Urban Land Institute

ULI/100RC/City of Miami Beach Panel
Review of Miami Beach Stormwater Management Program

FINAL PANEL SCOPE
March 15, 2018

With the support of the Rockefeller Foundation's 100 Resilient Cities initiative, the Urban Land Institute (ULI) has been invited to assess the City of Miami Beach's current stormwater management strategy. In recent years, the City has embarked on a proactive strategy to address flooding and sea level rise, which has included improving drainage systems, elevating roads and public seawalls and installing pumps to replace the aging gravity stormwater pipes. The Urban Land Institute will host a workshop, led by ULI members from both the local ULI Southeast Florida/Caribbean District Council and the national Urban Resilience program.

The City of Miami Beach has made a commitment to invest in aging infrastructure, adapt to sea level rise, and use the best available science to do so. The City is approximately 15% into a 10-year, $500 to 600-million multi-year stormwater program, including:

- elevating roads,
- upgrading its gravity-based stormwater infrastructure with tidal control valves, pump stations, pipes, and other innovative structures to improve drainage, and
- replacing much of the water, wastewater, and utilities at the same time, as most infrastructure is old and in need of repair.

The stormwater program was initially engineering-led, and began in the most vulnerable areas as design-build contracts to move as quickly as possible to address immediate flooding. The City utilizes the South Florida Climate Change Compact Sea Level Rise Projections for planning purposes, and stormwater system designs will shift from a five to ten-year storm event, and will include planning for power redundancy.

The City has also updated the land use and development code to incorporate climate adaptation and resilience, such as:

- increasing sea wall height,
- increasing base flood elevation,
- establishing a freeboard above FEMA base flood elevation,
- requiring sea level rise and resiliency review criteria for Land Use Boards,
- introducing additional commercial height standards,
- and increasing set-backs and open space for single family homes.

They are also many innovative projects underway, such as green infrastructure, developing design guidelines for historic preservation in the face of sea level rise and climate change, and establishing a pool of contractors with the capacity to develop a business case analysis of the stormwater resilience program.