May 2, 2019

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US Army Corps of Engineers  
New York District  
24 Federal Plaza  
New York, NY

Joseph Seebode  
Deputy District Engineer for Programs and Project Management  
US Army Corps of Engineers  
New York District  
24 Federal Plaza  
New York, NY

Re: New York-New Jersey Harbor and Tributaries Coastal Storm Risk Management Feasibility Study Interim Report

Dear Colonel Asbery and Mr. Seebode,

On behalf of the Waterfront Alliance, I am writing to share our comments regarding the approach for the New York-New Jersey Harbor and Tributaries Coastal Storm Risk Management Feasibility Study (NYNJHATS) Interim Report.

We appreciate the US Army Corps of Engineers’ (USACE) work to study options for increasing our regional resilience to coastal storms, climate change and sea level rise. Our region faces many challenges, and we need solutions that ensure the equitable resilience, accessibility, and ecological integrity of our communities. There is no silver bullet to address our increasing vulnerability, and little silver to pay the cost and most important, as we experience environmental calamity after environmental calamity, there is little time.

From community members to experts, there is a developing vision and identified need for a more comprehensive view on these issues, and an increase in the accountability, continuity, transparency, and flexibility with which we manage our response. The Waterfront Alliance has convened a regional resilience task force to inform proposed actions for addressing these issues. Through this study and the tentatively selected plan, the USACE has the opportunity to show leadership and contribute to that vision in a way that is reflective of those needs.

It is our perspective that the best possible result of the NYNJHATS is one in which adaptable pathways for flood risk reduction (for all relevant types of flooding in the study area, tidal to surge) are provided, based on local priorities and meaningful environmental, equity, and economic lenses. Additionally, the best possible result is one that provides a means (such as cost-share through in-kind or monetary investment) for states and municipalities to steer the components of projects which may be best led at state or local levels (e.g. public engagement and final design of
shore-based measures), and that a plan for that is specifically integrated into the ultimately authorization,

While we understand that some of our comments are limited by the current authorization of and resources devoted to this study, we feel strongly that these additions are critical, and that additional resources from the non-federal study partners and/or changes to authorization may be needed. We look forward to continuing to work with the Army Corps of Engineers, the states of New York and New Jersey, and the City of New York, as the study proceeds toward a vision for reducing the flood risk of our harbor. As the USACE and partners proceed toward further phases of this project, we have provided specific comments below:

- **The provision of adaptive pathways is a scientifically and economically responsible approach, through which the USACE has the opportunity to set an innovative precedent in addressing climate change.** The interim study suggests that the tentatively selected plan may include provisions for adaptation, such as near- mid- and long-term options: “A key consideration for the ongoing development of these concepts is the range of future RSLC projections and the need for adaptability, to ensure long-term resiliency in the face of uncertain future conditions. For each alternative concept, there is a need for measures of various scales, which are often complementary, in order to investigate the feasibility of managing frequent flooding which will worsen as sea levels rise, as well as managing the risk for larger more catastrophic storms, like hurricanes and nor’easters which can bring dangerous and damaging storm surge” (p 5, Interim Report). Given the uncertainty in planning horizon and need for the ability to adapt strategy over time, we support an approach to authorization that provides multiple options over different time scales and scenarios. This approach should be specifically codified into the proposed plan, including regular adaptive management cycles and the flexibility to shift based on the best and most up-to-date available consensus-based regional projections (e.g. New York City Panel on Climate Change, Rutgers Climate Institute). Considering the shifting social, environmental, economic, and risk dynamics over time, it would be unwise to “put all of our eggs in one basket” when the costs (direct and indirect) are high and our confidence in the various approaches to address all components of the problem, less so. A tentatively selected plan that incorporates this flexibility is an opportunity for USACE to show leadership in thinking and a cutting-edge approach in times that demand this kind of planning.

- **The full picture needs to be brought in to the cost-benefit analysis:** tidal, or “sunny-day” flooding is still considered primarily as additional later in the process, rather than integrated into the weighting of alternatives earlier in the process during the cost-benefit analysis stage. It is acknowledged that 1) sea level rise is included to define the protection level/design height of the alternatives; and 2) the USACE has stated that the congressional authorization for this study is to “address the threat of storm surge from coastal storms,” and that in design for shoreline-based measures, that
"relative sea level rise is also addressed by those measures." However, it seems fundamentally problematic to consider large-scale investments while omitting tidal, or "sunny-day" flooding as an integral part of the cost-benefit analysis and weighing alternatives at this early stage. While in many cases, the risk posed by storm surge may overwhelm that of tidal flooding, the relative importance of each type may shift depending on reach, and it is important to understand this to target the right solution to the context. Given that some approaches can mitigate multiple types of flooding, and others cannot, this may affect the relative costs and benefits depending on the reach. It has recently been calculated that 20% of Lower Manhattan will be under water daily by the end of the Century if no action is taken. This is also true of significant portions of Jersey City, Secaucus, Newark, Elizabeth, Linden, Carteret, Coney Island, Rockaway, Red Hook, Howard Beach, Hunts Point, Port Morris, Throgs Neck, among others. In a less-constricted study, Boston's "Green Ribbon Commission" recently recommended that surge gates would not be an effective approach for that city, and that "Shore-based solutions would provide flood management more quickly at a lower cost, offer several key advantages over a harbor-wide barrier, and provide more flexibility in adapting and responding to changing conditions, technological innovations, and new information about global sea level rise."

Acknowledging contextual differences between Boston and New York-New Jersey Harbor, the USACE is encouraged to carefully review the methods and results of that analysis. Additionally, the next iteration of prioritization should:

- **Better assess and incorporate public values.** The additional public sessions and timeline were positive additions to the scoping process, but the resources devoted to public engagement remain vastly less than what is needed to empower communities to weigh in on the prioritization of options. It is acknowledged that engagement may be limited by resources allotted to the USACE for this study. Regardless of how this is accomplished (e.g. through additional authorization or resources provided by cost-share partners), a robust community process should be an integral part of proceeding to a selected plan. Ultimately, these are important decisions about the kinds of neighborhoods that we want for the future, and significant assumptions are being made about public values. In the end, the prioritization of these elements is neither clear-cut nor monolithic across communities, and both increased engagement and provision of options at the local level (such as the reaches) are means of better gaging that value.

- **Meaningfully incorporate equity, especially in areas of highest near-term risk.** The study incorporates a lens of "environmental

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justice communities,” comprising roughly 50% of the study, and it is noted that impacts to these communities will be evaluated as part of the impact analysis process. It is appreciated that the Corps is including social vulnerability in its exposure index (at 10% weighted value). In addition to the geographic distribution of vulnerability, the USACE should analyze the relative importance of the specific flood risk stressors facing these communities (tidal flooding, inland flooding, surge-based flooding) as well as specific vulnerabilities (home ownership, insurance burden) and the extent to which the alternatives address these risks and vulnerabilities.

- **Thoroughly consider redundancies with planned projects.** Particularly as New York City and some New Jersey municipalities are moving forward with significant infrastructure investments, these solutions should be thoroughly incorporated into the cost-benefit analysis calculation before a tentative plan is selected.

- **Buyouts and retrofits remain important options, and not only for residual risk behind barriers.** It has been within USACE’s purview in past projects to assist with housing retrofit (elevation) and buyout programs, and similar programs, either leading or assisting states in doing so during disaster recovery. Within the geographic scope, there will be a need to increase pre-disaster buyouts over time, particularly in areas not addressed by surge barriers or shore-based measures (SBMs). While these measures are mentioned as potential accompaniments to the alternatives behind the surge gates, it is recommended that the USACE include in the tentatively selected plan, resources for buyout/retrofit programs both behind and in front of proposed surge gates and build flexibility into when and how those funds are used. Incorporating these kinds of resources in collaboration with the states and municipalities would provide an important voluntary “adaptive pathway” based on local and individual choices over time to include regardless of which alternative is chosen.

- **Provide states and municipalities with the flexibility and responsibility of shaping detailed design and outreach components of implementation, once a tentative plan is selected.** Certain aspects of design and implementation (particularly design of SBMs in the urban context and public engagement) are best executed by regional, state, local, and community entities. The tentatively selected plan and ultimate report for authorization should include a specific plan for how projects will be managed, including leadership roles and authorities at the local level from design to implementation, including flexibility and resources to support sound grassroots engagement.

- **Thoroughly evaluate the role of non-structural measures and context of planned and built resiliency projects.** Many years are likely to pass before any large-scale structural solutions are built. A thorough analysis of the impacts of funded planned projects, as well as the potential impacts of policy, programmatic, and regulatory changes should be conducted to gain a full picture of the benefits of various measures in context.
• **Natural and nature-based approaches should be employed to the extent feasible and reflected thoroughly in benefits calculations.** The planned additional consideration of non-structural and nature-based features is a positive inclusion (p. 97). Environmental impacts and benefits should be a priority when comparing projects earlier in the process, given the multiple co-benefits provided by natural resources. Natural and nature-based approaches can improve water and air quality, provide more green and open space, build community resiliency, mitigate the urban heat island effect, and create local job opportunities.

• **Carefully review the quality of life, economic, and environmental impacts, and how they are likely to change over time.** Each of these strategies may have significant impacts – wetlands loss due to barriers to migration, sediment transport and dissolved oxygen, communities’ ability to have access to their largest public space, and our small and moderate-sized maritime businesses. It is understood that environmental and social impact review is part of the NEPA process. Impacts to quality of life, access to and from the water, maritime operations, and the environment that account for sea level rise and flooding from surge as well as precipitation are critical to consider as early as possibly in this process.

We thank you for your review of these comments and are pleased to continue to discuss this study with the project partners, and to provide the resilience task force as a platform for discussion. If you have any questions about this letter, please feel free to call me at (212) 935-9831.

Sincerely,

Roland Lewis  
President and CEO

Cc:

Governor Andrew M. Cuomo  
Governor Phil Murphy  
New York Congressional Delegation  
New Jersey Congressional Delegation  
NY Department of Environmental Conservation, Commissioner, Basil Seggos  
NJ Department of Environmental Protection, Commissioner, Catherine McCabe  
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Newark, NJ, Mayor, Ras Baraka  
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