

# MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

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Dear Mayor Dan Gelber,

I am pleased to present to you Harvard Graduate School of Design's Office for Urbanization's final research report *South Florida and Sea Level: The Case of Miami Beach*. Over the course of the last two years, the Harvard Graduate School of Design completed a series of sponsored design studios to study the impacts of and the potential response to sea level rise in Miami Beach. The multi-year research project, examined the implications of rising sea levels and increased storm events on our city's economy, ecology, infrastructure, and community identity.

I am pleased to report that Harvard's findings are in line with the direction our resiliency program is moving. Many of the suggestions build upon programs and initiatives that the city has been engaged. The following four recommendations are timely and could take us to the next level. I recommend these for your consideration as we move to the next stages of our Resiliency Strategy development and following the recommendations of the Urban Land Institutes Technical Advisory Panel.

Recommendation 3: The city should **create a comprehensive and flexible medium-term plan for urban adaption**. This plan should project a shared, future cultural identity. This aspiration should draw upon the history of Miami Beach's natural endowment and synthetic construction to inform a future imaginary that simultaneously respects and transcends nostalgia and heritage. This medium-term plan should be comprised of short-term, multi-scalar efforts that multiple stakeholder can cumulatively and sequentially complete. Within these short-term projects, the challenge is to respond to shifting environmental and economic conditions that preserve the economic and cultural value of prior investments.

Recommendation 4: The city should **expand flood mitigation projects from a single-purpose engineering solutions to multi-functional green infrastructure**. The city should commission a study of the resilience metrics for local species and ecologies to inform ongoing and future flood mitigation projects. Beyond studying the hydrological and ecological advantages of native mangroves and rhizomatic grasses, the city should promote their public perception and work with the private sector to mandate their deployment, particularly along jurisdictionally discontinuous coastlines. Finally, the city should differentiate between plants used for ecological versus aesthetic purposes and deploy them accordingly to environmental, public, and educational ends.

Recommendation 6: The city should **reconceive elevated streets and avenues to maximize infrastructural and public co-benefits and to contribute to multi-adaptive infrastructure**. The city should commission a study or conduct a pilot program on using elevated roads for the conveyance, absorption, and storage of stormwater as well as for public benefits (e.g., recreation amenities). Furthermore, the city should commission a study on the use of interstitial block alleys for hydrological, environmental, and public functions. In the medium term, the city should develop sectional strategies for the gradual one-story elevation of streets and avenues and integrate them with ingress/egress requirements, sidewalks, storefronts, and other public right-of-ways.

Recommendation 8: The city should commission studies that **transform its main public right-of-ways into green infrastructure and exemplify innovative urban adaptation**. One of the studies should reconceive Collins Canal as stormwater infrastructure that also provides new a waterside development, a public promenade, and coastal vegetation. Another study should reconceive the Biscayne Bay coastline as a living seawall that also connects a system of elevated street-end plazas over pump stations with a continuous public baywalk. A third study should reconceive Flamingo Park as a hydrological and ecological resource that also maintains its public landscape.

At the next commission meeting on April 11, Charles Waldheim, John E. Irving Professor of Landscape Architecture at Harvard University's Graduate School of Design and Director of the School's Office for Urbanization will be presenting the final report for your consideration. Please do not hesitate to reach out to me prior to the meeting with any questions or concerns.

Thank you,

Jimmy L. Morales  
City Manager

SMT/ESW