Testimony of Roland Lewis, President and CEO  
New York City Council Oversight Hearing  
Committee on Recovery & Resiliency  
October 22, 2015  
Re: Two Years After the SIRR Report: The State of Coastal Storm Resiliency in the City

The Waterfront Alliance is a bi-state coalition of over 850 community and recreational groups, educational institutions, businesses, and other stakeholders committed to restoring and revitalizing the New York and New Jersey waterways. Our waterways have been revitalized with active recreation, environmental education, and waterborne transportation, and the harbor has for centuries been a vital conduit for commerce and an engine of economic development. Yet despite all the benefits our waterways afford, Hurricane Sandy made our challenges strikingly clear: this region is extremely vulnerable to the impacts of climate change and increasingly intense coastal storms.

Hurricane Sandy was an historic event, but it was not a worst-case scenario, and it will not be the last storm to strike this region. In fact, as sea levels continue to rise and hurricane patterns change, it is likely that coastal flooding will increase in both frequency and severity. In order to make important decisions about prioritizing and funding risk-reduction measures for the region, it is necessary to understand the cost—economic and otherwise—of failing to make long-term plans. New York City’s Special Initiative for Rebuilding and Resiliency (SIRR) report indicates that if no action is taken, a storm comparable to Sandy in 2050 would cause an estimated $90B of damage in New York City, a dramatic increase from $19B in actual damages in 2012. Others have also attempted to calculate the cost of inaction. The Risky Business Project, which aims to quantify the economic risks associated with climate change over time, projects up to a quadrupling of annual property losses in the northeastern U.S. by 2100 to $22B. The National Institute of Building Sciences estimates that for every $1 spent on mitigating natural hazards, $4 in future damages are avoided.¹

The City and the region’s response to the unprecedented challenge climate change and Sandy set before us has been tremendous, with almost $20B awarded in New York and New Jersey for recovery, rebuilding, and improved protection from future storms. We applaud the formation of the New York City Panel on Climate Change, the creation of the Mayor’s Office of Recovery and Resiliency to oversee the execution of the SIRR plan, the release of the OneNYC sustainability and equity plan, and federal support from the Department of Housing and Urban Development’s Rebuild by Design program, which is funding resiliency initiatives on Manhattan’s east side, on Staten Island’s south shore, and Hunts Point, Bronx.

Yet although we have done an excellent job with available resources, we are making only a down payment on resiliency in the wake of Sandy. The SIRR report estimates a cost of $14B for implementation of its 257 initiatives, plus an additional $5.5B for resiliency-related Sandy recovery initiatives. Coastal protection measures account for $3.7B of this $19.5B total. The report identified $15B in existing and expected sources, but still faces a $4.5B funding gap. Furthermore, the cost estimates presented in the 10-year SIRR plan do not attempt to give us a comprehensive picture of the price tag of long-term resiliency. The plan identifies only strategies

¹ National Institute of Building Sciences Multihazard Mitigation Council. Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities, 2005
implementable by the City of New York, though it does call on the Metropolitan Transportation Authority and The Port Authority of New York and New Jersey, as well as private utilities, to make appropriate investments. The report does not attempt to estimates costs for the “full-build” recommendations of its Comprehensive Coastal Protection Plan, but indicates its implementation “would be an expensive proposition.”

Indeed, New York City and New Jersey cannot address our flood risks alone; it is a national challenge. In the Netherlands, where two-thirds of the population live below sea level, reducing flood risk is a national priority. In 2008 the Sustainable Coastal Development Commission, also known as the second Delta Commission, developed the primary guide to reduce the country’s risk based on worst-case climate projections through the year 2200. That plan calls for more than $144B in new spending through 2100, financed by natural gas revenues and loans, to strengthen coastal defenses such as dunes and sea and river levees. Here at home, where the SIRR report tells us how we can reduce flood risk and improve resiliency based on available funding, we must also ask:

- What is the full cost of investments necessary to mitigate climate change-related flood risks in the New York region?
- What is the level of risk reduction of such investments, over what timeframe?

Earlier this year, working with our partners in the Harbor Coalition, we issued a call to action to develop a comprehensive capital strategy to dramatically reduce the region’s flood risk through 2100, including determining and prioritizing necessary infrastructure investments. Based on discussions with flood control experts, there may be a loose consensus that $25B–$30B of infrastructure investments could provide adequate risk reduction during a 1/100-year flood. However, Sandy is variously described as being somewhere between a 1/250-year flood and a 1/700-year flood. Under higher projections for sea level rise, by the 2080s, a flood currently rated as a 1/100-year flood, with a one percent chance of occurring in any given year, may be something closer to a 1/8-year flood, with a 12.5 percent chance of occurring in any given year. Thus $25B to $30B in near-term investments would likely provide inadequate risk reduction against another storm with the force of Sandy, with risks rising higher and higher throughout the 21st century.

We are off to a great start, but we must recognize that adapting to the realities of climate change is a costly, complex, multi-generational marathon. Rising seas, more intense storms, and a substantial increase in the extent of related damages by the end of the century require us to look farther into the future. This is an existential and unprecedented challenge for coastal cities like New York. We cannot eliminate the threats posed by climate change without massive international cooperation, but we can work to reduce the risks associated with future environmental calamities. We are overdue for a serious conversation and accounting of what to do and how to pay for it. Our children, and their children, depend on our planning and action today.

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2 New York City Mayor’s Office of Recovery and Resiliency, 2015