

January 2021 InteRaCt Webinar

Miami-Dade County: The Road to Resilience

#	Pre-Webinar Questions	Responses
1	Is Miami-Dade County considering nature-based solutions for coastal resilience (i.e. mangroves, levees, dikes, and so on)?	Absolutely. Building coastal resilience requires a multifaceted approach with a variety of tools. Using nature-based solutions is something that we have heard is a priority for the community, and we already have great examples across Miami-Dade, including dune enhancement and restoration, expanding green spaces, and preserving wetlands. At the County level, our Department of Environmental Resources Management Department leads stormwater planning and project implementation. They have existing stormwater management plans, and green infrastructure for stormwater management and water quality enhancement is a key feature of the forthcoming Miami-Dade County Sea Level Rise Strategy. Additionally, the Biscayne Bay Task Force made several recommendations for watershed habitat restoration and natural infrastructure which prioritize nature-based solutions.
2	Is there a unified plan for Florida or is it for every county to find a solution for own? Does State have a plan of action?	In August 2019, the Governor signed an executive order creating the positions of Chief Science Officer and Chief Resilience Officer for the State of Florida. The CRO developed a detailed report highlighting the ways in which the state could advance resilience planning and programming. Since then, the State continues to focus efforts on helping local governments via several grant programs like the Florida Resilient Coastlines Program. These grants help advance things like vulnerability assessments and implementation of projects to address those vulnerabilities. The State is also embarking on rulemaking for legislation passed that prohibits commencement of construction of certain structures in coastal areas after a without first taking certain steps regarding a sea level impact projection study.
3	What were the criteria for selecting the sea level rise projections used in your work?	The sea level rise projections are published by the Southeast Florida Regional Climate Change Compact every 5 years. The Compact convenes a Sea Level Rise Work Group to update the projection, composed of scientific experts within the academic community, as well as staff from local, regional, and federal government. The projection is reviewed and updated every five years, or sooner, as a result of ongoing advances in scientific knowledge and modeling via the peer-reviewed literature on global climate change.

4	<p>What is your opinion on current and future sources of capital funds - federal, state, local, private - to enhance disaster resilience?</p>	<p>It continues to be scaled up. Recently, innovative funding opportunities like the FEMA Building Resilient Infrastructure and Communities (BRIC) have been introduced at the federal level to enhance resilience pre-disaster rather than fund recovery post-disaster. We hope to see additional proactive programs like BRIC in the future. At the state level, funds continue to be made available from the Florida Department of Environmental Protection (FDEP) for resilience planning and project implementation. In fact, FDEP funding is supporting our first Adaptation Action Area in Little River. Locally, our entire budget is organized around resilience. We have many projects that have already been funded as well as a catalogue of unfunded projects for which we are seeking additional monies. To implement so many projects across the County, our private and nonprofit partners are essential. We have seen recent successful partnerships form to fund on-the-ground projects, including between the County, the Nature Conservancy and the Chubb Foundation to implement living shoreline projects and the County and Keep Safe Miami to pilot a building-level resilience checklist to identify needed investments.</p>
6	<p>How does METROLAB NETWORK work? Is there access to completed or ongoing projects under this coalition?</p>	<p>MetroLab Network is an international collaborative of 28 cities, 6 counties, and 35 universities focused on civic research and innovation. The Greater Miami & the Beaches (GM&B) team and the University of Miami, Florida International University and Miami-Dade College signed a partnership agreement in 2016 to collaborate on projects of shared interest. Originally focused on work related to Zika, the partners have since formed the Resilient305 Collaborative, partnership and is a joint academic-government research partnership among Florida International University, Miami-Dade College, University of Miami, and government and non-government organization leaders of GM&B committed to advancing community resilience. The Collaborative is currently working on a pilot project called the Little River to North Beach Resilience District. The goal of the project is to develop a metrics-based research framework for measuring the resilience benefits of actions and initiatives of Resilient305. Information about the collaborative is available at www.resilient305.com.</p>
7	<p>How has the scope of the Chief Resilience Officer position changed as a result of the ending of the 100 Resilient Cities?</p>	<p>The role of Chief Resilience Officer has remained the same since the sunset of 100 Resilient Cities. The CROs from across the globe have come together to create a network-led group called the Resilient Cities Network that builds upon the legacy of 100 Resilient Cities. The partnership continues to deliver urban resilience through knowledge sharing, collaboration, and collective action, seeking to inspire, foster, and build resilience around the world. It is also important to note that the position of Chief Resilience Officer at the County was created prior to being accepted into the 100 Resilient Cities program with the support of many community members and organizations.</p>

#	Questions during the webinar	Responses
8	Could you address the status or feasibility of the USACE proposed flood mitigation wall?	The USACE Miami-Dade County Back Bay Coastal Storm Risk Management Feasibility Study (Back Bay Study) is in the pre-Planning, Engineering, and Design (PED) phase. The Back Bay Study includes four elements: protecting critical facilities countywide, implementing non-structural solutions such as home elevations in flood-prone areas, implementing structural solutions such as the floodwall accompanied by additional gates and pumps, and implementing nature-based solutions, namely mangrove restoration in Cutler Bay. All four components of the Back Bay Study are at a 10% design level. The County submitted comments on the proposed measures in the Tentatively Selected Plan in August 2020.
9	How to encourage resilience investments in existing multifamily housing? Will enterprise KSM project help?	Miami-Dade County's Department of Public Health and Community Development, Office of Management and Budget, and Office of Resilience received funding from the Community Development Block Grant – Mitigation program for a pilot assessment of existing multifamily housing and critical facilities using the Keep Miami Safe toolkit. The County will use these tools to assess a number of buildings' resilience to climate change and natural disasters then identify actionable strategies and financing methods to address vulnerabilities.
10	Why are hurricanes not listed as stresses?	Hurricanes and other extreme weather events are considered acute shocks instead of a chronic stress because they are sudden intense events. Conversely, chronic stresses that weaken the fabric of a community over time, such as recurrent flooding, high unemployment, limited social safety nets, and inequitable public transportation systems.
11	What options for sea defense infrastructure are you considering?	The County is considering a wide variety of strategies to adapt to sea level rise, including more traditional "gray" infrastructure such as breakwaters, seawalls, and floodwalls. However, there is no one solution to help us adapt. Due to our porous limestone bedrock and the influence of rising sea level on our groundwater in certain locations, we will have to use additional tools to adapt to higher water levels. Some strategies the County is considering include elevating critical equipment, elevating buildings, and increasing waterfront setbacks.
12	Do you have a timeline for when certain things have to be done to combat sea level rise?	Working on adapting to sea level rise is something that the County has been focused on for a long time. We will soon be releasing a countywide sea level rise strategy that provides a vision on how to proactively address flooding and sea level rise. The Strategy includes actionable next steps focused on policy changes and program investments that will prepare us for rising waters and keep our communities safe and beautiful. County departments like the Water and Sewer Department have been incorporating sea level rise projections into the design and building stages of major infrastructure for years.

13	Knowing that the area has a high urbanized population and that sea-level rise is an apparent issue, have you included a strategy for planned retreat or any other accommodations for vulnerable people in the area?	The Miami-Dade County Sea Level Rise Strategy offers a suite of approaches and tools to adapt to sea level rise. Voluntary home buyouts is one tool the County is considering. In 2020, the County was awarded \$4.5 million through the Community Development Block Grant – Disaster Recovery program for voluntary home buyouts. The County is in the planning and implementation stage of the program.
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