

Sea Level Rise Workshop

March 15, 2017 – Miami Riverside Center, 444 SW 2 Avenue

Introduction

The Planning and Zoning Department has been working closely with the Office of Resilience and the Sea Level Rise Committee.

Existing Policies

The City's key planning documents include existing policies related to sea level rise, climate change, and resiliency:

Miami Comprehensive Neighborhood Plan

Future Land Use Element

Objective LU-1.8: The location, design and management practices of development and redevelopment in the City shall ensure the protection of natural resources and systems by recognizing, and sensitively responding to constraints posed by climate change and sea level rise.

Policy LU-1.8.1: The City shall assist Miami-Dade County in their analysis on climate change and its impacts on the built environment addressing development standards and regulations related to investments in infrastructure, development/redevelopment and public facilities in hazard prone areas including areas vulnerable to sea level rise, tidal flooding and other impacts of climate change. Recommendations from the analysis shall address appropriate changes to land use designations and zoning of impacted properties, and development standards, among other relevant considerations.

Policy LU-1.8.2: The City shall make the practice of adapting the built environment to the impacts of climate change and sea level rise, an integral component of all planning processes, including but not limited to comprehensive planning, infrastructure planning, building and life safety codes, emergency management and development regulations, stormwater management, and water resources management.

Policy LU-1.8.3: The City shall actively participate in the Southeastern Florida Regional Climate Change Compact and collaborate to increase regional climate change resiliency by sharing technical expertise, assessing regional vulnerabilities, advancing agreed upon mitigation and adaptation strategies and developing joint state and federal legislation policies and programs.

Policy LU-1.8.4: The City shall work with Miami-Dade County to determine the feasibility of designating areas in the City as Adaptation Action Areas as provided by Section 163.3177(6)(g)(10), Florida Statute, and designate Adaptation Action Areas as provided by Section 163.3164(1), Florida Statute, in order to determine those areas vulnerable to coastal storm surge and sea level rise impacts for the purpose of developing policies for adaptation and enhance the funding potential of infrastructure adaptation projects.

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Policy LU-1.8.5: The City shall work with Miami-Dade County to support the implementation of climate related policies, through education, advocacy and incentive programs such as public outreach, including workshops and a website with relevant information.

Potable Water Element

Policy PW-1.3.3: The City shall support Miami-Dade County efforts to consider areas that will be impacted by sea level rise when building, expanding or planning for new facilities such as water treatment plants.

Coastal Management Element

Objective CM-1.4: Ensure that land development regulations and policies for the Coastal Zone are consistent with the City's ability to provide the capital facilities required to maintain adopted LOS standards and those needed to maintain or enhance the quality of life within the Coastal Zone of the city. (See Capital Improvements Objective CI-1.2.)

Policy CM-1.4.2: Rise in sea level projected by the federal government, and refined by the Southeast Florida Regional Climate Change Compact, shall be taken into consideration in all future decisions regarding the design, location, and development of infrastructure and public facilities in the City. (See related policy CI-1.2.6)

Miami 21 Zoning Code

3.13 SUSTAINABILITY

3.13.1 General

- a. Landscape requirements are as required in Article 9 of this Code and the City of Miami Tree Protection regulations of Chapter 17 of the City Code, except that where this Code is more restrictive than the Tree Protection regulations, this Code shall apply.
- b. All new Buildings of more than 50,000 square feet of Habitable Rooms or Habitable Space in the T5, T6, CI and CS zones shall be at a minimum certified as Silver by the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) standards or equivalent standards adopted or approved by the City.

3.13.2 Heat Island Effect

The intent of this section is to reduce the heat island effect in the City of Miami and to consequently reduce energy consumption and bills for buildings within the City.

7.1.2.5 Waiver

7.1.2.5(a)(28) As appropriate to the nature of the Waiver involved and the particular circumstances of the case, Waivers up to ten percent (10%) of any particular standard of this Code except Density, Intensity and Height, may be granted when doing so promotes the intent of the particular Transect Zone where the proposal is located; is consistent with the guiding principles of this Code; and there is practical difficulty in otherwise meeting the standards of the Transect Zone, or when doing so promotes energy conservation and Building sustainability.

Building Resiliency into the Planning & Zoning Process

Among the existing supportive policies of the Miami Comprehensive Neighborhood Plan, there are a number of areas within Miami 21 that may be suitable to quickly incorporate resiliency into the Planning and Zoning process:

Design Review: Article 4, Table 12

The Design Review process within Planning & Zoning allows the Planners to engage with the design of each site that is subject to various permits under Miami 21. Put simply, when a project requires a Waiver (not all), Warrant, Variance, or Exception, Planning staff reviews the project pursuant to the detailed criteria listed in Article 4, Table 12. The criteria in the table includes aspects of the building and site design. Best practices for design and planning for sea level rise could inform an update to the table. This update would give City of Miami Planners the purview to review new development through the lens of resiliency and sea level rise adaptation.

Neighborhood Comprehensive Planning

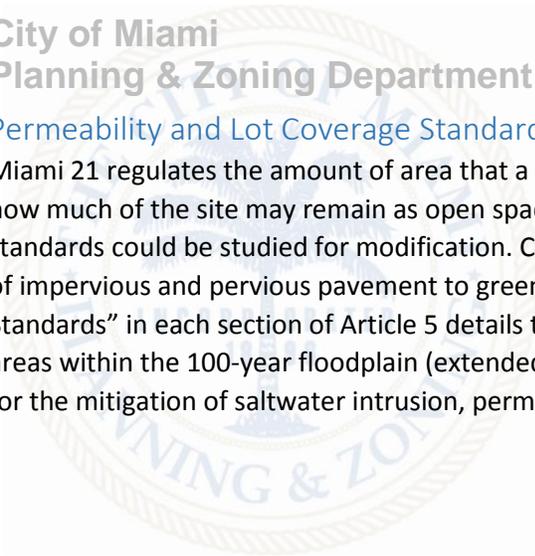
Planning & Zoning staff within the Community Planning and Urban Design divisions spend a considerable amount of time conducting long-range planning for specific communities within the City. These tasks already include intense consideration of sea level rise and climate change at all stages. Most recently, staff worked closely with partner agencies to develop neighborhood urban design schematics for the neighborhood of Shorecrest. Neighborhood planning takes a comprehensive approach to planning, meaning resiliency can be addressed from every angle.

Raising the Base Flood Elevation

A number of steps need to be taken before the City can amend its regulations for building heights in relation to the Base Flood Elevation (BFE). Considerable collaboration with 100 Resilient Cities partners will be needed to apply developed standards to the City of Miami. Additionally, a comprehensive study of BFE around the City, with consideration of sea level rise, is needed to understand the impacts of raising the finished floor elevation for new construction projects. The City of Miami Beach hired AECOM to conduct an analysis of best practices and existing conditions for Miami Beach. A similar effort would need to be conducted for the City of Miami. The City of Miami will benefit from much of the work already done by its partner municipalities in the 100 Resilient Cities network, so a study may be even shorter than it was for Miami Beach.

Raising Seawall Height Requirements

Seawall heights are governed in the Miami 21 Zoning Code in Appendix B, Waterfront Standards. The required height for new or greatly renovated seawalls to the north of the Rickenbacker Causeway (including along the Miami River) is five (5) feet above NGVD and south of the Rickenbacker Causeway it is six (6) feet above NGVD. Similar to the work required for studying finished floor elevations for sea level rise, a study of the raising seawall height requirements and its consequences and economic feasibility would need to be analyzed.



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Permeability and Lot Coverage Standards

Miami 21 regulates the amount of area that a development may cover on a site. This directly controls how much of the site may remain as open space. To promote groundwater recharge, permeability standards could be studied for modification. Currently, Miami 21 contains regulations for the proportion of impervious and pervious pavement to greenery for the required open space on a site. The “Landscape Standards” in each section of Article 5 details the specific requirement for each Zoning Transect. For areas within the 100-year floodplain (extended to consider sea level rise) or within an area that is critical for the mitigation of saltwater intrusion, permeability standards could be increased.