



FACTSHEET

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SECRETARY

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Flood Recovery Portfolio

Go to one place to look for commonly requested information, rather than going to multiple sources. Maps, spreadsheets and reports showing:

- NFIP data: SFHA, participating/non-participating, claims, policies, RL/SRL
- HMA projects
- Mitigation plan status
- General disaster info like declared areas

Visit <https://fema.connectsolutions.com/frp-la/> for the tool.

Inside this issue:	
Flood Recovery Portfolio	1
NFIP/CRS Corner Elevation of Machinery and Equipment	2-3
CRS Trainings / New Prerequisites	4
New Mitigation Tools	5
Broussard, LA Resilience in Action	6-7
CRS Improvements	8
Mark Your Calendar	9

Spreadsheet

Parish GeoPDFs

Parish Flat Maps

Parish PDF Snapshots

Statewide Status Maps



NFIP/CRS Corner

Elevation of Machinery & Equipment: The NFIP and the CRS Class 8 Requirement



Protecting Building Utility Systems From Flood Damage

Principles and Practices for the Design and Construction of Flood Resistant Building Utility Systems

FEMA P-348, Edition 2 / February 2017



Freeboard (additional height above the base flood elevation) for the lowest finished floor of buildings is important. Freeboard results in reduced flood losses, significantly lower flood insurance premiums, and more flood resilient property owners and communities. Also important is the elevation of machinery and equipment (M&E) associated with buildings. M&E being protected from flood damage means fewer National Flood Insurance Program (NFIP) claims. For some communities, M&E being protected can mean fewer future repetitive-loss properties.

Communities have asked for more information on the difference between the Community Rating System (CRS) Class 8 requirement and the minimum requirements included in the *2021 Addendum to the 2017 CRS Coordinator's Manual*, and what should be in their ordinances or codes.

For the NFIP minimum requirements, 44CFR 60.3 says, "... all new construction and 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." The most common interpretation of this requirement is that either the M&E is elevated to the base flood elevation, or may be placed below the base flood elevation if floodproofed to the base flood elevation.

For the CRS Class 8 prerequisite, the requirement is for residential M&E to be elevated to at least the base flood elevation plus one foot – with an exception. This requirement comes directly from the model International Residential Code (IRC). Since 2015, the IRC has required M&E to be elevated with the exception of specially designed equipment. Floodproofing around M&E is not allowed in the IRC and is not sufficient to meet the Class 8 prerequisite. Federal Emergency Management Agency (FEMA) publication P-348, "[Protecting Building Utility Systems from Flood Damage](#)," February 2017, and in particular Chapter 3 and Table 3-1 of P-348, best explains the IRC requirement for elevating residential M&E and the allowed exceptions.

3 COMPLIANCE AND MITIGATION MEASURES

Table 3-1. Summary of Mitigation Concepts for Building Utility Systems.

Mitigation Actions for Building Utility Systems	New Construction and SI/SD				Compliance or Conformance Not Required (not SI/SD) All Zones	Factors for Consideration		
	Residential		Nonresidential			Active or Passive ^a	Degree of Protection ^b	Relative Cost ^c
	Zone A	Zone V (CAZ)	Zone A	Zone V (CAZ)				
Elevation and Relocation								
Elevate on pedestal, or pier/spot-supported platform	✓	Not permitted	✓	Not permitted	✓	Passive	High	S
Elevate on pile-supported or knee-braced platform	✓	✓	✓	✓	✓	Passive	High	SS
Relocate to required elevation (pedestal/ platform), next higher floor or roof	✓	✓	✓	✓	✓	Passive	High	SS
Relocate for component protection (dry-floodproofed vault, machine room, floor barrier)	Not permitted	Not permitted	✓	Not permitted	✓	Active or Passive	Moderate	SSS
Component Protection								
Dry floodproof (building, portion of building, vault, machine room)	Not permitted	Not permitted	✓	Not permitted	✓	Active or Passive	Moderate	SSS
Flood barrier (outside or inside)	Not permitted	Not permitted	✓	Not permitted	✓	Active or Passive	Moderate	SSS
Specially designed equipment	✓	Not permitted	✓	Not permitted	✓	Active or Passive	Moderate	SSS
Partial Protection Measures								
Flood damage-resistant materials	Not permitted	Not permitted	Not permitted	Not permitted	✓	Passive	Low	SS
Facilitate replacement of below-BFE components	Not permitted	Not permitted	Not permitted	Not permitted	✓	Active	Low	S
Emergency measures	Not permitted	Not permitted	Not permitted	Not permitted	✓	Active	Low	SS
Quick-connect mechanisms for below-BFE equipment	Not permitted	Not permitted	Not permitted	Not permitted	✓	Active	Low	S

(continued on next page)

Elevation of Machinery & Equipment: The NFIP and the CRS Class 8 Requirement

As CRS communities review their floodplain ordinances to determine if the CRS Class 8 prerequisite is met, the CRS recommends the following:

1. If your community (or state) has an adopted building code based on the 2015, 2018, or 2021 IRC, look for Section R322.1.6, "Protection of mechanical, plumbing and electrical systems" in the residential code. If your community is enforcing this code requirement for all residential buildings, including mobile homes in mobile home parks, then the CRS Class 8 freeboard prerequisite is met. If your community is not enforcing the code, then you should begin to do so.
2. If your community (or state) does not have a building code or does not have the above language, then review your floodplain ordinance to determine if floodproofing around M&E is allowed. If so, the ordinance needs to be changed to state that M&E must be elevated, with the exception of specially designed equipment. For example, (using language from the IRC), M&E "must be elevated to the freeboard elevation. Locating electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment is permitted below the [freeboard elevation] provided that they [the equipment or system] are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation."

Key is that in the minimum NFIP language, M&E can be elevated or floodproofed to the base flood elevation. For the CRS, which measures what a community does above and beyond the NFIP minimums, it is easiest to remember that M&E must be elevated to at least the base flood elevation plus one foot, unless specially designed equipment is required for the building (e.g., elevator components).

As people invest in new construction, or as residences are substantially improved (or repaired from damage), placing M&E above the freeboard level is important. Remember, flood insurance premiums are lower when M&E is elevated. Also, CRS Activity 430 (Higher Regulatory Standards) freeboard credit (FRB) is maximized when M&E is elevated. The CRS continues to offer courtesy reviews of ordinances and codes. Contact your Insurance Services Office (ISO)/CRS Specialist for any assistance. As with all proposed flood damage prevention ordinance revisions, remember to have your FEMA Regional Office review your drafts for their concurrence.

(Taken from NFIP/CRS Update June/ July 2021)

CRS Webinars

CRS offers 1-hour webinars to help communities understand and meet their CRS requirements. Many will be recorded, so they can be accessed later. Registration is free but required, as space is limited. Some courses provide continuing education credits for certified floodplain managers (CFMs). See all of the CRS webinar trainings available on the CRS Resources website. All webinars begin at 12 pm Central time. For more on the CRS webinars, go to the Training tab of the [CRS Resources website](#). If you have questions about or suggestions for the CRS Webinar Series, contact Becca.Croft@atkinglobal.com.

If you would like to have a webinar on the FEMA Elevation Certificate, or a particular CRS activity, contact your ISO/CRS Specialist.



New Prerequisites with 2021 Addendum to CRS Manual



Class 9 now requires communities to develop a plan for managing floodplain-related construction certificates (including an annual 90% accuracy rate). This change will require communities to provide construction certificates to ISO annually, and not resubmitted at cycle time, like they were previously.

Class 8 now requires freeboard. The community must adopt and enforce at least a 1-foot freeboard requirement (including machinery and equipment) for all residential buildings constructed, substantially improved, and/or reconstructed due to substantial damage, throughout its Special Flood Hazard Area (SFHA) where base flood elevations have been determined on the Flood Insurance Rate Map (FIRM) or in the Flood Insurance Study (FIS), except those areas that receive open space credit under Activity 420 (Open Space Preservation). [Click here](#) for FAQ's on Class 8 Freeboard Requirement.

Class 6 require BCEGS of 5/5 or better.

These must be in place BEFORE your next verification visit to be eligible. Do not wait until your cycle visit to adopt these requirements. For more information please refer to the [2021 Addendum to the 2017 CRS Coordinator's Manual](#).

Permit Requirement Public Service Announcement

Here is a link to a quick public service announcement reminding people of the need for permits to rebuild after a disaster. Please feel free to share this.

[NFIP Permit PSA](#)

Be on the look out for a Social Media Mitigation Message Calendar on our website. This will be a 53 week guide of mitigation messages to post on social media.

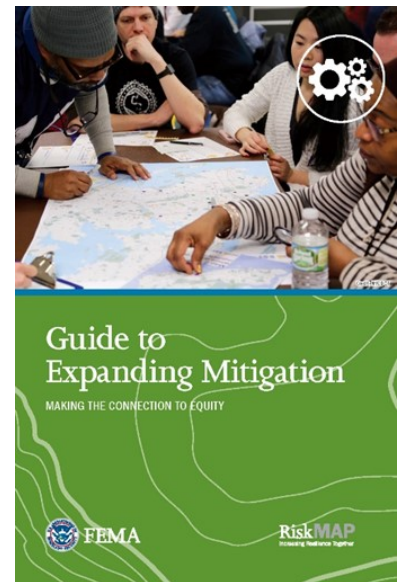


New Mitigation Tools Available to Support Mitigation Planning and Project Development

FEMA Publishes Eleven “Guides to Expanding Mitigation” for Local officials, floodplain managers, emergency managers, mitigation officials.

FEMA Region 6 participates in cross-regional sharing of learning opportunities and resources to benefit stakeholders in all regions. Today, we introduce you to the “Guides to Expanding Mitigation” that spark ideas about how mitigation projects can be strengthened by understanding their relation to other sectors of society. The series was informed by conversations with over 100 stakeholders from a wide range of organizations and includes guides on the following topics:

- Agriculture
- Arts and Culture
- Codes and Standards
- Cemeteries
- Whole Community
- Communications Systems
- Equity
- Electric Power
- Municipal Financing
- Transportation
- Public Health



Although the series was developed by FEMA Region 2, the information shared in the Guides is universal. Each is written using plain language and features ideas and resources for collaboration during the project development or planning process. Whether the reader is an emergency manager, community official, or someone new to mitigation, they can use the Guides to build broader community resilience.

The guides are available on FEMA.gov:

<https://www.fema.gov/about/organization/region-2/guides-expanding-mitigation>.

For more information, contact Dustin Busse, Dustin.Busse@fema.dhs.gov

Broussard, LA - An Example of Resilience in Action

Broussard is a city of fewer than 18,000 in Lafayette Parish, Louisiana, but they are building a resilient community. How? By actively engaging in flood mitigation.

What is flood mitigation? Flood mitigation is taking action to reduce or eliminate the long-term risk of flood through projects such as drainage maintenance.

Broussard had 125 structures damaged in the 2016 flood event in Louisiana, and to City Officials, this was unacceptable. "One house flooded is too many," stated Ray Bourque, Mayor of Broussard.

The Mayor, Director of Public Works, Code Enforcement/Floodplain Administrator, and the City Engineer, formed a committee, including City Council members Ray Gary, David Bonin, and Angel Racca, and set themselves the task of finding a solution to the frequent flooding in Broussard. "We have a responsibility to keep our citizens safe from flooding," stated Mayor Bourque, "and we are not going to accept the status quo. We are going to work with what we have to get the job done with deliberate and intentional planning."

A simple solution? Clean the canals and drainage ditches, then keep them clear. The ditches are in front of most of homes while the canals are located around the city.

Louisiana is essentially flat, and in many areas beneath the water table which means that significant rain levels in short periods of time can cause the canals and drainage systems to swiftly reach capacity, and beyond. This leaves the excess water with nowhere to go...but into peoples' homes.

Knowing of no federal agency able to act swiftly enough with federal monies, this committee decided to be proactive and designed a long-term plan. They identified areas where drainage improvements could have the most impact, then prioritized the list, and are steadily working their way through the projects while maintaining the work they have already completed.

The committee created a list of areas in need of attention and then went to work. Crews began clearing the canals and ditches using herbicide to kill the plants and natural growth occurring in the canals, and then removed all the debris.

Once the initial task was completed, the goal was to keep the ditches and canals clean. To do that, the committee assembled two drainage crews, with a third to be added this year. These crews are dedicated to drainage maintenance and are out every day working on identified areas. Each crew consists of three people equipped with a dump truck, excavator, and trailer.

Identifying areas that need to be addressed, the committee depends on reports from the public to identify where work should be done. They are also engaging with residents and continuing the conversation of prioritizing drainage maintenance, making them part of the solution.

No project goes perfectly. Initially, Broussard officials were met with resistance from homeowners who did not want their ditches dug out as it made it harder to mow. However, the homeowners began to realize the water was flowing *away* from their homes, they too recognized the importance of the committee's work and embraced the plan and became partners. Local Homeowner Associations have also been supportive, allowing easements on properties to ensure water flows away from homes.



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Broussard, LA – An Example of Resilience in Action

The public has gotten involved and been instrumental in reporting areas needing attention by either contacting the city directly or through social media. Broussard Proud, an initiative of Parish Proud, supports this effort by organizing clean-up days and beautifying their city.

The committee and crews kick into high gear before a predicted rain event, clearing and cleaning any obstructions from canals and ditches before the rain begins. “It’s easier to be proactive than to be reactive,” stated Mel Bertrand, Director of Public Works. Broussard uses their social media accounts to advise residents to tie down articles that may float away, such as patio furniture and garbage cans, to avoid these items becoming a hinderance to the natural flow of water.

After the rain passes “public works, police, fire, the members of this committee, and I are out on the streets making notes of where the water has gotten high or is standing to add to the list of future projects and to immediately clear obstructions to our drainage system,” said Mayor Bourque.

Since 2016, Broussard has spent \$3.8 million on major drainage improvements, including three major projects: Cypress Bayou Lateral 2B, Cypress Bayou Lateral 4B, and Ridgeview Outfall. An example of a completed project is the \$1.1 million spent on the Ridgeview Outfall: The drainage of the historic area of Broussard, which was hardest hit in 2016, is now protected.

In 2017, \$350,000 was invested in equipment for an additional crew to steadily work their way through the city.

The result of their work was evident after Hurricanes Laura and Delta roared through the city; no homes were flooded in the city. Some roads were closed due to high water and are on the list to have the ditches, canals, and surrounding areas cleared.

Cleaning the canals and ditches has made a significant difference in reducing the number of homes damaged due to flooding in Broussard.

Looking to the future, Broussard officials are currently in the process of engineering and acquiring easements on Coulee Fortune (canal) for a major maintenance project. “The goal is to always be working on a project and to have one in the planning stages,” said Mayor Bourque.

Additionally, the committee works with developers on new construction. They request that the builders do a backwater analysis, look at surface water measurements, and make efforts to keep silt out of the canals and ditches to prevent future flooding.

Broussard officials continue to expand their cleaning efforts and their partnerships. The impact of cleaning ditches and canals is far reaching. The City of Broussard partnered with Lafayette Parish, St. Martin Parish, and the Louisiana Department of Transportation and Development (LADOTD) on various projects all to the benefit of the residents of the city.

Choosing to be a resilient community is tough because it requires forward, proactive, and not always popular thinking. It requires money, passion for the projects, and sheer will to push projects through to the finish line.

The Broussard Committee and its leaders have what it takes to have a resilient community, and they embraced resiliency to protect their citizens. FEMA salutes the citizens of the City of Broussard and their proactive leaders.

(taken from FEMA bulletin 10/04/2021)

Congratulations!

TO THE FOLLOWING COMMUNITIES
FOR IMPROVING THEIR CRS CLASS
THIS YEAR.

KEEP UP THE GREAT WORK!!
NEW RATINGS COME OUT IN APRIL AND OCTOBER

8

City of Slidell

7

City of Carencro

City of Lafayette

Lafayette Parish

St. Charles Parish

St. John the Baptist Parish

Special Shout Out to Louisiana's Only Class 5 Community
Jefferson Parish

Does your community participate in the Community Rating System (CRS)?

There are 318 communities that participate in the National Flood Insurance Program (NFIP) in Louisiana, but only 41 participate in the FEMA, NFIP Community Rating System (CRS). Participating in CRS can benefit NFIP flood insurance policyholders in your community with up to a 45% discount on their premiums. Contact Pam Lightfoot to request a CRS What If to see the discounts your community could receive.



2022 ASFPM Conference



Call for Abstracts is Now Open
⇒

May 15-19, 2022 | Caribe Royale Orlando | Orlando, Florida



LFMA Winter Workshop

December 10, 2021 9:30 AM – 1:30 PM Workshop via Zoom

Register [HERE](#)



Back2Basics With Mike Segner:

The National Flood Insurance Program (NFIP) for Local Officials

Wednesday, December 15, 2021, 10:30 AM - 11:30 AM

Register [HERE](#)

This course will go over the responsibilities and benefits of being an NFIP-participating community. Geared towards floodplain administrators and their community executives--president; mayor; administrator; judge; council and jury members and more.

Recorded Webinars – Click [HERE](#) to view past webinars



Our goal is flood loss reduction . . .

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

If you or someone you know would like to receive future copies of this newsletter please contact our office:

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Merry Christmas
and
Happy New Year

From: Cindy, Pam, Susan, & Jeanette