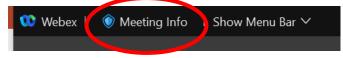
FMA & BRIC Grant Programs State-Wide Applicant Briefing

Call-in Number available through Webex. Click "Meeting info" tab in the top left corner





Webinar Info

- Audio
 - Available through Webex
- All lines will be muted for the duration of the webinar.
- If you have a question or issue during the presentation please submit it through the webinar chat.
- Any questions not answered during the presentation will be answered in the meeting minutes and made available to the public.

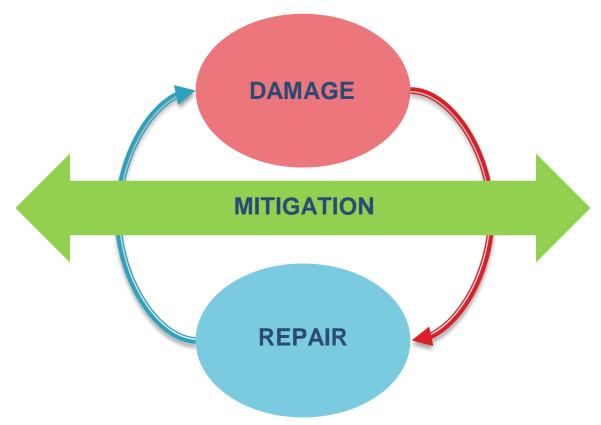


INTRODUCTION



What does Mitigation do?

Mitigation breaks the cycle of disaster, damage, reconstruction and repeated damage



\$6 is saved in future disaster costs for every \$1 of hazard mitigation spent



Where does Mitigation fit?

Mitigation

Reducing the loss of life and property by lessening the impact of disasters



Recovery

Putting a community back together after a disaster



Response

Saving life and property during and immediately after a disaster

Preparedness

Getting people and equipment ready to quickly and effectively respond to a disaster before it happens



Timelines

Non-Disaster Mitigation Grants Application Cycle and Funding Deadlines

NOFO posted to Grants.gov: 8/12/22

FDEM Announcement emailed: 8/15/22

Application period opens: 9/30/22

Deadline to Submit SA to FDEM: 11/14/22

Deadline to Submit a Subapplication to FDEM 11/14/22 by 5:00 PM EST

Only complete subapplications will be accepted and reviewed before submission to FEMA



ELIGIBILITY



Minimum Supbapplicant Eligibility Criteria

- Applicant's jurisdiction must have a FEMA-approved local mitigation plan as a condition of receiving a project grant
- All jurisdictions included in multi-jurisdictional plan must have formally adopted their respective Local Mitigation Strategy (LMS)
- All jurisdictions must participate in the NFIP (communities on probation or suspended from the NFIP are not eligible).

Eligibility Criteria

All mitigation measures submitted to the state for funding consideration must:

- Be consistent with the State Hazard Mitigation Plan
- Provide a long-term solution
- Be located in a vulnerable area as identified in the Local Mitigation Strategy (LMS)
- Be technically feasible and meet cost effectiveness and environmental conformity
- The measure must identify a non-federal match (90/10) (75/25)



Program Funding

- FMA & BRIC are cost-reimbursement grant programs
 - All approved eligible project costs are financed by the Sub-recipient with reimbursement requested from the State
- FEMA may fund up to 100% (FMA) and up to 75% (BRIC) of the eligible costs of each project
- Sub-Recipient Management Costs (SRMC) are available up to 5% of the total project cost
- Project Cost-Share
 - The applicant must provide the match, which can be fashioned from a combination of cash and in-kind sources (44 CFR 206.432(c)).

Cost Share Requirements

Generally, FEMA will pay up to 75 percent of the total project cost

BRIC:

- FEMA will pay up to 90 percent for Economically Disadvantaged Rural Communities
- FEMA will pay up to 100 percent for Management Costs

FMA:

- FEMA will pay up to 100 percent for Severe Repetitive Loss Properties
- FEMA will pay up to 90 percent for Repetitive Loss Properties
- FEMA will pay up to 75 percent for Non-RL/SRL Properties



FLOOD MITIGATION ASSISTANCE (FMA)



FY 2022 Flood Mitigation Assistance (FMA)

FMA Eligibility Requirements

 Subapplicants must participate in the National Flood Insurance Program (NFIP) (not on probation or suspended)

If Mitigated Structure Remains:

 Structures identified in the subapplication must have an active NFIP policy in effect at the FMA application start date (09/30/2022*) and must maintain it for the life of the structure regardless of flood zone

If Mitigated Structure is Acquired/Demolished:

 Structures identified in the subapplication must have an NFIP policy in effect at the FMA application start date (09/30/2022*) and must maintain it until the transfer of property occurs regardless of flood zone





FMA Eligible Activities

- Acquisition/Demolition
- Acquisition/Relocation
- Elevation of structures
- Mitigation Reconstruction
- Dry Floodproofing of Historic Structures
- Dry Floodproofing of Non-Residential Structures
- Localized Flood Risk Reduction Projects

- Structural Retrofitting of Existing Buildings
- Non-Structural Retrofitting of Existing Buildings and Facilities
- Infrastructure Retrofit
- Soil Stabilization
- Project Scoping Individual Home & Community Flood
- Miscellaneous/Other**

FY 2022 FMA Available Funding & Priorities

TO BE ANNOUNCED



FY 2021 FMA Available Funding & Priorities



\$3,397,751.27 Identified for Further Review



BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES (BRIC)



BRIC Eligible Activities

Existing Activities that are Still Eligible:

- Property Acquisition and Structure Demolition or Relocation
- Structure Elevation
- Mitigation Reconstruction
- Dry Floodproofing
- Generators
- Localized/Non-localized Flood Control Projects
- Structural Retrofitting and Non-structural Retrofitting of Existing Buildings and Facilities
- Construction of safe rooms
- Wind Retrofitting for Family Residences
- Infrastructure Retrofit
- Soil Stabilization
- Wildfire Mitigation
- Resilient Infrastructure
- Hazard Mitigation Planning



BRIC Eligible Activities

Expanded Eligibility Includes:

- Project scoping
- Building code activities
- Pre-award costs
- Additional activities for wildfire and wind implementation (DRRA Section 1205)
- Earthquake early warning (DRRA Section 1233)

Projects Must:

- Be cost-effective
- Reduce/eliminate risk and damage from future natural hazards
- Meet latest two consensus codes (i.e., 2018 or 2021 international building code)
- Align with Hazard Mitigation Plan
- Meet all environmental and historic preservation requirements

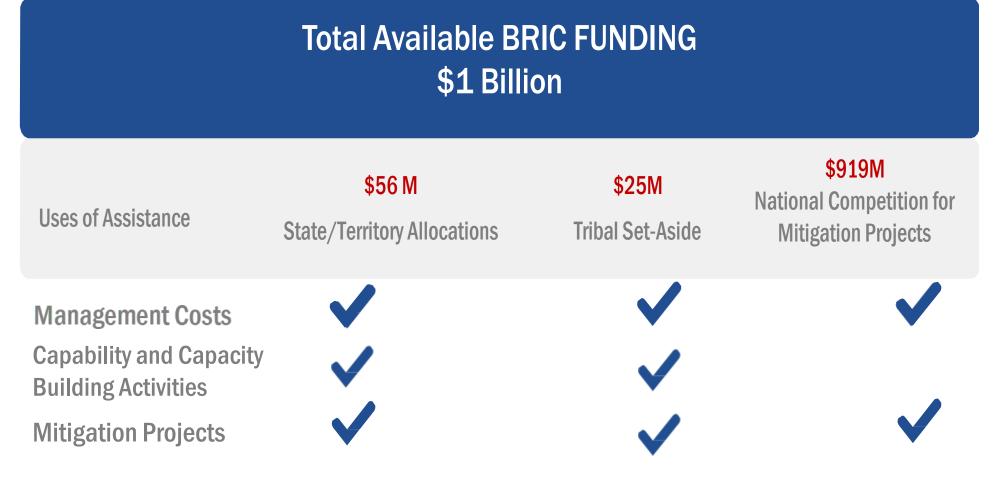


FY 2022 BRIC Available Funding & Priorities

TO BE ANNOUNCED



FY 2021 BRIC Available Funding & Priorities



\$74,125,111.74 Identified for Further Review



BRIC Technical Criteria



Infrastructure project



Mitigates risk to one or more lifelines



Incorporates nature-based solutions



Applicant has mandatory tribal, territory-, or state-wide building code adoption requirement

(recent versions of International Building Code and International Residential Code)



Subapplicant has Building Code Effectiveness Grading Schedule Rating of 1 to 5



Application generated from a previous qualifying award or the subapplicant is a past recipient of BRIC non-financial Direct Technical Assistance



A non-federal cost share of at least 30% (or, for Economically Disadvantaged Rural Communities, a non-federal cost share of at least 12%)



Designation as an Economically Disadvantaged Rural Community



BRIC Qualitative Criteria





FY 2021 BRIC Direct Technical Assistance

Double the number of communities supported through Direct Technical Assistance

Non-financial Direct Technical Assistance was provided to up to 20 selected communities to support the mitigation outcomes listed below:





FY 2021 BRIC Direct Technical Assistance

FEMA may prioritize Direct Technical Assistance for communities that:

- Have not received a project award under the Pre-Disaster Mitigation (PDM)
 program, FMA, or the Hazard Mitigation Grant Program (HMGP) within the past 5
 years
- Have not received an Advance Assistance award under PDM, FMA, or HMGP within the past 5 years
- Are Tribal entities
- Are Economically Disadvantaged Rural Communities and/or benefit disadvantaged community
- Have demonstrated a compelling need (e.g., have significant social vulnerability, multiple major disaster declarations within the past 5 years, etc.)

NOTICE OF INTEREST (NOI) FORM



FY 2022 Notice of Interest Form

If you would like to indicate your interest in pursuing a mitigation activity under the FMA or BRIC programs prior to developing and submitting a subapplication, you may submit a Notice of Interest (NOI) form to FDEM to receive programmatic, engineering and environmental feedback on the proposed project.

NOI Form will be e-mailed with FDEM's notice announcing the FMA and BRIC application cycles and will be available on FDEM's FMA and BRIC websites.

Using the NOI form is <u>strongly</u> recommended, but not required. *FY 23 it will be required.*

Submit Completed Form Via E-mail: non-disasterprograms@em.myflorida.com

NOI Submittal Deadline: (9/20/2022)

*After this date, DEM won't be reviewing NOI forms and providing feedback. If you would like feedback, you would like feedback.

APPLICATION DEVELOPMENT



How to Apply

- ✓ Eligible Subapplicants must create an account and apply for funding using FEMA Grants Outcomes (FEMA GO) at the FEMA GO Portal https://go.fema.gov/
- ✓ Once an account is created, please send an e-mail to nondisasterprograms@em.myflorida.com so that we may approve the user (as a SAR or SM).
- ✓ Visit FEMA Grants Outcome (FEMA GO) for Hazard Mitigation Assistance Grants to view the technical user manuals and support materials https://www.fema.gov/grants/guidance-tools/fema-go



Application Development

Make sure the program for which you are applying is identified within the subapplication title:

- FMA Evergreen County Elevation Project
 (Do not use street name or property owner's name in title)
- BRIC City of Evergreen Wind Retrofit Project



General Subapplicant Information Required

- Name of Applicant Organization
- Applicant type
- County/Counties
- State Legislative/ Congressional District(s)
- Federal Tax Identification Number
- FIPS Code
- Unique Entity ID (UEI) number
- FFATA

- Point of Contact
- National Flood Insurance Program (NFIP) Community Identification Number
- Application Preparer Information
- Duly Authorized Representative
- LMS Letter of Support



LMS Letter of Support

- All BRIC subapplications must have a signed letter of support from the LMS Chair
 - Must identify how project meets LMS goals and objectives
- Subapplications without a LMS letter of support will NOT be processed



Scope of Work

- ✓ Determine that the proposed activity is an eligible mitigation activity
- ✓ Completely answer all questions
- ✓ Provide clear and detailed description of the proposed activity and how the activity will be implemented
- ✓ Provide supporting documentation and historical data



Pre-Award Costs

- Pre-award costs are incurred prior to the date of the grant award.
 - There is no start date for when they can be incurred. They can be incurred any time prior to an award.
- Examples of pre-award costs:
 - Gathering NEPA data, developing BCA, design specs, conducting workshops for application development, etc.
- Must be approved by the State and FEMA
- Must be requested within subapplication budget
- If the project is not approved, pre-award costs will be the sole responsibility of the subapplicant



Budget Development

You must provide detailed costs of the project. This information will be used for the Benefit-Cost Analysis. Required items include:

- ✓ Pre-Award Costs (list individually)
- ✓ Construction Costs (labor, materials, etc.)
- ✓ Other costs/fees (permitting, engineering, etc.)
- ✓ Sub-Recipient Management Costs
- ✓ Provide Funds Commitment Letter for Non-Federal Share

For more information see 44 CFR §13.24



Budget Development

- Lump sums are **NOT** acceptable
- You must detail all anticipated project costs
- Provide the source of the estimate
 - Such as contractor estimate or estimating tool (RS Means, Cost Works, Bni, etc.)
 - Vendor quotes



Subrecipient Management Costs (SRMC)

- SRMC are available upon request
 - Keeps management funds and project funds separate.
 - Must be requested within the subapplication
 - Can only be used for indirect costs and/or administrative expenses associated with the project
 - Cannot exceed 5% of the total project costs

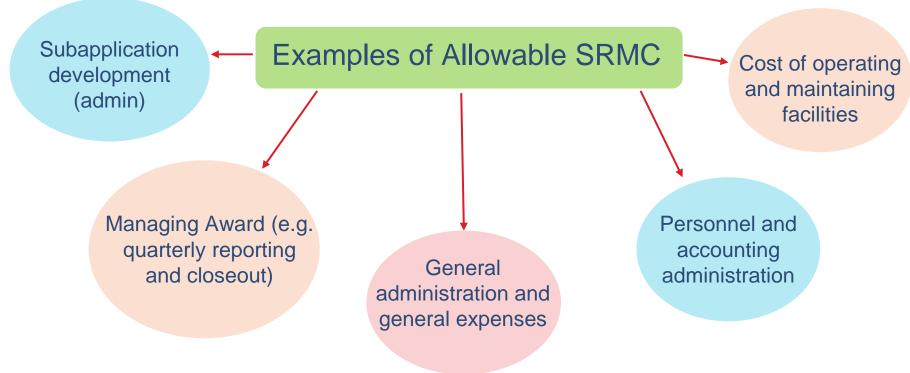
 For BRIC only – SRMC is not subject to the cost share split and can be requested at 100%.

Example:

Total Project Cost = \$200,000 (up to \$10,000 SRMC may be requested)

Subrecipient Management Costs (SRMC)

Management costs are any indirect costs and administrative expenses that are reasonably incurred by a Recipient or Sub-Recipient in administering an award or subaward



*These activities are not an exhaustive list and are subject to State/FEMA approval



Schedule of Work

Project Schedule of Work

- ✓ Identify project milestones and include all phases of the project
 - Milestone example: project design
- ✓ Number of days to complete
 - Example: 6 months
- ✓ BRIC Go/No-Go Milestones The subapplicant, must identify at least one or more Go/No-Go milestones in the work schedule for mitigation projects submitted to the national competition that FEMA will review and approve.

(cannot exceed a 36 months period with the exception of community flood mitigation projects which cannot exceed 48 months)

ENGINEERING REVIEW

Claudia Purser



State Technical Unit Engineering Review



STATE MITIGATION

PROGRAMMATIC



ENGINEERING



ENVIRONMENTAL





State Technical Unit – Engineering

The TechUnit Engineering is a team of experienced professionals that will **help you** complete your sub-application.

Our role is to ensure all sub-applications are complete and in good shape for the program you are applying for (FMA or BRIC):

- Good mitigation projects that will protect communities and increase resiliency
- Eligible and Feasible projects
- Cost effective projects



Key Points

BRIC IS A <u>COMPETITIVE</u> PROGRAM

Your project needs to be better than other projects from the rest of the country to be selected for funding

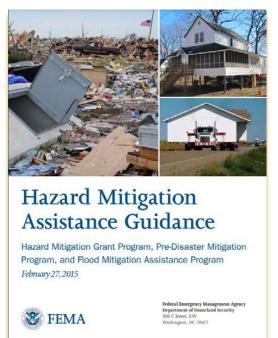
For BRIC and FMA, remember your project must meet all requirements

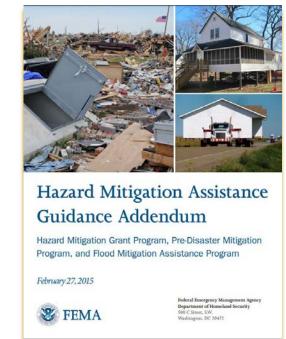




Key Points

- Read FEMA's Hazard Mitigation
 Assistance Guidance and identify
 the eligibility of your project
 under this funding source.
- Get help from the State or get help from professionals with HMA funding and Benefit Cost Analysis <u>experience</u>.







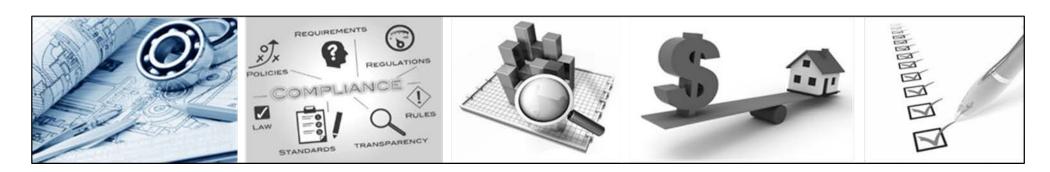


State Technical Unit - Engineering

Our team reviews multiple sub-application sections:

- Sub-applicant Information
- Contact information
- Scope of Work
- Schedule

- Budget
- Cost effectiveness
- Attachments





Sub-applicant and Contact Information

Please assign the correct person as the POC for the project:

- The POC must be aware of the Sub-application
- The POC must be available to respond RFI and provide additional information (Holidays)
- The POC must be able to reach out to different departments/staff members for help
- If working with a consultant, the information must come from the Sub-applicant



Key Points

Always keep in mind the State Technical Unit Engineering team is on your side and needs your help to be able to help you.

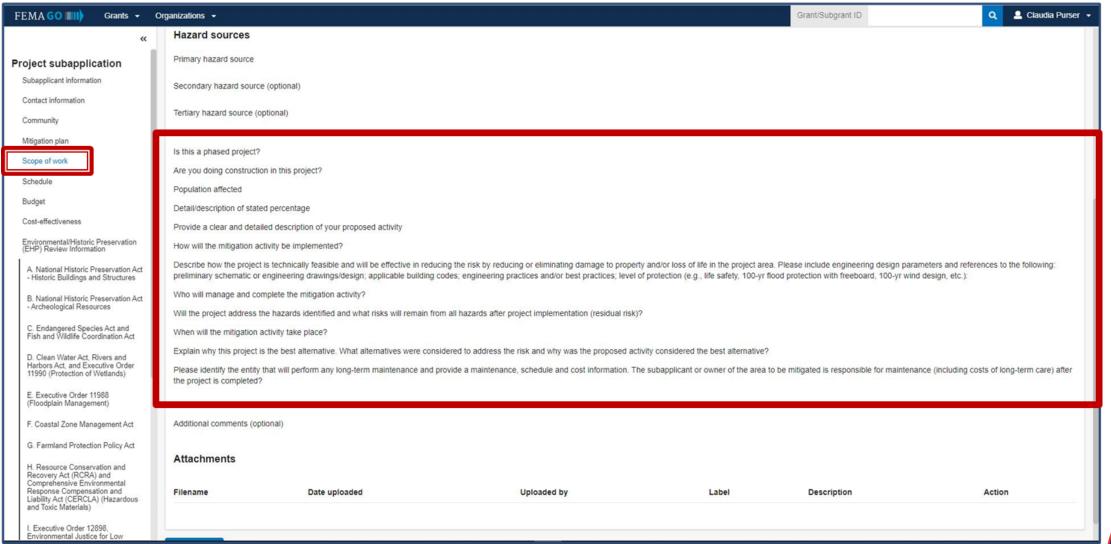
We are here to help you <u>complete and improve</u> your sub-applications.



Our goal is to present a sub-application where all aspects are covered and can be selected for funding.



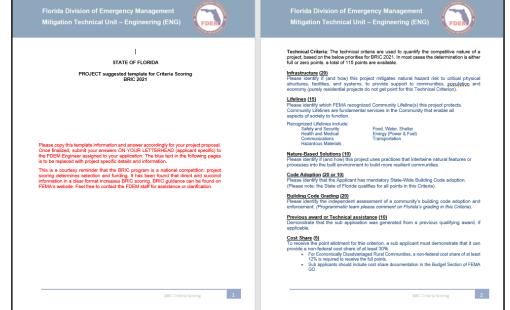
Scope of Work Section





Scope of Work Section

- Please answer all scope of work questions.
- Adding a separate document with answers is strongly recommended, our team will provide a template to the POC.
- The document must provide bold answers identifying the scoring criteria. It is for the best interest of the project.





Key Points

Elaborate a complete detailed SOW:

- Who will be doing the work
- Where the project is going to be located
- The existing problem
- Population affected
- Description of the work to be completed
- How the project will be implemented Phased projects
- The level of protection the project will provide
- Avoid being repetitive for the reader





Schedule Section





Schedule Section

Please provide a schedule, it is required!

- The project's schedule must not exceed the program's timeframe
- List all tasks the project would have
- Be consistent with your SOW
- Be consistent with your budget



Budget Section

EMA GO IIIII) Grants -	Organizations ▼ Grant/Subgrant ID	Q 🚨 Claudia Purse
«	Budget type: Construction	
roject subapplication Subapplicant information	•	
Contact information	Cost type: Cost estimate	\$2,161,224.46
Community		
Mitigation plan	Cost estimate is the line item(s) budget to support the scope of work for the execution and completion of the project. Be sure to include the cost associated with revisions/formal adoption. To add a line item, P	ease click on the Add an item
cope of work	button. Click anywhere within each row or the arrow to edit or delete the line item(s)	ease click off the Add affilem
chedule		
udget	Cost Items	
ost-effectiveness nvironmental/Historic Preservation HP) Review Information	Item: Sodding	\$1,980.00
National Historic Preservation Act Historic Buildings and Structures	Item: Maintenance of Traffic	\$40,022.68
3. National Historic Preservation Act Archeological Resources	Item: Dredging & Disposal of Dredged Materials - Seminole	\$74,448.00
C. Endangered Species Act and rish and Wildlife Coordination Act	Item: Dredging & Disposal of Dredged Materials - Pine to	\$218,295.00
D. Clean Water Act, Rivers and Harbors Act, and Executive Order 11990 (Protection of Wetlands)	Item: Sediment & Erosion Control	\$17,050.00
E. Executive Order 11988 Floodplain Management)	Item: Bank Regrading	\$3,960.00
F. Coastal Zone Management Act G. Farmland Protection Policy Act	Item: Design/Permitting/Data Collection	\$90,051.02
Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response Compensation and	Item: Dredging & Disposal of Dredged Materials - Plaza Al	\$76,824.00
Liability Act (CERCLA) (Hazardous and Toxic Materials) Executive Order 12898.	Item: Construction Engineering and Inspection	\$180,102.04



Budget Section

Please provide a budget, it is required!

- Lump sums are not allowed
- Provide detailed activities
- Attach a detailed project budget
- Be consistent with the attachment

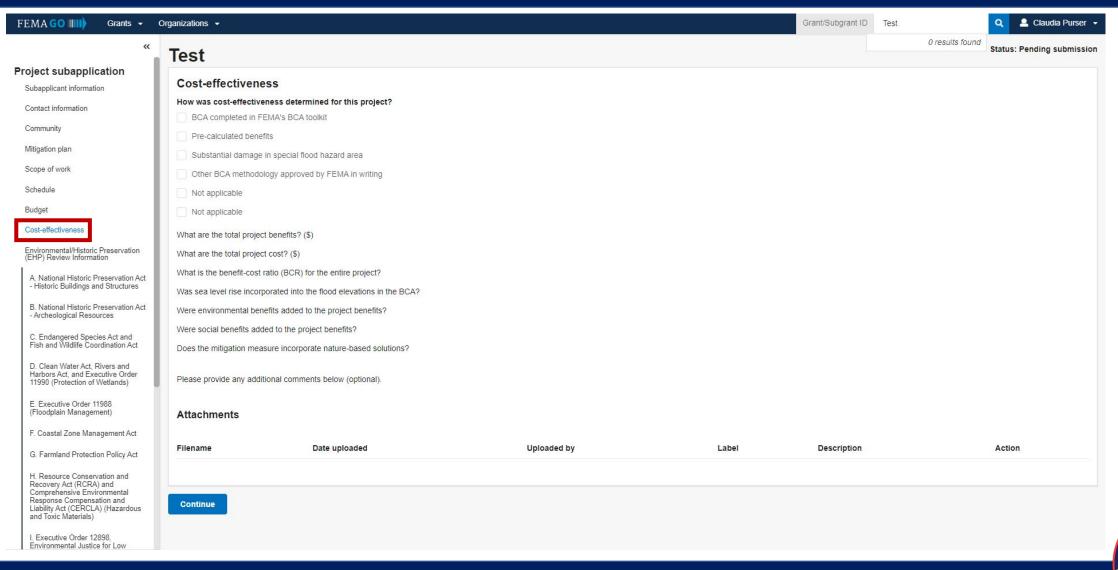
NEW*

SRMC will not be part of the BCA

	Applicant Name		Project	Name	
125 Fou	ntain Avenue, L.P.	Liberty Apartments			
Т	Trade/Item	Unit	Quantity	Unit Cost	Total
Division	1: General Requirements				
1 Mobilizati		LS	T T	\$20,000.00	\$20,0
2 Tempora		LS		\$30,000.00	\$30,0
	Bridge/Safety	LS	1	\$90,000.00	\$90,0
4 Dumpste		EA	85	\$1,100.00	\$93,5
5 Engineer	ing and Testing	LS	1	\$75,000.00	\$75,0
6 Plans and		LS	1	\$15,000.00	\$15,0
7 General L	abor	LS		\$80,500.00	\$80,5
8					
9					
0					
			Div	ision 1 Total	\$404,00
Division:	2: Sitework				
1 Surveying		LS	1	\$15,000,00	\$15,0
	grub/drainage	LS	2	\$15,000,00	\$30.0
	on/obstructions	CY	3964	\$50.00	\$198,2
	shoring engineer	LS	775	\$40.00	\$31,0
	/Misc Machine days	Davs	25	\$1,500,00	\$37,5
6 Plantings		EA	90	\$383.00	\$34,4
	avers/fencing/curbs			\$110,678,00	\$110,6
	with removal			88,652	\$88,6
	shings/play equipment/safety surface			\$54,500,00	\$54.5
0					
			Div	ision 2 Total	\$600,00
Division	3: Concrete				
1 Perimete	r walls	ICY	145	\$550.00	\$79.7
2 Interior W	/alls	CY	85	\$550.00	\$46,7
3 Perimeter	r and interior footings/stairs/misc. footings	CY	414	\$450.00	\$186.3
4 Misc, Cor	ncrete/rat slab	CY	56	\$400,00	\$22.4
5 Precast C	Concrete Plank	SF	49118	\$15.00	\$736,7
6 Precast s	tairs	FLT	7	\$5,000.00	\$35,0
7 Edge stop	DS .	LF	5112	\$4.50	\$23,0
8 Rebar		LBS	36953	\$1.50	\$55,4
9 Pump da	ys	EA	10	\$1,575.00	\$15,7
0					
			Divis	ion 3 Total	\$1,201,15
Division -	4: Masonry				
1 Interior C	MU Block	SF	9482	\$14.00	\$132,7
2 Exterior E	Block and Brick	SF	17420	\$31.00	\$540,0
	ntels, sills and bands	LF	2488	\$35.00	\$87,0
4 Grouting	,	SF	7073	\$3.00	\$21,2
5 Parapets		LF	575	\$130.00	\$74,7
	Scaffold Installation	LS	1	\$24,500,20	\$24,5
7 Washdov		LS	21613	\$1.50	\$32,4
8				*	
9					



Cost Effectiveness Section





Cost Effectiveness Section

- The State TechUnit will run the BCA for all projects, implementing approved methodologies
- All values on BCA must be supported with attachments
- The State will answer questions on this section
- Any answers entered may be modified to match our BCA
- Any BCA prepared by the sub-applicant or their consultant will be reviewed, but will also be removed from the subapplication to avoid confusion
- Irrelevant attachments will be removed to avoid confusion.
- The State TechUnit Engineering will attach a recommendation for funding supporting your project and a BCA

The analysis is done utilizing FEMA's Benefit Cost Analysis (BCA) toolkit (version 6.0)





3 ways to run a Benefit Cost Analysis BCA:

Modeled Damages

Using available technical data to enter info on tool and allow it to calculate damages and benefits.

- Flood Insurance Study
- Elevation Certificate
- Property Appraiser
- ASCE 7-16
- FDOT Traffic counts
- Other

Historical Damages

Using historical records available.

- Flooding pictures
- Insurance Claims
- Homeowner Affidavits
- Historical road closures
- 911 records
- Utility outages
- Other

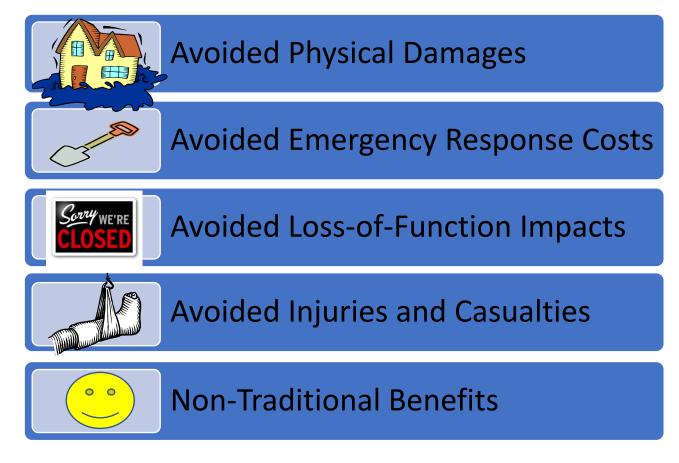
Professional **Expected Damages**

Using expected damages calculated and certified by the correct professional.

- Signed and Sealed information from the Engineer of Record
- Damages using DepthDamaged Function tables
- H&H Studies
- Other



Typical benefits:





What we look for when collecting benefits to run the BCA:

- Clear explanation of the problem
- Clear explanation of the solution
- Activities that will take place
- Maintenance cost (required)
- Location
- Property details
- Affected customers
- Level of protection (most important)





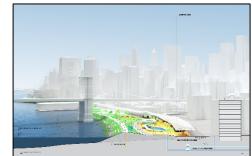




- Maps
- Conceptual Designs (required)
- If designed, set of construction plans
- Damage calculations (if available)
- Any other attachment that can help explain the benefits to the area and the community











Key Points

 Do not attach irrelevant information or duplicated files to your FEMA GO application

Make sure your application contains consistent information



 Do your best to guide the reader to understand your project



- **Elevations** in the SFHA under \$205,000
- Acquisitions in the SFHA and under \$323,000





U.S. Department of Homeland Security



9/29/2021

INFORMATION

MEMORANDUM FOR: Regional Administrators

Regions I - X

ATTENTION: Regional Mitigation Division Directors

Hazard Mitigation Assistance Branch Chiefs

FROM: Kayed I. Lakhia, AIA, NCARB, LEED AP, CFM

Deputy Director, Hazard Mitigation Assistance/

Mitigation Directorate

Federal Insurance and Mitigation Administration LAKHIA Date: 200 142159-

SUBJECT: Update to "Cost-Effectiveness Determinations for Acquisitions

and Elevations in Special Flood Hazard Areas Using Pre-

Calculated Benefits" Memorandum

I. Background and Purpose of this Memorandum

In 2013, FEMA's Hazard Mitigation Assistance (HMA) Division analyzed over 11,000 structures acquired or elevated and found that the average benefits for each project type were \$276,000 and \$175,000 respectively. FEMA is now adjusting these values for inflation.

This memorandum supersedes the October 2013 memorandum titled "Cost-Effectiveness Determinations for Acquisitions and Elevations in Special Flood Hazard Areas Using Pre-Calculated Benefits" and updates any values outlined in the 2015 Hazard Mitigation Assistance Guidance, Part IV, I.7, Pre-calculated Benefits for Acquisitions and Elevations in Special Flood Hazard Areas.

II. Scope and Applicability

This memorandum is effective on September 30, 2021.

This methodology is available for all HMA grant programs² and can be applied to new applications as well as pending or selected for further review projects. Additionally, pre-calculated benefits can be used to evaluate cost overruns for approved projects, if a new cost-effectiveness review is being performed.



¹ The Bureau of Labor Statistics' Consumer Price Index (CPI) Inflation Calculator (https://data.bls.gov/cgibin/cpicalc.pl) was used to inflate the values.

² HMA grant programs currently includes Hazard Mitigation Grant Program (HMGP); HMGP Post Fire; Flood Mitigation Assistance (FMA) and Building Resilient Infrastructure and Communities (BRIC).

 Acquisitions for Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties <u>outside the</u> <u>SFHA</u>, that meet specific qualifiers and definitions listed on the memorandum.

Dated February 15th 2022

U.S. Department of Homeland Security Washington, DC 20472



MEMORANDUM FOR: Regional Administrators

Regions I – X

ATTENTION: Regional Mitigation Division Directors Hazard Mitigation Assistance Branch Chiefs

FROM: Angela R. Gladwell GLADWELL
Director, Hazard Mitigation Assistance Division

Federal Insurance and Mitigation Administration

DATE: February 15, 2022

SUBJECT: Benefit-Cost Analysis Efficiencies for Repetitive Loss and Severe

Repetitive Loss Acquisition Projects Located Outside the

Designated Special Flood Hazard Area

I. Background and Purpose of This Memorandum

This memorandum establishes the use of a pre-calculated benefit to demonstrate costeffectiveness for Repetitive Loss (RL) and Severe Repetitive Loss (SRL) acquisition projects located outside the designated Special Flood Hazard Area (SFHA).

In this memorandum, RL refers to a structure or property meeting either (1) or (2) from the following definitions:

(1) A structure that meets one of the two following qualifiers:

- Two or more claims of more than \$1,000 paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978; or
- b. Two or more claims (building payments only) that, on average, equal or exceed 25 percent of the market value of the property.¹
- (2) A structure covered by a contract for flood insurance made available under the NFIP that meets both of the two following qualifiers:



¹ This definition is based on the definitions for RL used by the NFIP program. See <u>44 C.F.R. 5.209.2</u> and pt. 61, Appendixes A(1)-A(3); see FEMA, National Flood Insurance Program, Flood Insurance Manual, Appendix A, pg. 11-12, and Appendix B, pg. 5 (Apr. 2021); and see FEMA, National Flood Insurance Program, Community Rating System Coordinator's Manual, pg. 120-7 (2017).

- Wind Retrofit For Non-Residential Buildings with a mitigation cost under 10% of its Building Replacement Value
 - Must be located in the windborne debris area
 - Structural frame must consist of steel, concrete or reinforced masonry

U.S. Department of Homeland Security 500 C Street, SW Washington, DC 20472



March 1, 2018

MEMORANDUM FOR:

Regional Administrators

Regions I-X

ATTENTION:

Regional Mitigation Division Directors

Hazard Mitigation Assistance Branch Chiefs

FROM:

Michael Grumm

Federal Insurance and Mitigation Administration

SUBJECT:

Cost Effectiveness Determination for Non-Residential Hurricane Wind

Retrofit Measures Funded by FEMA

This memorandum establishes the use of pre-determined benefits for wind retrofit projects on non-residential buildings in wind borne debris regions.

Two mitigation packages, Option 1 and Option 2, are considered eligible for the pre-determined benefits:

- Option 1 consists of (1) opening protection for doors, windows, and louvers against wind borne
 debris, wind driven rain, and high wind pressure, and (2) roof retrofit, which consists of securing roof
 top equipment, replacing roof decking and covering
- Option 2 consists of (1) opening protection, (2) roof retrofit, and (3) improvement to or creating a
 continuous load path from the roof to the foundation

Eligible structures must have primary structural framing that consists of steel, concrete, or reinforced masonry; structures composed of other building materials, such as wood, steel stud, and unreinforced masonry are not eligible for this pre-determined benefit. When retrofitted, structures will comply with the loading requirements of latest edition of the International Building Code (IBC), International Existing Building Code (IEBC), American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures (ASCE 7), FEMA P-577, and the requirements of the locally enforced building code.

Applicants must provide maps with structures clearly indicated as being in a wind borne debris region to be eligible to use the pre-determined benefits. Additionally, the project must have a useful life of at least 25 years.

Mitigation projects meeting the above criteria are considered cost effective if the mitigation project costs less than 10% of the building replacement value. This eliminates the requirement for applicants to conduct a separate benefit cost analysis for eligible projects. The benefits are based on FEMA's existing methodology

www.fema.gov



- Wind Retrofit for Residential
 Buildings under the cost of specific packages listed on FEMA's job aid
 - Must comply with all activities from each package







Job Aid

Federal Insurance and Mitigation Administration

Cost Effectiveness Determination for Residential Hurricane Wind Retrofit Measures Funded by FEMA

This Job Aid establishes the use of pre-determined benefits to demonstrate the cost-effectiveness of wind retrofit projects that comply with FEMA P-804, Wind Retrofit Guide for Residential Buildings, December 2010 (available at https://www.fema.gov/media-library/assets/documents/21082). This eliminates the requirement for Applicants/subapplicants to conduct a separate benefit-cost analysis for a hurricane wind retrofit project that meets the

Applicants/subapplicants to conduct a separate benefit-cost analysis for a hurricane wind retrofit project that meets the criteria identified in the table below. The benefits are based on FEMA's existing methodology for evaluating the cost-effectiveness of residential wind retrofit projects and use updated 2014 construction costs for the measures outlined in FEMA P-804.

To qualify for these pre-determined benefits, residential structures as identified in FEMA P-804 (does not include manufactured homes) must be located in the 120-mile-per-hour (mph) basic wind speed zone for Occupancy Category II Buildings per the American Society of Civil Engineers (ASCE) / Structural Engineering Institute (SEI) standard ASCE 7-10, Minimum Design Loads for Buildings and Other Structures.

Grant applications must include maps that clearly indicate the structures to be retrofitted as being in this wind zone to be eligible to use the pre-determined benefits. A list of States, boroughs, counties, parishes, and territories that meet the 120 mph requirement is attached:

- States, Boroughs, Counties, Parishes, and Territories That Meet the Qualification Requirements for Pre-Determined Benefits This includes areas that are completely located within the 120 mph wind zone. These areas are automatically eligible to use the pre-determined benefit costs as long as the application includes a map with the structures clearly indicated on it (see List 1).
- States, Boroughs, Counties, Parishes, and Territories That Are Partially Located in the 120 mph Wind Zone
 For structures located in these areas FEMA will need to make the determination on a case by case basis if the predetermined benefits can be used. Applicants/subapplicants will need to submit a map with the structures clearly
 indicated on it to FEMA, who will then determine if the structure is located in the wind zone and can use the predetermined benefits (see List 2).

The residential wind retrofit projects for the intermediate and advanced package, as discussed in FEMA P-804, are cost effective as long as the total project costs are less than the maximum costs listed in the table below.

Mitigation Package Type	Roof Replacement Project	Maximum Costs	
Intermediate Protection	No	\$13,153.00	
Intermediate Protection	Yes	\$24,920.00	
Advanced Protection	No	\$40,252.00	
Advanced Protection	Yes	\$52,018.00	

Cost estimates submitted for a hurricane wind retrofit project that use the pre-determined benefits must be developed using industry-accepted cost-estimation standards, vendor estimates, or other sources. The costs identified in this Job Aid cannot be used to estimate or develop application project costs. Only documented, eligible costs for completed work will be reimbursed. The estimated costs above may be adjusted by the Applicant or subapplicant using the most current

"FEMA's mission is to support our 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."



- Precalculated Benefits for Certain Hospital Generators
 - Must have an Emergency Department
 - Project must be a stand-alone solution
 - Total cost of the project must be less than pre-calculated benefits: \$6.95 per gross area, \$12.62 for rural hospitals

U.S. Department of Homeland Security Washington, DC, 20472



9/29/2021

INFORMATION

MEMORANDUM FOR: Regional Administrators

Regions I - X

ATTENTION: Regional Mitigation Division Directors

Hazard Mitigation Assistance Branch Chiefs

FROM: Kayed I. Lakhia, AIA, NCARB, LEED AP, CFM

Deputy Director, Hazard Mitigation Assistance/Mitigation

Federal Insurance and Mitigation Administration LAKHIA

Lake 2017-06

Date: 2017-

SUBJECT: Pre-Calculated Benefits for Certain Hospital Generators to

Demonstrate Cost-Effectiveness

I. Background and Purpose of this Memorandum

This memorandum establishes the use of a pre-calculated benefit to demonstrate cost-effectiveness for hospital generator projects.

Projects that are eligible for funding under FEMA's Hazard Mitigation Assistance (HMA) programs must demonstrate cost-effectiveness. FEMA has developed several methodologies that applicants and subapplicants may use to demonstrate cost-effectiveness. Generally, applicants and subapplicants demonstrate cost-effectiveness by conducting a benefit-cost analysis (BCA) that establishes that mitigation projects have a benefit-cost ratio (BCR) equal to or greater than 1.0.3 Additionally, FEMA provides several streamlined methodologies that applicants and subapplicants may use to demonstrate cost-effectiveness. One of these streamlined methodologies is pre-calculated benefits, in which FEMA calculates pre-determined cost-effectiveness values. Using these pre-calculated benefits eliminates the requirement for applicants to conduct a separate BCA for eligible projects.



¹ See, for example, for Building Resilient Infrastructure and Communities (BBIC), see Stafford Act Section 20(b); for Hazard Mitigation Grant Program (HMGP) and HMGP Post Fire, see Stafford Act Section 404 and 44 Code of Federal Regulation (CFR) 2064-34(c)(5).
² In accordance with Office of Management and Budget (OMB) Circular A-94: Guidelines and Discount Rates for Benefit-Cost Analysis or Federal Programs.

³ A benefit-cost analysis is a quantitative analysis used to assess the cost-effectiveness of a hazard mitigation measure by comparing the project's avoided future damages to the costs over the project lifetime. The result is a Benefit-Cost Ratio (BCR), which is the numerical expression of the cost-effectiveness of a project calculated as the net present value of total project benefits divided by the net present value of total project costs. A project is generally considered to be cost-effective when the BCR is 10 or greater, indicating the benefits of a prospective hazard mitigation project are sufficient to justify the costs. For more information on cost-effectiveness and the BCA Toolkit, see the FEMA BCA vebopse at high projectors.

Key Points



SCORE YOUR APPLICATION

Understand what the reviewer is going to see on your project



ENVIRONMENTAL REVIEW

Kayla Born



Environmental and Historic Preservation (EHP) Review





What are EHP Reviews?

Ensure projects seeking federal funding are compliant with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA)



N E P

- All federal agencies must assess the environmental effects of the proposed action
- An umbrella law
 - Endangered Species Act
 - Clean Water Act
 - Clean Air Act
 - National Historic Preservation Act
 - Executive Orders:
 - Floodplains
 - Wetlands
 - Environmental Justice



Benefits of This Review Process

FDEM's Environmental Team has non-federal representation status and performs FEMA reviews for Hazard Mitigation Grant Program (HMGP) projects.

Allows the Environmental Team to bring our knowledge of FEMA reviews to these grant programs and build more complete and competitive applications.

We are here to help!



FEMA GO

Environmental/Historic Preservation (EHP) Review Information

Introduction

An environmental/historic preservation review is required for all activities for which FEMA funds are being requested. FEMA will complete this review with the assistance of both the state or tribal government and the local applicant. It is important that you provide accurate information. If you are having problems completing this section, please contact your application point of contact.

A. National Historic Preservation Act - Historic Buildings and Structures

1. Does your project affect or is it in close proximity to any buildings or structures 50 years or more in age?

B. National Historic Preservation Act - Archeological Resources

Does your project involve disturbance of ground?

C. Endangered Species Act and Fish and Wildlife Coordination Act

- 1. Are federally listed threatened or endangered species or their critical habitat present in the area affected by the project?
- 2. Does your project remove or affect vegetation?
- 3. Is your project in, near (within 200 feet), or likely to affect any type of waterway or body of water?

D. Clean Water Act, Rivers and Harbors Act, and Executive Order 11990 (Protection of Wetlands)

1. Will the project involve dredging or disposal of dredged material, excavation, adding fill material or result in any modification to water bodies or wetlands designated as 'waters of the U.S' as identified by the US Army Corps of Engineers or on the National Wetland Inventory?

E. Executive Order 11988 (Floodplain Management)

1. Does a Flood Insurance Rate Map (FIRM), Flood Hazard Boundary Map (FHBM), hydrologic study, or some other source indicate that the project is located in or will affect a 100 year floodplain, a 500 year floodplain if a critical facility, an identified regulatory floodway, or an area prone to flooding?



National Historic Preservation Act

Divided into two sections:

- Historic Buildings and Structures
 - Does the project involve structures 45 years or older?
- Archeological Resources
 - Will any ground disturbance/digging be required for the project?
- Important Documents to include:
 - Maps detailing where project activities will be
 - Photos: clear and cover all sides of structures or areas disturbed
 - 1:24,000 USGS Topographic map
 - Description and map of any ground disturbance
 - Description of the features of structures that are being altered

Ground Disturbance Maps & Project Area Maps

All projects need a map indicating where the project is taking place

Maps should:

- ✓ Include coordinates in decimal degree for all areas of work
- ✓ Clearly outline project areas
- ✓ Ground disturbance maps should include areas of ground disturbance in square feet and depth in inches



Endangered Species Act

All counties in Florida contains the range or habitat for at least one threatened or endangered species.

C.	. Endangered Species Act and Fish and Wildlife Coordination Act	
1. /	Are federally listed threatened or endangered species or their critical habitat present in the area affected by the project?	
•	Yes	
	Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please provide the required documents either through attachment and/or comment box below.)	
	Information you obtained to identify species in or near the project area. Provide the source and date of the information cited.	
	To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)	
	Any request for information and associated response from the USFWS, the National Marine Fisheries Service (NMFS) (for affected ocean-going fish), or your State Wildlife Agency, regarding potential listed species present and potential of the project to impact those species.	
	Attached materials or additional comments.	
	Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)	
		4
	No	
	Not known	

Information about species in or near the project area can be found at https://ipac.ecosphere.fws.gov/

Wetlands and Waterbodies

- FEMA uses the National Wetlands Inventory to determine wetland locations
- If the project occurs in or near a mapped wetland or a waterbody, a consultation with US Army Corps of Engineers (USACE) or Florida Department of Environmental Protection (FDEP) is required (depending on location)





Floodplains

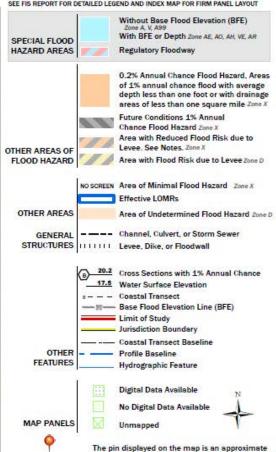
- Projects within mapped floodplains, that affect floodplains, or are being implemented to reduce flood risk or flood loss require public involvement and project alternatives.
- FDEM staff will provide public notice templates and guides during the review process.
- Public notice comment periods are between 15 and 30 days depending on project type.
- Project alternatives should include detailed descriptions and explanations of why it wasn't chosen.



National Flood Hazard Layer FIRMette 82°44'21"W 28°11'33"N T26S R16E S29 T26S R16E S30 28.123456 -82.123456 28.123456, -82.123456 12101C0353G Pasco County AREA OF MINIMAL FLOOD HAZARD 28.123456. -82.123456 T26S R16E S31 T26S R16E S32 accuracy standards Feet 1:6,000 250 500 1.500 1.000 2.000 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

an authoritative property location.

point selected by the user and does not represent

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/27/2022 at 10:08 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

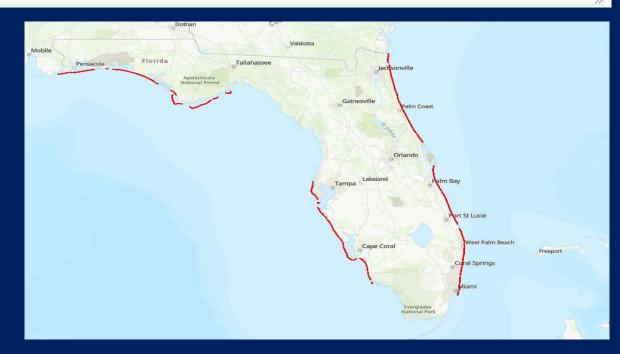
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Coastal Zone Management Act

The entire state of Florida is within the state's designated coastal zone.

1.1	Is the project located in the state's designated coastal zone?
•	Yes
	Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)
	Information resulting from contact with the appropriate state agency that implements the coastal zone management program regarding the likelihood of the projects consistency with the state's coastal zone plan and any potential requirements affecting the cost or design of the proposed activity.
	Attached materials or additional comments.
	Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)





Farmlands

- Are there over 5 acres of land being converted to a different land use?
- Mostly looking at areas outside cities





Hazardous & Toxic Materials

- Resource Conservation and Recover Act (RCRA) and Comprehensive Environmental Response Compensation and Liability Act (CERCLA).
- Includes:
 - Asbestos & asbestos containing material
 - Lead-based pain
 - Paints & solvents
 - Coolants
 - Petroleum products
 - Unusable equipment
- Any Superfund sites in or near the project location?



Environmental Justice

FEMA considers all project locations as areas with potential to impact low income or minority populations

. Executive Order 12898, Environmental Justice for Low Income and Minority Populations				
. /	Are there low income or minority populations in the project's area of effect or adjacent to the project area?			
•	Yes			
	If Yes, you must confirm that you have provided the following either in the text box below or by attachment: (If you have not provided these documents in any other section of the application, please attach the required documents or provide the description below.)	е		
	Description of any disproportionate and adverse effects to these populations.			
	To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)			
	Description of the population affected and the portion of the population that would be disproportionately and adversely affected. Please include specific efforts to address the adverse impacts in your proposal narrative and budget.			
	Attached materials or additional comments.			
	Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)			
		//		
	No No			
	Not known			

If the project provides benefits to these populations, include a description

Attachments

All projects should include (at minimum):

- ✓ Complete and detailed Scope of Work
- ✓ Coordinates in decimal degree format (Example: 28.123456, -80.123456)
- ✓ Photos (minimum of 4)
- ✓ Aerial map outlining project areas
- ✓FIRM/FIRMette
- ✓ USGS Topographic map (1:24000 scale)
- ✓ Any applicable permits obtained or permit applications
- √ For structures: documentation showing year built (property appraiser)



How Can You Help Us?

- Answer all questions in FEMA Go to the best of your ability.
- Respond to Requests for Information (RFI) as soon as possible.
- Answer all parts of the RFIs.
- Be understanding, we are here to help!



PROGRAM SUPPORT MATERIALS



FMA Program Support Materials

FDEM's FMA Website:

https://www.floridadisaster.org/dem/mitigation/flood-mitigation-assistance-program/

FEMA's FMA Website:

https://www.fema.gov/grants/mitigation/floods

FY 2022 FMA Notice of Funding Opportunity & Fact Sheet (forthcoming)

FMA Resources

- FMA Community Flood Mitigation Project Fact Sheet
- FMA Individual Flood Mitigation Fact Sheet
- FMA Project Scoping Fact Sheet
- Geospatial File Eligibility Criteria in Flood Mitigation Grant Applications



BRIC Program Support Materials

FDEM's BRIC Website: https://www.floridadisaster.org/dem/mitigation/builing-resilient-infrastructure-and-communities-bric-grant-program/

FEMA's BRIC Website: https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities

FY 2022 BRIC Notice of Funding Opportunity & Fact Sheet (forthcoming)

BRIC Resources

- BRIC Technical Criteria
- BRIC Qualitative Criteria
- BRIC Building Codes Activities
- BRIC Mitigation Planning Activities
- BRIC Partnership Activities

- BRIC Project Scoping Activities
- BRIC Phased Projects
- BRIC Direct Technical Assistance
- BRIC Tribal Information
- Mitigation Action Portfolio



Additional Resources

Unified Hazard Mitigation Assistance Guidance & Addendum

https://www.fema.gov/grants/mitigation/hazard-mitigation-assistance-guidance

Hazard Mitigation Assistance Job Aids

https://www.fema.gov/grants/mitigation/job-aids

Hazard Mitigation Assistance Cost Share Guide

https://www.fema.gov/sites/default/files/2020-08/fema_hma_cost-share-guide.pdf



2022 FEMA Hazard Mitigation Assistance Webinars

August 4, 2022 – October 4, 2022

To Register For FEMA's Webinars:

https://www.fema.gov/grants/mitigation/applying/webinars



Where do I go for help?

FEMA GO Help Desk

For technical questions such as error messages or forgotten password femago@fema.dhs.gov

1-877-585-3242

HMA Helpline

For programmatic questions about HMA grant programs such as eligibility 1-866-222-3580

BCA Helpline

For assistance using FEMA's Benefit Cost Analysis tool

BCHelpline@fema.dhs.gov

1-855-540-6744



Where do I go for help?

Feasibility and Effectiveness Helpline

FEMA-BuildingScienceHelp@fema.dhs.gov

Environmental and Historic Preservation Helpline

To assist applicants and sub-applicants with questions about grant applications and requirements for environmental and historic preservation compliance

EHPHelpline@fema.dhs.gov

1-866-222-3580



Where do I go for help?

Program Eligibility

Susan Harris-Council (850) 815-4532

Susan.Harris-Council@em.myflorida.com

David McCune (850) 815-4525
David.McCune@em.myflorida.com

Kailyn Quirk (850) 815-4555 Kailyn.Quirk@em.myflorida.com N. Karla Brown (850) 815-4558 Natoyla.Brown@em.myflorida.com

Technical

Luz Bossanyi (850) 815-4573

Luz.Bossanyi@em.myflorida.com

Environmental

Kayla Born (850) 815-4582 Kayla.Born@em.myflorida.com

Engineering

Claudia Purser (850) 815-4576

Claudia.Purser@em.myflorida.com



Questions?

