

The Resilient Coastal Communities Project
Climate Action Council Public Comments on Adaptation and Resilience
July 1, 2022

New York City’s historic working waterfronts have been transformed since their heyday in the middle of the 20th century, with legacy activities like shipping, manufacturing, and waste disposal giving way to new parks, office and entertainment complexes, large retail, and often controversial high-density residential developments. Even still-industrialized waterways like Newtown Creek and the Gowanus Canal increasingly share space with residential and commercial development that seemed unimaginable just a few decades ago.

As significant as this waterfront transformation has been, coastal New York will face far more drastic risks and changes in the years to come. According to recent projections by the New York City Panel on Climate Change, sea levels in the 2050s are likely to be 11 to 21 inches higher than in 2000. Heavy downpours like Hurricane Ida and enormous storm surges like those seen during Superstorm Sandy will become more frequent, with the greatest impacts falling on communities already most vulnerable due to a history of redlining, disinvestment, and other inequitable policies. Yet often these same communities are side-lined in planning and project development that takes on a top-down and exclusive character.

The urgent need to address the growing risk of storm surge, flash flooding and sea level rise, locally and around the world, in an inclusive and holistic manner, led by the Climate School to make coastal resilience one of its first four transdisciplinary initiatives. Here in the New York metropolitan area, this initiative is served by a new Resilient Coastal Communities Project (RCCP), under the auspices of Columbia University’s Center for Sustainable Urban Development, working in partnership with the New York City Environmental Justice Alliance. The project’s principal goal will be to foster new collaborations between environmental justice communities, practitioners, and researchers, as envisioned in Columbia’s Task Force Report on Directed Action, to help develop actionable, fundable, and equitable solutions to flood risks that also deliver complementary benefits, like habitat restoration, job creation, and greater community cohesion — and put into practice the Climate School’s commitment to fairness, social justice, and anti-racism.

The New York City Environmental Justice Alliance (NYC-EJA) is a citywide network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental and climate justice. NYC-EJA member communities are disproportionately overburdened by flood hazards, proximity to potential waterfront toxic exposures, lack of green and open spaces, air pollution, and extreme heat. NYC-EJA’s research has demonstrated that areas designated by the city as “significant maritime and industrial areas,” designed to encourage the clustering of heavy industrial and polluting infrastructure, are predominantly located in

environmental justice communities and all located in hurricane storm surge zones. Yet, the risks of cumulative toxic exposures from sources like major oil storage facilities, chemical bulk storage, and auto shops for nearby workers and residents still require further analysis. Looking forward, NYC-EJA envisions innovative climate adaptation and resiliency strategies that include green infrastructure, nature-based solutions, working waterfronts, and good local jobs.

New York City and other coastal communities are subject to at least three distinct flooding threats: storm surge, sea level rise, and flash flooding. Fortunately, a 2019 report issued in connection with the Army Corps' New York-New Jersey Harbor and Tributaries Study identifies over 40 different flood control techniques, including structural measures like seawalls, berms and surge barriers, non-structural approaches such as expanded street-level green infrastructure programs and combined sewer overflow reduction strategies, and nature-based solutions like living shorelines, restoring wetlands, aquatic vegetation, and oyster reefs. It is vital to identify which of these techniques are likely to work best along New York City's shorelines, so that they can be combined into community-specific and community-driven coastal resilience plans addressing all three of the flooding threats described above.

After the loss of life and physical damage our communities suffered during Superstorm Sandy and Hurricane Ida, it's clear that we need better flood risk reduction plans as quickly as we can get them. Investments in coastal resiliency are not meeting the pace of urgent climate risks. But, at the same time, we need to confront the flaws in past flood planning exercises that failed to center communities and take into account ecosystems. Post-Superstorm Sandy federally funded resiliency planning and investments fell short of meeting the needs of various local communities. In the Hunts Point peninsula in the Bronx, resiliency planning processes did not center neighborhood priorities calling for ecologically grounded coastal protection and its numerous co-benefits, including open space, stormwater retention, heat mitigation, and air quality improvements. In Newtown Creek in Brooklyn, a recent storm surge barrier feasibility study did not extend to all creekside communities and did not fully assess the impacts of heavy rainfall and combined sewer overflow, as well as the benefits of shoreline interventions. To develop just and effective solutions to the flood risks we face in these areas and many others, we need to center the deep store of wisdom that resides in our communities and put government expertise to work in a true planning partnership with communities.

Fostering greater community empowerment in coastal resilience planning is central for the Resilient Coastal Communities Project. Other key goals include supporting research to help inform resilience plan design, helping the public better understand coastal flooding, and building on the momentum provided by recent legislative and policy commitments centering on climate resiliency and equity.

In New York, the most important of these recent climate commitments is the Climate Leadership and Community Protection Act (CLCPA of 2019), a transformative law with aggressive goals and an investment mandate for disadvantaged communities. At the federal level, the Justice40 Initiative, inspired by the CLCPA, set a similar goal that 40% of the overall benefits of investment should flow to disadvantaged communities in order to advance environmental justice. These directives mean that

new and existing climate investments must prioritize disadvantaged communities, and provide benefits that can include community resilience plans, technical assistance and community engagement, increased flood mitigation through restored wetlands, green infrastructure, and more.

The Climate Action Council Draft Scoping Plan addresses coastal vulnerabilities in Chapter 21 Adaptation and Resilience with three main themes (1) Building Capacity, (2) Communities and Infrastructure, and (3) Living Systems. RCCP would like to uplift and support the Climate Justice Working Group feedback on the advisory panel recommendations for adaptation and resilience, including the creation of a State Resilience Officer position that should incorporate Just Transitions principles and be a DAC supported appointment, the establishment of a Resilient Infrastructure Fund that prioritizes frontline disadvantaged communities, and direct funding for efforts to build and maintain nature-based infrastructure and natural areas, among others.

On adaptation, to quote the Army Corps, the “best solution to our resilience challenges involves multiple, layered features.” There is no magic wall you can build to protect from storm surge, sea level rise and stationary storms. Instead, we must max out on approaches like nature-based infrastructure and natural solutions, while preventing development in sensitive areas. Only through a fundamental systemic change in the processes by which coastal resilience planning is done, and in the role locally based organizations plan in those processes, can communities, governments and academics, working in true partnership, foster just and restorative resilience projects that keep our communities safe and make them more vibrant, while providing for healthier, more biodiverse ecosystems. Government must share leadership on project design and implementation with those communities that are on the frontlines of climate risk and environmental injustice and recognize and compensate EJ groups for their work in frontline organizing, educating and plan-making, and bringing their knowledge to the table.

This is a moment where change is possible. Federal support for coastal resilience continues to grow, thanks to recent legislation like the Infrastructure Investment and Jobs Act of 2021, which will pump over \$13 billion into flood protection projects, and the Water Resources Development Act of 2020, which directs the US Army Corps of Engineers to improve on past resilience planning efforts by taking a harder look at sea level rise and heavy downpours, making a stronger commitment to nature-based solutions to flooding, and engaging in more effective consultation with local communities, especially in connection with environmental justice and climate justice concerns. On the local level, the new NYC Comprehensive Waterfront Plan presents its own range of goals and recommendations to better protect and utilize the NYC waterfront and coastlines. Of course, these new laws won’t enforce themselves — we still need our federal, state, and local officials to build a more inclusive planning process, provide proper funding for community participation in that process, and sponsor new research on flood risk reduction strategies.

To date, efforts to protect public health, foster community resilience, preserve coastal ecosystems and safeguard property from immediate or long-term damage due to storm and sea level rise-related climate disruption have had limited success. Policymakers have failed to establish a comprehensive

set of goals, processes and selection criteria for identifying and implementing protective resiliency projects that involve meaningful community consultation and empowerment, especially in frontline and Black, Indigenous, and People of Color (BIPOC) and economically disadvantaged communities.

Nine years after Superstorm Sandy, New Yorkers are still waiting for needed infrastructure investments in coastal protection and shoreline resiliency that can safeguard frontline disadvantaged communities, as well as provide new opportunities to strengthen community networks and create the new jobs needed for effective resilience strategies. The Resilient Coastal Communities Project looks forward to collaborating with the State government to ensure the next coastal transformation in New York City and surrounding communities may not only find us high and dry, but also living in more equitable, vibrant, connected, and ecologically sound communities.