-6903

joshua.oyer@twdb.texas.gov

Shawn Snyder, CFM

NFIP Team Lead

512-463-7771

shawn.snyder@twdb.texas.gov

Michael Segner, CFM, MBA

NFIP State Coordinator

512-463-3509

michael.segner@twdb.texas.gov