



FLOODWATCH

Educating, Planning, Protecting

The Official Newsletter of the Louisiana Floodplain Management Association

INSIDE THIS EDITION

From the Chair	2
The Mitigation Corner	3
Workshop Recap	5
News and Happenings	7
Calendar of Events	31
Board of Directors	33

LFMA Summer Workshop July 2018



Conference and workshop photo credits—Kim Reeves, Erin Johnson

From the Chair

I would like to begin by thanking our outgoing Chairman and current Vice-Chairman, Kara Moree, for a superb job over the last two years as LFMA Chairman. Kara has continued the tradition of setting the standard in which an LFMA Chairman should abide by. With Kara's and rest of the board's assistance, I am confident that we can continue to grow and move LFMA in the right direction.



We have a lot of exciting things going on within LFMA at this time. First and foremost, I would like to congratulate Jefferson Parish with the help of this year's conference chair, Michelle Gonzales, on being selected as the host location for the 2019 LFMA conference. I am confident that Michelle and her committee will plan yet another great conference which will highlight Jefferson Parish's great qualities and attractions. Mark your calendars from April 3 to April 5, 2019 as these will be the dates of the next conference. Be on the lookout for more information as the conference approaches.

Secondly, we are moving ahead with our online membership portal. For those who have not yet checked this out, I urge you to do so. Soon, all of our membership will be handled through this portal and no longer will you receive mailed copies of renewals or conference/workshop registrations. This will better streamline our membership and allow for you to more actively manage your membership. I would like to thank Melissa Becker for her dedication to this project.

I would also like to thank everyone who attended the Summer Workshop in Lafayette. This was one of the most well attended workshops I can remember. As always, these events are designed to discuss trending topics and allow for you, the floodplain administrator, a chance to network and ask questions to your fellow floodplain administrator in a neighboring city/Parish. This workshop featured some great presentations from several different speakers from around the area. I would like to thank these speakers for taking time out of their schedules to spend half a day with us and educate us. I would also like to thank the City of Lafayette and all involved for hosting this very successful event.

The Fall 2018 workshop will be held in St. Charles Parish on October 5th, 2018. More details will follow shortly. Mrs. Danielle Honor-Young, CMA, CFM of St. Charles Parish will be planning this event in conjunction with the "Battle for the Paddle". This should make for an interesting Fall workshop.

In closing, I would like to thank the membership for giving me the opportunity to lead this great organization. I promise to put the best intentions of LFMA and its members first. I am confident that with the help of our board and region representatives that we will continue to move LFMA in the right direction and spread the word of floodplain management.

Toby Fruge', PE, CFM

The Mitigation Corner

By: Michael D. Hunnicutt, CFM

This issue of the “Mitigation Corner” will address the FEMA Announcement of Fiscal Year 2018 PDM and FMA Application Cycle.

FEMA has posted the Fiscal Year 2018 (FY18) Notice of Funding Opportunity (NOFO) announcements for the [Flood Mitigation Assistance \(FMA\)](#) and [Pre-Disaster Mitigation \(PDM\)](#) grant programs on www.grants.gov. These NOFOs provide an overview of the grant programs and details about the agency's funding priorities and review process.

FEMA will open the FY18 application period on October 1, 2018. Eligible applicants must apply for funding through the Mitigation eGrants system on the FEMA Grants Portal accessible at <https://portal.fema.gov>. All applications must be submitted no later than 3 pm Eastern Time on January 31, 2019.



Flood Mitigation Assistance:

FMA grants are available to implement measures to reduce or eliminate risk of severe repetitive flood damage to buildings insured by the [National Flood Insurance Program \(NFIP\)](#). In FY18, \$160 million is available for FMA grants. Further information is in the NOFO: [DHS-18-MT-029-000-99](#) and [FY 2018 FMA Fact Sheet](#).

Pre-Disaster Mitigation:

The goal of the PDM grant program is to reduce overall risk to the population and structures, while at the same time reducing reliance on federal funding from [Robert T. Stafford Disaster Relief and Emergency Assistance Act \(Stafford Act\)](#) disaster declarations. \$235.2 million is available for FY18 PDM grants. Further information is in the NOFO: [DHS-18-MT-047-000-99](#) and [FY 2018 PDM Fact Sheet](#).

Please see the Notice of Funding Opportunity announcement posted on Grants.gov and the HMA Guidance available on the FEMA Internet: <https://www.fema.gov/hazard-mitigation-assistance> for more detailed information regarding eligibility.

FEMA's mission is to support the citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. If you have any questions about the Mitigation Section of FEMA or any of its programs, you can contact your Local FEMA Regional Office, or visit FEMA's website at www.fema.gov, or call LFMA Representative Michael Hunnicutt, CFM, at 504-279-4084, michaeldhunnicuttcfm@gmail.com



LFMA at the ASFPM Annual Conference in Phoenix

LFMA was well-represented at ASFPM this year with presentations by Monica Farris, Rod Scott, Shandy Heil, Maggie Olivier Talley, and Jennifer Gerbasi. Apologies if I left anyone out! The photo below is from the LFMA breakfast.

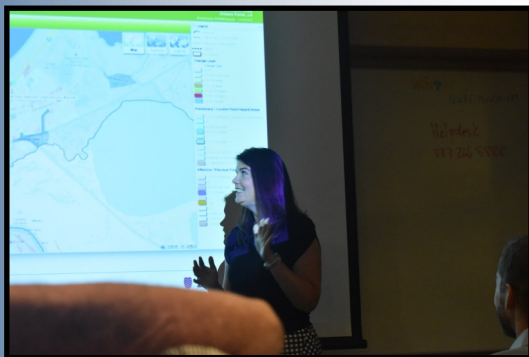
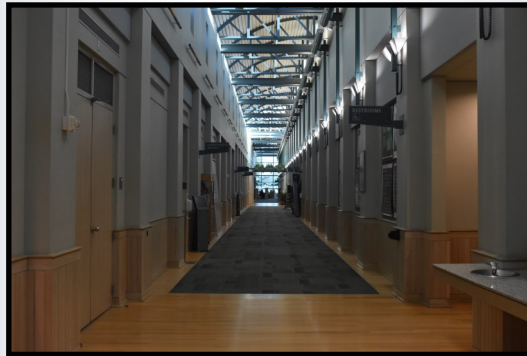


Summer Workshop Lafayette July 2018

The workshop was held at the USGS National Wetlands Research Center and featured a variety of speakers and 66 attendees.



Summer Workshop cont.



Proposed Houma Navigation Canal

Contributed by Mitch McDonald

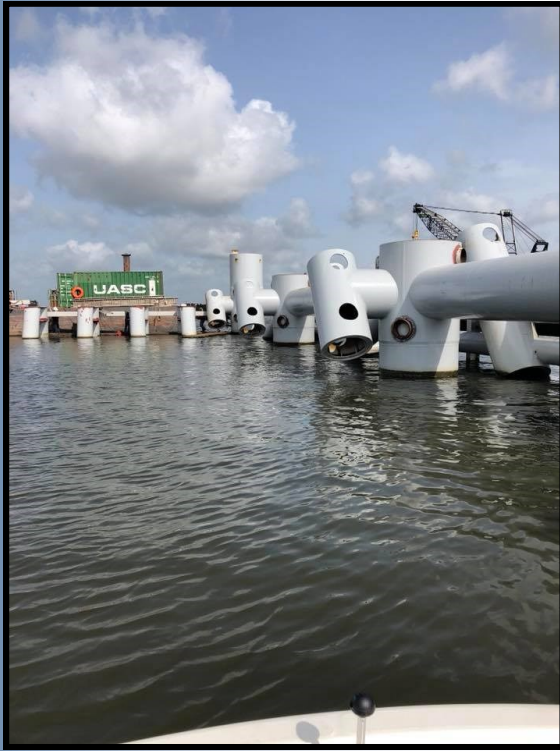
The Terrebonne Port Commission's 680-acre site is located in Houma, LA. The tract is one mile west of LA Highway 57 and the Houma-Terrebonne Airport. The Port is located on the Houma Navigation Canal within one-half mile of its intersection with the Gulf Intracoastal Waterway. This location puts the port in a strategic position to take advantage of significant cargo flows and marine traffic on both waterways.

The Terrebonne Port region supports the oil and gas industry and has done so since the inception of drilling operations in South LA. This region pioneered the marine vessel fabrication and repair demanded by the industry and the fabricators in this region compete very well nationally and internationally, said David Rabalais, Executive Director of Terrebonne Port. "The major hurdle facing Terrebonne Port is that the Houma Navigation Canal's federal maintenance program is very inconsistent. The inconsistent dredging cripples the commerce in Terrebonne. The Port's goal is to fix this inconsistency or build a rock jetty along the last 10 miles of the 35-mile channel. This jetty will block material from migrating into the channel while creating a source of borrow material for barrier island restoration.

To watch a video on the Houma Navigation Canal and proposed jetty, please click [here](#).



Falgout Canal Floodgate Barge update



Contributed by Mitch McDonald

From the Facebook page of Terrebonne Parish President Gordon Dove—Falgout Canal Floodgate Barge being built at Bollinger Shipyard in Amelia. This barge is 190 feet Long x 40 feet wide x 28 feet high and has approximately 1000 tons of steel to be delivered to Falgout Canal Floodgate in Dularge on January 2019. This floodgate protects lower Terrebonne but also stops hurricane tidal surge from moving north to Houma within the Morganza Floodgate & Levee System to protect ALL of Terrebonne Parish. The \$35.6 million Falgout Canal Floodgate is funded by the State \$13.8 million, Terrebonne Parish Government \$16.8 million and Levee Board \$5 million and should be operational in March 2019 before the 2019 Hurricane Season. Great job and thanks to the Terrebonne Levee & Conservation District and the taxpayers of Terrebonne Parish! This is the final floodgate in Morganza south as we move north towards Houma with levee system and east towards South Lafourche levee system.

A Look Back at 30 Years of Mitigation Helping Communities Rebuild Stronger

Contributed by Lisa Ledet

Written by Jennifer Gerbasi

This year marks the 30-year anniversary since the Robert T. Stafford Act was amended to include funding for hazard mitigation grants as a way to help communities recover and rebuild after a Presidentially-declared disaster. In the last three decades, FEMA's Hazard Mitigation Assistance programs have expanded to three mitigation grant programs for pre-and post-disaster events and recently surpassed \$15 billion in funding provided for state, local, tribal and territorial mitigation projects. Communities across the nation are now more resilient, and that growth continues.

Terrebonne Parish has been awarded FEMA Hazard Mitigation Grant and Hazard Mitigation Assistance grant funding for 38 projects worth \$94 million, of which \$78 million is federal funding. The Parish has expended these funds on elevations, pump stations, dredging, home acquisitions, demolitions, and a host of other flood and wind risk reduction projects. Immediately after eight (8) disasters, FEMA provided Public Assistance totaling \$50 million providing 90% of the reported expenses in the Parish for Debris Removal, Emergency Protective Measures, Roads & Bridges, Drainage, Pollution Control, Buildings & Equipment, Utilities, and Parks. The Parish has also been awarded \$135 million through the Office of Community Development from HUD that has paid for levees, raised roads, demolitions, low income housing and infrastructure and housing improvements.

FEMA and the State have been, and will continue to be valuable partners, and will continue to assist the Parish in reducing risk and protecting lives, our culture, and property values. Terrebonne Parish has raised over \$50 million of local funding to invest in our protection as well and will continue to seek out any and all avenues to fund our safety and way of life.

View a [detailed timeline](#) showcasing defining events and advancements in the history of FEMA's mitigation assistance program and watch Hazard Mitigation Assistance Branch Chiefs Karen Helbrecht, Michael Hillenburg and Anna Pudlo share their reflections on the value and benefits of mitigation.

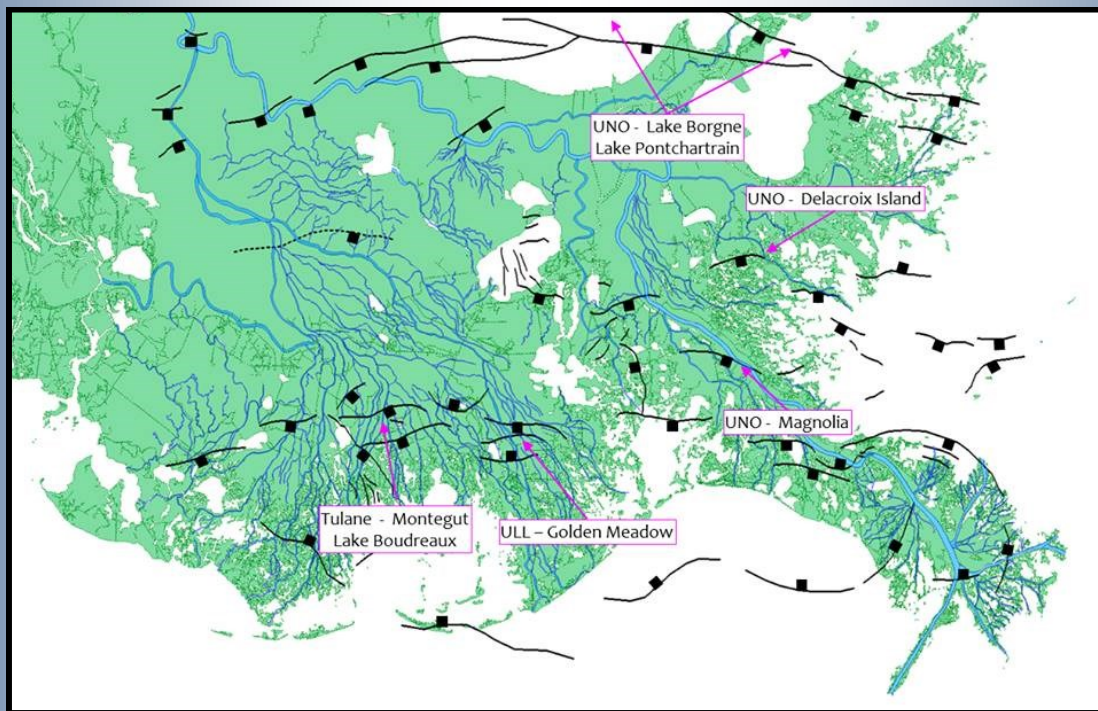
Cleaning ditches in Terrebonne

Contributed by Mitch McDonald

From the Facebook page of Terrebonne Parish President Gordon Dove—Cleaning of the Glynn Avenue concrete ditch. This is like many other drainage ditches throughout the parish that have been neglected over the last 10 years. Unacceptable! Our public works department are addressing these issues on a daily basis throughout our parish.



Mapping faults may help in controlling subsidence and wetlands loss



Contributed by Mitch McDonald

From the Facebook page of Louisiana Coastal Geology —Since 2014 over \$200 million worth of oil and gas industry seismic data been used by area universities to map faults that extend to the surface. These faults appear to play a critical role in controlling hot spots of subsidence and wetlands loss.

This is really the tip of the iceberg in terms of data that is needed to map the entire coast. It will be necessary to find a more effective way to work cooperatively with industry to achieve the goals of long term sustainability in the coastal zone.

New traffic laws impact DWI convictions, driving on flooded roads and off-road vehicles

Contributed by Melissa Becker

Louisiana Highway Safety Commission Aug. 8, 2018 - Several new highway safety laws are now in effect in Louisiana, including stiffer penalties for DWI convictions, new laws concerning driving through flooded areas and the use of off-road vehicles on public roads.

The new laws were passed during the 2018 regular session of the Louisiana Legislature. Most of the new laws became effective on August 1, according to Louisiana Highway Safety Commission Executive Director Lisa Freeman.

"The overall tone of the new legislation is one of seriousness toward traffic safety, as well as respect for measures of accountability," Freeman said.

Act 198 levies an additional \$50 fine for use of a breath-testing instrument for anyone convicted of driving while intoxicated. "Convictions for impaired driving carry significant financial consequences, and this new law demonstrates that by the notable increase from \$75 to \$125 for this special assessment," Freeman said.

Act 508 allows judges to extend probation for up to eight years for people convicted of third- and fourth-offense DWI in a "specialty court program," making substance abuse treatment a more feasible possibility. "This new law recognizes the importance of a specialty court program, such as DWI court, and the appropriateness of extended substance abuse treatment for repeat impaired drivers," Freeman said.

Careless operation of a motor vehicle during flood conditions is a new law designed to protect lives and property from drivers who cause dangerous wakes. The new law carries a penalty of up to 250 hours of community service and a two-year driver's license suspension.

Three-wheelers, four-wheelers, dirt bikes and other all-terrain vehicles not designed for public road use are now subject to a new law. Reckless operation of an off-road vehicle on a public road can carry a penalty of up to \$500 and 90 days in jail, plus forfeiture and destruction of the off-road vehicle. The new law defines reckless operation as forcing another vehicle to leave the road, colliding with a vehicle or person, speeding, going the wrong way, disregarding traffic signs or signals, impeding traffic, wheelies and stunts, harassing other drivers and corralling an occupied vehicle or pedestrian.

Experts talk missteps, lessons learned and plans for future on flood anniversary

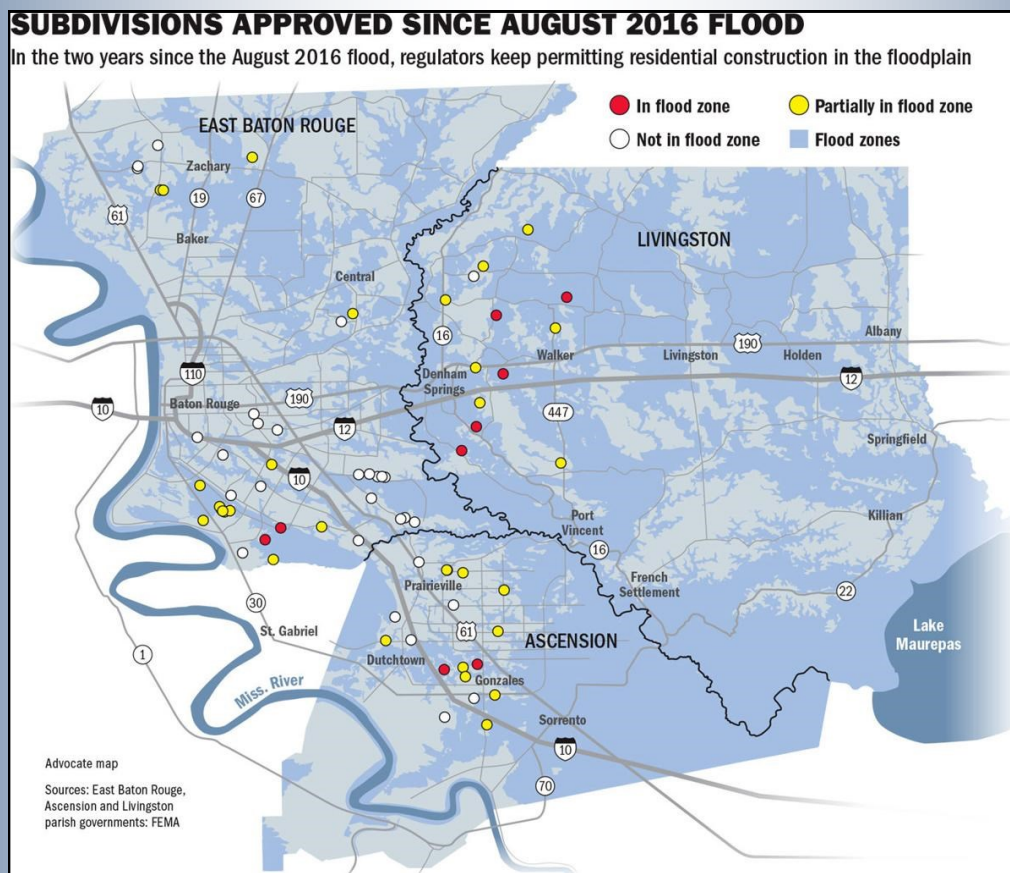
Contributed by Mitch McDonald

Computer modeling that indicated a tremendous amount of rain could fall on the Capital region two years ago this month seemed so out of line with anything that had happened before that forecasters dismissed the numbers rather than heed their warning, a television meteorologist said Monday at a symposium assessing the storm.

“We should have given this (model) more faith and attention than we did,” WAFB meteorologist Jay Grymes said.

As they poured rain over the Gulf of Mexico, the storms received little attention even though forecasts showed the deluge could continue inland, Grymes said. He said TV weathermen could have done a better job warning the public about the storm _ and at least should have warned first responders about the potential for the tremendous amounts of rain.

Full story [here](#).



Teams chosen for new coastal resilience program

Contributed by Melissa Becker

Four county-based teams have been selected to participate in a new technical assistance and training program focused on strengthening coastal counties' resilience, sponsored by NACo in partnership with the Association of State Floodplain Managers (ASFPM), the Coastal States Organization (CSO) and the National Oceanic and Atmospheric Administration (NOAA). The selected teams are from: Santa Rosa County, Fl.; Calcasieu and Cameron Parishes, La.; Harrison County, Miss.; and Cameron and Willacy Counties, Texas.

In October 2018, the team members will travel to Baldwin County, Alabama, to participate in a coastal resilience training and peer exchange workshop. During the workshop, attendees will receive intensive, hands-on training designed to boost their capacity to better prepare for, plan for, absorb the impacts of, recover from or adapt to extreme weather events and climate-related hazards. Teams will develop tailored action plans that will guide their efforts to protect and strengthen both their natural habitats and economies. Each team will also receive individual assistance following the in-person training forum to guide their implementation of the coastal resilience strategies and projects they chose to incorporate into their action plans.

Full story [here](#).



New Floodplain Management Video To Share

Contributed by Melissa Becker

Flooding is the most common and costly natural disaster. Floodplain management helps communities reduce losses, protect valuable economic and natural resources, and more importantly, save lives. This video, named “Higher Standards: The Value of Floodplain Management” may help communities learn to reduce the physical and financial impacts of future flooding through floodplain management. Review and post the video on your web pages.

Video can be found [here](#).



Area coastal projects to receive nearly \$17 million

Contributed by Lisa Ledet

Gov. John Bel Edwards issued a list of projects Tuesday, including four in Terrebonne and Lafourche, aimed at helping coastal Louisiana residents adapt as the Gulf of Mexico encroaches.

The distribution of \$41 million for 10 projects in half a dozen coastal parishes comes after roughly 18 months of public hearings, discussion and informal polling. Nearly \$17 million will go toward projects in Terrebonne and Lafourche.

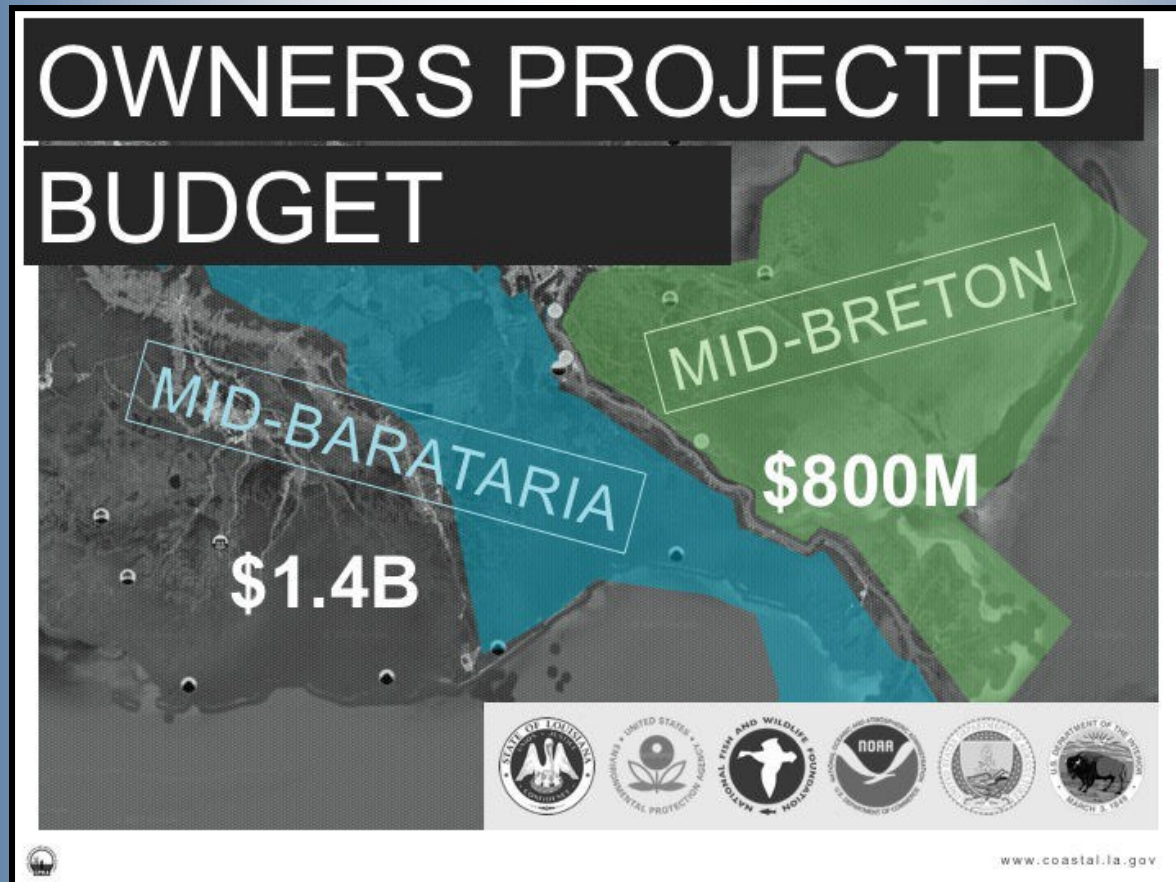
La. Safe's projects, funded by a competitive federal grant to help communities adapt to such changes. The projects are seen as a complement to the state's 50-year, \$50 billion master plan to deal with the increasing threats from coastal erosion, sinking land, rising seas and hurricanes.

Full story [here](#).

Also visit lasafe.la.gov for more details.



Coastal Authority hears pros -- and cons -- of Mid-Barataria Sediment Diversion



Contributed by Mitch McDonald

A stand-in for Plaquemines Parish President Amos Cormier lectured the state's Coastal Protection and Restoration Authority board on Wednesday (July 18) on why the proposed Mid-Barataria Sediment Diversion should be abandoned in favor of simply dredging sediment from the Mississippi River and elsewhere to build new wetlands.

Ken Savastano of Braithwaite, a former National Marine Fisheries Service researcher who represents recreational fishers on the parish's coastal zone management advisory committee, outlined a series of concerns during a 20-minute lecture to the authority, which met at the Lafitte Civic Center.

Full story [here](#).

50th Anniversary of NFIP

August 1, 2018 commemorates the 50th anniversary of the National Flood Insurance Act of 1968. The Act was motivated by the devastating loss of life and property by Hurricane Betsy in 1965 and created the National Flood Insurance Program (NFIP). Since then, the program has aimed to reduce the impact of flooding on private and public structures by providing affordable insurance to property owners, renters, and businesses as well as by encouraging communities to adopt and enforce floodplain management regulations.

50th Anniversary of the National Flood Insurance Program





This photograph represents the ultimate floodplain from a community's perspective: nature following its course with no threat to life or property. The waterfront is a community asset where people can relax and enjoy the view.
Photo courtesy of John Kinley



More than **1,485** communities have taken a more assertive approach to keeping their neighbors safe by joining the NFIP Community Rating System, which provides discounts for some flood insurance policies.



Nearly **\$4B** in flood grants has been dedicated by FEMA, buying out or elevating nearly 53,000 properties.



More than **6,300** flood-prone properties have been mitigated with the help of \$1.1 billion in NFIP Flood Mitigation Grants since 1996.



FEMA

Watch a [video](#) about 50 Years of NFIP.
Visit <https://www.fema.gov/nfip50> for more information.

Getting Planning Mileage Out of the Flood Risk Products

FEMA's Flood Risk Products (FRPs) are sets of data designed to help communities make better planning and investment decisions. FEMA encourages communities to use the FRPs to support local mitigation planning. For example, using FRPs to identify the location and impacts of flood hazards in order to better prioritize areas in need of mitigation strategies.

However, community planners may not be aware of what data is available or how it can be used to help meet the mitigation planning requirements found in the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#). The new "Using Flood Risk Products in Hazard Mitigation Plans" publication aims to help planners improve how they talk about flood risk in their mitigation plan. The document explains what FRPs are, where they can be found, and includes several case studies. Most importantly, the publication walks the user through how each FRP can be applied to help meet mitigation planning requirements.

Flood Risk Products
USING FLOOD RISK PRODUCTS IN HAZARD MITIGATION PLANS

Hazard mitigation is the effort to reduce loss of life and property by reducing the impact of disasters. Disasters can cause injury and death, damage buildings and infrastructure, and have devastating consequences for a community's economic, social, and environmental well-being. Hazard mitigation plans are key to breaking the cycle of disaster damage, reconstruction, and repeated damage, and they allow communities to remain eligible to receive certain types of state, tribal, and federal assistance.

The Federal Emergency Management Agency (FEMA) provides policy, guidance, products, tools, training, and technical assistance to state, local, and tribal jurisdictions to help them develop and update mitigation plans. More information on available resources can be found on FEMA's Hazard Mitigation Planning website, www.fema.gov/hazard-mitigation-planning. In addition, FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program has developed Flood Risk Products (FRPs), which are tools created to assist in mitigating flood risk. Under the Risk MAP program, FEMA partners with local, state, and tribal governments to identify flood hazards, assess flood risks, develop plans and mitigation strategies, and implement mitigation actions using a wide range of public and private resources. Data produced from Risk MAP projects can be incorporated into a mitigation plan and help inform mitigation strategies and prioritize mitigation activities.

WHAT ARE FLOOD RISK PRODUCTS?

FRPs are data communication tools intended to be used with National Flood Insurance Program (NFIP) regulatory products, such as Flood Insurance Rate Maps (FIRMs). Communities can use FRPs to transform traditional flood mapping efforts into an integrated process of identifying, assessing, communicating, and mitigating flood-related risks. The non-regulatory FRPs, which expand upon basic flood hazard information, can be used in mitigation planning to identify areas where risk reduction actions may produce the greatest return on investment. FRPs include a main database of flood risk information called the Flood Risk Database. This geodatabase contains a variety of datasets generated during a Risk MAP project that can be used to analyze flood risk in a geographic information system (GIS) format. The standard datasets include:

- Changes Since Last FIRM
- Water Surface Elevation Grid
- Flood Depth Grids
- Percent 30-Year Chance Grid
- Flood Risk Assessment
- Areas of Mitigation Interest

Optional Flood Risk Products that can support mitigation planning decisions:

Enhanced Flood Risk Datasets: These products that enhance flood risk analysis may include datasets such as velocity grids, Water Surface Elevation change grids, and multi-frequency grids for levees. In coastal communities, enhanced datasets may include increased flooding scenarios that reflect potential sea-level rise, dune size and location, and simplified coastal zones.

Flood Risk Report: A narrative of a community's flood risk study, provided to help the community understand the study methods and results.

Flood Risk Map: A color-coded map that illustrates the range of the community's flood risk. This map also identifies essential facilities that are exposed to risk, past claims, areas with significant land-use change, stream flow constrictions, and other areas in which to focus flood mitigation efforts.

BENEFITS OF FLOOD RISK PRODUCTS

- Enhance emergency, community, and mitigation planning by prioritizing areas for risk reduction actions.
- Support improved risk communication and outreach to the public.
- Visualize flood risk and help explain differences in risks within and outside the Special Flood Hazard Area (SFHA).

FLOOD RISK PRODUCTS CAN BE USED IN HAZARD MITIGATION PLANNING TO HELP IDENTIFY AREAS WHERE RISK REDUCTION ACTIONS MAY PRODUCE THE GREATEST RETURN ON INVESTMENT.

JULY 2018

USING FLOOD RISK PRODUCTS IN HAZARD MITIGATION PLANS | 1




This product is now available in the FEMA Library at <https://www.fema.gov/media-library/assets/documents/168137>

PDM Resilient Infrastructure Funding

New this year!

PDM Resilient Infrastructure Funding

PRE-DISASTER MITIGATION (PDM) GRANTS provide competitive funding for...






 **STATE**  **LOCAL**  **TRIBAL**


...government projects that reduce their communities' risks from natural hazards.

One way PDM grants reduce risk is through **Resilient Infrastructure Projects**
A new opportunity for the 2018 grant application period

During the FY 2018 funding period, FEMA will award the highest ranked Resilient Infrastructure subapplicants **up to \$10 million Federal cost share.**

Resilient Infrastructure projects may include those that help communities mitigate damage from many types of natural hazards.

 **FLOOD**  **EARTHQUAKE**  **WIND**  **WILDFIRE**  **DROUGHT**

 **FEMA**

Learn more about the [Pre-Disaster Mitigation](#) program.

Check out the FY 2018 PDM Program [Fact Sheet](#).

NFIP Wins 4 Month Extension

Contributed by Toby Fruge

Hours before the National Flood Insurance Program was set to expire on Tuesday night, the Senate passed an extension through November. The House had already passed the bill, and President Trump quickly signed it into law.

Full story [here](#).

Building barriers: Inside the race to save Louisiana's first line of storm defense

Contributed by Mitch McDonald



Ten miles from Louisiana's receding shore, on an island that was on the verge of sinking away, new land is growing at a rate of 200 feet per day.

A slurry of sand blasts from a 30-inch-wide pipe with the force of a firehose. In foaming sheets, it spreads across the beach of Whiskey Island, making it thicker and wider by the minute. Backhoes and bulldozers finish the job, sculpting the sand into something resembling the island's younger self, before storms, oil spills and erosion took a heavy toll.

Full story [here](#).

Forecasters peer into heart of hurricanes to improve intensity forecast

Contributed by Darla Duet

AUSTIN, Texas (Reuters) - Despite advances in predicting where hurricanes are heading, forecasters are still struggling to determine a crucial factor in deciding emergency measures and evacuations: their intensity.

With a better way to predict a storm's power, or intensity, people on the ground will be more prepared in knowing whether a hurricane headed their way will cause devastating floods and winds that can uproot trees like Maria, which devastated Puerto Rico last year, or just shake branches and rattle windows.

"The fact that we have a much better understanding of where these storms are going to go is a great first step. We sort of have half the circle filled in, and we need to get that other half filled in, which is that intensity component," said Steve Bowen, director and meteorologist for insurer Aon Benfield's Impact Forecasting team.

Due to warming sea and air temperatures, there is also more energy in storms, which might affect intensity predictions, some climate scientists have said.

"Climate change potentially affects the frequency, intensity and tracks of tropical cyclones," MIT climate professor Kerry Emanuel wrote in a recent academic paper.

Measuring a hurricane's intensity quickly and formulating predictions on its changes is key to giving people on the ground time to prepare as the Atlantic hurricane season peaks this year after a devastating 2017 season.

Maria, one in a series of devastating hurricanes last year, killed an estimated 4,465 people, knocked out the electric grid and caused \$90 billion in damage in Puerto Rico.

The National Hurricane Center said in a report last year that it failed to adequately predict the rapid intensification of Hurricane Matthew in 2016 to a Category 5 storm with maximum sustained winds of 165 mph (270 kph).

The storm carved a destructive path in the Caribbean, killing more than 1,000 people in Haiti, according to data gathered by Reuters.

HEART OF THE HURRICANE

There are more than a dozen scientific models for predicting hurricane intensity but they are of limited use, scientists say.

While the science of tracking a storm relies heavily on data about conditions on its periphery, predicting intensity relies on finding where its energy is coming from by measuring what is happening in the middle of it.

Heart of hurricanes, cont.

Typically, that means flying a hurricane hunter aircraft inside the storm, measuring wind speeds from a weather buoy as a storm passes overhead or relying on satellites that may fly over once every other day.

One project to obtain more data to predict intensity is the Cyclone Global Navigation Satellite System or CYGNSS for short, a constellation of eight low-orbit satellites launched by NASA in 2016.

Previous satellites, which flew over relatively infrequently, had trouble measuring ocean surface winds at the center of storms, with their signals often being degraded by heavy rain at the core, NASA said.

“For storms that are changing really quickly, you could miss something like rapid intensification,” said Christopher Ruf, principal investigator for CYGNSS and a climate science professor at the University of Michigan.

CYGNSS was designed to measure surface winds in and near the inner core of tropical systems, including regions that could not previously be measured from space. With more satellites passing over more often, and being in a position closer to the storms, it offers more real-time data to be plugged into intensity models, researchers said.

At present, researchers are focusing on the 2017 season when hurricanes devastated Texas, Florida and Puerto Rico, causing hundreds of billions of dollars in damage. They are replaying data gathered from CYGNSS to see how it affected the quality of the forecasts and how it can be better used to predict intensity.

CYGNSS could be fully operational next year, researchers said.

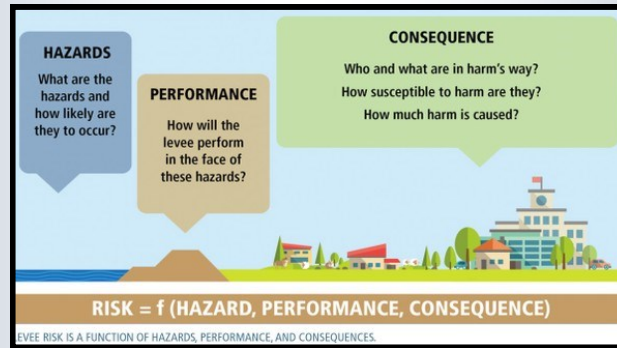
Michael Brennan, branch chief of the hurricane specialist unit at the National Hurricane Center, said the 2017 hurricane season saw a great deal of rapid intensification when storms quickly picked up, or lost, power.

The center launched a 10-year Hurricane Forecast Improvement Program in 2009 that has helped it better understand where storms are going and the power they will possess by coordinating hurricane research to improve the task.

Last year, in the Atlantic basin, forecasters correctly forecasted six of 39 instances of rapid intensification, Brennan said.

“It doesn’t sound like a really great number, but 10 years ago that number would have been zero,” he said.

New Orleans area levee system 'high risk,' and 'minimally acceptable'

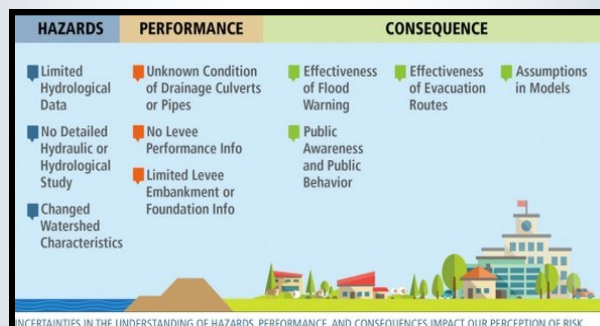


Two different reviews of the New Orleans area levee system by the Army Corps of Engineers raise troubling questions about the ability of much of the system to withstand surges caused by a major storm nearly 13 years after Hurricane Katrina. The reviews also question the ability of local levee districts to keep up with costly maintenance between storms, as required to remain eligible for the National Flood Insurance Program, records show.

One of the reviews, completed in 2011, gave the 350-mile levee system the second worst classification - "Urgent (Unsafe or Potentially Unsafe)" -- in the corps' Levee Safety Action Classification system. While preliminary because post-Katrina improvements were not finished, the classification remains accurate to this date, a corps New Orleans District spokesman confirmed recently.

The documents indicate New Orleans' levee system is well-designed for a storm surge with a 1 percent chance of occurring in any given year, the so-called 100-year event. But the poor ranking reflects a stark reality: much of the metro area's population is at risk of levee failures during stronger, less frequent storms -- 200-year events or stronger. Such a disaster could kill nearly 1,000 people if storm surge overtopped east bank levees, the corps estimated, and almost 3,000 if those levees broke before being overtopped, unleashing a furious wall of water similar to what some areas faced during Katrina.

Full story [here](#).



FY2018 Grant Funding Application Period Opening Soon!

[FY 2018 FMA Fact Sheet](#)

[FY 2018 PDM Fact Sheet](#)

[HMA Home Page](#)

The infographic features a red megaphone icon on a yellow background with the text "Coming soon!". Below this, a dark blue banner reads "FY 2018 Grants for Pre-Disaster Mitigation and Flood Mitigation Assistance". A central yellow box states "A total of \$395.2M in funding is available for these competitive grant programs." To the left, "PDM \$235.2M" is shown with a stack of money icon. To the right, "FMA \$160M" is shown with a stack of money icon. A green banner below indicates the "Application Period: October 1, 2018 → January 31, 2019". A map of the United States is titled "Who is eligible for PDM and FMA funding?" and lists: All States, Federally-Recognized Tribes, District of Columbia, Alaska, Hawaii, American Samoa, Guam, Northern Marianas, Puerto Rico, and U.S. Virgin Islands. The FEMA logo is at the bottom left, and the text "Visit Grants.gov for more information" is at the bottom right.

The Louisiana Watershed Initiative: A New Statewide Approach to Flood Risk Reduction

Contributed by John Snow

At the last LFMA workshop, Danica Adams provided a presentation to LFMA members describing the state's work to develop and advance this statewide comprehensive approach to flood-risk management, the highlights of which are outlined below for LFMA membership, along with an overview of current efforts.

As Adams noted, in response to the devastation caused by the Great Floods of 2016, Gov. John Bel Edwards charged several state agencies with coordinating their efforts to develop a new approach to reducing flood risk throughout Louisiana. This work has included efforts ranging from the development of a hydraulic and hydrologic model of the Amite Watershed to the development of watershed coalitions in coordination with parish, state and federal government entities.

These early planning and engagement efforts yielded quite a bit of data, with summary conclusions that include:

- Ecosystem services maximized through the natural and beneficial functions of the floodplain and effective flood risk management go hand in hand.
- The root of all wise decision-making is accurate, complete, transparent and accessible data.
- Communities and local government entities need to be empowered and supported in meeting the demands of Louisiana's changing flood risk context.
- The state should set the bar for sound flood-risk management throughout Louisiana.
- Sustainable sources of funding are needed to implement and maintain sound flood risk management practices across the state, and existing sources can be stretched and leveraged more efficiently if put toward a common goal.
- Engagement, trust building and partnership toward collective action are necessary to maximize program effectiveness.

In taking the next step to build upon these efforts, Gov. Edwards issued an executive order that established the Council on Watershed Management—an interagency effort that includes the Office of Community Development, Coastal Protection and Restoration Authority, Governor's Office of Homeland Security and Emergency Preparedness, Department of Transportation and Development and Department of Wildlife and Fisheries. One of the primary charges of this executive order is for these agencies to create the conditions necessary for local governments and stakeholders to manage flood risk at the watershed level, as opposed to the traditional political and jurisdictional boundaries that we know water simply does not recognize.

Continued on next page

Watershed Initiative, cont.

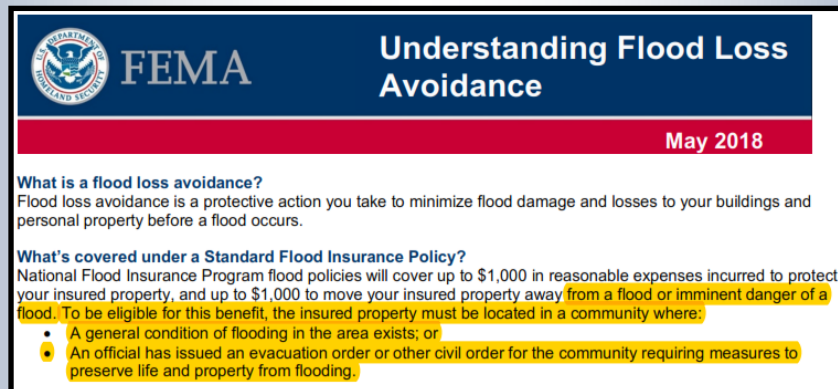
Just a few months ago, the Council launched the Louisiana Watershed Initiative to serve as the programmatic arm of these coordinated floodplain management efforts across all involved state agencies. Subject matter experts working in an advisory capacity are building a foundation of data, projects, policies, standards and guidance to manage our state's flood risks at the watershed level. These technical advisory groups are working to engage stakeholders throughout the state in these planning efforts, starting with each of you and the jurisdictions you work for and represent.

In the coming months, your input will be critical to informing how these efforts move forward, guided by objective, science-driven approaches to reducing flood risk and the knowledge you each maintain of your local communities. The Louisiana Watershed Initiative will soon host a series of workshops and meetings throughout the state, with more to come in terms of local and regional community engagement. For more information on these upcoming meetings, please email watershed@la.gov with your name, title and the parish or municipality for which you work. From there, we will ensure you receive updates on future meetings in or near your community.

For more information, please take a moment to read the Louisiana Watershed Initiative's [vision white paper](#), released by Gov. Edwards in August 2018 as the foundation upon which efforts will move forward.



Flood Loss Avoidance Measure



Submitted by Katherine Howington

I wanted to bring to your attention, if you aren't aware that when you have a NFIP flood policy you could possibly be reimbursed up to \$1,000. to prevent your home/business from flooding. This is listed in the policy section under coverage C, see below:

C. COVERAGE C—OTHER COVERAGES: 1. Debris Removal. a. We will pay the expense to remove non-owned debris that is on or in insured property and debris of insured property anywhere. b. If you or a member of your household perform the removal work, the value of your work will be based on the Federal minimum wage. c. This coverage does not increase the Coverage A or Coverage B limit of liability a. Sandbags, Supplies, and Labor (1) We will pay up to \$1,000 for costs you incur to protect the insured building from a flood or imminent danger of flood, for the following: (a) Your reasonable expenses to buy: (i) Sandbags, including sand to fill them; (ii) Fill for temporary levees; (iii) Pumps; and (iv) Plastic sheeting and lumber used in connection with these items. (b) The value of work, at the Federal minimum wage, that you or a member of your household perform. (2) This coverage for Sandbags, Supplies and Labor only applies if damage to insured property by or from flood is imminent and the threat of flood damage is apparent enough to lead a person of common prudence to anticipate flood damage. One of the following must also occur: (a) A general and temporary condition of flooding in the area near the described location must occur, even if the flood does not reach the building; or (b) A legally authorized official must issue an evacuation order or other civil order for the community in which the building is located calling for measures to preserve life and property from the peril of flood. This coverage does not increase the Coverage A or Coverage B limit of liability. b. Property Removed to Safety (1) We will pay up to \$1,000 for the reasonable expenses you incur to move insured property to a place other than the described location that contains the property in order to protect it from flood or the imminent danger of flood. Reasonable expenses include the value of work, at the Federal minimum wage, you or a member of your household perform. (2) If you move insured property to a location other than the described location that contains the property, in order to protect it from flood or the imminent danger of flood, we will cover such property while at that location for a period of 45 consecutive days from the date you begin to move it. The personal property that is moved must be placed in a fully enclosed building or otherwise reasonably protected from the elements. Any property removed, including a movable home described in II.6.b. and c., must be placed above ground level or outside of the special flood hazard area. This coverage does not increase the Coverage A or Coverage B limit of liability.

Read the rest of the article [here](#).

Click [here](#) to access the full FEMA bulletin shown above.

Impacts From The NFIP Actuarial Rate Increases

Submitted by Roderick Scott

This article is meant to review the different impacts the NFIP rate increase to actuarial rates is having on both the numbers of policies and real estate values. For around forty years we have had the NFIP and FEMA flood maps and for better or worse, those maps set the flood insurance rates on the buildings and contents. We began this new flood insurance era of property development by setting minimum standards for elevation, types of foundations and construction in order to reduce flood risks and cover that property with some assurance the risks had been analyzed and made lower by the standards. At the start of this new path we said “all buildings built before the first flood map were going to get a below real risk rate”, this was due to them being built before minimum elevation standards. Then we added millions of newer buildings with lower flood risk, sometimes replacing the older buildings, but more often than not, just building newer ones outward from the original ones. Those subsidized premium rates were good for the property owners until Biggert Waters 2012 and then the “fixit” revisions of the Grimm/Waters 2014 legislative actions. One of the big issues now is we do not really know how many of these pre-FIRM high flood risk building there are out there in our flood plains. We do know the numbers of NFIP policies but not the real total numbers of these pre-FIRM buildings and therefore our real flood damages risks and possible real estate value reductions.

How many pre-FIRM buildings in flood plains are there and what are their values and property tax revenues? What would the reduction in values due to NFIP premium increases be and subsequently the reduced property tax revenues to schools, government operations, levee taxes, revenue bonding credit/re-payments, mean? Buildings are critical for housing and operating most businesses and flooding interrupts/eliminates the uses of those buildings as well as causing economic and emotional hardship on families, businesses and the community. Pre-FIRM buildings are high flood risk.

Once we started down this new path to actuarial rates, none of us were sure if it would result in changes to property owner behavior towards flood mitigation of the buildings. Would they just sell the property so the insurance rate increases would not reduce the value and their investments? Would they try to privately finance the projects? Would they try to get mitigation grants from our local governments? The last 20 years of disasters/floods has resulted in a large and growing inventory of repetitive and severe repetitive NFIP loss designated buildings and the SRL designation more than doubles the annual increase in premium rates to actuarial for primary residences. We must find ways to do many more of these flood mitigation projects, like elevating/dry flood proofing the building, than we have been.

Acquisition and demolition for flood mitigation is in my opinion only to be used selectively, if no other solution is available. Elevation is the most utilized flood mitigation option used in our Louisiana communities and is gaining in popularity in other flood impacted and high pre-FIRM building areas of the US. Elevation projects stabilize pre-FIRM building/property values and their tax revenues. Elevation and dry floodproofing provides work for our structural engineers and architects as well as surveyors. Almost every construction trade is involved with elevation and dry flood proofing projects. Even though we have elevated over 35,000 since Katrina, GOHSEP stat, how do we finance more of these projects than we currently are annually? The Louisiana Coastal Restoration Protection Agency – CPRA has identified over 20,000 homes needing flood mitigation in non-leveed communities on the north shore area of Lake Pontchartrain. Madisonville, Mandeville and Slidell have large numbers of pre—FIRMs in the flood zones with rapidly rising flood policy premiums and lots of them with multiple flood loss claims.

Continued next page

Impacts From The NFIP Actuarial Rate Increases, cont.

The biggest question would end up being not can we but, “How do we finance the flood hazard mitigation of these older and often historic buildings?” When Congress changed the rules, insurance premiums, on the pre-FIRM buildings it did not provide any additional funds or even a financing ability to respond to the legislation. Yes, the focus is starting to be on more pre-disaster mitigation funding but really folks we are talking millions of pre-FIRM’s in flood zones and maybe 15,000 SRL’s now. Remember the FEMA NFIP policies only cover maybe 20%-30% of those buildings in the flood zones as evidenced by the two big Louisiana floods and the 3 in 3 years in Houston. That has left us way short of the funds we need to do these projects and now we are seeing dropping property values. SRL’s in VE-Zones that are 10ft below BFE are around \$15,000 in premiums this year on their way to over \$20,000/year! The flood mitigation of even half of the pre-FIRM buildings in today’s flood zones is going to cost many billions of dollars and it could take 20-30 years with the current capacity of the structural elevation industry, even with broad financing or grants. In Houston some of the “3 strikes – SRL homes in the flood zones near those big drainage ditches, sorry bayous, have been devalued and are sitting empty.

We have a problem. Our neighbors have homes that are pre-FIRM, our church buildings and commercial buildings are pre-FIRM in high risk flood zones and that has economic ramifications. In Congress and in “think tanks” like Pew and the Economist there is a lot of discussion about a federal private partnership to fund these activities. This would be a revolving loan much like the one used for many years for sewer and water project funding, only this program would help finance the flood mitigation of private and non-profit owned buildings. The ones that produce the revenues that fund all the other stuff. Low to moderate income - LMI property owners our neighbors and labor force, need to have additional considerations, like forgivability or outright grants. LMI multi family and single family property owners will need another type of program so rents stay affordable for our LMI neighbors that do not own the property. In this Congress we saw the introduction of S-1507 by Jack Reed of Rhode Island that would have created just such a program. That legislation is stalled out and will expire at the end of 2018 if not moved ahead. I really believe we need at least one research study about this type of mitigation funding and how we would implement it. It is a long way from legislation to an actual government program and we are running out of time. I do hope this article generates lot’s of conversations towards a solution out of the hole we are sliding deeper into.

CALENDAR OF EVENTS

LFMA Fall Workshop

October 5, 2018 8:00-12:00

Edward A. Dufresne Community Center

274 Judge Edward Dufresne Parkway

Luling, LA 70070

AGENDA

8:00 AM – Breakfast & Coffee

8:30 AM - **Introduction**

Toby Fruge', CFM

LFMA Chairman

8:35 AM - **Welcome** by St. Charles Parish Administration

8:45 AM – **Disaster Response Team**

Shandy Heil, CFM

10:00 a.m. – Break

10:15 a.m. – **Floodplain Management in Zone V**

Nic LeBlanc, CFM, City of Mandeville

10:50 a.m. – **Louisiana's Watershed Initiative**

Jeffery Giering, CFM, Governor's Office of Homeland Security & Emergency Preparedness, SHMO

11:30 a.m. – **St. Charles Parish Coastal Issues**

Earl Matherne, CFM, St. Charles Parish

Planning Administrator

1:00 p.m. – **CFM Exam (Pre-registration required)**

Workshop Host contact: Danielle Honor-Young

Hosted by St. Charles Parish Government



CALENDAR OF EVENTS

36th Annual Technical and Business Conference

“Rise Above the Risk”

April 3-5, 2019

Hilton New Orleans Airport

901 Airline Drive

Kenner, LA 70062



Conference Chair: Michelle Gonzales

**Stay tuned for more details about call for presenters, technical tours,
annual party and much more!**

Louisiana Floodplain Management Association

P.O. Box 64725
Baton Rouge, LA 70896

LFMA Board Members and Regional Representatives

CHAIRMAN: Toby Fruge', PE, CFM
(225) 926-5125
toby@owenandwhite.com

VICE CHAIR: Kara Moree, CFM
(225) 755-2120
kmoree@bucharthorn.com

SECRETARY: Darla Duet CFM
(985) 537-7603
darlad@lafourchegov.org

TREASURER: Melissa Becker, CFM
(318) 487-5401
mbecker@rapc.info

EXECUTIVE DIRECTOR: Theodore E. DeBaene, PE, CFM
(225) 926-5125
tdebaene@owenandwhite.com

DRT: Shandy Heil, CFM
(225) 603-4090
shandyogeaheil@gmail.com



WORKSHOP COORDINATOR: Darla Duet CFM
(985) 537-7603
darlad@lafourchegov.org

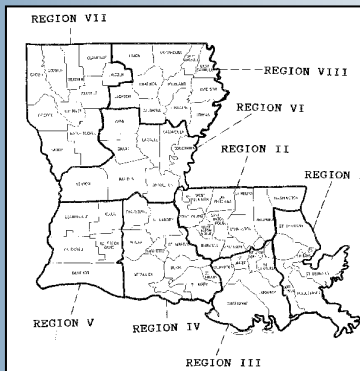
MEMBERSHIP CAP:

CONTINUING ED: Michelle Gonzales
(504) 648-3613
michelle.gonzales@arcadis.com

NEWSLETTER EDITOR: Vicki Holmes, CFM
(504) 919-0066
vickih@orleansshoring.com

WEBMASTER:

STATE NFIP COORDINATOR: Cindy O'Neal, CFM
(225) 379-3005
Cindy.ONeal@LA.GOV



Region I
Kim Reeves, CFM
(504) 481-5132
tkreeves@cox.net
Mike Hunnicutt, CFM (alt)
(202) 394-8493
mandjhunnicutt@yahoo.com
Region II
Jeri Daniels, CFM
(504) 872-3776
jdaniels@dewberry.com
Bruce Dyson, PE, CFM (alt)
(225) 766-5358
bdyson@bha-engineers.com

Region III
Lisa Ledet, CFM
(985) 873-6567
lisaledet@tpcq.org
Region IV
Bonnie Anderson, CFM
(337) 654-9312
floodmgr@gmail.com
Region V
Dana Watkins, CFM
(337) 721-3600
dwatkins@cppj.net

Region VI
Melissa Becker, CFM
(318) 487-5401
mbecker@rapc.info
Region VII
Juanita Fowler, CFM
(318) 357-3840
juanita@natchitochesla.gov
Region VIII
Larry Walters, CBO, CFM
(318) 747-2454
lwalters@ibts.org
Lisa Richardson, CFM (alt)
(318) 398-9780
lrichadson@oppi.org

Floodwatch is published by the Louisiana Floodplain Management Association. Information and opinions contained herein do not necessarily reflect the views of all members. Items for publication and other editorial matters should be directed to the Editor: vickih@orleansshoring.com