

## Hazard Mitigation Grant Program (HMGP)

The Hazard Mitigation Grant Program (HMGP) is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (the Stafford Act), Title 42, United States Code (U.S.C.) 5170c. The key purpose of HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster. HMGP is available, when authorized under a Presidential major disaster declaration, in the areas of the State or territory requested by the Governor. The amount of HMGP funding available to the Applicant is based upon the total Federal assistance to be provided by FEMA for disaster recovery under the Presidential major disaster declaration. Federally-recognized tribal governments can submit a request for a major disaster declaration within their impacted areas.



### TIMELINE OF HMGP PROCESS





## Hurricane Hermine

Above is a picture of infrastructure damage in Tallahassee after Hurricane Hermine. The NOAA radar graphic is also above. Hermine was a Category 1 storm when it made landfall.

# Hurricane Matthew

Below is a photo of damage on A1A in Flagler County from Hurricane Matthew. The radar graphic from NOAA is also below. Matthew never made landfall in Florida but definitely left his mark.





# **Best Practice:**

## **Daytona Beach Museum of Arts and Sciences**

FEMA Press Release

In May of 2009, Florida's northeast coast was drenched by five consecutive days of rain. One of the worst hit areas was Daytona Beach, where more than 20 percent of the streets were underwater and nearly a thousand buildings reporting some kind of flood damage.

One of those structures was the West Wing of the Museum of Arts & Sciences (MOAS), which contained a range of exhibits from prehistoric fossils and historic weapons to Cuban art and African artifacts. Located on a low-lying plot about three feet lower than the rest of the museum campus, the 22,416-square-foot wing gradually filled with three to four inches of flood water.

According to Jenelle Codianne, the museum's director of marketing and public relations, there was damage to the floors, walls, interior walls, electrical, doors and office furniture. No collections were lost, but several exhibits were damaged including the Center for Florida History, which displayed the museum's giant ground sloth skeleton. It took several days to disassemble, but the prehistoric skeleton was moved to another wing and avoided water damage. Meanwhile, museum employees were busy moving artworks into other galleries.

As one of Daytona Beach's leading cultural institutions, it was imperative the wing be rebuilt. But museum authorities were adamant that reconstruction should eliminate the potential for future flooding.

In order to fund the reconstruction, MOAS applied for a Flood Mitigation Assistance (FMA) Grant from the Federal Emergency Management Agency (FEMA) and financial aid from the Volusia County Environmental, Cultural, Historic and Outdoors (ECHO) Program. The FMA program is one of the Hazard Mitigation Assistance (HMA) programs funded by FEMA and managed by the State of Florida. The FEMA grant provided more than \$4 million of the \$5.4 million reconstruction price, with an additional \$1.3 million coming from local sources including an ECHO grant and the museum's own funding. The Orlando office of global architects VOA Associates Inc. won the competition to design the new structure, while locally based Hall Construction handled the fabrication.

After demolishing the flood-damaged structure, construction began on its replacement – on the same footprint but slightly larger than the previous building. The new wing was built on a concrete spread foundation with concrete masonry stem walls backfilled with earth and overlaid with a concrete slab. The floors of the new wing were elevated 2.5 feet above the old level and 2.2 feet above Base Flood Elevation – or roughly six inches above the maximum water level of the 2009 flood.

Unveiled in October of 2015, the new West Wing is a state-of-the-art museum space that features five exhibit galleries as well as a planetarium. In addition to being a huge success with the press and public, the resurrected building also passed its first weather test with flying colors.

"Happy to report NO FLOODING!" Stephanie Mason-Teague, the museum's director of development, declared via email the week after Hurricane Matthew stormed up Florida's Atlantic coast. The new West Wing held up perfectly to Hurricane Matthew. Water didn't even get close to the building, let alone enter it. The mitigation measures incorporated at the time of the rebuilding did the job of preventing repetitive flood loss.

"We had a lot of tree debris," Mason-Teague added, "and were without power, phones, internet." But that was the extent of the hurricane's impact. The museum was able to get back online, clean up the tree debris and open its doors to the public again within a week of Matthew striking Daytona Beach.



<u>Right:</u> Opened in 2015, the reconstructed West Wing of MOAS was undamaged when Hurricane Matthew blasted Florida's east coast in October, 2016. Photo courtesy MOAS.



<u>Above:</u> Large fans were used to dry out the water-damaged West Wing of the Daytona Beach Museum of Arts & Sciences (MOAS) after the devastating flood of 2009. Photo courtesy MOAS.

# **Eligible HMGP Projects**

The following is a list of eligible project types:

- Property Acquisition and Structure Demolition
- Property Acquisition and Structure Relocations
- Structure Elevation
- Mitigation Reconstruction
- Dry Flood-proofing of Historical Residential Structures
- Dry Flood-proofing of Non-Residential Structures
- Generators
- Localized Flood Risk Reduction Projects
- Non-Localized Flood Risk Reduction Projects
- Structural Retrofitting of Existing Buildings
- Non-Structural Retrofitting of Existing Buildings and Facilities
- Safe Room Construction
- Wind Retrofit for One- and Two-Family Residences
- Infrastructure Retrofit
- Soil Stabilization

- Wildfire Mitigation
- Post-Disaster Code Enforcement
- Advance Assistance
- 5 Percent Initiative Projects\*
- Miscellaneous/Other\*\*
- Planning Related Activities
- Management Costs\*\*\*

#### For more information visit the FEMA website.

\* FEMA allows increasing the 5% Initiative amount up to 10% for a Presidential major disaster declaration under HMGP. The additional 5% Initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

\*\* Miscellaneous/Other indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

\*\*\*The Recipient may request up to 4.89 percent of the HMGP allocation for management costs. The Recipient is responsible for determining the amount, if any, of funds that will be passed through to the sub recipient) for their management costs.

### Residential Construction Mitigation Program By: Luis Lopez

The Residential Construction Mitigation Program (RCMP) is a wind mitigation program. These programs provide an enhanced level of protection against the effects of natural disasters that occur in every county. Providing opportunities to reduce private and public vulnerability to known hazards not only reduces the number of residential damages but also reduces the costly impacts on the public infrastructure. No one has to look beyond the impact Hurricane Wilma had on Florida in 2005 to understand why mitigating the impacts of wind is critical. Wilma was the third costliest natural disaster in the history of the nation, yet its impacts were basically isolated in three counties. Wilma was primarily a wind event that had enormous impacts on South Florida; over 6 million residents lost power, some for several weeks.

Every county in the State of Florida is highly susceptible to the excessive wind which can cause severe countywide damages. Florida is also the most vulnerable state in the nation to hurricanes and the damages they cause. The RCMP receives \$7 million annually from the Florida Hurricane Catastrophe Trust Fund. There are allocations to fund the Florida International University (FIU) Hurricane Research Program, the Mobile Home Tie-Down Program, and the Low to Moderate Income Retrofit Project. FIU conducts research regarding the elimination of state and local barriers to upgrading existing mobile homes; and hurricane loss reduction devices and techniques for site-built residences. The Mobile Home Tie-Down Program's goal is to reduce property damage from high wind events by using a new tie-down system to secure the manufactured homes to the ground using lateral foundation systems with longitudinal stabilizer devices or ground stabilizer plates. The Retrofit Project is intended to minimize insured loss exposure, promote the use of sound residential retrofitting, and teach homeowners about practical and affordable ways to strengthen homes. These retrofits are usually implemented on homes already undergoing general rehabilitation efforts.

Mitigating future wind damages through the currently available programs, plans, and statutes are do-able if there is interest expressed on your part to take advantage of them. Doing nothing could have catastrophic consequences. If such an event happens on your watch, the more your local community mitigates future wind-borne losses, the quicker you will be able to return to normalcy. For more information, visit the FDEM website.



Example of Hurricane Strap

## **New Planners**

### **Elise Fisher**



Elise joined the Mitigation Bureau in October 2016, after spending nine months in the State Watch Office. She is currently a student at Florida State University obtaining a Master's degree in Urban and Regional Planning.

Elise grew up in southeast Florida, and prior to moving to Tallahassee, she lived in Pensacola while attending the University of West Florida. Elise is excited continue her education and grow in the emergency management field. She will be the LMS Liaison for Regions 1 and 2, and is looking forward to building relationships within those counties, and throughout the state.

When not at FDEM and school, Elise enjoys riding bikes and spending time outdoors with friends and her dog!

#### **Roger Lemarque**

Roger joined The Florida Division of Emergency Management (FDEM) in 2015 originally as a State Watch Office Operations Officer, and transitioned to the Mitigation Bureau in October 2016 as a Planner. Roger graduated from Florida State University in December 2015 with a Bachelors in Environmental Studies and Certificate in Emergency Management and Homeland Security. Prior to working with FDEM, Roger worked as a student researcher for Florida State University's Disaster Incident Research Team and completed an apprenticeship at the Wakulla County Sheriff's Office.

Roger will be the LMS Liaison for Regions 3 and 4 and looks forward to working with all stakeholders involved in the planning process.





Congratulations!

Glades, Liberty, Suwannee, and Taylor Counties completed the LMS update process. Their new plans expire in 2021.

Gadsden and Orange Counties achieved Approved Pending Adoption Status.

### Florida Enhanced State Hazard Mitigation Plan

With an ENHANCED SHMP, Florida receives 20% of total federal disaster assistance, rather than the 15% a state receives for having a Standard SHMP. This has resulted in millions more for mitigation efforts in Florida. Only 11 other states have approved Enhanced SHMP's.

### **Need More Information?**

<u>Melissa (Schrader) Schloss</u> melissa.schloss@em.myflorida.com

Laura Waterman laura.waterman@em.myflorida.com

<u>Elise Fisher</u> elise.fisher@em.myflorida.com

Roger Lemarque roger.lemarque@em.myflorida.com

Luis Lopez luis.lopez@em.myflorida.com

Jared Jaworski jared.jaworski@em.myflorida.com

<u>Luz Bossanyi</u> Luz.bossanyi@em.myflorida.com

### The Bureau of Mitigation

Mitigation is an integral part of the Florida Division of Emergency Management (FDEM). Mitigation actions reduce or eliminate the loss of life and property by lessening the impact of disasters. Due to Florida's weather, geography, and miles of coastline the state is highly vulnerable to disasters. Disasters can be very costly to both the citizens and government.

Under the direction of Division Director Bryan W. Koon and State Hazard Mitigation Officer, Miles E. Anderson, the Bureau of Mitigation administers several federal mitigation grant programs including the Hazard Mitigation Grant Program, the Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program. The Bureau also administers a state funded mitigation program called the Residential Construction Mitigation Program.

If you would like to know more about mitigation in Florida please visit: <u>www.floridadisaster.org/mitigation.</u>

