Department of Regulatory and Economic Resources / Office of Resilience

100 Resilient Cities

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PIONEERED BY THE ROCKEFELLER FOUNDATION

100 RESILIENT CITIES

A global effort founded by The Rockefeller Foundation in 2013, focused on helping cities around the world build resilience to the social, economic, and physical challenges of the 21st century.

Greater Miami and the Beaches

An innovative and collaborative partnership between Miami-Dade County, City of Miami, City of Miami Beach and the Miami Foundation, designated a 100 Resilient City in the Spring of 2016.

(Left to right) City of Miami Mayor *Tomas Regalado*, Miami-Dade County Mayor *Carlos A. Gimenez*, City of Miami Beach Mayor *Philip Levine* receive recognition from Regional Director *Otis Rolley* of 100 Resilient Cities at the Greater Miami and the Beaches Agenda Setting Workshop on September 29, 2016.

What is Urban Resilience?

The capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and grow no matter what kinds of chronic stresses and acute shocks they experience.

Benefits of being a 100 Resilient City

- Access to global network of member cities who learn from and help each other.
- Services and tools valued at over $200 million to help solve local challenges.
- Improved ability to deal successfully with natural and manmade disasters.

The Greater Miami and the Beaches partners will work together to develop a Resilience Strategy that will address top shocks and stressors:

Hurricane

Infrastructure Failure

Coastal Flooding

Sea-Level Rise

Rainfall Flooding

Transportation

Pronounced Poverty

Affordable Housing

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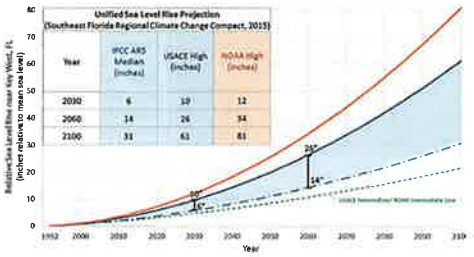
Sea Level Rise Taskforce

Sea Level Rise - Task Force

- Explored sea level rise implications on our environment, economy, communities and government policies.
- Made recommendations for Miami-Dade County to better prepare for rising sea levels.
- Seven resolutions, which support implementation of the Task Force recommendations, were adopted by the Board of County Commissioners on January 21, 2015.

Sea Level Rise - What can we expect?



- Since reliable record keeping began over 100 years ago in Key West, the average sea level has risen about 9 inches.
- This rise has been primarily due to thermal expansion (as warmer water occupies more volume) and melting glaciers and ice sheets.
- The Southeast Florida Regional Climate Change Compact developed the "Unified Sea Level Rise Projection for Southeast Florida."
- The projection published in 2015 estimates sea levels 6 to 10 inches higher by 2030 than in 1992, and 31 to 81 inches higher by 2100.

Progress on the Recommendations

County staff produced several final reports summarizing their research in coordination with multiple departments, external organizations, and universities. Each report focuses on a different facet of sea level rise including:

Adaptation Action Areas (AAA)
This report outlined four approaches. The County is currently moving ahead with one pilot Adaptation Action Area in the Arch Creek Basin Area.

Insurance and Risk Management
This final report first describes why the County chose to focus on insurance in the context of climate change and provides a summary of the key considerations and long-term risk management options.

Environmentally Endangered Lands (EEL) Program
This report presents a history of the Environmentally Endangered Lands (EEL) Program, its importance for adapting to climate change, and the Program's recent progress. A primary focus of the report is to identify additional potential funding mechanisms appropriate to continue to support the program.

Flooding and Saltwater Intrusion
This report provides a summary of the major efforts, complete or underway, to understand how sea level rise will affect the risks for flooding and saltwater intrusion. This report also explores potential funding mechanisms for adaptation.

Enhanced Capital Plan
This report outlines the typical process other governments have taken to improve the resilience of their infrastructure, and potential approaches to developing an enhanced capital plan for Miami-Dade County.

Climate Change Advisory Task Force
This report discusses the history of the Climate Change Advisory Task Force and the evolution of its final recommendations. The report details recent progress on related initiatives including GreenPrint, the County's sustainability plan, and the Compact's Regional Climate Action Plan.

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Adaption Action Areas

Moving ahead with Adaptation Action Areas (AAA)

- Miami-Dade County completed a feasibility assessment and has decided to proceed with Adaptation Action Areas on a pilot basis.

Pilot Area - The Arch Creek Drainage Basin

ARCH CREEK STUDY AREA

- Arch Creek was selected because it provides an excellent case study for resilience planning.
- The study area is located in northeastern Miami-Dade County along the coast of Biscayne Bay.
- The area is economically diverse, includes numerous historical resources and is the possible site for a future passenger rail station.
- The study area crosses jurisdictional boundaries for five different local governments and can provide a model for multi-jurisdictional coordination on resilience.
- Under current estimates, approximately 62% of the study area is vulnerable to storm surge from a category 3 storm or greater.
- The area's vulnerabilities are characteristic of other areas in Miami-Dade County. Solutions for the Arch Creek area will have wide applicability.

Visiting Experts - Urban Land Institute Resilience Panel

Renowned land use and urban planning experts, convened by the Urban Land Institute (UBI), visited Miami-Dade County in 2016 to make recommendations on improving the resilience of the Arch Creek Basin.

Next Step - Resilient Redesign

The Arch Creek Basin was chosen as the focus area for one of the design teams for Resilient Redesign, hosted by the Southeast Florida Regional Climate Change Compact. Participants from multiple disciplines, areas and backgrounds, including students from the University of Miami's School of Architecture, will help the County and municipal partners advance adaptation measures within the basin.

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Special Energy Efficiency Initiatives

Miami-Dade County Sustainable Buildings Program

The Sustainable Buildings Program, established in 2007, demonstrates the County's commitment to building greener and smarter buildings, and supports GreenPrint, our countywide sustainability plan.

Green buildings use environmentally-superior building materials, employ mechanical systems and technology that are energy-efficient and conserve water, are designed to reuse stormwater on site, and avoid impacts on local natural habitat.

Since inception of the Sustainable Buildings Program, a total of 11 projects have achieved LEED certification. Some of them are:

The Internal Services Department 's (ISD) Trade Shops was the first County project to achieve LEED Silver certification in November 2010.

The Lillie M. Williams Head Start Center opened in August 2014, becoming the first Head Start Center in Miami-Dade County to attain LEED Gold certification in October 2014.

The Gran Via Apartments affordable housing project was awarded LEED Silver certification in May 2015.

The Perez Art Museum Miami was awarded LEED Gold certification in November 2014.

The Children's Courthouse, which was completed in late 2014, earned LEED Gold certification in September 2015.

Property Assessed Clean Energy Programs (PACE)

Miami-Dade County homeowners, businesses and industries in unincorporated Miami-Dade County interested in improving wind resistance or energy efficiency of their homes or businesses now have another financing option through the property assessed clean energy (PACE) program. Qualifying improvements include hurricane resistant windows, rooftop solar panels, solar water heaters, energy efficient air conditioning units, insulation, and more.

PACE allows property owners to receive upfront financing for a variety of windstorm or energy-related home improvements, then repay the debt through voluntary assessments on their property tax bills.

www.miamidade.gov