FEMA Grants Overview: Upcoming Opportunities with BRIC, HMGP, & FMA
Simplifying the Complexities

Keren Bolter
Climate Compact VA Workshop
8/18/2021
How can your VA process/results be leveraged to support funding its implementation?

• Before starting your VA, envision of how it will come to life
• Tailor the process to ensure that it will produce “FEMA-ready” projects
  • How can you make sure that the VA will ID eligible (cost effective) projects?
  • What information/processes will support any FEMA application?
• What kinds of data should you already be collecting?
ROI: The Business Case for Resilience

Solution Oriented Approach

Prevention Oriented Approach

Stop the Cycle!
Our Approach to Funding

FEMA-Ready: Arcadis uses methodologies approved by Federal agencies so that the results of analyses may be used for future grant funding pursuits.

**PROVEN TRACK RECORD**

$5B in funding for resiliency projects over the last seven years

>20 years Experience and accumulated capacity and knowledge in Federal, state, and local grants.
FEMA Funding in 2021/2022

- **$3.46B** in Hazard Mitigation Grant Program (HMGP) for COVID
  - **$188M** for FL

- Flood Mitigation Assistance (FMA) (focus of repetitive loss)
  - **$160M** announced for 2021
  - 117 of 236 applications awarded **$200M** in 2020
    - 26 states did not submit

- **$1B** in Building Resilient Infrastructure and Communities (BRIC) (formerly PDM)
  - NOFO released Mon - $919k is for competitive projects ($50k cap)
2021 Flood Mitigation Assistance (FMA)

$160 MILLION

TOTAL AVAILABLE FMA FUNDING

Allocated up to $10 MILLION

1. Project Scoping (previously Advance Assistance)

   $300-900k cap

Allocated up to $70 MILLION

2. Community Flood Mitigation Projects

   $30M cap

At least $80 MILLION

3. Technical Assistance

4. Flood Hazard Mitigation Planning

5. Individual Flood Mitigation Projects
For the $500M in Federal funding available, FEMA received 991 sub-applications requesting nearly $4 billion in funding – competition is high!

Most projects required adjustments to meet technical scoring criteria: nature-based solutions, increasing level of protection

Phasing enables greater flexibility for projects that still need to go through full design and construction

Starting early is critical to developing a competitive application
BRIC Scoring Criteria

Technical Evaluation Criteria
Technical points will be awarded as “all or nothing”.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Minimally</th>
<th>Partially</th>
<th>Mostly</th>
<th>Entirely</th>
<th>Exceeds</th>
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<tbody>
<tr>
<td>0</td>
<td>7</td>
<td>14</td>
<td>21</td>
<td>28</td>
<td>35</td>
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</table>

Qualitative Criteria
Rated on how well they address the prompts
Rated on a scale

Technical Criteria
100 pts

Qualitative Criteria
100 pts

Total score
200 pts
Technical Criteria

- Infrastructure Project: 20 points
- Mitigating risk to one or more lifelines: 15 points
- Incorporation of nature-based solutions: 10 points
- Applicant (i.e. State) has mandatory building code adoption: 20 points
- Subapplicant has BCEGS Rating of 1 to 5*: 15 points
- Application generated from previous Advanced Assistance Award: 10 points
- Increased non-federal cost share: 5 points
- Designation as a small impoverished community: 5 points

*Building Code Effectiveness Grading Schedule
Qualitative Criteria

- Risk Reduction/Resiliency Effectiveness: 35
- Future Conditions: 15
- Implementation Measures: 15
- Population Impacted: 15
- Outreach Activities: 5
- Leveraging Partners: 15
Community Lifelines

Lifelines are services communities use. Lifeline-focused mitigations projects could improve a wide variety of public, private and non-profit organizations.
Eligibility and Competitiveness

Projects Must:

• Be cost-effective

• Reduce/eliminate risk and damage from future natural hazards

• Meet latest two consensus codes

• Meet all environmental and historic preservation (EHP) requirements

• Align with Hazard Mitigation Plan
2020 BRIC

22 Awards went to 10 States
• 12 Flood Control Projects
• 4 Utility and Infrastructure Protection
• 2 Relocation Projects

1 of each of the following:
• Elevation (Roadway)
• Floodproofing
• Saferoom/Shelter
• Wildfire

• 568 applications were competitive
  • The rest were “allocations”
• 241 out of 293 Capability & Capacity Building applications were awarded
• 22 mitigation projects
  • 490 not selected out of 512

Source: https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Status</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Building Codes Capacity Building</td>
<td>Selected</td>
<td>$56,381</td>
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<tr>
<td>Pasco County - Indigo Ln - Acquisition Demolition</td>
<td>Selected</td>
<td>$94,574</td>
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<tr>
<td>Pasco County - Fasano Regional Shelter Hardening</td>
<td>Selected</td>
<td>$55,900</td>
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<tr>
<td>Public Works Generator Mitigation Project - Animal Care Protective Services</td>
<td>Selected</td>
<td>$361,251</td>
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<tr>
<td>Pasco County - Senior Center Generator</td>
<td>Selected</td>
<td>$262,500</td>
</tr>
<tr>
<td>Pasco County - Green Key Drainage</td>
<td>Not Selected</td>
<td>$1,460,935</td>
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<tr>
<td>Pasco County - Thomas Blvd Acquisition</td>
<td>Not Selected</td>
<td>$212,651</td>
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<tr>
<td>City of Panama City Emergency Response Center Codes Plus</td>
<td>Not Selected</td>
<td>$1,030,188</td>
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<tr>
<td>City of Tamarac Water Treatment Plant Hardening</td>
<td>Not Selected</td>
<td>$967,874</td>
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<td>Charlotte County Leachate Plant Generator Project - LPGP</td>
<td>Not Selected</td>
<td>$1,022,819</td>
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<td>City of Homestead Power Grid Resiliency</td>
<td>Not Selected</td>
<td>$5,207,401</td>
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<td>K-8 School Central Basin</td>
<td>Not Selected</td>
<td>$5,268,000</td>
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<tr>
<td>Human Services Generator Project</td>
<td>Not Selected</td>
<td>$598,500</td>
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<tr>
<td>City of Port St. Lucie Flood Control Structures</td>
<td>Not Selected</td>
<td>$3,915,941</td>
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<tr>
<td>Miami-Dade PHCD Ingram Terrace Comprehensive Residential Mitigation</td>
<td>Not Selected</td>
<td>$794,632</td>
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<tr>
<td>Monroe County Twin Lakes Subdivision Road Mitigation Project</td>
<td>Ineligible</td>
<td>$7,312,399</td>
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<tr>
<td>Data Center Generators</td>
<td>Ineligible</td>
<td>$367,500</td>
</tr>
<tr>
<td>City of Miami Beach Maurice Gibb Memorial Park Seawall Mitigation Project</td>
<td>Ineligible</td>
<td>$2,045,432</td>
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<tr>
<td>SFWMD Building Flood Resiliency at Critical Basins in South Florida: C-9 Basin</td>
<td>Ineligible</td>
<td>$64,824,136</td>
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<tr>
<td>Miami-Dade Countywide Continuity of Operations Energy Resilience Project</td>
<td>Ineligible</td>
<td>$28,980,001</td>
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<tr>
<td>SFWMD Building Flood Resiliency at Critical Basins in South Florida: C-7 Basin</td>
<td>Ineligible</td>
<td>$62,295,863</td>
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<tr>
<td>Monroe County Sands Subdivision Road Mitigation Project</td>
<td>Withdrawn</td>
<td>$8,659,364</td>
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## 2020 BRIC Competitive Awards

<table>
<thead>
<tr>
<th>State</th>
<th>Title</th>
<th>Project/Hazard Category</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA</td>
<td>Central Street Bridge Improvements and Sawmill Brook Restoration, Culvert Retrofit &amp; Restoration</td>
<td>Drainage Improvements</td>
<td>$4,484,673</td>
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<tr>
<td>CA</td>
<td>City of Rohnert Park Copeland Creek Detention Basin</td>
<td>Drainage Improvements</td>
<td>$6,000,000</td>
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<tr>
<td>DC</td>
<td>Blue/Green Storm Water Flood Mitigation in Southwest Washington, DC</td>
<td>Green Infrastructure/N-B Solutions</td>
<td>$18,612,178</td>
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<tr>
<td>CA</td>
<td>Central San Walnut Creek / Grayson Creek Levee Project</td>
<td>Levee or Other Large Flood Protection Structure</td>
<td>$2,465,231</td>
</tr>
<tr>
<td>WA</td>
<td>North Shore Levee West</td>
<td>Levee or Other Large Flood Protection Structure</td>
<td>$34,650,746</td>
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<tr>
<td>NY</td>
<td>Upper Minkel Dam Decommissioning &amp; Riparian Corridor Restoration</td>
<td>Levee or Other Large Flood Protection Structure</td>
<td>$1,050,000</td>
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<tr>
<td>NJ</td>
<td>Central San Walnut Creek / Grayson Creek Levee Project</td>
<td>Levee or Other Large Flood Protection Structure</td>
<td>$2,465,231</td>
</tr>
<tr>
<td>DC</td>
<td>Saint Elizabeths Hospital &amp; DC Emergency Communications Microgrid Project</td>
<td>Microgrid</td>
<td>$19,948,639</td>
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<tr>
<td>NC</td>
<td>Lumberton Loop: A City-Wide Plan for Flood Mitigation, Restoration, and Recreation in Lumberton, NC</td>
<td>Other Planning/Assessment</td>
<td>$1,927,179</td>
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<tr>
<td>KY</td>
<td>Frankfort Mero Flood Pump Station (CSO) Renewal and Relocation</td>
<td>Pump Station</td>
<td>$10,543,961</td>
</tr>
<tr>
<td>NC</td>
<td>Hickory Snow Creek Pump Station Relocation and Hardening</td>
<td>Pump Station</td>
<td>$3,540,939</td>
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<tr>
<td>NJ</td>
<td>New Jersey Meadowlands East Riser Ditch Pumping Station and Channel Improvements</td>
<td>Pump Station</td>
<td>$36,000,000</td>
</tr>
<tr>
<td>WA</td>
<td>Westport Vertical Evacuation Structure</td>
<td>Safe Room</td>
<td>$13,735,823</td>
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<tr>
<td>NY</td>
<td>NYC Parks - Tottenville Shoreline Protection Project</td>
<td>Streambank/Shoreline Restoration/Stabilization</td>
<td>$19,822,053</td>
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<tr>
<td>NC</td>
<td>Hickory Northeast Wastewater Treatment Facility Hardening and Stream Restoration Project</td>
<td>Utility Protection</td>
<td>$5,407,285</td>
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<tr>
<td>WA</td>
<td>Kittitas County Washington Waste Transfer Station Flood Mitigation</td>
<td>Utility Protection</td>
<td>$12,654,940</td>
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<tr>
<td>SC</td>
<td>City of Columbia Resilient Water Supply Project</td>
<td>Utility Protection</td>
<td>$32,635,784</td>
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<tr>
<td>CA</td>
<td>Wildfire Resilient Sonoma County - Nature-based Mitigation to Adapt in an Era of Megafires</td>
<td>Wildfire</td>
<td>$36,983,752</td>
</tr>
</tbody>
</table>

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• Don’t Stress! If something is missing, they don’t just throw out the application, there will be an RFI and they will request info or ask Qs

• Social Determinants of Emergency Preparedness –
  • Show how you will prioritize and operationalize Equity

• AVOID any language on required maintenance, wear & tear repair/replacement work
  • Focus on what will happen if a particular project isn’t done & increasing level of protection

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Eligible Projects

Flood Protection
- Acquisition, floodproofing, retrofits, elevating structure
- Flood control, floodwater storage and diversion, stream restoration, stormwater management
- Wetland restoration/creation

Other Hazards
- Power outages, wind, fire, redundancy & more!

Planning - Capability & Capacity Building
- Water Master Plan, Vulnerability Assessment, Asset Management
- Project Scoping and Application Development

Infrastructure Mitigation
- WTP upgrades
- Generators
- SCADA
- Booster and lift stations
FMA/BRIC Mitigation Grants Timeline

NOFO posted to Grants.gov – August 9, 2021
Application period – September 30, 2021 – January 28, 2022
Eligibility and Technical Reviews – February – May 2022
Selections – Summer 2022
Period of performance – 36/48 months from Award Acceptance

Period of Performance 36/48 Months

2021 2022 2023 2024 2025+

Logistics

• How do you apply?
  • FEMA Go
• Is there cost share?
  • Yes – 25% or more
Technical Due Diligence

Common technical justification required for funding applications

- Flow modeling
- Scope of work
- Detailed cost estimate
- Alternatives analysis
- Design drawings
- Permits
- Future condition projections

- Benefit-cost analysis
- Economic impact analysis
- Monitoring plans
- Environmental and Historic Preservation review

Technical backup can also be used to develop robust value propositions!
Benefit Cost Analysis

FEMA’s BCA Toolkit 6.0

• Modelled or Historic Losses

• Ex. Flooding – FIS, SW Modelling, or high-water marks, repair invoices

• All about damages avoided before and after mitigation for various return periods
Study #1
Water Treatment Plant Floodwall and Stream Restoration Project in VA
Floodwall Project in VA

Floodwall Specifics
- 2k’ long & ~16ft high
- Concrete floodwall – 1ft above BFE
- $8.7M Fed Share – Selected
- Michael in 2018 caused lagoon submersion, equipment damage, and plant shutdown from 11ft of water that took 30 hours to recede
- Recent floods - higher watermark
Study #2
Miami-Dade Water and Sewer Department HMGP Case Study
What Does WASD Do?

- Operates and maintains two critical assets – Pump Station 1 and 2 that serve over 800k residents combined.

What Are the Risks to the Facilities?

- Wind, surge, stormwater, power loss, and subsurface intrusion into the wastewater collection system.

Project Funding Allocations:

- Applied and awarded funding and awarded under the Hurricane Irma (DR-4377) HMGP Allocation
- Phase 1 (~$1.7M) – Hydrology and Hydraulic Study, Design Engineering, and Permitting
- Phase 2 (~$18.4M) – Construction

Source: Miami-Dade Water and Sewer Department
Study #3
Portsmouth
Olde Town
Stormwater Pump Station

[FMA FY19 // $7.4M Fed Share
*Selected*]
Portsmouth Olde Town Stormwater Pump Station

- Stormwater Pump Station Construction and Stormwater Improvements
- Protection of RL and SRL Properties

Left: Independent measures to protect structures from flooding
Important Resources

Funding Nature-Based Solutions with FEMA Grants

- www.nature.org/content/dam/tnc/nature/en/documents/TNC_NBS_Guidebook-04-30-2021_LR.pdf

FEMA BRIC/FMA Webinar Series

- Only 1000 spots so register ASAP
  - https://femacqpub1.connectsolutions.com/content/connect/c1/7/en/events/catalog.html?folder-id=202865375&from-origin=fema.connectsolutions.com
## 2021 BRIC and FMA Programs Webinar Series

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Webinar Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 16 2-3:30 pm ET</td>
<td>BRIC and FMA FY 2020 Data and Trends</td>
</tr>
<tr>
<td>August 18 2-3:30 pm ET</td>
<td>Where Equity Fits into the BRIC and FMA Program Design and Community Resilience</td>
</tr>
<tr>
<td>August 24 2-3:30 pm ET</td>
<td>Severe Repetitive Loss/Repetitive Loss Mitigation Priorities</td>
</tr>
<tr>
<td>August 26 2-3:30 pm ET</td>
<td>BRIC and FMA FY 2021 NOFO Webinar #2</td>
</tr>
<tr>
<td>September 8 2-3:30 pm ET</td>
<td>BRIC FY 2021 NOFO Technical and Qualitative Criteria</td>
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<tr>
<td>September 13 2-3:30 pm ET</td>
<td>BRIC and FMA FY 2021 NOFO Tribal Webinar</td>
</tr>
<tr>
<td>October 13 2-3:30 pm ET</td>
<td>Federal Agency Roundtable</td>
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If you miss them, the recordings get posted on the FEMA YouTube page: [https://www.youtube.com/user/FEMA](https://www.youtube.com/user/FEMA)

You can view the 8/11 recorded presentation in its entirety here: [https://fema.connectsolutions.com/pjduekrmua/](https://fema.connectsolutions.com/pjduekrmua/)
Thank You

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