

RISE TO RESILIENCE

OUR COMMUNITIES, OUR FUTURE

Jaime Pinkham
Deputy Assistant Secretary of the Army for Civil Works
United States Army Corps of Engineers

May 4, 2021

Re: Implementation Guidance for the Water Resources Development Act of 2020

Dear Deputy Assistant Secretary Pinkham,

In the Water Resources Development Act of 2020 (WRDA 2020), the Rise to Resilience coalition helped secure key changes to United States Army Corps of Engineers (USACE) authorization of the New York-New Jersey Harbor and Tributaries Study (NYNJHATS), a study that could help secure the protection of millions of residents in the New York-New Jersey metropolitan region from an increased frequency of storms and rising sea levels. The coalition now seeks to ensure that the implementation guidance directing USACE work related to NYNJHATS reflects the intent of the language included in WRDA 2020.

We are asking for the development of implementation guidance to ensure that the District and local sponsors have a clear and shared understanding of the Congressional intent of Section 203. Over the past year, the Rise to Resilience coalition has worked closely with our Congressional leadership and local sponsors to secure this modification to the study authorization. The coalition was informed by the New York District staff that this was needed in order for the NYNJHATS to be expanded to address other flood threats outside of storm surge. Specifically, **we are calling for adjustments to the study to allow it to move forward in ways that incorporate more holistic and equitable approaches to address multiple flood threats, especially tidal flooding associated with sea level rise (“blue sky flooding”) and low-frequency precipitation events (along riverine floodplains) as individual threats and as a compounding threat during a storm event. We are also calling for specific guidance for increased public engagement with those most impacted and vulnerable to flood risk and a plan for how community values will be considered in alternative selection and design.** This implementation guidance is essential as many of our organizations have met with

the New York District since the passage of WRDA and there is a clear misunderstanding of what the modification to the authorization means and how it should be interpreted and implemented.

We appreciate the level of effort that the USACE New York District has completed thus far on this study and feel this is a clear opportunity to demonstrate how the USACE can be an international leader of innovation in tackling the complex issue of compounding flooding. By integrating multiple flood threats, the USACE can better align with the needs of local sponsors as a collaborative partner, as well as ensure we are being proactive for today's risks and the risks to come in the future. By adaptively managing flood risks over time, the USACE will better serve its constituents, make better investment decisions and become the real problem-solver of flood risk in a time of climate change. All four of these are goals in the new strategic plan for the Southwest District, which we believe should be adopted by the entire USACE and the New York District.

In addition, President Biden recently highlighted the importance of maximizing the resilience of land and water resources to protect communities and the environment and calls for the investment in coastal resilience to sea level rise and hurricanes, specifically with the use of nature-based infrastructure. We believe this study, with the expanded scope of work, can lead the nation in how we plan for resilient infrastructure in the future. We hope to work with the Biden Administration, the USACE, and cost-share partners to support a successful study. Summarized below are the coalition's **primary priorities for inclusion in the implementation guidance for Section 203 specific to NYNJHATS, with other sections cited as relevant to this specific project:**

Prioritize measures that address multiple flooding threats

It is immensely important and urgent to identify and prioritize federal investments in large-scale solutions to address flood risk and build resilience. However, taking a one-off approach to the multiple flood risks that are being faced is not an effective or efficient way to plan for our future. The objectives of the NYNJHATS have been too limited and do not fully integrate the impacts and solutions to all three threats of flooding: storm surge, sea level rise and precipitation. The solutions proposed and selected in the NYNJHATS study may differ if the objectives are expanded to manage the multiple flood threats of the region. There are clear examples around that country that solutions developed to only address coastal storms can actually exacerbate the flood risk from sea level rise, such as blue sky flooding, and low frequency precipitation events. On the other hand, holistically planning for all flood risks in these coastal areas can lead to solutions that are effective against multiple flood threats.

WRDA 2020 calls for a revision of existing planning guidance documents and regulations to ensure they are reflective of best available peer-reviewed data and the effects of sea level rise regardless of storm surge inducing events and inland flooding on communities in **Section 113**. The ability for cost-share partners to request use of local, peer-reviewed data should be clearly articulated in the guidance for this section. Authorization specifically for NYNJHATS (**Section 203**) was expanded to evaluate and address sea level rise and low-frequency precipitation events. For the NYNJHATS study, the USACE should use regionally down-scaled peer reviewed climate data developed by the New York City Panel on Climate Change and Rutgers University,

and integrate with the recently initiated study by the Mayor's Office of Resiliency to model and map future flood risk in New York City.

The implementation guidance should be very clear that the study authorization was expanded to study impacts and develop solutions and projects that address the flood risk from sea level rise (tidal or “blue sky flooding”) and low-frequency precipitation events (along riverine floodplains), not just coastal storm surge, as individual threats and compounding threats. The study should focus on nature-based and nonstructural solutions to these multiple flood threats. The study should update modeling and cost-benefit analysis to prioritize the selection of projects that address multiple flooding threats. It is not recommended that the USACE conduct a detailed inland flooding analysis as part of this revision, but rather focus on solutions that address the compounding flood threats from storm surge, riverine flooding, and sea level rise, and that considers local studies on urban/stormwater flooding in final design. This approach will allow the USACE to develop plans that address both tidal- and storm-related flooding that is occurring now and will worsen over time. A comprehensive stormwater study is currently being conducted by the City of New York, and other municipalities such as Hoboken and others have completed research that should inform and integrate with, but not be replicated by this study.

Increase assessment and incorporation of public values in decision-making

Section 110 of WRDA 2020 places an emphasis on the need to increase engagement with affected communities. Further, for all projects, adherence to the 2013 Principles, Requirements and Guidelines with particular focus on climate change, environmental justice, and environmental impacts is explicitly required.¹ It is recommended that for NYNJHATS (**Section 203**), the implementation guidance should also provide specific ways to significantly increase community engagement and empowerment (especially in those communities most exposed to and socially vulnerable to flood hazards) in the decision-making process to ensure an equitable and informative process. The USACE Army Corps' Coastal Texas Study provides a useful model for public engagement. Implementation guidance should also specify how cost-share partner priorities and stakeholder feedback will be used alongside traditional cost-benefit analysis to select the preferred alternative. It should be noted that to be effective, engagement must be funded or leveraged through partnership with state and local governments and nongovernmental entities. We strongly encourage resourcing these efforts accordingly.

Update cost-benefit analysis approach to ensure equity

In order to equitably address the needs of low income communities and communities of color, the cost-benefit analysis used for project selection must be revised to assign value to communities most impacted by climate change that do not have a high level of residential mobility, prioritizing population density or replacement value. To do this, we need to remove the bias towards wealthy neighborhoods and housing stock. In areas where there is a scarcity of low income housing, existing low income residential properties should be given a higher value, reflecting scarcity not the resale value of that property. The current resale value driven approach to assessing Cost-Benefits favors affluent communities that have greater mobility and

¹ [Consolidated Appropriations Act of 2021](#) P 3748, lines 13-19 and p 3751, lines 11-26

opportunity to move and still remain within their communities. Communities that will be entirely displaced, especially those with historic roots in a location, should be assigned a higher value.

Prioritize nature-based and nonstructural approaches

Recognizing that investments go farther when multi-beneficial approaches are taken, **Section 116** WRDA 2020 explicitly requires the prioritization of natural and nature-based features and ecosystem services in cost-benefit analysis.² Grey infrastructure solutions proposed to date will take decades for final design, permitting, and funding. During that time, communities and ecosystems are left exposed to all flood threats. Using natural infrastructure and non-structural projects can reduce these risks more quickly with less investment and protect against multiple flood threats simultaneously while improving ecosystems and protecting human health. It is recommended that the implementation guidance for NYNJHATS prioritize multi-beneficial, natural and nature-based approaches and take into account quality of life, economic, and environmental impacts. For example, at different times during the year, New York Harbor provides habitat for endangered and protected species, including Atlantic sturgeon and a range of marine mammals species (including humpback whales). NYNJHATS must evaluate how each alternative will impact these and other protected species. While environmental and social impact review is part of the NEPA process, these impacts should be considered as early as possible in the process to inform alternative selection.

Working closely with cost-share and local partners, the USACE should incorporate into their plans the utility of non-structural and building-scale measures for areas with certain risk profiles. Where these efforts are pursued in tandem with USACE projects, the USACE should consider these as qualifying toward project cost-share requirements.

In addition, the study should be completed in accordance with the January 5, 2021 Policy Directive from the Commanding General of the USACE on [Comprehensive Documentation of Benefits in Decision Document](#). Specifically, the study should fully account for the total project costs and benefits including economics, environmental and social categories, consideration of local and state concerns in scoping the assessment of benefits, addressing state and local objectives for the study and including a locally preferred alternative in the scope of work. This should include a:

- Focus on life safety and equity.
- Full accounting of the benefits derived from ecosystem services and the impacts from each alternative, fully integrated into the decision-making process for a tentatively selected plan.³

² Ibid. P 3757-8, Sec 116.

³ For example, a study of the NYNJHATS barrier system by Chen *et al* (2020) found that sea level rise can cause an exponential increase of the gate closure frequency, a lengthening of the closure duration, and a rising probability of trapped river water flooding. Increased flood risks and long-term environmental and social impacts should be thoroughly incorporated. See Chen, Z; P Orton; and T Wahl. 2020. Storm Surge Barrier Protection in an Era of Accelerating Sea-Level Rise: Quantifying Closure Frequency, Duration and Trapped River Flooding. *Journal of Marine Science and Engineering*.

- Locally preferred alternative that focuses on a combination of non-structural and natural infrastructure solutions.

Pursue a phased approach to advance projects more quickly

The interim NYNJHATS report suggested that the tentatively selected plan may include provisions for adaptation, such as near-, mid-, and long-term options. Given the uncertainty in the planning horizon, we encourage the USACE to pursue a phased approach that enables understanding the relationship between local and more regional approaches, thoughtful decision making that accounts for the many local structural and non-structural projects now underway and implementation of different options over different time scales and scenarios. This approach should also enable rapid implementation of near-term measures for which there is high confidence and support. It is critical that the USACE ensure the phased approach and resulting projects are designed with financial feasibility. The USACE should finalize plans through this study that reach holistic goals and can be completed given projected funding levels from local, state, and federal sources.

In addition to its overall analysis of the costs and benefits of different alternatives, a breakdown of costs and benefits of the alternatives by flood-shed or protection area for NYNJHATS that incorporates the quantification of ecosystem services and nonstructural solutions would provide an easier way for discrete components of a particular alternative to be compared and funded in phases.

Thank you for your consideration of these important measures which are tremendously needed for the protection of communities living in the densest coastal region of our nation. **We urge you to provide the implementation guidance necessary to ensure the study can resume and meet the needs of your constituents in the New York and New Jersey region.**

The undersigned organizations are looking forward to working with you.

Sincerely,

American Littoral Society, Northeast
Chapter

ANJEC

Bronx River Alliance

BRS, Inc.

Center for NYC Neighborhoods

Coney Island Beautification Project, Inc.

Earth Celebrations

Earth Matter NY Inc.

ECONcrete

Environmental Defense Fund

Flood Mitigation Industry Association

Future City Inc

Hackensack Riverkeeper

Hudson River Waterfront Conservancy

Human Impacts Institute

James Corner Field Operations

The Municipal Art Society of New York

National Parks Conservation Association

Natural Areas Conservancy	Red Hook Container Terminal, LLC
New Jersey Future	Regional Plan Association
New Jersey Voluntary Organizations Active in Disaster	Riverkeeper
New York City Audubon	Rockaway Initiative for Sustainability and Equity (RISE)
New York City Chapter of the Surfrider Foundation	Row New York
Newtown Creek Alliance	Save the Sound
NHS Brooklyn CDC, Inc.	South Brooklyn Marine Terminal, LLC
NJ Audubon	Stormwater Infrastructure Matters (SWIM) Coalition
NYC H2O	Waterfront Alliance
NYC Soil & Water Conservation District	Wildlife Conservation Society
Raritan Riverkeeper	

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Rise to Resilience is a campaign and coalition spearheaded by the Waterfront Alliance. We represent residents, leaders in business, labor community and justice, volunteer organizations, scientists, environmental advocates, and design professionals collectively calling on our federal, state, and local governments to make building climate resilience an urgent priority.