LMS

Miami-Dade County

2025

PART 2:

THE PROJECTS

MIAMI-DADE
DEPARTMENT OF
EMERGENCY
MANAGEMENT

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TABLE OF CONTENTS

INTRODUCTION

This part details the methodology for mitigation project submission, tracking, and prioritization[1] in Miami-Dade County. This section also includes the list of projects identified by the LMS Working Group members and highlights case studies of projects completed within the last four years. Project submissions are evaluated to ensure they meet FEMA and LMS criteria and are prioritized to determine funding order when limited funding sources under the purview of the LMS are made available.[2]

METHODOLOGY

Project Submittal and Tracking

WebEOC is an online system that allows LMSWG members to input new projects and update existing projects at any time throughout the year. The LMS Chair is responsible for the review of the projects and for providing an update to the State of Florida every January 31st. The LMS Chair will post an update of the current list of projects every January on the LMS website: https://www.miamidade.gov/global/emergency/projects-that-protect.page

It is the responsibility of the LMSWG members that post projects to ensure the projects are listed with the information that local and Federal Emergency Management Agency (FEMA) requirements identified below. The LMS Chair may also require additional information that may be required to prioritize projects because of shifting priorities.

Project Requirements

Below is a list of the project fields in WebEOC for project submission:

Project List Field	Level of Requirement	Comments
Agency Type	Local Requirement	Must be utilized to tie project to agency
Agency	Local and FEMA Requirement	Must be utilized to tie project to agency
Project Title	FEMA Requirement	Satisfies Name and Description
Entry type	FEMA Requirement	Identifies new project and project to be removed from Active List
Original Date of Entry	Default	Identifies when the project was first put in the LMS Project list.
Last Updated	Default	Identifies last date of update. If an agency fails to review and update project on an annual basis, they can be made inactive.
Status	FEMA Requirement	Current status of project. Satisfies New, Deferred, Completed or Deleted.

[1] EMAP 2016 Standard 4.2.3
[2] EMAP 2016 Standard 4.2.3

Project List Field	Level of Requirement	Comments
Hazard	Local Requirement	Allows us to sort hazard type for potential funding and identify flood projects in support of Part 6.
Project Type	Local Requirement	Allows us to sort for funding options by type of project
Mapper Label	Not Required at this time	For future use for mapping
Address	Local Requirement	Will allow us to geo-code and map projects
Longitude and Latitude	Local Suggestions	Will aid in future mapping of projects
Flood Basin	Local Requirement for Flood projects, Local Suggestion for ALL projects	Allows us to identify where mitigation projects for flooding have been identified and facilitate additional coordination and mapping. May assist with showing effectiveness of mitigation projects after significant rain events.
Completion Time Frame	FEMA Requirement	If a project is unfunded provide your best estimation as to when this project could be completed.
Mitigation Goals	Local Requirement	Shows alignment with LMS
Funding Source	FEMA Requirement	FEMA lists this a potential funding source, we split this to also identify internal funding sources or potential grant sources
Grant Source (Potential or secured)		
Is a Match Required	Local Requirement	May assist us with identifying projects for global match opportunities
Match Identified	Local Requirement	
Estimated Costs	Local Requirement	We are required to include this in the County Annual report.
Global Match	Local Requirement	Identifies if the project may be able to be used as a global match for another project in need of a match
Project Description	FEMA Requirement	
Comments	Reserved for additional notations	LMS Chair notates and changes or requests for letters of support in this area.
Attachments	Local Suggestion	Allows the agency to place supporting documents in the database with the record.
Name, Email and Phone	Local Requirement	Allows LMS Chair to contact POC directly regarding projects
BCA Completed and BCA score	Required only when funding source requires this information.	Must be completed if a letter of support is requested and the funding source requires it.
Self-Prioritization	Local Requirement	Identifies agency priorities.
Benefit Cost Review	FEMA Requirement	Provides a score based on Suitability, Risk Reduction and Cost and Time.

The LMS Chair has the responsibility for requesting that the LMS working group members update their projects and determine if these projects are missing information. This LMS Chair will also utilize the information provided to develop documents and other supporting documents such as maps to track mitigation projects.The LMS Chair will also utilize the information provided to develop documents and other supporting documents such as maps to track mitigation projects.

The projects listed later in this document are in a table format, which is an abridged version of the full project descriptions maintained in the WebEOC LMS Board. Additional information on listed projects, is available to all stakeholders with project accounts. Anyone wishing to have an account to add or review projects should make a request to the Miami-Dade County Department of Emergency Management at eoc@miamidade.gov or call 305-468-5400.

Updates and Reports

As stated in *Part 1*, the LMS is updated on an annual basis and as part of a regular update and monitoring process. To keep the project list updated, agencies with listed projects are required to review and update them within WebEOC on an annual basis by October 31. Based on those updates, the Prioritized Project List will be updated on the website each January.

In December of every year the LMS Chair is required to provide a report to the Continuity of Operations Planner as part of the Department's Annual Preparedness Report that is submitted to the County Mayor. The LMS Chair compiles information on projects that have been completed, are under construction, or are funded but not yet started since the previous year's report. This information is derived from the LMS Project list and is another way to demonstrate on an annual basis the progressive mitigation work being accomplished.

Project Administration and Implementation

The agency that submits each project is responsible for implementation and administration. Due to the variable nature of procurement and contracting procedures, availability of resources, and weather conditions, accurate implementation timelines are difficult to predict. Therefore, implementation timelines may not be developed for some projects until a funding source is identified and the factors above can be determined relative to the prevailing operating environment. Grant requirements may also dictate project implementation timelines for the appropriate recipient. If the project is funded through a grant, the grantee is responsible for implementing these projects as outlined in the grant's regulations.

Letters of Support

The LMS Chair will write a letter of support for grant opportunities when a listed project has all the required information provided, and the minimum requirements met, the LMS Chair will notify the requestor, if additional information is needed to be added to the project for a letter of support to be provided. Requests for letters must, at a mini-

mum, be requested 10 working days in advance of the required deadline. Late requests may not be able to be facilitated. The LMS Chair will make notations in the comments section as to date and action taken.

The agency requesting a letter of support must be an active participant of the LMS, meaning they comply with the requirements set forth in *Part 1* of the LMS. Currently the requirements include their organization/agency must attend at least two (2) of the four (4) previous quarterly meetings held each year or an equivalent committee or sub-committee meeting as a substitution. The other requirements are that their project in the LMS WebEOC must be updated every calendar year.

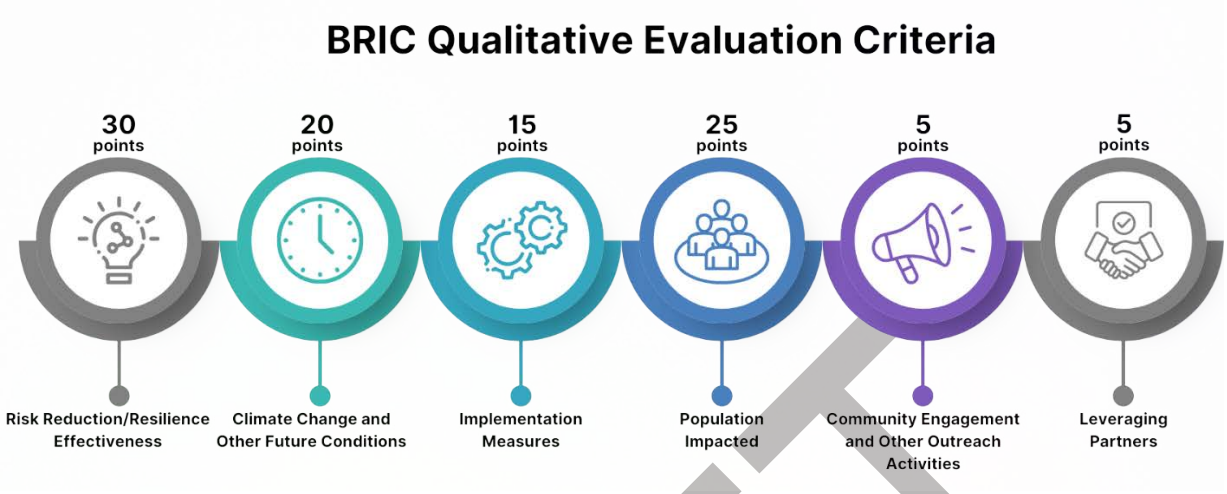
Inactive Projects

If a project has not been updated by October 31 of that same year, it will be marked *Inactive* by the LMS Chair. The agency will have until December 31 to update the project to restore the project back to active status. Projects that are not updated by that time will be deleted and archived on WebEOC.

PRIORITIZING MITIGATION PROJECTS[3]

The LMS Steering Committee is responsible for conducting the project prioritization process. The FEMA Building Resilient Infrastructure and Communities (BRIC) Qualitative Evaluation Criteria (QEC) has been adopted to prioritize mitigation projects in Miami-Dade County. The BRIC-QEC aligns with the mitigation goals and objectives of the Miami-Dade County LMS and has been developed through national stakeholder engagement. FEMA developed the qualitive evaluation criteria based on comments received during stakeholder engagement efforts in 2019. Comments indicated support for holistic project evaluation beyond economic metrics alone as well as for incentivizing partnerships and high-quality community engagement. Adopting the BRIC QEC will afford the advantage of normalizing FEMA's evaluation criteria and its implementation locally. It will also incentivize development of projects that align with FEMA's BRIC national competition. The LMS Steering Committee is responsible for reviewing project materials and scoring projects based on the QEC. The highest and lowest scores will be eliminated and the average of the remaining scores will be the final QEC project score. The BRIC QEC is divided into the following six parameters:

[3] EMAP 2016 Standard 4.2.2



The LMS Steering Committee members will apply the scoring options listed in Table 1 to all six qualitative criteria for each mitigation initiative. Scores will be submitted using an online WebEOC form. Note that point values vary among each criterion. The graded scoring and point scales for each criterion are included later in this document.

Table 1: Qualitative Criteria Scoring Options

Scoring Option	Description
Not at all	The mitigation initiative does not address the criterion at all.
Minimally	The mitigation initiative addresses some of the criterion, but information in the mitigation initiative may be missing, confusing, unclear, and/or incorrect. The degree to which the mitigation initiative demonstrates the criterion is minimal, and references to the criterion do not include substantive information.
Partially	The mitigation initiative partially addresses the criterion, but the mitigation initiative may lack clarity and/or strong support, have some minor inconsistencies, or not address all components of the criterion. The degree to which the mitigation initiative demonstrates the criterion has been met is mediocre.
Mostly	Although the mitigation initiative may include a few minor inconsistencies or areas that need more clarity, there is strong support for most components of the criterion. The degree to which the mitigation initiative demonstrates the criterion has been met is acceptable.

Entirely	The mitigation initiative is clear, concise, and complete; provides examples; and is supported by data. It addresses all components of the criterion and may have a particularly compelling narrative. The degree to which the mitigation initiative demonstrates the criterion has been met is excellent.

Prompts are included for each qualitative evaluation criterion to serve as a helpful starting point for partners submitting mitigation initiatives. These prompts are designed to clarify terms and provide guiding questions for mitigation partners to consider as they develop mitigation initiatives. This information will be provided to the LMS Steering Committee members to foster a common frame of reference. Please note that answering every question, while informative, will not necessarily guarantee an "Entirely" score. Finally, prompts included here are by no means mutually exclusive or exhaustive; any additional information to support the merit of the mitigation initiative is welcome.

It is important to note that this will be one level of consideration when limited funding sources are available to fund projects in Miami-Dade County. Other considerations may include criteria of the available funding source.

There may be situations when the window for a funding opportunity is very limited and in situations like this, projects that are "shelf-ready" may be put ahead of projects that may have a higher priority. The LMS Steering Committee will work to maximize opportunities for funding and will be called upon by the LMS Chair when circumstances arise that require additional considerations to be made.

The LMS Chair or designated representative will act as the committee facilitator. The committee's primary function will be to review and act on recommendations with respect to its evaluation of mitigation initiatives and its ranking of the priorities for their implementation. Projects that may not have a QEC completed will not be considered for funding.

Qualitative Evaluation Criterion 1: Risk Reduction/Resilience Effectiveness (30 possible points)

FEMA defines resilience as the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruption. The score received for Criterion 1 will depend upon how well the mitigation initiative details the following elements: (1) effective risk reduction, (2) effective increase in community resilience, (3) the provision of ancillary benefits, and (4) the leveraging of innovation.

Ancillary benefits could include among other options how the project will:

- Address inequities and provide the greatest support to those with greatest need.

- Contribute to the reduction of greenhouse gases by considering the use of low carbon materials or developing low carbon or net zero energy projects as described in the March 2023 Memorandum (IRA) Section 70006.

- Enable greater community resilience through cybersecurity in accordance with best practices and standards.

Criterion 1 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely
0	7.5	15	22.5	30

Prompts for the Risk Reduction/Resilience Effectiveness Criterion

Below are additional considerations for developing mitigation initiatives towards this criterion.

Interpreting Responses to Effective Risk Reduction

The mitigation initiative should detail how the project will reduce risk. The details should identify the risk being reduced and state what action will reduce the identified risk. The details should be clear and reasonable. The mitigation initiative should identity how the project will mitigate the subject's most prevalent risk and also identify additional risks that may be mitigated as well. Priorities for BRIC include risk reduction of both acute events and chronic stressors, exacerbated by hazard risk and climate change, which are either observed or expected. However, FEMA does not limit evaluation of risk reduction to those that are quantifiable. FEMA encourages alternative explanations of risk reduction. How will the proposed project reduce risk(s) and to what level?

For example, a proposed project could be designed to provide 100-year-level flood protection to a neighborhood with 250 people, 135 homes, and 15 publicly owned structures that support several Community Lifelines, and a variety of cultural, historic, and environmental resources. Additionally, partners may have high Building Code Effectiveness Grading Schedule (BCEGS) scores that show a commitment to reducing risk through strong building code adoption and enforcement activities.

Interpreting Responses to Increases in Resilience

The mitigation initiative should indicate how the proposed project will improve resilience. Resilience refers to the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruption. Detail how

the project will increase resilience. The details should identify the aspects of resilience being increased and state what action will increase the identified resilience. The details should be clear and reasonable. For example, a project designed to retrofit a library to serve as a tornado shelter could include tornado (and other hazards) preparedness, resilience, and hazard mitigation information. This could enhance the community's resilience by educating the public about the natural hazard risks they face, as well as build a culture of preparedness.

Interpreting Responses to Ancillary Benefits

Ancillary benefits refer to benefits other than the project's primary risk reduction objective, which should be identified in the Scope of Work section, if applicable. Ancillary benefits are benefits related to water/air quality, habitat creation, energy efficiency, economic opportunity, reduced social vulnerability, reduced carbon emissions, cybersecurity, cultural resources, public health, and mental health, as well as support mission areas of non- governmental organizations (NGOs), community-based groups, and other partners, etc.

Partners should consider the following: What ancillary benefits will the project provide and how? Does the project consider multiple hazards (e.g., wind/storm surge, wildfire/mudslides) to address risks beyond the proposal's primary risk reduction objective? Ancillary benefits should include how a project will lead to equitable outcomes and provide the greatest support to those with greatest need. Ancillary benefits could also address climate-related benefits. In this particular case, very significant ancillary benefits would be achieved by the project if it follows the Inflation Reduction Act Section 70006, FEMA building materials program and considers the use of low carbon materials or the project is developed as a low-carbon or net-zero energy project. The partner should include when possible or provide a reference to the Environmental Product Declarations (EPD) of the materials utilized in the project. A product-specific Type III (third-party verified) EPD must be shown and reported in a third-party dataset, such as the Embodied Carbon in Construction Calculator (EC3).

Interpreting Responses to Leveraging Innovation

Innovation in one community can look very different from innovation in another community. Partners should consider the following: How does the project leverage or demonstrate innovation for the community? What new ideas or approaches is the project incorporating? Does the project leverage collaborations and resources with NGOs, community-based groups, and other partners? The details should be clear and reasonable.

For example, a proposed project in a rural community that has seen an increase in development and impervious surface might include nature-based solutions that have

not previously been used. Details should include how the project will leverage innovation. The details should identify the aspects of innovation being leveraged and state what project aspects incorporate this element.

Qualitative Evaluation Criterion 2: Climate Change and Other Future Conditions (20 possible points)

Future conditions are inherently difficult to predict. However, it would be a mistake to not acknowledge potential climate change impacts when designing a project. Planning with climate change and future conditions in mind helps a community invest in choices that protect lives and property for a longer period of time. Hazard mitigation projects that account for changes in future conditions can minimize damage and losses as well as save or restore the benefits of natural systems. The score received for Criterion 2 will depend on how well the mitigation initiative details how the project will: (1) enhance climate adaptation, (2) respond to the effects of climate change, (3) respond to the effects of other future conditions (population/demographic/land use, etc.), and (4) cite data sources, assumptions, and models. Climate change is defined as "Changes in average weather conditions that persist over multiple decades or longer. Climate change encompasses both increases and decreases in temperature, as well as shifts in precipitation, changing risk of certain types of severe weather events, and changes to other features of the climate system" (Fourth National Climate Assessment).

The BRIC program may also accept the definitions of climate change of the National Aeronautics and Space Agency (NASA). Note, NASA defines climate change as "A change in the usual weather found in a place. This could be a change in how much rain a place usually gets in a year. Or it could be a change in a place's usual temperature for a month or season."

The U.S. Environmental Protection Agency's (EPA) definition of climate change is also accepted by the BRIC program. EPA defines climate change as "Any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer."

According to the EPA, climate change involves significant changes in average conditions—such as temperature, precipitation, wind patterns, and other aspects of climate—that occur over years, decades, centuries, or longer. Climate change involves longer-term trends, such as shifts toward warmer, wetter, or drier conditions. These trends can be caused by natural variability in climate over time, as well as human activities that add greenhouse gases to the atmosphere such as burning fossil fuels for energy.

The partner should indicate which definition of climate change is being used in its project narrative.

Criterion 2 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely
0	5	10	15	20

FEMA works with state, local, Tribal, and territorial governments to build and deliver resources and capabilities that ensure the nation can withstand climate hazards of today and those we anticipate for tomorrow. Partners should use evidence-based, best-available climate data sets, information resources, and decision support tools, including Federal resources, to identify current and future climate risks over the project's expected service life. Climate projections, emission scenarios, or other suitable scenario conditions should be specified based on the project's service life and applicant's risk tolerance, as appropriate and available. Applicants should document how their planned project design and operations are resilient to any identified current and future climate risks.

Partners should describe how the project will enhance climate adaptation and resilience using the best available data, detail how the project is being responsive to the effects of climate change (such as sea level rise), increased rainfall, increased likelihood of flash flood due to wildfire, etc.) and/or other future conditions (population/demographic/land use, etc.), and cites data sources, assumptions, and models.

Be sure to include relevant information supporting this criterion, including data sources, studies, models, etc. Available data sources that partners may use as supporting data may include: Climate.gov, Drought.gov, Heat.gov, the Sea Leave Rise Viewer, the National Climate Assessment, the Wildfire Risk to Communities tool, Climate Mapping for Resilience and Adaptation (CMRA) portal, the National Risk Index and the U.S. Climate Resilience Toolkit. Cite the page number and location in the supporting data related to the qualitative criteria.

Prompts for the Climate Change and Other Future Conditions Criterion

Examples of future conditions include, but are not limited to, the following: expected population changes, land use and development shifts, aging population, shifts in income or employment, changes in housing needs, increasing temperatures, increased wildfire risk, sea level rise, more frequent high tide flooding, more intense rainfall events, increasing storm frequency, persistent and prolonged droughts, changing groundwater tables, etc. The following are additional considerations that may help complete the development of the mitigation initiative.

- What anticipated future conditions are relevant for the project?

- For climate adaptation, a proposed project in a coastal area that is at risk to coastal flooding due to sea level rise might include details as to how the proposed activities may combat climate change. Details might include anticipated

rate of sea level rise, construction techniques to elevate or mitigate future flooding, or other information that would allow a reviewer to determine how the proposed project takes into account future changes.

- How is the project responsive to any identified anticipated changes? Does the project integrate the consideration of future conditions into design, planning, and operations workflows?

- How was the project informed by, or connected to, plans and planning efforts and the assessment of future conditions? For example, a local hazard mitigation plan may identify climate change as a threat or risk and include the proposed project as a mitigation response. Relevant plans may include hazard mitigation plans, comprehensive plans, climate adaptation plans, long-range transportation plans, small area plans, coastal zone management plans, capital improvement plans, etc.

- What data sources and assumptions are used to guide the project? For example, when citing a sea level rise projection, what time period and what scenario of sea level rise are assumed?

Qualitative Evaluation Criterion 3: Implementation Measures (15 possible points)

To properly implement a project, partners need to understand what is expected of them, ensure the human capital and financial resources needed to complete the project are in place, and develop a realistic timetable. If implementation measures are thoroughly developed, the partner has a roadmap to successfully meet overall project objectives. The score received for Criterion 3 will depend on how well the partner describes: (1) how the costs will be managed; (2) how the schedule will be managed; (3) how the project will be successfully implemented, and how innovative techniques to facilitate implementation will be incorporated; and in its Scope of Work section, (4) the technical and managerial staff and resources available to successfully implement this project; and (5) whether and how strong labor standards are incorporated to ensure high-quality work, avert disruptive and costly delays and promote efficiency.

Criterion 3 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely
0	3.75	7.5	11.25	15

Prompts for the Implementation Measures Criterion

Below are additional considerations for developing the mitigation initiative.

- Are strong labor standards incorporated? For example, the use of project labor agreements, requiring workers to be paid wages at or above the prevailing rate; use of local hire provisions; use of a directly employed workforce (as opposed to a subcontracted workforce); use of an appropriately skilled workforce (e.g., through registered apprenticeships or other joint labor-management training programs that serve all workers—particularly those underrepresented or historically excluded); and use of an appropriately credentialed workforce (i.e., satisfying requirements for appropriate and relevant pre-existing occupational training, certification, and licensure).

- Does the application inspire confidence that the project can be completed successfully as designed, given the stated implementation measures?

- What potential implementation challenges and obstacles are identified (e.g., technical, political, financial, public support, environmental/permitting, constructability), and what implementation solutions are proposed to address these challenges?

- How do project cost estimates and the schedule identify and address potential challenges and obstacles?

- What pre- and post-implementation monitoring strategies are proposed for the project? What specific evaluation elements are proposed to measure progress and ensure the project is executed as designed?

- What technical and managerial staff and resources are available to successfully implement the project? How will anticipated staff and resource gaps be filled?

- Are examples of successfully completed projects included to demonstrate effective implementation measures?

Qualitative Evaluation Criterion 4: Population Impacted (25 possible points)

While the intensity of a hazard is important, of equal or greater importance is the identification of the population impacted, many of whose demographic or socioeconomic characteristics may place its members at greater risk of harm before, during, and after a disaster.

The score received for Criterion 4 will depend on how well the sub application describes: (1) community-wide benefits, (2) the proportion of the population that will be impacted, including a description of the disadvantaged communities as referenced in Executive Order 14008, (3) how the project was selected and designed to maximize positive impacts and minimize negative impacts to any disadvantaged populations as referenced in Executive Order 14008, and (4) how the proposed project clearly benefits a disadvantaged community. As defined in Executive Order 14008:

- "A disadvantaged community may be characterized by variables including, but not limited to, low income, high and/or persistent poverty, high unemployment and underemployment, racial and ethnic segregation, linguistic isolation, high housing cost burden and substandard housing, distressed neighborhoods, high transportation cost burden and/or low transportation access, disproportionate environmental burden and high cumulative impacts, limited water and sanitation access and affordability, disproportionate climate impacts, high energy cost burden and low energy access, and all geographic areas within Tribal jurisdictions."

If a population impacted as demonstrated by the partner does not include a disadvantaged community, then the highest point allotment available is Partially. Mitigation initiatives that clearly state the proposed project is benefiting a disadvantaged community can score Mostly or Entirely.

Partners are encouraged to document their designation as an Economically Disadvantaged Rural Community (as referenced in Title 42 of United States Code (U.S.C.) Section 5133(a) as a small, impoverished community) or as a Community Disaster Resilience Zone (as defined in Title 42 United States Code Section 5136(a)) and if the project benefits or primarily benefits a census tract identified as disadvantaged by the Resilience Analysis and Planning Tool (RAPT) or Climate and Economic Justice Screening Tool (CEJST). Please note that the partner must explain in a narrative how the community is disadvantaged and impacted in addition to attaching all supporting documentation.

- Mitigation initiatives that demonstrate a direct positive impact to a disadvantaged community will receive a score of "Mostly."

- Mitigation initiatives that thoroughly describe the population impacted and demonstrate a high positive impact— including a high positive impact on a disadvantaged community--will merit a score of "Entirely."

Criterion 4 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely

0	6.75	12.5	18.75	25

Prompts for the Population Impacted Criterion

Below are additional considerations for developing the mitigation initiative:

- Community size, scale, and definition can vary in different local contexts. Explain what "community-wide" means in the context of the proposed project.
- Describe what quantity (e.g., percent) of the population will directly benefit from the project (i.e., experience direct community-wide benefits) and how the estimate was calculated.
- The mitigation initiative should include percentages of the community's population that will directly and indirectly benefit from the project.
- Explain who are the most vulnerable members of the community where the project is proposed and describe how the project will minimize negative impacts to disadvantaged members of the community.
- Explain whether the project will maximize positive impacts to disadvantaged members of the community. Impacts can be directly related to the risk reduction activity or indirectly related, such as with ancillary impacts (i.e., social, environmental, and economic impacts).

Qualitative Evaluation Criterion 5: Community Engagement and Other Outreach Activities (5 possible points)

A key element in the hazard mitigation process is the discussion it promotes among community members about creating a safer, more disaster-resilient community. Community engagement and other outreach activities that capture a community's values and priorities are likely to result in a project having greater legitimacy and support, leading to greater success in implementation.

The score received for Criterion 5 will depend on how well the mitigation initiative describes: (1) the outreach strategy and supporting activities appropriate to the project and community that advance hazard mitigation, (2) the types of community planning processes leveraged, (3) how input from a diverse range of stakeholders, including people from disadvantaged communities, was gathered and incorporated into project conception and design, and (4) how community planning and stakeholder input will continue to be used to help direct project execution.

Criterion 5 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely
0	1.25	2.5	3.75	5

Prompts for the Community Engagement and Other Outreach Activities Criterion

Below are additional considerations for completing developing a mitigation initiative.

- To what extent did stakeholders and/or stakeholder groups contribute to this project? What stakeholder collaboration activities occurred? What information regarding outreach has been provided? How was the community made aware of this potential project?

- What planning processes were leveraged during the development of the project proposal to advance mitigation? How did the project planning process ensure that the disadvantaged members of the community were involved in the planning and decision-making processes?

- For example: Were town hall meetings conducted with communities impacted by the project? How many stakeholder groups were represented? Suggestion: document attendance and outreach efforts.

- What information (e.g., resilience goals and outcomes, partnership opportunities, project implementation progress) will be shared with the public? What public outreach and engagement strategies will be used to disseminate project information to and gather feedback from stakeholders and members of the community? How will the information be shared?

- What support or conflicts emerged through the project planning process? How will conflicts be resolved as the project is implemented? How is support being used to implement the project?

- What are the connections between your hazard mitigation plan and local land use requirements, and how does the linkage make your community more resilient? For example, a local hazard mitigation plan may identify within the flood element that certain areas of the community are at a greater risk of future flooding. Do the associated land use plans have a floodplain classification, land use classification, or zoning ordinance that discourages development in that floodplain?

Qualitative Evaluation Criterion 6: Leveraging Partners (5 possible points)

Leveraging partners allows partners to access complementary strengths from neighboring communities, states, the federal government, and non-profit and private partners. This potentially helps the partners from a cost basis and serves the local community's greater good; leveraging may come from funds or provision of in-kind services by the partner.

The score received for Criterion 6 will depend on how well the mitigation initiative incorporates: (1) partnerships (e.g., state, territory, tribal, private, district, local community) that will ensure the project meets community needs, (2) an explanation of how these partnerships benefit disadvantaged communities, and (3) an explanation of the anticipated outcome of those partnerships (e.g., leveraging resources, such as financial, material, and educational resources; coordinating multi-jurisdictional projects; and a heightened focus on equity-related issues).

Criterion 6 Qualitative Criteria Scoring Points

Not at all	Minimally	Partially	Mostly	Entirely
0	1.25	2.5	3.75	5

Prompts for the Leveraging Partners Criterion

Below are additional considerations for developing mitigation initiatives.

- What partners were involved in the project design? How did partners contribute to the application? What partners will contribute to the implementation of the project? Partnerships can take many different forms. For example, partners may contribute financially, support and promote the proposed project, or help generate community-wide awareness of the risks the proposal is designed to address, etc.

- To what extent were NGOs—including those organizations that represent disadvantaged groups, universities, or other government entities—consulted for advice or assistance? How has collaboration with surrounding jurisdictions supported project development?

- To what extent have other federal programs or funding sources been leveraged for the project? To what extent have partners provided funding (or in-kind services, such as grant writing support, procurement support, expertise, supplies, etc.) that increases the non-federal cost share?

- How have partnerships been used to increase community resilience? What community groups will participate in this project? What potential exists for partnerships to continue beyond implementation of the project?

PRIORITIZED PROJECT LIST

Project information provided in this list is reported by the respective agency listed for each project. These projects are prioritized using the Benefit Cost Review (BCR) process described in the previous version of this plan. Projects will be prioritized using the process described in this version of the plan when the plan is approved and formally adopted. For more information on each project, please contact the responsible agency.

2020							
BCR	**Project Title**	**Agency**	**Hazards Mitigated**	**Funding Source**	**Estimated Costs**	**Completion Timeframe**	**Status**
0	NE 29PL & Aventura Boulevard	Aventura	Flood	City of Aventura	247,000.00	10/1/20 to 4/1/21	Project Complete
0	Yacht Club Drive Drainage Improvements	Aventura	Flood	Secured City of Aventura	750,000.00	8/1/20 to 2/1/21	Project Complete
0	Yacht Club Drive Seawall Repairs	Aventura	Flood, Flood/Storm Surge	City of Aventura	491,000.00	6/20 through 2/21	Project Complete
86	Replace Above Ground Fuel Tank	Mount Sinai	Flood, Power Failure, Wind, Health	Unknown	2,247,478.15	7/25/2022	Project Complete
87	Utility Bridge Hardening	Mount Sinai	Power Failure, Wind	Unknown	759,622.04	6/30/2022	Project Complete
43	Potable Water Lines	Pinecrest	Other	Unknown/None	17,674,687.50	1 year	Construction/ Project Begun
74	Palmetto Island Drainage (Phase 1)	Pinecrest	Flood, Flood/Storm Surge, Storm Surge	Unknown	750,000.00	1 year	Construction/ Project Begun
79	Police Station Headquarters Garage Drainage Improvements	Miami Beach	Flood, Flood/Storm Surge, Sea Level Rise	HMGP Funded Phase 1. Phase 2 TBD.	Unknown	2025	Funding Secured
80	Larchmont Drainage Retrofit Project	Public Works	Flood, Flood/Storm Surge	Stormwater Utility	1,000,000.00	1 year after funding is identified	Future Unfunded Project
83	CRS Activity 420 Open Space Preservation	Cutler Bay	Flood, Flood/Storm Surge, Sea Level	Building Resilient Infrastructure and	8,000,000.00	1 year	Funding Applied for

			Rise, Storm Surge, Wind	Communities (BRIC)			
85	West Lakes Drainage Improvements Project Phase IV	Miami Lakes	Flood, Flood/Storm Surge, Storm Surge, Health, Other	FEMA HMA Grants Programs Funds Secured	1,000,000.00	2023	Funding Secured
85	King's Bay Septic to Sewer Conversion	Coral Gables	Health, Sea Level Rise, Storm Surge	Grant source to be determined.	4,500,000.00	TBD	Future Unfunded Project
91	Miami-Dade County, FL: Countywide Continuity of Operations Energy Resilience Project	Fire Rescue	Power Failure, Technological Disruption	BRIC Program, Hazardous Mitigation Program	16,340,000.00	3 years	Funding Applied for
92	Seal and Paint Exterior DHM Patient Tower	Mount Sinai	Flood, Wind, Health	Hospital Funded	1,920,104.00	8/23/2023	Construction/ Project Begun
2021							
BCR	**Project Title**	**Agency**	**Hazards Mitigated**	**Funding Source**	**Estimated Costs**	**Completion Timeframe**	**Status**
0	Beach Club Sewer Extension	Key Biscayne	Health	ARP	42,000.00	FY22	Project Complete
51	NW 187 Street Drainage and Sidewalk Curbing Improvement Project (from NW 33 - 34 Court)	Miami Gardens	Flood	Stormwater Funds	175,000.00	6 months to 1 year	Project Complete
57	NW 34 Ave and NW 151 Ter Area	Miami Gardens	Flood	Stormwater and CITT Funds	800,000.00	1 Year	Project Complete

	Road and Drainage Improvement Project						
62	NW 213 Street Drainage Improvement Project (Flooding at 2931 NW 213 Street)	Miami Gardens	Flood	Stormwater Funds	100,000.00	1 Year	Funding Secured
62	Alleyways Drainage Project Improvements (off NW 2 Avenue between NW 189 to 191 Street)	Miami Gardens	Flood, Other	Stormwater Funds	30,000.00	6 months to 1 year	Funding Secured
62	Leslie Estates Road and Drainage Improvement Project-Phase #2 between NW 189 to 191 Street)	Miami Gardens	Flood	Stormwater and CITT Funds	1,700,000.00	1 Year	Funding Secured
63	NW 195 Terrace from NW 33-34 Court Drainage Project	Miami Gardens	Flood	Stormwater Funds	25,000.00	6 months to 1 year	Project Complete
65	NW 187-199 Street and NW Sunshine State Parkway to NW 12 Avenue	Miami Gardens	Flood	Stormwater and CITT Funds	1,200,000.00	1 Year	25% complete

66	Storm water & Roadway improvements	El Portal	Flood, Sea Level Rise	Miami-Dade County, FDEP, State of Florida Legislative Appropriations, federal government.	2,400,000.00	TBD	Funding Applied for
66	NW 165 Street Area Drainage/Swale Improvement Project	Miami Gardens	Flood	Stormwater Funding	25,000.00	1 Year	Project Complete
66	NW 202 Terrace Road, Drainage and Street Parking Improvement Project (west of NE 2 Avenue	Miami Gardens	Flood, Other	Stormwater Funding	750,000.00	1 Year	Project Complete
68	Miami Springs Wind Retrofit Project	Libraries	Wind	Submitting HMGP grant December 21, 2021	173,074.00	TBD	Funding Secured
69	NW 203 Street Area Drainage Improvement Project	Miami Gardens	Flood	Stormwater Funds	50,000.00	6 months to 1 year	Project Complete
71	Downtown Coral Gables Drainage and Water Quality Improvements	Coral Gables	Flood, Flood/Storm Surge, Health	Hazard Mitigation Grant Program	1,000,000.00	May 31, 2024	Funding Secured
74	Miami Beach Regional Hardening Project	Libraries	Flood/Storm Surge, Wind	HMGP, resilience and other Grant sources	1,415,285.00	TBD	Funding Secured

75	City of Miami Springs: Erosion Control and Stabilization of Drainage	Miami Springs	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	State Legislation	$1,281,383.00	5 years	Project in Planning Stage
75	Allapattah Flood Improvements	Miami	Flood, Sea Level Rise, Other	Flooding & Sea Level Rise Resilience Plan, Miami Forever Bond	31,376,188.00	12/31/2024	Funding Secured
75	Melrose Flood Improvements Phase I	Miami	Flood, Sea Level Rise, Other	HMGP	11,029,883.00	12/31/2024	Funding Secured
75	Melrose Flood Improvements Phase II	Miami	Flood, Sea Level Rise, Other	HMGP	55,510,496.00	12/31/2024	Future Unfunded Project
75	Morningside Flood Improvements Phase I	Miami	Flood, Sea Level Rise, Other	HMGP	13,627,868.00	12/31/2024	Future Unfunded Project
75	Morningside Flood Improvements Phase II	Miami	Flood, Sea Level Rise, Other	HMGP	19,415,225.00	12/31/2024	Future Unfunded Project
75	North-West Wynwood Flood Improvements	Miami	Flood, Sea Level Rise, Other	HMGP	53,545,318.00	12/31/2024	Future Unfunded Project
75	South-West Wynwood Flood Improvements	Miami	Flood, Sea Level Rise, Other	CDBG MIT	31,523,773.00	12/31/2024	Funding Secured
75	Clemente Park Flood Improvements	Miami	Flood, Sea Level Rise, Other	Miami Forever Bond	14,734,729.00	12/31/2024	Funding Secured

75	Edgewater Flood Improvements Phase I	Miami	Flood, Sea Level Rise, Storm Surge, Other	Resilient Florida Grant Program (RFGP), Miami Forever Bond	17,111,976.00	12/31/2024	Funding Secured
75	Edgewater Flood Improvements Phase II	Miami	Flood, Sea Level Rise, Storm Surge, Other	HMGP	18,650,223.00	12/31/2024	Future Unfunded Project
75	Brickell East Flood Improvements	Miami	Flood, Sea Level Rise, Other	HMGP	23,257,426.00	12/31/2024	Future Unfunded Project
75	South Shenandoah & Silver Bluff Flood Improvements Phase I	Miami	Flood, Sea Level Rise, Other	HMGP	10,100,000.00	12/31/2024	Funding Applied for
75	South Shenandoah & Silver Bluff Flood Improvements Phase II	Miami	Flood, Sea Level Rise, Other	HMGP	10,990,604.00	12/31/2024	Funding Applied for
75	East Little Havana Flood Improvements	Miami	Flood, Sea Level Rise, Other	CDBG-MIT, Miami Forever Bond	36,894,877.00	12/31/2024	Funding Secured
75	8 Street Flood Improvements	Miami	Flood, Sea Level Rise, Other	HUD - Community Project Funding (CPF) grant, Miami Forever Bond	9,781,446.00	12/31/2024	Funding Secured
75	Auburndale Flood Improvements	Miami	Flood, Sea Level Rise, Other	Resilient Florida Grant Program (RFGP), Miami Forever Bond	30,000,000.00	12/31/2024	Funding Secured
75	Shenandoah Flood	Miami	Flood, Sea Level Rise, Other	HMGP	49,433,816.00	12/31/2024	Future Unfunded

	Improvements Phase I						Project
75	Shenandoah Flood Improvements Phase II	Miami	Flood, Sea Level Rise, Other	HMGP	44,510,554.00	12/31/2024	Future Unfunded Project
75	East Flagami Flood Improvements	Miami	Flood, Sea Level Rise, Other	Resilient Florida Grant Program (RFGP), Miami Forever Bond	30,000,000.00	12/31/2024	Funding Secured
75	NE 75 Street Flood Improvements	Miami	Flood, Sea Level Rise, Other	HMGP	24,337,933.00	12/31/2024	Funding Applied for
75	Shorecrest North Flood Improvements	Miami	Flood, Sea Level Rise, Storm Surge, Other	HMGP	11,440,377.00	12/31/2024	Future Unfunded Project
77	Design Stormwater Infrastructure Improvements K-8 Basin	Key Biscayne	Flood, Sea Level Rise	CIP, GF, Resilient Florida	2,419,130.00	5/9/2025	Funding Applied for
79	Dade Chase - C-4 Hardening	Banyan Community Health Centers	Wind	Either in-house or global match	430,225.57	3 years	Funding Secured
79	Sea wall improvements and shoreline enhancement	Key Biscayne	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	N/A	47,361,600.00	2 years	Future Unfunded Project
80	Thalatta Estate Shoreline Stabilization	Palmetto Bay	Flood/Storm Surge, Sea Level Rise, Storm Surge	FIND grant and Village of Palmetto Bay	500,000.00	1 year or more	Funding Secured

81	complete Streets/Roadway Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Sea Level Rise, Storm Surge	general obligation bond	40,000,000.00	2021-2028	Funding Secured
81	Install Village Wide Security and Surveillance System	Key Biscayne	Health, Technological Disruption	ARPA, GF, CIP	470,000.00	FY23	Funding Secured
82	Brickell Bay Drive Seawall and Flood Improvements	Miami	Flood, Sea Level Rise, Storm Surge, Other	HMGP	20,000,000.00	03/31/2025	Funding Applied for
84	Replace Community Center RTU	Key Biscayne	Health, Power Failure, Flood/Storm Surge	N/A	27,888.00	3/25/2022	Project Complete
84	Colorama Estates/Avalon Estates Drainage Improvements Project	Miami Lakes	Flood, Flood/Storm Surge, Health, Storm Surge, Other	DEP, FEMA, Legislative	1,465,455.00	2024	Future Unfunded Project
85	Resilient Infrastructure Integration Strategy/Implementation Plan	Key Biscayne	Other, Sea Level Rise, Storm Surge, Wind, Technological Disruption, Health, Flood/Storm Surge, Flood, Power Failure, Security Breach	General Funds & Stormwater	1,000,000.00	FY23	Project in Planning Stage
85	Utility Undergrounding-Phase 1	Key Biscayne	Power Failure, Technological Disruption, Wind, Security Breach, Health, Other, Flood/Storm Surge, Flood	General Obligation Bond	8,500,000.00	TBD	Future Unfunded Project

86	Replace Community Center Roof	Key Biscayne	Health, Other, Technological Disruption	N/A	5,200,000.00	FY23	Project in Planning Stage
86	Hampton Park Improvements	Key Biscayne	Other	Grant	50,000.00	FY22	Project in Planning Stage
87	Replace Rescue Stretchers	Key Biscayne	Health, Other	General Fund	170,000.00	FY23	Future Unfunded Project
87	New Little Havana Health Center - Code Plus	Banyan Community Health Centers	Wind	Potential funding sources include FEMA, HMGP, HRSA, Florida House & Senate, private funders	5,000,000.00	3 years	Funding Secured
87	Miami-Dade County, FL: Structural and Roof Rehabilitation for Multiple Miami-Dade Fire Rescue Stations	Fire Rescue	Wind, Flood/Storm Surge	Potential HMGP	2,979,000.00	Unknown	Funding Secured
88	Miami-Dade Fire Rescue Headquarters Water Intrusion Retention Wall and French Drainage System	Fire Rescue	Flood/Storm Surge, Flood	Potential Resilient Florida Grant Program	1,150,000.00	TBD	Funding Applied for
88	MDFR Fire Station Hardening Project	Fire Rescue	Wind	Potential HMGP grant	2,000,000.00	TBD	Future Unfunded Project

89	Seal and Paint Exterior Blum Patient Tower	Mount Sinai	Flood/Storm Surge, Health, Wind	Hospital funding	500,000.00	08/23/2023	50% complete
89	Miami Fire Rescue - Fire Station 6 Hardening	Miami	Wind, Security Breach, Power Failure, Technological Disruption	Hazard Mitigation Grant Program (HMGP) - Potential	279,265.00	12/1/2025	Funding Secured
90	Blum Patient Tower Hardening	Mount Sinai	Flood/Storm Surge, Health, Wind, Storm Surge	Possible grant opportunity	16,000,000.00	18 months	Future Unfunded Project
90	Greene Patient and Medical Education Tower Hardening	Mount Sinai	Flood, Flood/Storm Surge, Health, Wind	Possible grant opportunity	7,000,000.00	18 months	Future Unfunded Project
90	Ascher Support Services Building Hardening	Mount Sinai	Flood, Flood/Storm Surge, Wind, Health	Possible grant opportunity	9,000,000.00	18 months	Future Unfunded Project
92	Solar Microgrid for Flood Risk Mitigation at Miami-Dade Fire Rescue Headquarters and Emergency Operations Center	Fire Rescue	Flood, Flood/Storm Surge	Potential Resilient Florida Grant Program Potential BRIC	28,625,019.00	TBD	Other
97	Improvements to access and parking to	Solid Waste	Flood, Sea Level Rise, Flood/Storm Surge	Florida DEP Protecting Florida Together Funding	2,500,000.00	06/01/2023	Future Unfunded Project

	account for sea level rise						
97	Design plan to improve stormwater management for South Dade Landfill	Solid Waste	Flood, Flood/Storm Surge, Sea Level Rise	Florida DEP Resilience Project Grant	1,500,000.00	12/30/2023	Funding Secured
97	Feasibility study for a location of a new Waste to Energy (WTE) plant	Solid Waste	Flood, Flood/Storm Surge, Sea Level Rise	Florida DEP Resilience Projects Grant	500,000.00	12/31/2022	Future Unfunded Project
97	Storm Water Drainage Improvements for Snapper Creek Trash and Recycling Center	Solid Waste	Flood, Flood/Storm Surge, Sea Level Rise	Florida DEP Resilience Projects Grant	250,000.00	12/30/2023	Future Unfunded Project
2022							
BCR	**Project Title**	**Agency**	**Hazards Mitigated**	**Funding Source**	**Estimated Costs**	**Completion Timeframe**	**Status**
68	Immediate Flood Control Solutions	Key Biscayne	Flood	CIP	1,000,000.00	TBD	Project in Planning Stage

69	Miami Beach Regional Library Resilience Grant	Libraries	Wind, Flood/Storm Surge, Sea Level Rise	Florida Department of Environmental Protection Agency	800,000.00	TBD	Funding Secured
70	Village-Wide Stormwater Master Plan Implementation	Pinecrest	Flood	Grants	12,750,000.00	1 year	Future Unfunded Project
73	Zone 7 Resilient Infrastructure Improvements	Key Biscayne	Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Flood, Wind, Other	CIP, GOB, CWSRF	40,000,000.00	TBD	Future Unfunded Project
73	Main Library Resilience Grant	Libraries	Flood, Flood/Storm Surge, Sea Level Rise	GOB and Library Taxing District Construction Fund	1,520,000.00	TBD	Other
78	Offshore Breakwater Submerged Structure Implementation	Key Biscayne	Flood/Storm Surge, Sea Level Rise, Storm Surge, Other	Potential grants like Resilient Florida, NFWF NCRF, or coral reef restoration grants.	15,340,000.00	2027	Future Unfunded Project
79	FS3/Fire Administration/ Logistics Hardening	Miami	Flood, Flood/Storm Surge, Wind, Technological Disruption, Power Failure, Security Breach	Hazard Mitigation Grant Program (HMPG)	650,000.00	45 months	Future Unfunded Project
80	Utility Undergrounding - Phase 2	Key Biscayne	Power Failure, Wind	CIP, GOB	30,000,000.00	TBD	Future Unfunded Project
83	Modify Rights of Way for Flood Reduction	Key Biscayne	Flood, Sea Level Rise, Flood/Storm Surge	General Obligation Bond	750,000.00	2027	Future Unfunded Project

83	City of Hialeah BRIC FY22 - Critical Facility Backup Generator	Hialeah	Flood, Flood/Storm Surge, Power Failure, Storm Surge, Wind	BRIC	543,049.29	TBD	Funding Applied for
83	Develop risk reduction ordinances	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Security Breach, Storm Surge, Technological Disruption, Wildfire, Wind, Other	General Fund or General Obligation Bond	350,000.00	2024	Future Unfunded Project
84	Montrose Road from Oak Lane to NW 154th Street Drainage Improvements Project	Miami Lakes	Flood, Flood/Storm Surge, Storm Surge, Other	Legislative	741,421.00	2024	Funding Secured
84	West Lakes Gardens Third Addition Drainage Project	Miami Lakes	Flood, Flood/Storm Surge, Other, Storm Surge	State Legislative Funding	490,447.00	2024	Funding Secured
86	Construct Pump Station in K-8 Stormwater Basin	Key Biscayne	Flood, Sea Level Rise, Storm Surge, Power Failure, Wind	Clean Water State Revolving Loan Fund, Resilient Florida (FDEP)	11,979,008.00	2026	Funding Applied for
86	Zone 2 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Power Failure, Sea Level Rise, Storm Surge, Wind, Other, Health	CIP, CWSRF, General Obligation Bond	30,000,000.00	TBD	Future Unfunded Project

86	Zone 3 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind, Other	CIP, CWSRF, General Obligation Bond	33,000,000.00	TBD	Future Unfunded Project
86	Zone 4 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind, Other	CIP, General Obligation Bond, CWSRF	36,000,000.00	TBD	Future Unfunded Project
86	Zone 5 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind, Other	CIP, General Obligation Bond, CWSRF	36,000,000.00	TBD	Future Unfunded Project
86	Zone 6 Resilient Infrastructure Improvements	Key Biscayne	Storm Surge, Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Wind, Other	CIP, General Obligation Bond, CWSRF	43,000,000.00	TBD	Future Unfunded Project
86	Zone 7 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Wind, Other, Storm Surge	CIP, GOB, CWSRF	43,000,000.00	TBD	Future Unfunded Project
86	Zone 8 Resilient Infrastructure Improvements	Key Biscayne	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind, Other	CIP, GOB, CWSRF	43,000,000.00	TBD	Future Unfunded Project
87	Procure Mobile Generator for Pump Stations	Key Biscayne	Flood, Flood/Storm Surge, Power Failure, Sea Level Rise, Storm Surge,	General Fund	150,000.00	2024	Future Unfunded Project

			Technological Disruption, Health, Other, Wind, Security Breach				
87	Replace Two Fire Rescue Trucks	Key Biscayne	Flood/Storm Surge, Flood, Health, Security Breach, Storm Surge, Wildfire, Wind, Other	CIP	1,000,000.00	2026	Funding Secured
87	Loch Lomond Phase II Drainage Improvements Project	Miami Lakes	Flood/Storm Surge, Flood, Storm Surge, Other, Health	State Legislative Funding Secured	920,000.00	2024	Funding Secured
89	Renourish Beach and Restore Dunes	Key Biscayne	Flood/Storm Surge, Sea Level Rise, Storm Surge	CIP, Beach Management Assistance Funding, State Appropriations	2,800,000.00	2024	Funding Secured
89	Construct Northwest Boundary Berm	Key Biscayne	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Will require grant assistance, local contribution, and other funding sources to complete.	19,500,000.00	2028	Future Unfunded Project
89	Miami Fire Rescue - Fire Station 3 Hardening	Miami	Flood, Flood/Storm Surge, Wind, Security Breach, Technological Disruption, Storm Surge	HMGP	745,925.00	36 months	Future Unfunded Project
92	EOC Generator UPS replacement	Hialeah	Power Failure	BRIC Grant	236,928.80	30 days	Funding Secured

96	Stormwater Improvements – Northeast Transfer Station	Solid Waste	Flood	Statewide Flooding and Sea Level Rise Resilience Plan Grant	500,000.00	12/31/2025	Funding Secured
96	Stormwater Improvements – West Transfer Station	Solid Waste	Flood/Storm Surge	Statewide Flooding and Sea Level Rise Resilience Plan Grant	500,000.00	12/31/2025	Funding Secured
56	Hardening of Miami City Ballet Building	Miami Beach	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge, Wind	Potential grant funding	Unknown	2019	Project Complete
61	Village Seawall and Dock Renovation	Bal Harbor	Flood, Flood/Storm Surge, Storm Surge, Other, Sea Level Rise	Capital Projects Reserved Funding. A FIND construction grant was recently secured to support with construction.	1,500,000.00	1 year	Project Complete
69	MIA South and Central Terminal Baggage Handling System Improvements	Aviation	Sea Level Rise, Flood	TSA OTA - $101.2M, FDOT Grants - $19.1M, Future Financing - $203.9M	Unknown	1/1/2021	Project Complete
74	EC2 Expansion-Phase III	Mount Sinai	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind	FDOH Grant	4,200,000.00	2021	Project Complete
80	PG5- Market Station First Floor	Florida Inter-	Wind	HMGP	Unknown	More than 1 year	Project Complete

	Shutter Installation	national University					
82	PG5 Market Station Generator Installation	Florida Inter-national University	Flood, Flood/Storm Surge, Power Failure, Technological Disruption, Wind	HMGP	Unknown	More than 1 year	Project Complete
88	Seawalls: Convention Center Dr to Washington	Miami Beach	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Unknown	Unknown	2022	Project Complete
			2023				
BCR	**Project Title**	**Agency**	**Hazards Mitigated**	**Funding Source**	**Estimated Costs**	**Completion Timeframe**	**Status**
85	Franjo Park Restoration and Upgrades	Cutler Bay	Flood, Flood/Storm Surge, Health, Sea Level Rise, Storm Surge, Wind	Budgeted for in fiscal year(s) 2017-18 & 2019-20	1,800,000.00	2 years	Project Complete
84	Saga Bay 1.5 Drainage Improvement	Cutler Bay	Flood, Health	Stormwater Utility Fund	1,100,000.00	1 year	Project Complete
83	Cutler Ridge Section 3 Drainage Improvement	Cutler Bay	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge, Technological Disruption, Health	Florida Small Cities Department of Economic Opportunity (CDBG) and Stormwater Utility Fund. Submitted as part of Legislative Priority 2018-06; State Appropriations	1,325,000.00	18 months	Project Complete

				granted $200,000 for design.			
77	Emergency Operations Center (EOC) Relocation/Expansion Project	Doral	Flood, Other	General Fund	Unknown	FY 2018-2019	Project Complete
55	NE 34th Avenue Drainage Improvements	Aventura	Flood	City of Aventura	770,000.00	10/1/22 - 6/1/23	75% complete
64	City of Hialeah City-wide Storm water Master Plan	Hialeah	Flood, Flood/Storm Surge, Health, Storm Surge	Match will be provided with General funds upon approval	775,000.00	36 months	Funding Applied for
65	Coral Gables Country Club Emergency Generator	Coral Gables	Power Failure	Potential	800,000.00	1 year	Future Unfunded Project
65	Youth Center Emergency Generator	Coral Gables	Power Failure	Potential	350,000.00	1 year	Future Unfunded Project
67	Aventura Parking Lot Injection Well	Mount Sinai	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Unsecured	1,000,000.00	1 years	Future Unfunded Project
73	130-1 NW 99th Terrace Connector	Medley	Flood, Flood/Storm Surge, Storm Surge	State Legislation and FEMA	2,034,700.00	2024	Funding Applied for
73	Homestead JD Redd Park Wind Mitigation Retrofit	Homestead	Wind	RFP-DEM-22-23-026: Hurricane Loss Mitigation Program	194,000.00	1 year	Funding Secured
73	Citywide Critical Asset	Aventura	Technological Disruption, Flood,	Unsecured	95,000.00	1 to 2 years	Project in Planning Stage

	Management System		Flood/Storm Surge, Power Failure, Other				
74	Vizcaya Village Flood and Wind Mitigation (Garage & Mechanic's Shop)	Vizcaya Museum and Gardens	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Storm Surge, Wind	Potential - HMGP	2,000,000.00	Dec. 31, 2026	Future Unfunded Project
74	Vizcaya Casino Flood & Wind Mitigation	Vizcaya Museum and Gardens	Flood, Flood/Storm Surge, Sea Level Rise, Wind, Storm Surge	Potential - HMGP	900,000.00	09/30/2026	Project Deferred
74	Emergency By-Pass Pump Sanitary/Storm	Coral Gables	Health, Flood/Storm Surge, Power Failure, Sea Level Rise	Potential	200,000.00	1 year	Future Unfunded Project
75	EOC Generator and Enclosure	University of Miami	Power Failure, Wind, Flood, Security Breach, Technological Disruption	HMGP DR-4673 Hurricane Ian	926,386.00	36 months	Future Unfunded Project
75	Vizcaya Drainage Improvement - Main Gardens	Vizcaya Museum and Gardens	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Potential - HMGP	900,000.00	09/30/2026	Project Deferred
76	6th Avenue Drainage Improvements	Homestead	Flood, Health	Federal This is a 50/50 matching grant.	2,900,000.00	3 Years	Funding Secured
77	Phoenix Manor I - External Hardening	Banyan Community Health Centers	Wind, Power Failure, Health	HMGP-DR-4673 - Hurricane Ian + In-kind & cash match	2,807,577.01	36 months	Funding Applied for
77	Leslie Estates Road and	Miami Gardens	Flood	Stormwater along with CITT Funding with State	1,500,000.00	2025	Funding Secured

	Drainage Project - Phase III			Appropriation Funding.			
80	Banyan Health RRC Load Path Hardening	Banyan Community Health Centers	Wind, Health	FEMA HMGP-DR-4673 Hurricane Ian + in-kind match + cash match (potential)	1,142,199.74	36 months	Funding Applied for
80	Stormwater Improvement Project Sub Basin NW 33 ST	Doral	Flood/Storm Surge, Flood	75% Federal Share 25% City of Doral-Stormwater Fund	973837.44	3 years	Future Unfunded Project
81	Vizcaya Drainage Improvement - East side of estate	Vizcaya Museum and Gardens	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge, Power Failure, Technological Disruption	Potential - HMGP	1,800,000.00	09/30/2026	Future Unfunded Project
81	City-wide Flood Sensors	Hialeah	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	The match will be paid from the City of Hialeah General Fund	2,776,920.16	36 months	Funding Applied for
81	City of Hialeah - Drainage Improvement Project 1	Hialeah	Flood, Flood/Storm Surge, Storm Surge	Match will be paid from General Funds	2,168,390.30	36 Months	Funding Applied for
82	Upgrading Critical Facility Generators for Enhanced Support and Resilience	Miami Shores	Power Failure, Health, Security Breach, Technological Disruption	Our Matching Portion would come from our Capital Budget.	750,000.00	12 months	Future Unfunded Project
82	Hardened 911 Communication and Emergency	Aventura	Wind, Flood/Storm Surge	General Funds, Police Forfeiture Funds	2,500,000.00	1 to 2 years	Future Unfunded Project

	Operations Center						
83	Emergency Power Generator for Police & Emergency Operations Center	Aventura	Power Failure	City of Aventura, FY 24 general funds	550,000.00	1 Year	Project in Planning Stage
84	Emergency Shelter Generator Replacement	MacTown	Health, Power Failure, Technological Disruption, Security Breach	HMGP or County or City funds	548,002.00	6 months	Funding Applied for
84	City of Hialeah - Drainage Improvement Project 3	Hialeah	Flood, Flood/Storm Surge, Storm Surge	Match will be paid from General Funds	5,216,255.60	36 Months	Funding Applied for
85	Utility Undergrounding - Phase 2	Key Biscayne	Flood, Health, Power Failure, Other, Wind, Technological Disruption	General Obligation Bond	8,500,000.00	2027	Future Unfunded Project
85	Utility Undergrounding - Phase 3	Key Biscayne	Health, Power Failure, Security Breach, Technological Disruption, Wind, Other, Flood, Flood/Storm Surge	General Obligation Bond	8,500,000.00	2030	Future Unfunded Project
85	7 Generators for 7 traffic light intersections throughout the city		Power Failure	Potential 2023 HMGP grant application cycle	40,000.00	2 years or more	Future Unfunded Project

86	Drainage and Roadway Improvements Residential and Commercial areas (Zones 3, 4, and 5)	Opa-Locka	Flood, Flood/Storm Surge, Health	City of Opa-Locka and State Revolving Loans from Florida Department of Environmental Protection	21,577,269.00	36 months	Project in Planning Stage
86	Jackson Memorial Generator Plant Upgrade	Jackson	Power Failure, Health, Technological Disruption, Other	BRIC, HMGP, FLDEO	5,000,000.00	30 months	Future Unfunded Project
86	Stormwater Improvement Project Sub Basin E7	Doral	Flood, Flood/Storm Surge	FEMA Hazard Mitigation Grant Program cycle for Hurricane Nicole (FEMA 4680-DR-FL)	515,181.63	3 years	Future Unfunded Project
87	Improvements to NE 213th Street Basin	Aventura	Flood, Flood/Storm Surge	Stormwater Utility Fund	8,000,000.00	3 Years	Project in Planning Stage
87	Stormwater Pump Station 1 & 2, pump replacement and upgrades	West Miami	Flood, Health, Power Failure	HMGP and State funds	571,000.00	1 year	Funding Applied for
87	Uninterruptible Power System Police Department	Homestead	Power Failure, Technological Disruption	Hurricane Ian (FEMA 4673-DR-FL) 75% with 25% Match	79,000.00	1 year	Funding Applied for
87	Retrofit of Fire Department Headquarters Building	Hialeah	Health, Wind	Match will be paid with General funds	595,414.00	36 Months	Funding Applied for

87	West Miami Standby Generators for four (4) Lift Stations	West Miami	Flood/Storm Surge, Health, Power Failure	Potential funding source is HMGP for the October 20, 2023, application cycle. Funding match of 25%	300,000.00	2-3 years	Project in Planning Stage
87	Westchester Emergency Department	Mount Sinai	Health, Other	Legislative appropriation request	4,000,000.00	2024-2025	Project in Planning Stage
88	Miami-Dade, FL: Miami-Dade Fire Rescue Station 03 Hardening Project	Fire Rescue	Wind	Potential Hazard Mitigation Grant Program (HMGP)	1,000,000.00	TBD	Future Unfunded Project
88	Dade Chase Admin Building	Banyan Community Health Centers	Wind, Power Failure, Health	HMGP-DR-4673-Hurricane Ian and In-kind and cash match	1,168,171.61	36 months	Funding Applied for
88	City of Hialeah - Drainage Improvement Project 2	Hialeah	Flood, Flood/Storm Surge, Storm Surge	Match will be paid from General funds	1,278,870.25	36 Months	Funding Applied for
89	Miami-Dade, FL: Miami-Dade Fire Rescue Station 34 Hardening Project	Fire Rescue	Wind	Potential Hazard Mitigation Grant Program (HMGP)	1,250,000.00	TBD	Future Unfunded Project
89	Miami Fire Rescue - Fire Station 7 Hardening	Miami	Flood/Storm Surge, Storm Surge, Technological Disruption, Wind, Flood, Security Breach	Hazard Mitigation Grant Program (HMPG)	551,325.00	48 Months	Funding Applied for

89	Yacht Club Drive Seawall Hardening	Aventura	Storm Surge	City of Aventura and FDEP	3,000,000.00	9/1/23 - 9/1/25	Project in Planning Stage
89	Stormwater Drainage and Roadway Improvements to NE 191 Street System	Aventura	Flood, Flood/Storm Surge, Storm Surge	Aventura Stormwater Utility Fund	6,500,000.00	1 to 2 years	Project in Planning Stage
89	Improvements to NE 27th Avenue System	Aventura	Flood, Flood/Storm Surge	Stormwater Utility Fund	4,000,000.00	1 to 2 years	Project in Planning Stage
90	Perform Immediate Flood Control and Mitigation	Key Biscayne	Flood/Storm Surge, Flood, Sea Level Rise, Storm Surge	State appropriations, Village stormwater revenue fund, and general fund from CIP	1,055,250.00	2025	Funding Secured
90	Miami-Dade Fire Rescue Stations 01, 03, & 15 Hardening Project Including Roof	Fire Rescue	Wind	Potential Hazard Mitigation Grant Program (HMGP)	1,953,487.20	TBD	Funding Applied for
90	Roof Replacement	Mount Sinai	Health, Wind, Other, Technological Disruption	HMGP: Hurricane Nicole	4,974,680.00	2027	Future Unfunded Project
91	Miami-Dade Fire Rescue Headquarters Hardening Project	Fire Rescue	Wind	Potential Hazard Mitigation Grant Program (HMGP)	Unknown	TBD	Future Unfunded Project
91	Miami-Dade Fire Rescue Stations 34, 51, 53, & 56 Hardening Project	Fire Rescue	Wind	Potential Hazard Mitigation Grant Project (HMGP)	2,163,277.20	TBD	Funding Applied for

91	Roof, Wind and Enclosure Protection	Mount Sinai	Wind, Power Failure, Other, Technological Disruption, Health	Hazard Mitigation Grant Program (HMGP) DR-4673 Hurricane Ian	$3,000,000.00	2027	Future Unfunded Project
91	Miami Fire Rescue - Fire Station 5 Hardening	Miami	Security Breach, Storm Surge, Technological Disruption, Power Failure, Wind, Flood/Storm Surge	Hazard Mitigation Grant Program (HMPG)	714,477.74	48 Months	Funding Applied for
92	Miami-Dade Fire Rescue Stations HQ IT, 21, 54 & 55 Generator Installments	Fire Rescue	Wind, Power Failure, Flood/Storm Surge	Potential Hazard Mitigation Grant Program (HMGP)	1,274,548.80	TBD	Funding Applied for
92	Generator Replacement for Water Treatment Facility	North Miami Beach	Power Failure	Currently, working with WIFIA funds and Water Revenues Bond	3,358,216	1 year	25% complete
92	Improvements to NE 207 Street Basin	Aventura	Flood, Flood/Storm Surge	Stormwater utility Fund	2,500,000.00	1 to 2 years	Project in Planning Stage
93	Miami-Dade County Building Resilient Infrastructure and Communities Direct Technical Assistance	Emergency Management	Flood/Storm Surge, Sea Level Rise	This grant program provides technical assistance, not grant funding.	Unknown	3 years	Project in Planning Stage
93	Miami Fire Rescue - Fire Station 1 Hardening	Miami	Flood, Flood/Storm Surge, Health, Power Failure, Sea Level Rise, Security Breach, Storm Surge,	Hazard Mitigation Grant Program (HMPG)	375,000.00	48 Months	Funding Applied for

			Technological Disruption, Wind				
0	Presidential Estates Pump Station and Drainage Improvements	Public Works	Flood, Flood/Storm Surge, Sea Level Rise	Applying for Grants	3,000,000.00	1 year after funding is identified	Future Unfunded Project
0	Drainage Conveyance west of NE 10 AVE at Lake Belmar	Public Works	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge, Wind	Applying for Grants	1,000,000.00	2 years from funding allocation	Project in Planning Stage
0	NE 26 AVE Pump Station and Drainage System Hardening	Public Works	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Applying for grants	3,000,000.00	2 years from funding allocation	Future Unfunded Project
0	Public Works Department Compound Flood Protection	Coral Gables	Flood	Potential	500,000.00	1 year	Future Unfunded Project
0	2023 Friedland Manor Pump Stations & Dry Retention Pond Restoration	Florida City	Flood	HMGP	1,383,031.18	TBD	Future Unfunded Project
0	Hazard Mitigation Wind Retrofit Fire Station 2	Miami Beach	Wind	HMGP	Unknown	Unknown	Project Complete
0	Hardening of Affordable Housing Neptune Wind Retrofit	Miami Beach	Wind	HMGP	Unknown	Unknown	Project Complete
0	Public Works Yard	Miami Beach	Flood	None obtained	Unknown	Unknown	Future Unfunded Project

0	Madeleine Village Wind Retrofit & Flood Proofing	Miami Beach	Wind, Flood	HMGP	Unknown	Unknown	Construction/ Project Begun
0	Elevation of 2 Repetitive Loss Private Properties	Miami Beach	Flood/Storm Surge	FEMA FMA - selected for further review.	Unknown	Unknown	Funding Secured
0	United Way Miami Ansin Building Wind Retrofit (TB)	United Way	Wind	HMGP	877,027.00	TBD	Funding Applied for
0	Swale Re-shaping Projects (as needed)	Miami Gardens	Flood	Stormwater Funding	150,000.00	2024	Funding Secured
0	NW 171 St and NW 2 Court Drainage Project	Miami Gardens	Flood	Stormwater Funding	400,000.00	2025	Funding Secured
0	16411 NW 37 Court Drainage Project	Miami Gardens	Flood	Stormwater Funding	150,000.00	2024	Funding Secured
			2024				
BCR	**Project Title**	**Agency**	**Hazards Mitigated**	**Funding Source**	**Estimated Costs**	**Completion Timeframe**	**Status**
61	Critical Facility Improvement	El Portal	Health, Power Failure, Sea Level Rise, Security Breach, Storm Surge, Technological Disruption	Federal, state, county	1,800,000.00	One year	Project in Planning Stage
64	Biscayne Gardens Pump Station Retrofit	Public Schools	Flood, Flood/Storm Surge, Sea Level Rise	SWU, GOB, FEMA, FDEP, Grants	2,500,000.00	2 years after funding is approved	Project in Planning Stage

65	Drainage Improvement Project for NE 185th Street from NE 2nd Court to Primary Canal C-9	Public Works	Flood, Flood/Storm Surge, Sea Level Rise	SWU, FEMA, FDEP, Grants	770,500.00	2 years after funding is identified	Project in Planning Stage
65	Drainage Improvement Project for NE 189 St from NE 4 CT to NE 6 Ave	Public Works	Flood/Storm Surge, Flood, Sea Level Rise	SWU, FEMA, FDEP, Grants	715,000.00	2 years after funding is identified	Future Unfunded Project
65	SW 16 St from SW 73 Ave to SW 72 Ave Drainage Improvements	Public Works	Flood, Flood/Storm Surge, Sea Level Rise	SWU, GOB, FEMA, FDEP grants	500,000.00	2 years after funding is approved	Project in Planning Stage
65	Storm Water Improvements to the 58th Street Collections Building in Miami-Dade County	Solid Waste	Flood, Flood/Storm Surge	Florida Department of Environmental Protection (FDEP) Resilient Florida Grant	1,200,000.00	December 2028	Funding Applied for
68	Miami-Dade County, FL; Homeless Assistance Center - South Hardening Project	Homeless Trust	Wind	HMGP	2,928,111.00	TBD	Funding Applied for
71	Main Library Resilience Grant	Libraries	Flood, Flood/Storm Surge	Florida Department of Environmental Protection	1,500.00	TBD	Funding Secured

72	Recreation Community Center Expansion	West Miami	Flood, Flood/Storm Surge, Health, Power Failure, Wind, Other	Potential BRIC FY 2024-2025	6,700,000.00	2-3 years	Construction/ Project Begun
74	Recreational Center Hardening	West Miami	Power Failure, Flood/Storm Surge, Wind, Other	Potential HMGP	1,000,000.00	2-3 years	Project in Planning Stage
75	City of Hialeah - Critical Facility Wind Retrofit	Hialeah	Wind	City of Hialeah General Funds	5,833,771.85	36 Months	Funding Applied for
75	City of Miami Fire Station #13 Flood Mitigation	Miami	Flood, Flood/Storm Surge, Storm Surge	BRIC	900,000.00	36 Months	Future Unfunded Project
77	Kendall Campus, Building 6 Hurricane Wind Projection	Miami Dade College	Wind	Potential HMGP	2,111,772.00	TBD	Future Unfunded Project
77	Royal Green Drainage Improvements	Public Works	Flood, Flood/Storm Surge, Sea Level Rise	SWU	4,500,000.00	2 years after funding is approved	Project in Planning Stage
78	Miami-Dade County; Chapman Partnership North Hardening, Wind Retrofit- Infrastructure Retrofit	Homeless Trust	Wind, Other	HMGP	1,296,610	TBD	Funding Applied for
79	Northeast Dade Aventura Library Resilience Upgrade Grant	Libraries	Flood/Storm Surge, Flood, Sea Level Rise	Potential FDEP	2,500,000.00	TBD	Funding Applied for
81	Construct Zone 1 Upgraded Stormwater	Key Biscayne	Flood	Potential HMGP	$1,468,202	2027	Future Unfunded Project

	Infrastructure Outfalls						
81	Drainage for Sub-Basin 41	Palmetto Bay	Flood, Flood/Storm Surge	Unidentified/ Potential HMGP	1,270,000.00	36 months	Future Unfunded Project
81	Drainage for Sub-Basin 11	Palmetto Bay	Flood, Flood/Storm Surge	Unidentified/ Potential HMGP	1,450,000.00	36 months	Future Unfunded Project
81	Miami Dade NW 39 St from NW 29 Ave to 30 Ave Drainage Improvement	Public Works	Flood, Sea Level Rise	Grants, SWU, GOB	1,500,000.00	2 years after funding is approved	Funding Applied for
81	NW 7 Street (Midway Pump Station) Improvements	Public Works	Flood	Grants, SWU, GOB	1,500,000.00	2 years after funding is approved	Future Unfunded Project
83	City of South Miami Stormwater Masterplan	South Miami	Flood, Flood/Storm Surge, Sea Level Rise	Mitigation Federal Non-Disaster Programs, FMA and BRIC	278,045.00	12/2025	Project in Planning Stage
86	Lakes by the Bay Basin Design	Cutler Bay	Flood, Flood/Storm Surge, Health, Sea Level Rise, Storm Surge, Other	Partially Funded with ARPA	10,052,509.00	1 year	Funding Applied for
87	#2 Freidland Pump Capacity Upgrade	Florida City	Flood, Flood/Storm Surge, Storm Surge	Self-funded	275,000.00	12 Months	Future Unfunded Project
90	Jackson Memorial Hospital Solar and Generator Project	Jackson	Health, Power Failure, Technological Disruption, Other	2024 FEMA BRIC	12,000,000.00	9 months	Future Unfunded Project

91	MDFR USAR Complex Retrofit	Fire Rescue	Wind, Storm Surge	Potential HMGP	3,434,733.75	3 years	Funding Applied for
91	Jackson Health System Information Technology Security Project	Jackson	Health, Power Failure, Security Breach, Technological Disruption	1. FEMA Cybersecurity Grant 2. FEMA BRIC 3. FEMA FMA	16,000,000.00	24 months	Future Unfunded Project
91	Jackson Memorial Hospital Wind Retrofit and Rollup Doors Project	Jackson	Flood/Storm Surge, Health, Wind, Other	FEMA BRIC	8,000,000.00	18 months	Future Unfunded Project
93	MDFR (RWD) Retrofit at Stations #14, 43, and 50	Fire Rescue	Flood/Storm Surge, Wind	Potential HMGP	2,315,550.30	3 years	Funding Applied for
93	MDFR (WD) Retrofit at Stations #48, 52, 55, 57, 65, and 66	Fire Rescue	Wind, Flood/Storm Surge	Potential HMGP	2,785,944.00	3 years	Funding Applied for
93	Jackson Memorial Hospital Geothermal Chiller Cooling	Jackson	Power Failure, Health, Technological Disruption, Other	HMGP	6,000,000.00	16 months	Future Unfunded Project
95	Miami-Dade County Miami River Canal C-6 Basin Improvements Project Phase 2 (Secondary Canals)	Regulatory and Economic Resources	Flood, Sea Level Rise	Stormwater Utility and FDEP Resilient Florida Program	17,500,000.00	2029	Funding Applied for

95	Miami-Dade County Snake Creek Canal C-9 Basin Improvements Project Phase 3 (Secondary Canals)	Regulatory and Economic Resources	Flood, Sea Level Rise	Stormwater Utility and FDEP Resilient Florida Program	11,000,000.00	2029	Funding Applied for
95	Stormwater Improvements-Northeast Transfer Station Phase II	Solid Waste	Flood, Flood/Storm Surge, Sea Level Rise	FDEP Resilient Florida Grant Program matching source Waste Disposal Operating Fund	700,000.00	January 2028	Funding Applied for
95	Stormwater Improvements-West Transfer Station Phase II	Solid Waste	Flood, Flood/Storm Surge, Sea Level Rise	FDEP Resiliency Florida Grant Program and DSWM Waste Disposal Operating Fund	700,000.00	June 2028	Funding Applied for
0	MDFR HQ Windows/Glass Replacement	Fire Rescue	Wind, Storm Surge, Flood/Storm Surge, Other	UASI 2023 Federal Legislative Request	1,000,000.00	1 year	Funding Applied for
0	Par 3/Bayshore Park Retention Lake	Miami Beach	Flood	Resilient FL Grant Awarded	Unknown	2025-2026	Funding Secured
0	First Street Neighborhood Improvement Project	Miami Beach	Flood, Flood/Storm Surge, Sea Level Rise	Unsecured. FDEP Resilient FL Program, USDOT Protect Program, and PROTECT.	Unknown	TBD	Funding Applied for
0	Mitigation of Air Rescue Helicopter	Fire Rescue	Flood, Flood/Storm Surge, Wind, Other	Potential BRIC	1,500,000.00	1 year	Future Unfunded Project

	Hangers Air Rescue North						
0	Chuck Petzoldt Library State Public Library Construction Grant	Libraries	Other	Florida Public Library Construction Grant - State funded-	9,400,000.00	TBD	Funding Secured
0	Miami-Dade Fire Wells	Fire Rescue	Wildfire	Potential BRIC	1,500,000.00	3 years	Future Unfunded Project
0	Miami-Dade County, MDFR HQ Storm Water Mitigation and Drainage System	Fire Rescue	Flood, Flood/Storm Surge	Potential BRIC	2,500,000.00	3 years	Future Unfunded Project
0	Brickell Roadway and Drainage Improvements	Miami	Flood/Storm Surge, Sea Level Rise, Storm Surge	Unknown	1,300,000.00	Unknown	Project Complete
0	Commerce Way Drainage Improvements	Miami Lakes	Flood	Stormwater Utility System Revenue Bonds Series 2021	2,900,000.00	Unknown	Project Complete
0	Upgrade of Pump Station 137 – Mashta Island	Water and Sewer	Flood, Storm Surge, Sea Level Rise	Unknown	3,000,000.00	Unknown	Project Complete
58	Granada Pro Shop Hurricane Mitigation - Impact Windows	Coral Gables	Wind	Post-Disaster Funding Program	150,000.00	Unknown	Project Complete
63	Pump Station Cocoplum 1 Emergency Generator	Coral Gables	Flood/Storm Surge, Health, Power Failure, Sea Level Rise	Sanitary Sewer Fund	Unknown	12/1/2020	Project Complete

68	North Campus, bldg. 900 Hurricane Protection	Miami Dade College	Flood, Flood/Storm Surge	Unknown	55,052.00	Unknown	Project Complete
73	Kendall Campus Bldg. 9000	Miami Dade College	Wind	HMGP	206,521.00	1 year	Project Complete
76	North Central Library Hardening Project	Libraries	Wind	FEMA PDM 2019 and HMGP 2020	35,293.71	Unknown	Project Complete
82	South Dade Regional Installation of Roof Replacement and Impact Windows Storefront	Libraries	Flood, Wind	HMGP 2018 - PDM 2019 PDM funding approved for FY20-21	Unknown	2018	Project Complete
84	Venetian Islands – Neighborhood Improvements	Miami Beach	Flood, Flood/Storm Surge, Sea Level Rise, Storm Surge	Unknown	Unknown	2020	Project Complete
85	City #2 Gravity Sewer Capacity Improvement Project	Coral Gables	Flood/Storm Surge	HMGP	1,565,000	2/28/2024	Project Complete

CASE STUDIES

Miami-Dade County has a rich history of mitigating against hazards as well as a dedication to it in the present. As a county, our greatest mitigation efforts began following Hurricane Andrew through FEMA's Hazard Mitigation Assistance programs. Since then, we have been committed to reinforcing our critical infrastructure and property to withstand disasters. This section is meant to capture some of the substantial recent efforts made by the Local Mitigation Strategy Working Group which have contributed to our resilience.

2020-2024 Projects Summary

The summary below depicts active mitigation projects for which WebEOC data was readily available and updated by partners; it is not reflective of all mitigation actions undertaken by Miami-Dade County departments, municipalities, or partners within this timeframe.

# of projects

128

Infrastructure

Projects that involve the engineering of infrastructure systems (energy, telecom, water, transportation) to be more resistant to the impacts of hazards.

71

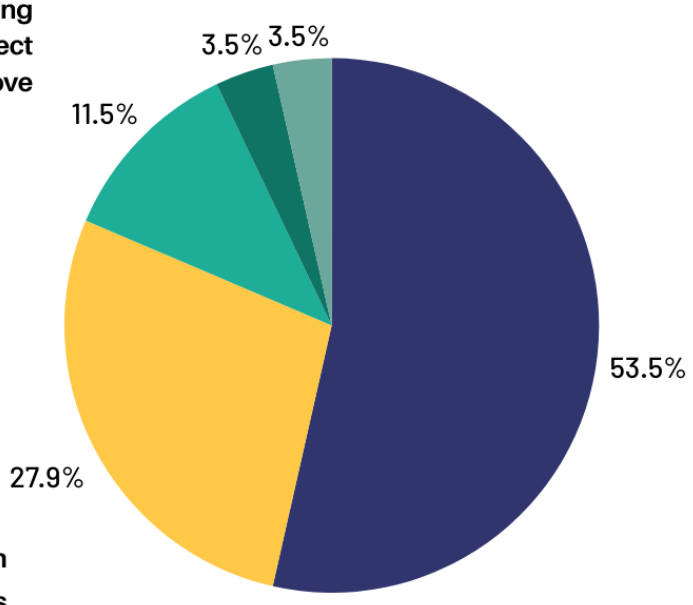
Property Protection

Projects that involve the modification/retrofit of existing buildings or structures to protect them from a hazard, or remove them from the hazard area.

29

Emergency Services Equipment

Projects that invest in equipment to protect people and property, or increase the capacity of emergency response during and immediately following a disaster event.



TOTAL:247

8

Planning

Projects centered on administrative or planning actions and processes that influence the way systems, land, or buildings are upgraded or built.

11

Coastal & Natural Resource Protection

Projects focused on preserving or restoring the functions of natural or coastal systems in addition to minimizing the hazard losses.

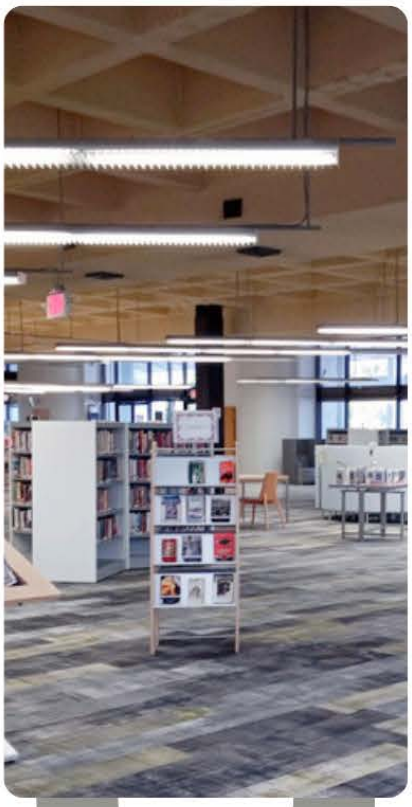
County Department

MIAMI DADE PUBLIC LIBRARY SYSTEM

Building Envelope Retrofits
2012-2023

What was done?

Over the course of eleven years, MDPLS has completed retrofit projects to bring eight of their facilities into code compliance. The scope of work consisted of replacing existing windows, doors, and roofs with wind resistant high-impact ones. Additionally, in 2023, the North Dade Regional Library Branch was arrayed with the first-ever large-scale solar panel installation on a county building.



How did it help?

These projects have successfully protected the integrity of the building envelope and reduced potential damage from wind events. By doing so, MDPLS has guaranteed the continuity of vital services to many communities after disasters like hurricane Irma in 2017.

How much did it cost?

Each project ranged from $26,000 to $650,000

What hazards does it mitigate?

Wind, Hurricanes

Municipality

CUTLER BAY

Saga Bay Water Quality Improvement Project 2022

Before

What was done?

The project consisted of drainage improvements, exfiltration trench for water quality treatment, roadway resurfacing, pavement markings, and site restoration.

How did it help?

This project is one of many that have improved the stormwater management system to prevent flooding in Cutler Bay neighborhoods.

How much did it cost?

$840,000

What hazard does it mitigate?

Flooding

After

Municipality

CITY OF MIAMI

Brickell Roadway & Drainage Improvements 2024

What was done?

Street improvements were done to include milling and resurfacing, a pump station, deep drainage wells, and limited roadside reconstruction along streets.

How did it help?

The area where the project was completed is known to flood significantly. After the drainage improvements, the effects of flooding have decreased, making the busy area more accessible for the public during and after heavy rain events.

How much did it cost?

$1.3 Million

What hazard does it mitigate?

Flooding

County Department

DEPARTMENT OF TRANSPORATION & PUBLIC WORKS

Improved Flood Control Structures 2019

What was done?

Three flood control structures: Dressels Canal Basin, North Line Canal Basin, and Snapper Creek Canal Basin, along NW 117th Avenue were upgraded to allow better water management during rain events. Improvements included the redesign of the structure, upgrades to the control system for remote monitoring and operation, and motorizing existing flood gates.

How did it help?

Automating the system has kept workers safer during storms and provided more efficient operations. These upgraded structures allow for better water management to help reduce flooding that impacts residents in three different canal basins within the County.

How much did it cost?

$850,000

What hazard does it mitigate?

Flooding

Municipality & County

MIAMI BEACH & MIAMI DADE COUNTY

Raising Dade Boulevard 2017

What was done?

City of Miami Beach and Miami Dade County cooperated to raise a section of Dade Boulevard more than 2 feet to reduce impacts from King Tide flooding. This new elevation builds in additional height above the King Tide levels.

How did it help?

Before the elevation project, Dade Boulevard was flooded during high tide, causing traffic issues, decreased access, and increased damage to the road and to vehicles passing through saltwater. After the elevation project, Dade Boulevard is dry and accessible. Dade Boulevard is one of the first County-owned roadways to be elevated to prepare for sea level rise.

How much did it cost?

$1.9 Million

What hazards does it mitigate?

Flooding, Sea Level Rise, Storm Surge, Hurricanes

Municipality

TOWN OF MIAMI LAKES

Commerce Way Drainage Improvements 2024

What was done?

The Commerce Way Drainage Improvement project is an integral part of the Town's comprehensive plan to reduce flooding. The project includes the addition of catch basins, French drains, manholes, valley gutters as well as restoration and resurfacing of the existing roadway surface, and new pavement markings.

How did it help?

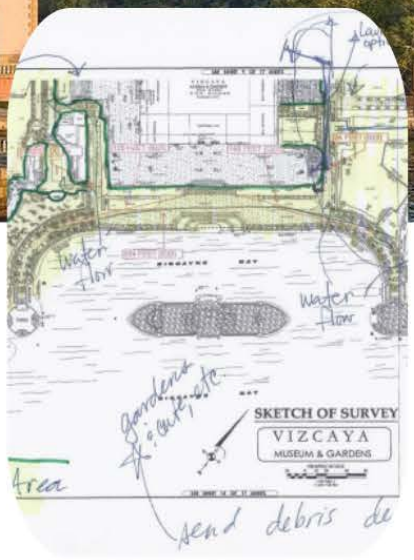
The new system increased the stormwater management capacity and mitigated flooding in the area.

How much did it cost?

$2.9 Million

What hazard does it mitigate?

Flooding



Museum & Gardens

VIZCAYA

Tiger Dam Project 2021

The Problem

The Solution

What was done?

The project consisted of installing a flood control system called a Tiger Dam around the designated perimeter of Vizcaya. The system is composed of a series of inflatable tubes made of reinforced vinyl that withstand effects of storm surge and debris damage.

How did it help?

The Tiger Dam protects Vizcaya grounds from active flooding, which can result from storm surge, wave action, and debris. After Hurricane Irma, Vizcaya experienced millions of dollars of damages and workers took thousands of hours to restore the grounds. Since the dam was installed, Vizcaya has better mitigated against flooding events.

How much did it cost?

$590,000

What hazards does it mitigate?

Flooding, Storm Surge, Hurricanes

Municipality

MIAMI BEACH

Affordable Housing Wind Retrofit Project 2023

What was done?

This project hardened an affordable housing facility, increasing its resilience to hurricane force winds. Standard windows were replaced with impact windows that provide protection from winds up to 171 MPH. A complete roof replacement, concrete and stucco repair, and other storm protections was also completed on this facility.

How did it help?

The retrofit for this building has minimized damage from wind and wind-driven rain caused by events such as hurricanes. The project secured safe and sanitary living conditions for vulnerable residents while bringing the property into compliance with local building code during the 30-year affordability period.

How much did it cost?

$1.7 Million

What hazards does it mitigate?

Wind, Hurricanes

County Department

WATER & SEWER DEPARTMENT

Upgrade of Pump Station 137
Mashta Island, Key Biscayne 2024

What was done?

This project was a groundbreaking effort for WASD, as the department introduced a fully submergible pump station control panel for the first time ever. WASD also collaborated with RER to decide on the elevation of the pump station based on the County's unified sea level projection. The project site was particularly vulnerable, sitting at a very low elevation with the crown of the road and sidewalk between 4-4.5 ft in a flood zone. To meet the flood hardening requirements, a special waterproof electrical housing was developed that can function through submerged conditions. Other project enhancements included a new wet well for more storage capacity and a new water tight hatch that secures against water intrusion.

How did it help?

The project increased capacity and efficiency of the sanitary sewer system and decreased vulnerability to flooding. These improvements allow WASD to continue providing high-quality services to protect public health and sensitive aquatic habitat. The collaboration between RER and WASD also benefited many other subsequent projects that harden pump stations while keeping elevations harmonized with the nearby landscape.

How much did it cost?

$3 Million

What hazard does it mitigate?

Flooding, Sea Level Rise, Storm Surge, Hurricanes