“Bury the Plan, Not the Park”: Limitations to Community Participation in Coastal Flood Protection Redevelopments

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Hurricane Sandy

Early in the afternoon of October 24th, 2012, Hurricane Sandy, then a Category 1 storm, made landfall on the island of Jamaica. It subsequently strengthened considerably, reaching the southeastern province of Cuba, Santiago de Cuba, as a Category 3 major hurricane. The impact was so strong it caused the failure of meteorological instruments and left nearly 150,000 homes damaged. After passing the island, the storm veered towards the Northeastern United States. President Obama preemptively signed state of emergency declarations in multiple states in the region, allowing them to immediately request disaster relief funds through the Federal Emergency Management Agency (FEMA)[1]. On the evening of October 29th, 2013, the Category 1 Hurricane Sandy[2] took a sharp turn and made landfall on eastern New Jersey. Such a perpendicular movement was unprecedented on the East Coast, as only one storm since 1870 has made direct, unmitigated impact upon New Jersey, just north of Atlantic City. Impact was aggravated by the concurrent full moon, elevating the storm surge caused by the storm's winds, at that point 70 knots, or 80 miles per hour[3]. Wave action and inundation were later assessed to be vastly more damaging than winds during Hurricane Sandy. Despite the relative modesty of the total rainfall and winds, the surge itself was beyond the scope of what had been seen or

[1] Erin Ashley and Diana Castro, "Hurricane Sandy in New Jersey and New York," Mitigation Assessment Team Report (Federal Emergency Management Agency, November 2013).

[2] With multiple alternations between "hurricane" and "tropical storm" designations and its status as a "post-tropical cyclone" in New York, many took to calling the system a "superstorm".

[3] Eric S. Blake, Todd B. Kimberlain, Robert J. Berg, John P. Cangialosi, and John L. Beven II, "Hurricane Sandy," Tropical Cyclone Report (National Hurricane Center, February 12, 2013), https://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf.

experienced before – a fact that would become woefully relevant as climate scientists, meteorologists, and planners later reflected on the damage caused by Sandy[4].

Outdoor electrical lines fell across the city and transformers exploded, leaving hundreds of thousands of residents without power for four days. One such transformer explosion, caused by contact with seawater, started a fire in Breezy Point, Queens, which firefighters were unable to reach due to flooding and eventually resulted in the destruction of 126 homes[5]. Electrical infrastructure was so badly damaged that some residents' service was not restored until January of 2013[6]. Public and private transportation were both affected by tunnel flooding, road and track damage, signal failures, and power outages. The storm, which hit New York City on a Monday evening, left schools closed for an entire week[7]. The foundations and first floors of many structures flooded considerably, which resulted in critical damage to their electrical and plumbing infrastructure. FEMA noted that many of these systems were constructed before the 1968 establishment of the National Flood Insurance Program (NFIP), which mandates that participating municipalities issue and enforce development guidelines aimed at reducing catastrophic damage in developed floodplains. As such, these systems were below the base flood

[4] Michael Bloomberg, *A Stronger, More Resilient New York.* (The City of New York, 2013), https://login.avoserv2.library.fordham.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00989a&AN=ford.2221021&site=eds-live.

[5] Rebecca Fishbein, "Massive Breezy Point Fire During Sandy Was Caused by Electrical Wires," Gothamist, December 25, 2012, https://gothamist.com/news/massive-breezy-point-fire-during-sandy-was-caused-by-electrical-wires

[6] "As Cold Snap Hits, Some Sandy Victims Still Lack Heat," WNYC News (New York, January 23, 2013), http://www.wnyc.org/articles/wnyc-news/2013/jan/23/cold-snap-hits-some-sandy-victims-still-lack-heat/.

[7] Vivian Yee, "Schools Reopen to Snarls; Transit Headaches Persist," The New York Times, November 5, 2012, https://www.nytimes.com/2012/11/06/nyregion/new-york-city-schools-reopen-after-hurricane-sandy.

elevation (BFE) and vulnerable to disruption by flooding. Wastewater management facilities, already belabored by the City's antiquated combined sewer system, experienced power outages and sewer flooding so intense that many halted operations altogether, discharging 1.6 billion gallons of untreated or semi-treated sewage into the New York Harbor[8]. Damage throughout New York City was ultimately said to be $19 billion and $50 billion in New York State[9]. The New York Stock Exchange closed for two consecutive days, the first weather-related halt in trading for that length since 1888[10].

Human Costs of Sandy

In addition to federal emergency response preparation, state and local governments did the same. Governor Andrew Cuomo issued both mandatory and advisory evacuation notices across Long Island. Similar declarations were made across New Jersey by Governor Chris Christie. Preparations in New York City, then administered by Mayor Michael Bloomberg, included preparing generators across Lower Manhattan and closing Consolidated Edison facilities in anticipation of inundation. Sandbags and deployable flood protections were placed surrounding vulnerable electrical infrastructure. Intercity evacuations, supervised by the Office of Emergency Management[11] were called by flood zone, which included Lower Manhattan south of East 39th Street and east of First Avenue, around the southern tip of the island, and continuing along the West Side Highway to West 60th Street. While no research surrounding community

8 Alyson Kenward, Daniel Yawitz, and Urooj Raja, "Sewage Overflows from Hurricane Sandy" (Princeton, New Jersey: Climate Central, April 2013), https://www.climatecentral.org/pdfs/Sewage.pdf

9 Ashley and Castro 2013, 1.

10 Eric S. Blake et. al, 18.

11 The Office of Emergency Management has since reconvened under the title "NYC Emergency Management".

responsiveness in Manhattan has been published, a comparable study was conducted six weeks following the storm by the Department of Health and Mental Hygiene in highly affected areas of Brooklyn, including the Rockaways, Coney Island, and Sheepshead Bay. Over more than four-hundred interviews, the rate of evacuation appeared to be almost exactly half of the population. Of those that did choose to evacuate, it was revealed that 47% chose to do so during or after the hurricane made landfall. The authors of the study cited a need for further research and more robust evacuation messaging to low-lying, coastal communities (Brown et al. 2016)[12].

Almost certainly in correlation with the low rate of evacuation compliance, 43 people died in New York City, primarily in the boroughs of Staten Island and Queens, and in most instances by drowning. Other causes of death were trauma sustained by falling debris, tripping, and electrocution by downed power lines. All except five were above the age of fifty, and many were considerably older. In Connecticut, Long Island, New Jersey, and the northern suburbs of New York City, 63 people lost their lives to the storm, with additional causes of death including carbon monoxide poisoning from basement generators, automobile accidents, hypothermia, and lack of access to bottled oxygen or medication[13]. One disaster relief volunteer said of public housing complexes, “There were literally thousands of elderly people trapped in the upper floors of these buildings. The hallways were pitch black. Many apartments were without functioning

[12] Shakara Brown et al., “Evacuation During Hurricane Sandy: Data from a Rapid Community Assessment,” PLoS Currents, 2016. The only finding of correlation of statistical significance between demographics and rate of evacuation was that those living on lower floors were more likely to comply with evacuation orders.

[13] Josh Keller, “Mapping Hurricane Sandy’s Deadly Toll,” The New York Times, November 17, 2012, www.nytimes.com/interactive/2012/11/17/nyregion/hurricane-sandy-map.html.

plumbing. People were living in their own feces"[14]. Investigations following the devastation of the storm revealed what could be reasonably predicted: a prevalence of trauma in the communities most affected. In speaking with survivors in Staten Island, which saw more loss of human life than any other borough, stories of post-traumatic stress disorder, survivor's guilt, and depression represent the damage more lasting than fractured infrastructure or fallen trees[15].

Initial Rebuilding Measures

Despite climate change's general association with national and international governance, municipalities are often those which face its effects most directly, in the form of extreme weather and natural disaster, rising temperatures, water scarcity, amongst other challenges. New York City has indicated its concern with this issue since at least the Bloomberg administration, when the Mayor convened the New York City Panel on Climate Change (NPCC) in 2008. The analyses made by this group were included in the *Climate Information Report* in 2009, which outlined potential effects of climate change upon the city's infrastructure. Climate change became much more tangible and urgent with a storm that matched the descriptions of the remote disasters described in the 2009 report. In January of 2013, two months after Hurricane Sandy, the NPCC issued *Climate Risk Information 2013 - Observations, Climate Change Projections, and Maps*, which was included in the comprehensive planning document *A Stronger, More Resilient New York.* The latter of these was dedicated to the 43 New Yorkers who lost their lives during

[14] John Manuel, "The Long Road to Recovery: Environmental Health Impacts of Hurricane Sandy," Environmental Health Perspectives 121, no. 5 (May 2013), https://doi.org/10.1289/ehp.121-a152.

[15] Jim O'Grady, "Emotional Trauma Part of Hurricane Sandy's Lasting Damage," Morning Edition (New York: WNYC, October 29, 2013), https://www.npr.org/2013/10/29/241548504/emotional-trauma-part-of-hurricane-sandys-lasting-damage.

the storm, and in recognition of all those whose homes, businesses and communities were damaged[16].

The report echoed sentiments the scientific community had expressed for years, namely that as human use of fossil fuels emits more greenhouse gasses into the atmosphere, our climate gradually warms, arctic land ice melts, sea levels rise, and extreme weather events become more common and unpredictable. *A Stronger, More Resilient New York* localized these phenomena. Prior to Sandy, New York City's Flood Insurance Rate Map (FIRM) – a FEMA-issued map displaying risk of flooding – was from 1983. These maps vastly understated the vulnerability of New York's coastal communities, as one and a half times as much land flooded as was predicted by FEMA. Sixty percent of buildings that flooded were outside of the 100-year floodplain[17], and lacked both awareness by residents and flood-protective construction standards. Most startlingly, it underscored the extent of damage that would have been possible had the storm hit nine hours earlier, at high tide – including the disruption of the Hunts Point Food Distribution Center, integral to the delivery of 60% of the city's food[18].

Further, *A Stronger, More Resilient NYC* laid out an extensive set of actionable proposals to prepare for climate change. All of these were guided by Mayor Bloomberg's position against retreat from the floodplain, which was inherited by Mayor de Blasio in the following years. As a matter of official policy, the City stated, "We can fight for and rebuild what was lost, fortify the shoreline, and develop waterfront areas for the benefit of all New Yorkers. The city cannot, and

[16] Michael Bloomberg, *A Stronger, More Resilient New York*, 3

[17] The "100-year floodplain" is a reference to the area flooded by the "100-year storm". This terminology is occasionally confusing, but a convenient shorthand for the "1% annual chance flood".

[18] Ibid, 222.

will not, retreat"[19]. Managed retreat (sometimes referred to by proponents as managed realignment) is a strategy which involves depopulating and de-developing low-lying coastal areas in response to sustained and repeated flooding. In cases of more active planning and intervention, natural flood defense resources are often restored, including salt marshes, wetlands, oyster beds, and breakwaters. The mangroves of the southeastern United States represent one of the largest estuary ecosystems in the world and are integral to the mitigation of the hurricanes and floods which often hit the region. Though retreat is almost entirely infeasible in densely populated islands like Manhattan, it has been attempted successfully, though with some resistance from developers and landowners in Staten Island[20]. *A Stronger, More Resilient New York* outlined a similar method of flood protection for the Lower East Side, called integrated flood management, defined by its flexibility and adaptability, and evolution away from hard features and grey infrastructure (e.g. walls), towards softer and greener components, like drainage through flood-tolerant plantings and deployable, temporary barriers[21].

The preference for this sort of infrastructure is not shared by all, however. The United States Army Corps of Engineers (USACE) has researched and advocated the construction of a harbor-wide system of flood and storm surge protection for the New York City metropolitan

[19] Ibid, 8.

[20] Three such attempts are depicted in the 2018 short documentary "Managed Retreat", by director Nathan Kensinger. The New York State Office of Storm Recovery financed these relocations and land conversions to wetlands in Ocean Breeze, Graham Beach, and Oakwood Beach.

[21] Ibid, 54.

area. Following Hurricane Sandy, Governor Cuomo indicated support for this idea[22], and it has since been scoped with a Draft Environmental Impact Statement anticipated to be released in March of 2020[23]. Though the exact location of the barriers is yet to be determined, initial proposals include closing entire New York-New Jersey Harbor with a barrier between Sandy Hook and Breezy Point, as well as closing tributaries at Jamaica Bay, Arthur Kill, and the Upper Bay at the Verazzano Bridge. Critics of such designs often point to the disruption of migratory patterns of species that enter and exit the Hudson Estuary, such as the striped bass and the Atlantic silverside, as well at the enormous associated cost of construction. The USACE intends to begin a $615 million construction of such coastal floodwalls at a smaller scale, five miles in length, off eastern coast of Staten Island.

Rebuild by Design

Allocation of federal funding following Hurricane Sandy followed a different course than it had in the wake of previous storms. Shaun Donovan, then the director of the Department of Housing and Urban Development (HUD) under President Obama, instructed his staff to commission an international design competition in mid-2013. The concept took the form of

[22] Andrew Cuomo, "New York Rising," State of the State Report (Albany, New York: Governor's Office, January 9, 2013), 227-229. https://www.ny.gov/sites/ny.gov/files/atoms/files/2013SOSBook.pdf.

[23] US Army Corps of Engineers NY District, NJ Department of Environmental Protection, and NYS Department of Environmental Conservation, "New York – New Jersey Harbor and Tributaries Coastal Storm Risk Management Feasibility Study," Interim Report (New York: US Army Corps of Engineers, February 2019), 9. https://www.nan.usace.army.mil/Portals/37/docs/civilworks/projects/ny/coast/NYNJHAT/NYNJHAT%20Interim%20Report%20-%20Main%20Report%20Feb%202019.pdf?ver=2019-02-19-165223-023.

Rebuild by Design (RBD), which convened expert opinions across disciplines with needs and land uses in specific local communities. Its objects set out to:

1. Contribute to a better understanding of the region's vulnerabilities, strengths, and interdependencies;
2. Generate design proposals that focus on regionally applicable solutions, increase resilience, develop and promote innovation, and integrate local efforts in the region;
3. Build capacity of local communities and federal agencies while promoting an integrated regional approach;
4. Connect to local efforts and strengthen the collaboration within governments and between government, business, academic, non-profit, and other organizations;
5. Ignite innovation, outside-the-box perspectives, and address new trends; and
6. Execute world-class projects with regional impact (either large scale or replicable across the region).

RBD was launched concurrently with the announcement of the Obama Administration's Climate Action Plan of 2013, which directed agencies to support local climate-resilience[24] measures, and explicitly named the competition as a pilot for innovative strategies to "to strengthen communities against future extreme weather and other climate impacts"[25]. Despite only accounting for $930 million of the $13 billion section of the set aside for Sandy reconstruction in the Community Development Block Grant as Disaster Recovery (CDBG-DR), Donovan has

[24] The words "resilience" and "resiliency" have no substantive difference and are used interchangeably. Except when quoting source material directly, I use "resilience" here.

[25] Barack Obama, "The President's Climate Action Plan," Policy Report (Washington DC: Executive Office of the President, June 2013), 14. https://obamawhitehouse.archives.gov/sites/default/files/image/president27sclimateactionplan.pdf.

spoken about the resistance with which RBD was met. Internally, HUD attorneys were concerned with the complex legal framework for the implementation of disaster funds, and externally lawmakers from affected districts in Congress were appalled at the expenditure of disaster funds on design and research[26]. To circumvent these issues, HUD partnered with the Rockefeller Foundation, which administered the competition and covered the associated costs of contracting the work of design and architecture firms across the world[27]. HUD would then allocate the $930 million dollars of award funding to the municipalities to begin implementation.

HUD released a Request for Qualifications in June of 2013, seeking interested teams with the ability to demonstrate professional expertise in at least three of the following: "infrastructure engineering, landscape design, urban design, architecture, land use planning, community development, communications design, public finance, or real estate", as well as to include an institutional research partner. After the Hurricane Sandy Rebuilding Task Force selected ten teams, they were each awarded $100,000 to visit sites and begin research including assessment of local ecology, surveying and community outreach. A subsequent dispersal was to be made in the same amount to complete a finished design. Acknowledging the different rates of municipal adoption and project implementation, the initial RBD project description did not impose a deadline, although one was later imposed, requiring that all federal funding be allocated for

[26] "Lessons from Rebuild by Design" (Panel Discussion, September 17, 2019), http://www.rebuildbydesign.org/news-and-events/events/lessons-from-rebuild-by-design-with-shaun-donovan-and-kate-orff.

[27] The Rockefeller Foundation emerged as the philanthropic partner for Rebuild by Design as a result of its opening and operation of 100 Resilient Cities, a non-profit that established the office of Chief Resilience Officer in cities across the world and connected them to collaborate on resilience policy and design. The Rockefeller Foundation, which intensively invests in non-profits for a short, fixed period, expects that they become financially self-sustaining. When 100 Resilient Cities failed to do so, it was closed in 2019. The role these Resilience Officers will play without the centralized network is yet to be seen.

expenditure by September of 2019. Winning projects, located in Bridgeport, Connecticut, Hoboken and Meadowlands, New Jersey, and Hunts Point, Long Island, Manhattan, and Staten Island, New York, are all currently in different stages of review, permitting or construction.

East River Park

East River Park opened in 1939, in tandem with the Franklin Delano Roosevelt Drive ("FDR Drive"). The two were designed and constructed together, envisioned and executed by Robert Moses, then the Commissioner of the New York City Parks Department and the Chairman of the New York State Council of Parks, two years before his ascent to the chairmanship of the New York City Department of City Planning. The land, once a tidal salt marsh before the expansion of New Amsterdam, was covered with docks and ports through the 19th and early 20th centuries. Maritime trade, an integral element to the development of New York City's economy, eventually began to migrate to ports with deeper waters as ships grew larger. The decline of shipping on the lower East River resulted in subsequent residential development of the waterfront, primarily by high-rise tenements. Recognizing the high residential density and minimal access to parkland, as well as the growing use of private automobiles, Moses began to design a highway along the east side of Manhattan and a park beyond that in the early 1930's.

Using a combination of infill and land acquisition, Moses was able to erect what was then one of the largest parks in Manhattan, although it progressively shrunk with expansions of the FDR Drive in 1949 and again in 1963. In 2001, John V. Lindsay was added to its name, formally John V. Lindsay East River Park, in honor of the mayor one year following his death. The park spans from East Montgomery Street on its south end to East 12th Street on its north, where it then connects to the Captain Patrick J. Brown Walk, a thin waterfront pedestrian and cyclist path

that passes the 14th Street Con-Ed substation and leads to the 1.9 acre Stuyvesant Cove Park. Access to East River Park is limited by the FDR Drive, and bridges connect to the surrounding neighborhood only at Corlears Hook Park, Delancey Street, Houston Street, and East 6th Street. These bridges connect to a wide, paved road that runs alongside the FDR Drive, and is used by pedestrians, cyclists, and service vehicles. To its east, the East River Promenade, a concrete bulkhead that replaced the wood boardwalk that preceded it, opened in early 2012. The Williamsburg Bridge, which looms over the southern reach of the park, is one of its defining visual elements. The interior of the park itself consists of a combination of active and passive recreation spaces, including ballfields, tennis courts, two splash pad water features, barbeque areas, a track, and three comfort stations. In the summertime, the park is a popular and widely visited for fishing, grilling and reunions, sports, and other forms of recreation.

Hurricane Sandy did a considerable amount of damage to East River Park on its path into the neighborhood. London Plane Trees, the leaf of which adorns the logo of the Parks Department, was a favorite of Moses. Despite being a non-native hybrid between the sycamore and the oriental plane tree, it is still widely planted by the City for its resistance to pollution, which causes its bark to fall off, revealing its patchy green core. However, given that these trees are not endemic to flood-prone areas like coastal marshes or mangroves, brackish and saltwater brought in by Hurricane Sandy caused many to die, in addition to those brought down by wave and wind action. Electrical outlets, lighting, sprinklers, pavement, fields, and other plants were damaged by the storm as well. Many of these issues were insufficiently addressed, or were neglected altogether, as the licensed steward of East River Park, the Lower East Side Ecology Center, is only supported by two full-time Parks Department employees and the Center's volunteer network.

The BIG U

The team with the winning project for Lower Manhattan was led by the Danish architecture firm Bjarke Ingels Group, from which the name of the project, the BIG U was derived, a reference to the "U" shape of the lower portion of the island. In addition to Bjarke Ingels Group, the team was composed of the Regional Planning Association, the Municipal Arts Society of New York, and the School of Constructed Environments at Parsons School of Design[28]. The proposal, which is publicly available, begins by outlining a philosophy centered on combining the elements of participatory community organizing of Jane Jacobs' with the efficiency and scale of Robert Moses. To accomplish this, the design process was guided by the principle of multifunctional, integrative resilience, connecting social, economic, infrastructural, and ecological resources and issues. In addition to the principles guiding the Rebuild by Design competition, the BIG team instituted their own, including:

1. Flood protection and preparation are not a mere line of defense; they must take entire neighborhoods and districts into account.
2. The design should be community-driven.
3. The system should be compartmentalized and should be able to be built incrementally.
4. Physical resiliency should be combined with social resiliency.
5. The requirements of different sectors (housing/transit/energy/urban development) should be addressed by one solution.
6. Flood protection should be tied to community benefits (better open space, better access to housing, jobs and education, lower insurance rates, possibilities for growth), allowing

[28] Other architecture and design firms contributed, including One Architecture and Urbanism, Starr Whitehouse, Buro Happold, Level Agency for Infrastructure, James Lima Planning and Development, Green Shield Restoration Ecology, AEA Consulting, and Arcadis.

government investment to be leveraged with local and sectoral funding in a Resilient Community District.

The BIG U divided Lower Manhattan into three "compartments", each with distinct neighborhood characteristics, risks, and needs. These were Compartment 1 (LES North-East River Park), from East 23rd Street to Montgomery Street, Compartment 2 (Two Bridges), from Montgomery St to the Brooklyn Bridge, and Compartment 3 (The Battery-Financial District), from the Brooklyn Bridge to the Battery. In Compartment 1, community vulnerabilities noted in the proposal include "Hospital Row" - the string of hospitals along First Avenue between 23rd and 34th Streets - the 14th Street Con-Ed plant, and the density of affordable housing immediately bordering the waterfront.[29] Of the Lower East Side, the BIG team observed the primacy of residential development, its concentration of rent-controlled, stabilized, or publically-owned units, the diversity, both racial and economic, as well as its disproportionate lack of access to transportation, public green space, social institutions (libraries, museums, etc.), and waterfront access[30]. It also observed the range of existing community plans and projects, from the 2004 Community Board 3 (CB3) Waterfront Report and the 2009 plan by the NYC Economic Development Corporation (NYC EDC) for the waterfront esplanade in Chinatown and the Lower East Side. The People's Plan, published by Organizing and Uniting Residents (O.U.R.) Waterfront Coalition responded to EDC's proposals by advocating greater access, affordability, and local control in the face of post-9/11 gentrification through those two

[29] US Department of Housing and Urban Development et al., "The Big 'U' - Promoting Resilience Post-Sandy Through Innovative Planning, Design, & Programming," Design Proposal (Rebuild by Design, June 2014), 41. http://www.rebuildbydesign.org/data/files/675.pdf.

[30] Ibid, 52-59.

neighborhoods, pointing out that many long-term stakeholders hadn't been consulted regarding their needs or desires[31]. The plan resulted in the transfer of the vacant, neighboring Pier 42 from NYC EDC to the Parks Department[32]. The BIG U drew on each of these plans, seeking to reconcile the City's technical surveying with the concerns raised by Lower East Side residents who weren't receptive to the City's various plans throughout the 2000's.

These initial observations were reaffirmed as concerns expressed in participatory workshops with residents in local community spaces. The design team gathered and interviewed residents primarily through LES Ready, a coalition of twenty-six community-based organizations formed to promote disaster preparedness and response following Sandy. The first series of meetings gave residents the opportunity to respond to an initial palette of flood protection options, as well as to demonstrate their own ideas by drawing on maps or manipulating physical models. Feedback was taken verbally and through written statements, and interpretation was provided in Spanish and Mandarin. A second series of workshops was held a month later, in which the original attendees and newcomers were presented with refined and further articulated models, maps, and renderings of the proposals they had previously expressed interest in. Representatives from the Department of City Planning and the Manhattan Borough President's Office were present throughout each workshop to provide expert opinion, as well as to gauge the community's. In Compartment 1, the portion of the BIG U primarily based in East

[31] People's Plan citation. OUR Waterfront was composed of CAAAV Organizing Asian Communities, the Urban Justice Center's Community Development Project (UJC), Good Old Lower East Side (GOLES), Jews for Racial and Economic Justice (JFREJ), Public Housing Residents of the Lower East Side (PHROLES), Hester Street Collaborative, the Lower East Side Ecology Center, Two Bridges Neighborhood Council and University Settlement. Many of these would later be named stakeholders in the BIG U and the ESCR project.

[32] Pier 42 remains unconstructed today and is closed off by fencing. It's construction and opening are being offered as mitigation for the construction effects of ESCR.

River Park, a few basic design concepts were used to start the ideation process (Figure 1). Using a basic seven-foot wall was widely unpopular, as it limited both park and water views, further reduced the sense of access to the park, and diminished the sense of safety by hiding park users from the view of the buildings on the other side of the roadway. However, changes in grade to the park, creating elevated land features, or building a programmable berm were more appealing. While this was offered on both the east and west sides of the park, the response was strongly in favor of doing so along the FDR Drive, with many interested in decking, a process in which an elevated park is built above a lowered highway.

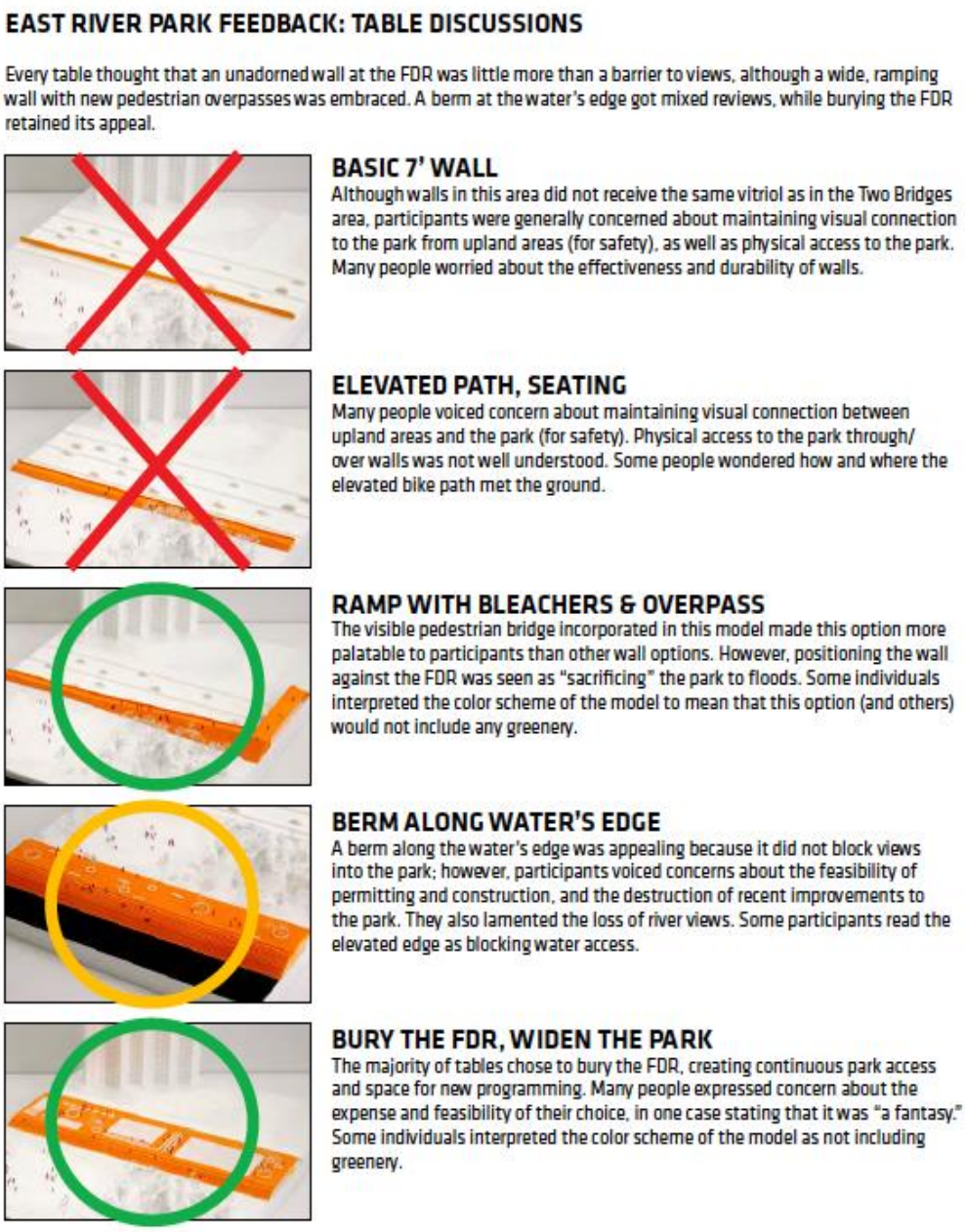


Figure 1. Basic design options considered in Rebuild by Design workshops.



Figure 2. Final Rebuild by Design proposal for East River Park flood protection.

Ultimately, the final proposal for Compartment 1 was to include a multifunctional "bridging berm", connecting the neighborhood to the park through a set of wider, more accessible, landscaped bridges. The berm would sit atop the shared pedestrian and service road, the original point of arrival into the park, and foot and cycle traffic would be redirected to a winding path lined with benches at the base of the berm (Figure 2). Waterfront access would be improved with a water filtering "harbor bath", an additional fishing pier, and a kayak wharf. Native plantings, more likely to survive a saltwater and more capable of mitigating the effects of storms, would replace older, non-native ones. It also included a flyover bridge, eliminating the "pinch point" where the Captain Patrick J Brown Walk is squeezed to a mere three feet path between the roadway and the Con-Ed substation. The proposal outlines options for a long-term expansion of the park, following construction or upon the availability of additional funding. Amongst these were extending the park above the FDR Drive, and a light-rail transit upon, along or within the berm.

In Compartment 2, where the FDR is elevated and there is no existing park space, residents were most receptive of the idea to install flip-down, retractable walls that could be deployed in extreme weather events, as well as a permanent set of undulating bleachers that would obstruct the flow of water in less intense ones. This area under the elevated FDR Drive would be filled with "urban furniture", including benches and simple recreation spaces. The flip-down walls could also be activated during the winter, blocking the neighborhood from the harsh winds off the East River and creating a semi-covered pavilion for a winter marketplace, operated by local vendors. A long-term intervention the proposal also recommended and intended to lay the groundwork for was to move the NYCHA and City-owned parking lots along South Street underground and leaving a similar, Compartment 1-like berm in their place. In each

Compartment, the BIG team called for upland flood resilience measures as well, including the planting of more street trees, creation of bioswales, addition of green roofs, wet-proofing of the first floor of residential structures, regrading of NYCHA campuses, and the expansion of the role and capacity of community centers. The BIG U was named one of the winners of the Rebuild by Design competition in June 2014, and the City of New York was awarded $335 million for its implementation.

With regards to East River Park from the summer of 2014 to March of 2018, as geotechnical surveying, inspections of the park's underlying sewer network, and hydrological analyses became available, the structural and mechanical engineering of the proposal became clearer. Now included in the plan were expansions to the seventeen sewer outfalls that run underneath the park, and a parallel conveyance system, designed to redirect water from heavily saturated areas to others through a series of subterrestrial pipes. Throughout this period, the Department of Design and Construction (DDC), the Parks Department, and the Mayor's Office for Resiliency and Recovery (ORR) led twenty-nine community workshops to refine the details of the proposal offered by the BIG U. The progress of these meetings, which used many of the same models, maps, and renderings as those which were conducted in 2013, was then reported back quarterly to the Joint Waterfront Task Force, which consisted of members of Community Boards 3 and 6. In New York City, community boards are advisory bodies constituted of volunteer residents, who are nominated half by the borough president and half by the district's councilmember. They are the first step in the political process of the Uniform Land Use Review Process (ULURP) and are often the venue where the finest and most local details of development projects are finalized.

In March of 2018, the Parks, Recreation, Cultural Affairs, and Waterfront Committee of Community Board 3 committed to vote for the existing design, granted that the team would integrate: basketball courts; historical and educational references to Hurricane Sandy, ecology, and resilience; construction performed with recycled materials; greenery in certain paved areas; solar and wind energy lighting; and preventative measures to discourage skateboarding[33]. The expectation was that these issues would be corrected before the formal filing of a ULURP application, and that the City would remain on its stated construction timeline of a Spring 2019 groundbreaking and park reopening in 2024.

Design Overhaul by DDC

In October of 2018, Mayor's Office announced a change in the fundamental concept design, switching to one that no longer left the park in the floodplain as a means of flood protection, but instead elevated it by eight to ten feet altogether, keeping the park out of the zone of inundation for the 100-year storm in 2050. To justify the change, the City cited "value engineering report" they had conducted internally that year, which stated that the night-time piledriving necessary on the west side of the park would be highly disruptive to the neighboring NYCHA developments. Instead, the City said, piledriving and delivery of the fill necessary to raise the park would be performed by barge, rather than trucks moving through the neighborhood. Additionally, the new plan was stated to take a full year less to construct, with flood protection implemented by the 2023 hurricane season[34]. In making these changes, the cost

[33] "CB 3 Does Not Support East Side Coastal Resiliency Design Unless Noted Changes Are Made," § March 2018 Full Board Minutes (2018), https://www1.nyc.gov/html/mancb3/downloads/minutes/minutes2018-03.pdf.

[34] Office of Mayor Bill de Blasio, "Fact Sheet: De Blasio Administration Announces Faster, Updated Plan for East Side Coastal Resiliency Project," Press Release, September 28, 2018,

of construction rose from $750 million in the original proposal to $1.4 billion in the new one, with the requisite additional funding to come from the City. The value engineering report remains unreleased, leaving room for speculation surrounding the motives for the change. Following the press release, there was no further communication from the City about the details of how it intended to proceed.

Following a December design presentation to the Community Board[35], City Councilmembers were given a chance to question the Parks Department and DDC about the new design in January of 2019[36]. The hearing was so well attended by concerned park users and waterfront residents that it was moved to the full Council chambers from a smaller committee room. Councilmember Carlina Rivera, a former community organizer with Good Old Lower East Side (GOLES) and the representative for the district, rallied with protesters who held signs reading "Don't bury our park!" and "Viva East River Park"[37]. Aware of the sense of abruptness and lack of transparency felt by those who had participated in Rebuild, DDC Commissioner Lorraine Grillo began her testimony with an apology to Rivera and the residents of the Lower

https://www1.nyc.gov/office-of-the-mayor/news/493-18/fact-sheet-de-blasio-administration-faster-updated-plan-east-side-coastal.

[35] NYC Department of Parks and Recreation et al., "East Side Coastal Resiliency - Interactive Community Engagement Meeting" (Project Update, December 11, 2018), https://www1.nyc.gov/assets/escr/downloads/pdf/181211-ESCR-CE-PRESENTATION.pdf.

[36] "Hearing on East Side Coastal Resiliency" (2019), https://legistar.council.nyc.gov/View.ashx?M=F&ID=7006747&GUID=C2EECDEB-053E-4548-8598-F7C7BB2B5E2E.

[37] Sydney Pereira, "Revamped East Side Flood Protection Plan Debated at Packed City Council Hearing," *Curbed New York*, January 24, 2019, https://ny.curbed.com/2019/1/24/18195342/manhattan-east-side-coastal-resiliency-city-council-hearing.

East Side, assuming personal responsibility for the confusing transition. However, she also commented that while the East River Park design had been altered, the rest of the project remained "basically the same"[38]. Though it was not further addressed in the testimony presented by the agency commissioners, this view indicated the City's intention to pursue the same timeline and to advance the project without dwelling on its changes. When asked to further describe the decision to Agency and administration representatives cited the ability under the new plan to upgrade the combined sewer system which runs under the park, as well as to perform necessary repairs to the bulkhead[39]. They also pointed to the long-term costs associated with maintaining a park in the floodplain[40]. With regards to constructability, Grillo stated that the decision "had nothing to do with protecting traffic or keeping the FDR open", but that closing and reopening the outermost lane of the FDR for nighttime construction would be prohibitively time-consuming and expensive[41]. In response, many questioned why the lane couldn't just be permanently closed to enable daytime construction and a faster reopening of the park. Three months later, in March of 2019, the announcement of the details of the state's congestion pricing program also sparked skepticism about the true motives behind the design change, as the drivers

[38] "Hearing on East Side Coastal Resiliency" (2019), 73.

[39] NYC Office of Management and Budget and NYC Department of Parks and Recreation, "Chapter 5.8 - Water and Sewer Infrastructure," Final Environmental Impact Statement (US Department of Housing and Urban Development), https://www1.nyc.gov/assets/escr/downloads/pdf/FEIS/ESCR-EIS-Chapter-5.8-Water-and-Sewer-Infrastructure.pdf. This would allow the Department of Environmental Protection to make progress on its Combined Sewer Overflow Abatement Program and Combined Sewer Overflow Long-term Control Plan with the NYS Department of Environmental Conservation.

[40] "Hearing on East Side Coastal Resiliency" (2019), 79.

[41] Ibid, 25.

on the FDR will not be charged, leading some to believe the City and state are prioritizing the highway above parkland[42].



Figure 3. Ayo Harrington of East River Alliance speaks alongside Councilmember Rivera on the steps of City Hall. (Photo by Naomi Schiller)

[42] Winnie Hu, "Over $10 to Drive in Manhattan? What We Know About the Congestion Pricing Plan," *New York Times*, March 26, 2019, https://www.nytimes.com/2019/03/26/nyregion/what-is-congestion-pricing.html.

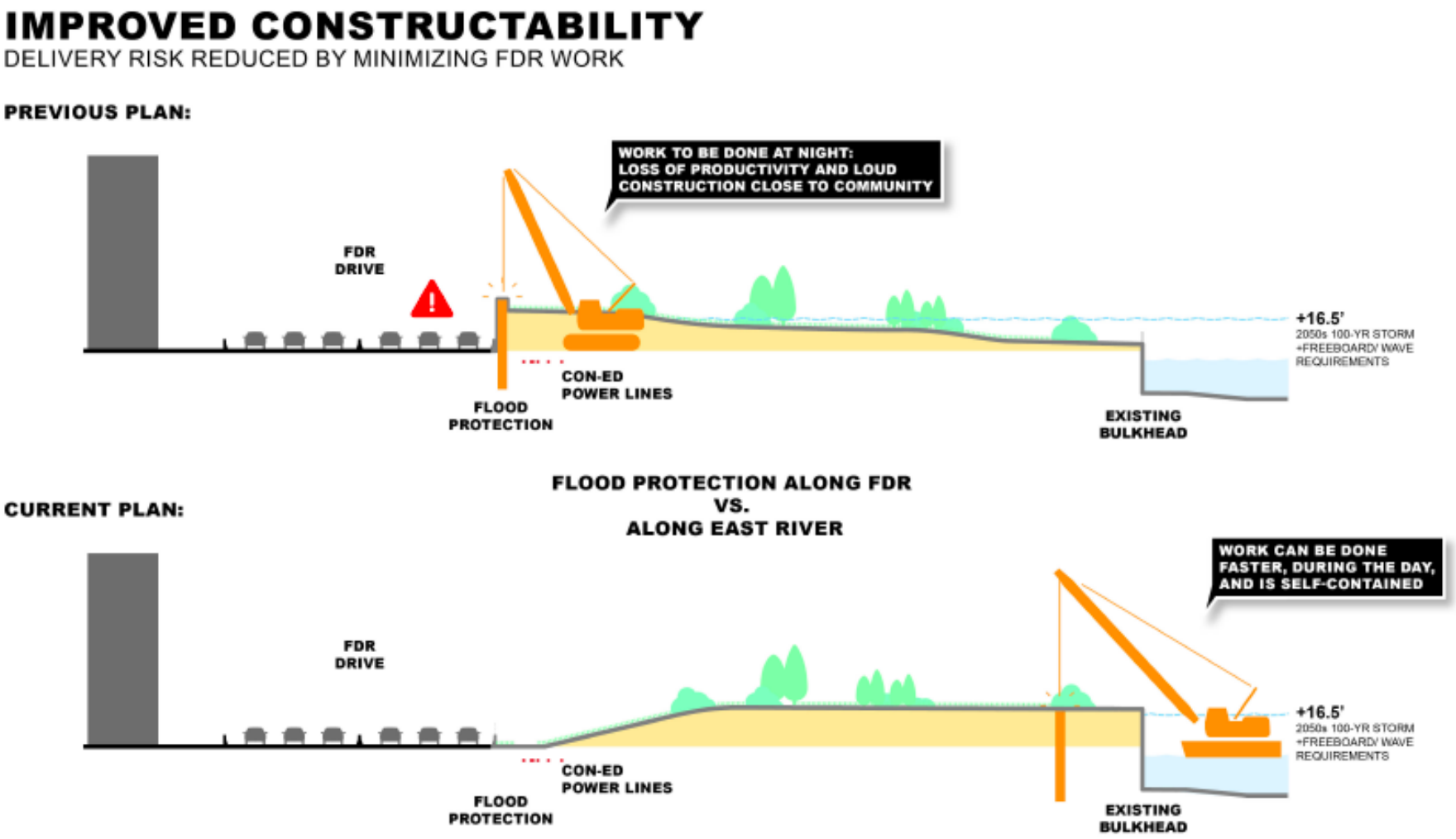


Figure 4. Slide from December 11, 2018 presentation by lead agencies to Community Board 3.

	Big U	DEIS Preferred Alternative 4 Flood Protection System with a Raised East River Park
Design approach	Line of flood protection is located on western side of park; extensive use of levees and earthwork floodwalls along FDR Drive	Park is elevated 8-9 feet above current elevation to 16.5 feet NAVD88; Flood protection system is installed below grade; Line of flood protection is moved eastward into park
Protects neighborhood through	2050s	2050s
Trees lost in construction	Undetermined	981 trees
Native + salt-tolerant species	Yes	Yes
Wetland loss	260 sq ft	29,982 sq ft.
Estimated cost	$760 million	$1.45 billion
Land grade	Rising and falling along undulating berm	Flat landscape maintained with slight downward slope
Phased construction	Assumed but uncomfirmed	Initially no, until October 3, 2019
Artificial wetlands	Yes	No
Esplanade	Uneffected	Reconstructed
Amphitheater	Restored	Reconstructed at direction of Amphitheater Task Force
Fire Boat House	Uneffected	Initially unaddressed, later determined to be wet-floodproofed
Access improvements	Construction of six new land bridges, reconstruction of three existing	Cement reconstruction of three existing bridges
Waterfront access	Improved embayments with direct water stepdowns	Rebuilds existing embayments at bridge landings
Active vs. passive recreation	Unspecified increase of passive on undulating berm	2.87 acres of passive space replaced with active

Figure 5. Chart comparing BIG U proposal to City's Preferred Alternative 4.

Reactions to Design Change and Community Organizing Efforts

Almost immediately, many residents who had attended meetings and contributed their ideas and concerns over the previous four years reacted with anger and confusion to the new design being presented to them. Initial concerns surrounding the new designs included: the extensive losses to wildlife habitat, including 1000 mature trees; the destruction of recently-finished construction on the track and the esplanade; the replacement of passive recreation space with active, synthetic turf fields; the lack of accommodation in the short or long-term for the LES Ecology Center and the historic structure in which it operates, the East River Park Boat House; loss of access to the waterfront for fishing due to elevation. As details were revealed over the course of subsequent community board hearings, opponents to the plan pointed to construction effects, namely: the possibility of a decline in air quality as a consequence of the use of infill; the lack of interim flood protection measures; skepticism regarding the city's ability to complete the project according to the 3.5 year timeline; lack of interim access to open green spaces or recreational fields; noise pollution, and the release of contamination in soil and groundwater from historic land uses. Overarching, conceptual grievances with the project also aired were: its planning for moderate-risk sea-level rise estimates for 2050, seen as only a few years after the conclusion of construction on a realistic timeline; the doubling of the cost, and the ubiquitous claim in low-income, minority-majority neighborhoods facing major redevelopments - the potential for changes in neighborhood character and demographic composition, following interest by commercial real-estate developers.

In February of 2019, a group of local residents convened at a community center in order to discuss their options for political resistance to the plan on these grounds. Those present decided to formalize their organization under the name East River Alliance (ERA). The group

was composed of regular park users, community organizers, and tenants of waterfront developments. This group was composed of a wide range of subgroups and factions, all of which opposed the City's iteration of the coastal resiliency plan. At one end of the spectrum, the primary concern was the loss of nearly all terrestrial natural resources and biodiversity in the park. In general terms, these activists tend to be whiter, wealthier, and older. From this perspective, there is an inherent value to the existing park, wrapped up in its history and cultural significance on the Lower East Side, and their messaging reflects this. In posters, protest signs, and sidewalk chalk graffiti, "save our park" is the most common refrain. On the other end of the spectrum is a group which is principally opposed to the "modernizing" of the waterfront because of the potential of such an action to change the character of the neighborhood, make the property more desirable, and eventually lead to displacement. These members of East River Alliance are more often people of color, of lower socio-economic status, and live in NYCHA developments. Both groups shared many of the same worries about the cumulative effects of construction, the unlikelihood of its timeline, and the social, emotional, and health consequences of the loss of the largest open space in the area. However, tensions quickly emerged along the lines described here, as the Alliance's factions struggled to determine what their explicit positions and demands would be.

Through both their demographics and their "save the park" campaign, the environmentally oriented wing of the group was occasionally accused of NIMBYism, both by those on the opposite end of the Alliance and by proponents of the plan. This acronym has in recent years become a ubiquitous criticism of those who advocate for affordable housing, climate adaptation, or economic development, until it is proposed for a nearby area and would have implications upon their way of life. In this particular case, the moniker is especially damning, as

the population most affected by flooding was low-income people of color, and the ESCR project has been undertaken with the intention of preventing such damage from occurring again. Yet, members of ERA have frequently claimed that the City deliberately pits various neighborhood interests against one another and stands to benefit from a fractured opposition, as it can advance the plan without facing an organized response. In doing community outreach to raise awareness of the project, ERA collected thousands of signatures from park users, many of whom were indeed NYCHA tenants, some of which did become members of the group. Still, internal dissatisfaction over the style of activism and tone of its messaging eventually led to a split in the early summer of 2019, and the formation of a new group, East River Park ACTION (ERPA). ERPA uses protest, art, and sought to defend East River Park in its current form. ERPA allies with Reverend Billy and the Church of Stop Shopping, and Earth Celebrations, two environmentalist performance groups. East River Alliance, for its part, instead demands mitigations, including improved transparency and a return to a participatory process, phased construction, support for the Lower East Side Ecology Center, and a neighborhood-led stewardship model in the completed park. Both groups regularly attended Community Board 3 and 6 meetings, private meetings with City Councilmembers, and independent forums, including those hosted by the Grand St Dems.

These groups have, to date, achieved two main victories through the variety of methods thus described. One demand, which was prevalent amongst even those who defended the plan's new iteration, was that its construction be performed in phases. This approach would leave segments of the park open, with their construction performed after the completion and reopening of those before it. This was often raised as an issue of environmental justice, which held that given that access to green and public space on the Lower East Side is less than half of the

citywide standard, closing its only large park would further marginalize the community[43]. While the agencies frequently reminded critics that phasing was being investigated, they maintained that they had not found a way to make it feasible. After months of advocacy, Mayor de Blasio personally announced, following an impromptu and unannounced walk through of the park[44] that at least some of the park would remain open during construction[45]. The details of the phased construction were announced the following day, at the October 3rd City Council hearing.

The second of these victories was the review of the plan by an outside, independent analyst. This demand was supported by Borough President Gale Brewer and Councilmember Carlina Rivera, who revealed that they had spent $30,000 to initiate such an investigation. Councilmember Rivera, skeptical about the project but unwilling to reject it outright, granted the request of activists from ERPA commissioned an independent review in early September. This was advocated for by the Borough President as well, who paid for the investigation by Dr. Hans Gehrels of the Dutch hydrology and infrastructure firm Deltares. Though the independence of this review came into question weeks later, following the announcement of the same firm's

[43] The Lower East side has 0.42 acres of open space per 1000 residents, falling short of the standard set out in PlaNYC of 1 acre per 1000 residents. The neighborhood does have more community gardens than any other neighborhood in New York City, in large part due to lot vacancies through the 1980s, which were reclaimed by "guerrilla gardening". Still, between these and the neighborhood's pocket parks, it is deficient in open space, canopy cover, and permeable surfaces, all of which have both social and hydrological repercussions. http://www.ny4p.org/client-uploads/pdf/OSI/NY4P_Open_Space_Index.pdf

[44] Sydney Pereira, "Mayor Blows Off Resiliency Meeting With Pols For Walk In The Park," *Patch*, September 28, 2019, https://patch.com/new-york/east-village/mayor-blows-resiliency-meeting-pols-walk-park.

[45] Office of Mayor Bill de Blasio, "Mayor Announces Plan to Keep Nearly Half of Park Open Throughout Construction of East Side Coastal Resiliency Project," Press Release (New York City: Mayor's Office, October 2, 2019), https://www1.nyc.gov/office-of-the-mayor/news/454-19/mayor-plan-keep-nearly-half-park-open-throughout-construction-east-side-coastal.

consultancy on the Lower Manhattan Coastal Resiliency project, Brewer and Rivera quickly released a joint statement affirming their confidence in the analyst's ability to objectively assess the engineering of the park elevation[46]. After conducting six weeks of interviews with local activists, organizations, and the City's agencies, the report was released with conclusions akin to those of ERA and ERPA, but not ultimately stating whether the BIG U or the City's plan would provide better flood protection.

Gehrel's recommendations were: to improve transparency and stakeholder engagement; to monitor for air quality impacts and to make the results available publicly; that the City release that provide evidence for the analysis underlying the Final Environmental Impact Statement; to further investigate of Interim Flood Protection Measures (IFPM) during the construction period; to phase construction for continued use of portions of the park with additional open space mitigation, and; to raise the park with additional clean fill for future flood protection against sea level rise[47]. Each of these conclusions aligned with community demands, except for the second and the last. The "evidence for the analysis underlying the Final Environmental Impact Statement" referred to here is the value engineering report, the unreleased study conducted by DDC which they cite as the impetus for the change to the park elevation plan. Given this recommendation and the absence of a final ruling between the Preferred Alternative and

[46] Office of Manhattan Borough President Gale Brewer and Office of Council Member Carlina Rivera, "Joint Statement by Brewer and Council Member Rivera on the Lower Manhattan Coastal Resiliency Program Announced by the EDC," Press Release (New York City, October 7, 2019), https://www.manhattanbp.nyc.gov/joint-statement-by-borough-president-gale-a-brewer-and-city-council-member-carlina-rivera-on-the-lower-manhattan-coastal-resiliency-program-announced-by-the-edc/.

[47] Johannes Gehrels, "East Side Coastal Resiliency Project Review," Engineering Study (New York City: Deltares USA, October 10, 2019), 48-50. https://www.manhattanbp.nyc.gov/wp-content/uploads/2019/10/East-Side-Coastal-Resiliency-Project-Review-final.pdf.

Alternative 3, which most closely resembled the BIG U design, many inferred that this meant the City didn't provide the independent analyst with the necessary documentation to make a decision. When asked in a subsequent Community Board meeting why these documents weren't provided, Brewer said she was working to procure it from the agencies, but they were not forthcoming, and that the value engineering report is actually a series of many documents. By this point, though, the ULURP was already well into the time allotted for City Council to schedule its hearing and vote on the matter. To date, they have not been released and Brewer and Rivera have signed off on the plan.



Figure 6. "Bury the Plan, Not the Park" rally, led by ERPA, Reverend Billy and the Church of Stop Shopping, and Earth Celebrations on September 21, 2019. (Photo by Olivia Bensimon)



Figure 7. Ceremonial burying of new ESCR plan at September 21st rally. (Photo by Susan Loeb)



Figure 6. Young protestors protest in East River Park.(Photo by Stacie Joy)

Environmental Review under NEPA

One of the review processes the ESCR project is subject to is the production of an Environmental Impact Statement (EIS). This process was established by the passage of the National Environmental Policy Act of 1970, which mandates that all federally funded infrastructure projects assess their overall and cumulative effects on surrounding ecosystems, as well as ensure compliance with EPA regulations. The process of compiling an EIS in New York City is detailed in the City Environmental Quality Review (CEQR) Technical Manual. The scope of analysis must include: Land Use, Zoning, and Public Policy, Socioeconomic Conditions, Community Facilities and Services, Open Space, Shadows, Historic and Cultural Resources, Urban Design and Visual Resources, Natural Resources, Hazardous Materials, Infrastructure, Solid Waste and Sanitation Services, Energy, Transportation, Air Quality, Greenhouse Gas Emissions, Noise, Public Health, Neighborhood Character, and Construction Impacts. After submitting initial analyses of these factors, project administrators, often state or local government agencies, must then allow for a period of public comment and hold public hearings. After these are submitted, each are to be compiled and responded to in the Final Environmental Impact Statement, which then serves as a tool to guide decision-making within the political system. The City's Draft EIS for the ESCR project was published on April 5th, 2019, and the Final EIS was issued on September 13th, 2019. Other federal processes which occur largely out of the view of the public are Action Amendments filed with HUD to update them on project completion, as well as permitting for construction in estuary waterways with the National Oceanic and Atmospheric Administration (NOAA) and the US Army Corps of Engineers (USACE).

The Draft EIS was where many of the plan's details were revealed, including the extensiveness of canopy and habitat loss, the intention to leave the East River Park Fire Boat House at its existing grade, the new configuration of ballfields and park programming, and the reconstruction of the promenade's two embayments. However, these points were shrouded in thousands of pages of text, produced in collaboration with three contracted firms. To the outrage of many activists, especially those with ERPA, the report on natural resources was based on analysis from two contractors and based on a series of short walk-throughs over the course of one summer. The Environmental Justice chapter, a mandate included by a series of executive orders from President Clinton, also evoked strong criticism, as it expanded the study area from the half or quarter mile used in other sections to a full mile radius. Consequently, wealthier and whiter census tracts in Murray Hill, Kips Bay, Gramercy, and Union Square were included. In the chapter's conclusion, it is stated that, "the proposed project would not result in any disproportionately high and adverse effects on minority or low-income communities for any of the analyzed alternatives"[48]. With a smaller study area like the one used in almost every other chapter of the EIS, this conclusion wouldn't have been possible. NYS Attorney General Letitia James independently arrived at the same conclusion, which she formally submitted as a comment, arguing, "The Draft EIS's environmental justice analysis and its treatment of impacts to open-space uses, tree canopy and air quality do not meet the requirements of the federal, state and New York City law governing environmental review. Those treatments are also arbitrary and

[48] NYC Office of Management and Budget and NYC Department of Parks and Recreation, "Chapter 5.11 – Environmental Justice," Final Environmental Impact Statement (US Department of Housing and Urban Development), 1. https://www1.nyc.gov/assets/escr/downloads/pdf/FEIS/ESCR-EIS-Chapter-5.11-Environmental-Justice.pdf

capricious in violation of federal and state administrative law requirements"[49]. The City responded extensively to these comments in defense of their analysts' credentials and methodology. However, community members who had submitted comments making similar assertions received brief responses, in many cases only two words: "comment noted"[50].

One requirement of the EIS process is that the authors draft and describe at least one possible project alternative. The environmental impact statement produced by the City had five. Alternative 1 was the "no action" alternative, or the control variable used to describe what environmental consequences would occur as a result of maintaining the status quo. Alternative 2, or the "West Side Protection Baseline" would construct a ten-foot wall along the FDR Drive and replace bridges entering the park to improve accessibility at a cost of $455 million. Alternative 3, at $1.2 billion, which most closely resembled the Big U proposal would use land berms instead of walls to reduce the blight of Alternative 2's walls. Alternative 3, however, would necessitate the removal of 776 mature trees, only 215 fewer than Alternative 4, the City's preferred approach of elevating the park. It would also elevate each ball field, turf, basketball and tennis court, many of which had been only recently installed and opened. The EIS stated that Alternative 3 alone would jeopardize the ConEdison cables which run underground along the west side of the park. Alternative 5 took the same elevation approach as the Preferred Alternative but diverged in its plan for Stuyvesant Cove Park. Each Alternative included renovations and

[49] NYC Office of Management and Budget and NYC Department of Parks and Recreation, "Chapter 10.0 – Response to Comments on the DEIS," Final Environmental Impact Statement (US Department of Housing and Urban Development), 121 and 152. https://www1.nyc.gov/assets/escr/downloads/pdf/FEIS/ESCR-EIS-Chapter-10.0-Response-to-Comments-on-the-DEIS.pdf

[50] Ibid, 33, 81, 101, and 131.

improvements to the sewer system to raise drainage capacity. All were predicted to be completed in five years except the Preferred Alternative, which would take three and a half[51].

Shortcomings of EIS Process

Various shortcomings in the EIS process became apparent in the course of the East Side Coastal Resiliency Project. Central amongst these is the almost inevitable confusion surrounding what the process actually is. Many are unaware that the intention of the drafting of the EIS is not necessarily to prevent, diminish, or even mitigate environmental degradation resulting from federally funded development projects, but rather to allow important facts and perspectives to come to light and enter the political process. What the actors subsequently decide to do with the information is not a concern of the EIS. Although the EIS is deliberately designed to foster compliance with binding federal environmental regulations, the identification of issues which may render the project non-compliant aren't automatically disqualifying. In other words, the efficacy of the EIS in accomplishing that objective is entirely dependent upon the responsiveness and attentiveness of the political system in which it is taking place.

The most troublesome revelation about the EIS drafting process is that it is highly prone to conflicts of interest, as those seeking to execute the project are charged with evaluating it themselves. In this case, New York City was motivated by concern for the looming deadline for expenditure of federally awarded disaster recovery funds. In order to ensure these were secured, the City had a vested interest in accelerating the review process, no different from a private

[51] NYC Office of Management and Budget and NYC Department of Parks and Recreation, "Chapter 2.0 – Project Alternatives," Final Environmental Impact Statement (US Department of Housing and Urban Development), 1-27. https://www1.nyc.gov/assets/escr/downloads/pdf/FEIS/ESCR-EIS-Chapter-2.0-Project-Alternatives.pdf

developer with a vacant parcel of land they wish to build upon. With an incentive to work quickly and to a certain extent, the ability to assess their prospective construction's environmental impact, the final product is almost bound to be fraught with questions of the honesty of the EIS. Furthermore, the structure of the report requires the contemplation of various "Project Alternatives", each of which is analyzed and measured against the others. As the municipality or developer advances their Preferred Alternative, they also create and describe the other Alternatives, essentially defining their competition. In the case of ESCR, activists were very dissatisfied with the Alternatives, as none of them closely resembled the community's original plan. The only Alternative with significant detail was the plan to elevate the park, which was much more clearly articulated and justified. Theoretically, this enables the project lead to define the options available to their opponents or to guarantee that whichever Alternative is ultimately selected is palatable to them. These issues are further aggravated by the ability to contract out the analysis and drafting, which adds a layer of distance from the City and a shroud of plausible deniability of any wrongdoing. These contractors are hired with a very clear sense that they are to produce an EIS that will view the Preferred Alternative favorably, calling into question the ability for them to assess it in a truly objective manner.

ULURP

Most major changes to land use in New York City are subject to the Uniform Land Use Review Procedure (ULURP), a process that was implemented by City Council in 1975. The same reform, intended to foster more transparency and community participation in the wake of Robert Moses's unilateral mega-projects, also established 58 community boards, the advisory bodies of volunteer appointees who weigh in on developments and advocate for the interests of affected residents. A ULURP application can begin with either a private developer or a City

agency. In both cases, the Department of City Planning works with the applicant in order to develop a plan that is likely to be approved at each of the following stages. Following the certification, or publication, of a finalized ULURP application, the community board has sixty days to review and assess the proposal in public hearings and private deliberation, after which it may vote “yes”, “yes with conditions”, “no, unless”, or “no”. Regardless of the outcome, the elected Borough President and the Borough Board, which is composed of the president, the borough’s City Council members, and the chairperson of each community board. The President and Board have thirty days and can vote in the same way that the community board before it does, with either unconditional approval or rejection, or it can impose necessary criteria to satisfy its members. Still, however, the ULURP process proceeds even in the event of disapproval from the Community Board, the Borough President, or the Borough Board[52].

The first vote in the ULURP process with codified, legal implications is that of the City Planning Commission (CPC), which is composed of twelve commissioners. Seven of these are mayoral appointees, including the chair, who also serves as the Director of the Department of City Planning (DCP), the agency in which ULURP applications are initiated. Each Borough President appoints a commissioner, as does the Public Advocate. The City Planning Commission holds a public hearing and must vote within sixty days of receiving the application, and also has the opportunity to add stipulations or modifications. A “no” vote ends a ULURP application altogether, and the applicant must refile and proceed through the initial steps of the process again. After being affirmed by the CPC, the City Council has fifty days to hold a hearing, often in the Land Use Committee, before voting. For matters regarding land use, zoning, and

[52] NYC Department of City Planning, “Uniform Land Use Review Procedure Flow Chart,” Graphic (New York City, 2019).

development, the long-standing precedent in New York City is that all members vote in accordance with the Council Member in the most affected district. This practice is called "member deference" or "home rule", and it is rarely violated or transgressed by City Council members. Though some find member deference to be wrought with potential for corruption and that it squanders the opportunity for true, democratic oversight, others argue it allows the most informed arbiter to make important decisions and allows constituents to appeal to one or two Council Members rather than the whole chamber. Following a City Council vote, the Mayor can sign or veto the ULURP application. However, projects with any Mayoral or City Council-member objections are rarely brought far along in the process, as the Mayor is able to direct the Department of City Planning to revise or kill the proposal in its early development[53].

The East Side Coastal Resiliency Project does not resemble most ULURP applications, as City-owned parks don't adhere to zoning regulations, and the Parks Department is typically allowed to undertake capital projects unilaterally. However, because the new project design and construction plan would require the City to obtain or reconfigure a number of nearby properties to facilitate vehicle and materials access, a ULURP application was filed. In Community Board meetings from April to June of 2019, First Deputy Commissioner Jamie Springer-Torres represented DDC and Deputy Commissioner for Planning and Development Alyssa Cobb-Konon spoke for Parks. Initially, they attempted to maintain the scope of the discussion and presentation to those small properties and their interim use for parking, loading, and staging during construction, rather than the implications of the park itself. This fact was addressed openly, as the Deputy Commissioners often reiterated that the ULURP is not necessary for City-owned land, and that, accordingly, the application only encompassed these peripheral elements.

[53] Ibid.

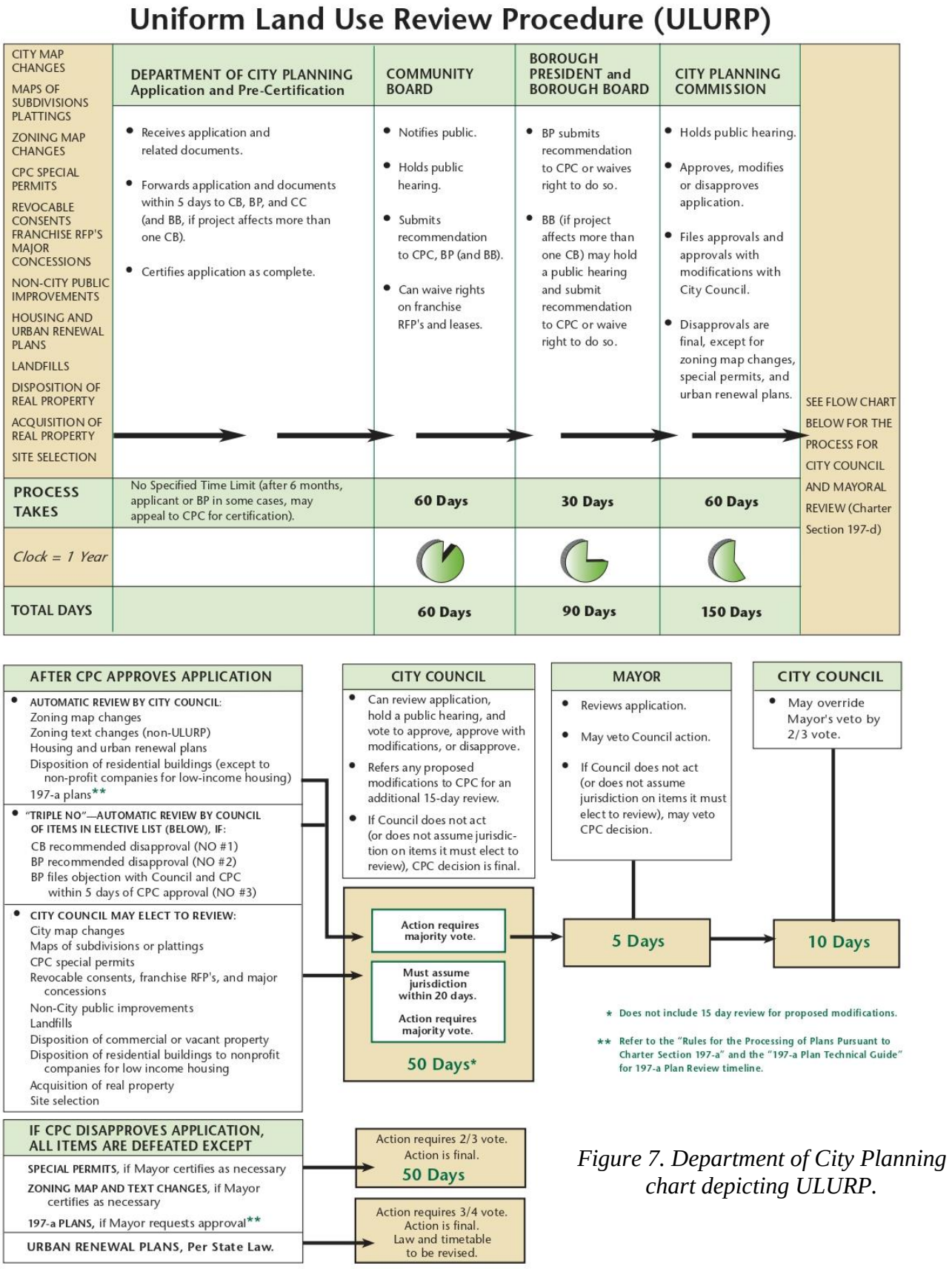


Figure 7. Department of City Planning chart depicting ULURP.

Quickly, however, persistent concerns about loss of parkland and construction effects from actor or institution would be pressured to evaluate the flood protection measure as a whole, not by the application's particularities.

For most developments, these ULURP and EIS processes are concurrent to one another and also to the design and engineering processes. In other words, these reviews are conducted on evolving, unstable products. Especially in the case of the East Side Coastal Resiliency project, in which a significantly revised design was undertaken with only a little more than a year before the scheduled groundbreaking, a number of details were left to be resolved at the time of voting, by the Community and Borough Boards, the City Planning Commission, the Borough President, and the City Council. Each actor or institution referenced the expectation that certain details would be filled in at a later step in the process. When the Community Board ultimately voted to advance the resolution supporting the ESCR ULURP application in June, it did so under the assumption that construction would occur without phasing. Amongst its nine pages of conditions was one which mandated interim flood protection measures, improved transparency, investigation of alternative cycling and jogging routes, and commitments to monitor noise, vibration, and air quality through the duration of construction.

On November 12th, 2019, two days before the meeting of the full City Council at which ESCR was scheduled to receive its final vote, Councilmembers Margaret Chin of District 1, Carlina Rivera of District 2, and Keith Powers of District 4 released a joint statement detailing the agreement they had reached with City. Included in these concessions were the very same conditions listed by the Community Board, all still in the form of promises to perform studies on the construction effects and possible solutions. Guaranteed items included a community advisory group to receive monthly reports on project progress, tree plantings and pocket park

improvements that Parks had been describing for months, and incentives and liquidated damages for contractors working on deadlines. With some resolute adjustments to the plan and some implied or requested ones, the Councilmembers then loaned their approval to the ESCR project, along with supportive quotes and signatures from Community Board Chairs, District Leaders, and NYCHA Tenant Association Presidents. In her assent, Borough President Gale Brewer wrote, "While this agreement checks off many of the boxes we had fought for, there is still more to do to make sure this is the best project that we get for the Park's future". Similar statements, which acknowledged the imperfection of the deal and the work left to be done, were made by State Assemblymembers and State Senators[54]. As the ULURP application was approved unanimously on November 14th, 2019, a number of protesters were forcibly removed from City Council Chambers for their interruption of Carlina Rivera's explanation of her vote.

Shortcomings of ULURP

Dissatisfaction with ULURP was well-known before the contentious ESCR application. In 2013, the $1.1 billion Essex Crossing redevelopment was approved on a nine-block area, including mixed-income housing and up-zoned retail[55]. Construction is still underway, and the 500 affordable units have been met with the same political unease as they have in other areas of

[54] Carlina Rivera, Margaret Chin, and Keith Powers, "Council Members Chin, Powers and Rivera Reach Agreement on Construction Plans, Community Investments for East Side Coastal Resiliency Project," Press Release (New York City: The Council of the City of New York, November 12, 2019), https://council.nyc.gov/carlina-rivera/2019/11/12/council-members-chin-powers-and-rivera-reach-agreement-on-construction-plans-community-investments-for-east-side-coastal-resiliency-project/.

[55] James Russell, "Why Essex Crossing Is a Model Mega-Development," *City Lab*, September 12, 2019, https://www.citylab.com/design/2019/09/essex-crossing-development-nyc-real-estate-lower-east-side/596818/.

the City[56]. In the same summer of the ESCR ULURP, the Lower East Side saw two more high-profile land use fights. The first of these was with regards to the construction of three "mega-towers" on the waterfront of the Two Bridges neighborhood, less than a mile away from the in which the developer, with the support of City Hall vis-a-vis the Department of City Planning, attempted to circumvent ULURP by claiming that old zoning criteria allowed their construction. Councilwoman Chin and Borough President Brewer supported a lawsuit, which eventually won an injunction, overriding the Department of City Planning ruling and forcing the project to undergo ULURP. Some activists pushed further still, arguing that with or without ULURP, the project shouldn't be allowed to proceed. If it does ultimately progress through the process and win approval, politicians and the community would likely secure a more palatable iteration of the original deal, which would make 700 of the 3000 luxury units affordable.

The second pertained to the construction of four, borough-based jails, done with the long-term goal of closing the jail on Rikers Island, infamous for its abuses of human and civil rights. This fight in particular was highly polarizing, as it involved the highly relevant and charged issue of criminal justice reform, and the political process surrounding it was accordingly very different. Many opponents with views more abolitionist than reformist criticized the City for simply sanitizing the brutality of its criminal justice apparatus, and actually expanding it by adding more beds. The de Blasio administration, with the support of the progressive caucus of the City Council, responded that it was a constructive step to addressing the lack of

[56] Affordable housing, distinct from public housing or units under rent regulation, is the new paradigm employed by New York and many other cities in the process of development. Through negotiation with developers, a certain number of units are set aside to be rent by earners at determined levels of the Area Median Income (AMI). Given that the algorithm which determines the AMI includes wealthier Putnam, Rockwell, and Westchester counties, the question is often asked "for whom are these units affordable?". This has been the case at Essex Crossing.

accountability inherent in jailing people on an island inaccessible to the public. Yet, the fight also occurred at the level of land use, as the City accelerated the project in a legally dubious combined ULURP application, in which four sites in different boroughs were evaluated and approved together[57]. This example serves to illustrate the manipulability of ULURP to sidestep or streamline community engagement when the City Council and Mayor are in agreement on a particular land use application.

In this sense, residents of the Lower East Side were very quickly made to become familiar with ULURP, during the summer of the East Side Coastal Resiliency project, the Two Bridges towers, and the borough-based jail plan. ULURP's shortcomings become readily apparent, and some are akin to those of the EIS process. In both cases, the decision of whether or not to undergo the process is a determination made by the agency or actor seeking to initiate a project. The Environmental Impact Assessment proceeds the EIS, which can result in a Finding of No Significant Impact (FONSI), established by President Reagan as he sought to cut red tape every possible opportunity. Though this wasn't the case in East River Park, it nearly was for the project's ULURP. The City is exempt from undergoing its own ULURP process, and consequently ESCR's application was primarily focused on the small easements on private properties west of the FDR Drive. In the case of the Two Bridges towers, the City's decision not to undergo ULURP had to be overridden by the New York State Supreme Court. Additionally, much of ULURP occurs before certification, the point at which the clock starts ticking and the public is notified. During this "pre-ULURP", the applying developer or agency works in tandem with the Department of City Planning, and, by proxy, the Mayor's Office and the City Planning Commission, in order to write an application that will be approved. In this way, projects actually

[57] Jei Fong et al., "What Is ULURP?" (Panel Discussion, October 30, 2019).

begin much sooner than those who will be most affected have any knowledge of its existence, and the application is designed to make the political process as expedient as possible. For those seeking to change the paradigm of developer-centric waterfront revitalization or the very nature of coastal parkland, this makes their advocacy incredibly difficult.

As seen in the ESCR process, member deference means that the most affected Councilmember has considerable say over the project's implementation, sometimes to the point of absolute authority. Despite dissatisfaction with the lack of transparency during the transition from one plan to another, Rivera quickly began to actively court the plan more explicitly, stating "I believe this is a plan that can work for our community", albeit with an extensive list of mitigations similar to those espoused by community organizers[58]. Many organizers, including those fighting redevelopments in Sunset Park and Inwood, found that they had little to no recourse to influence outcomes through ULURP, as their Councilmembers were supportive of the initiatives[59]. Despite the Community Board's theoretical capacity to vote against a Councilmember-backed initiative, Board members who do so risk losing their seat, as they are appointed half by the Borough President and half by the Councilmember. Moreover, Councilmembers have a greater incentive to work with the Mayor to tweak and reform their initiatives than they do to resist them, as the Mayor can quietly direct their agencies to do work in that Councilmember's district. As exemplified by the list of mitigations and concessions recommended through a conditional approval of the Community Board, these can then be echoed through the ULURP by the Borough President and Board, the City Planning Commission, and

[58] Brian Lewis, "Update from the Office of Carlina Rivera," § Parks, Recreation, Waterfront, & Resiliency Committee (2019), https://www1.nyc.gov/html/mancb3/downloads/minutes/minutes2019-09.pdf.

[59] Jei Fong et al., "What Is ULURP?" (Panel Discussion, October 30, 2019).

then by the Councilmember, without ever receiving binding commitments for any of them. The constrained time period for review by each actor or body encourages this relaying of responsibility because it is more politically viable to do that than send the application back to the beginning by deliberating or negotiating until the window expires. Each of these issues further diminishes the capacity of the public to have their demands integrated into the outcome of a ULURP application.

Possible Legal Challenges to ESCR

Finally, ULURP is often unable to yield a conclusive or binding decision on the projects it aims to certify within one year. In many cases, controversial developments are settled through the legal system, not the political one set up for that very purpose. As seen in the case of the Two Bridges mega-towers, costly lawsuits can halt projects for years, even after they've broken ground, leaving unwanted, open construction sites. A number of challenges to ESCR are likely to be raised, one of which already has, pertaining to a state-level political process the City elected not to undergo. In New York State, courts have held that the public trust doctrine - the legal principle that public land should be protected and maintained by the state for public benefit - requires that any conversion of parkland to uses other than that of a park requires a declaration of alienation from the State Assembly. These declarations must be initiated and sought by a municipality and apply to all "non-conforming uses" in excess of six months. As questions of whether parkland alienation would be a necessary legal step, DDC consulted the City Law Department and City Council's in-house legal department, which determined that it was not. However, organizers, particularly those from ERPA, began to threaten to sue for alienation and State Assemblymembers Harvey Epstein and Yu-Leen Nu concurred that it should be sought in order to prevent lengthy construction delays resulting from legal injunctions. Though the

announcement of phased construction, which leaves at least 42% of the park open throughout the project period, may have potentially abated some concerns about this legal challenge, a lawsuit was formally announced on the steps of City Hall on the day the ULURP application was approved[60].

Additionally, the State Attorney General's comments on the Draft Environmental Impact Statement very clearly lend themselves to a lawsuit. James argues that discrepancies in the EIS' treatment of open space, natural resources, and environmental justice meet the legal standard - "arbitrary and capricious" - and thus entitle a petitioner to relief, up to the point of annulling the approved ULURP application[61]. Whether this factors into the lawsuit announced on behalf of activists seeking state oversight through parkland alienation or is raised as a separate and distinct lawsuit, it does appear that it will pose a significant obstacle to the City's ambitious intended groundbreaking, the spring of 2020. It can be reasonably predicted that the politics surrounding the case will not end when it enters the courts, as the City and the plan's proponents will argue that those suing are delaying flood protection and putting the community at risk.

Conclusions and Findings

Coastal flood protection represents a challenge to the existing order of things, at a number of levels. For the individual, depending upon how their government chooses to respond, may find themselves displaced by eminent domain or buyouts, with wilderness area or parks on the land they once owned, or instead surrounded by new infrastructures to tame and redirect

[60] Sydney Pereira, "Hi, I'm at City Hall to Cover the Vote on a $1.45B Resiliency Project . . ." Tweet, *Twitter*, November 14, 2019, https://twitter.com/sydneyp1234/status/1195058582150139904.

[61] New York Consolidated Laws, Civil Practice Law and Rules - CVP § 7803.

floodwaters. The Big U and the current iteration of the ESCR project offer different visions for the use of undeveloped land in the floodplain, the former of which promoting wetland restoration and the latter an engineered retreat. Either approach inevitably necessitates a consideration of the values of those who influence or orchestrate the project. As the eight Rebuild by Design projects finish implementation, it is left to be seen whether or not the federal government will replicate the approach. The mere existence of the design competition which brought the BIG U to fruition required fundamentally new political processes. It took legal acrobatics, private partnerships, and a complex chain of grant-writing to enable hyper-local, participatory design. The small sessions from which the BIG U's vision emerged were, for some of their participants, an unfamiliar and empowering experiment in democracy. Whether waterfront properties in question are private or public, and whether or not they will remain that way, is an indication of the social and economic values of the political system. That their redeveloped, new use reflects the reality of rising sea levels and intensifying weather events is of dire importance.

Yet, it has become apparent from the case of the East Side Coastal Resiliency project that priorities within municipalities may differ from those held by the residents. This shouldn't necessarily come as a surprise, as representative democracy inevitably depends upon the centralization of some knowledge and expertise. Community members who participated in workshops to shape the BIG U didn't consider sewer infrastructure or construction feasibility because they weren't asked to. As unsatisfying as the City's justification may be, these are valid obstacles to obeying what appeared at the time to be a consensus plan. This is not to say, though, that the ESCR project had to unfold in the way that it did. With the most generous interpretation and the benefit of hindsight, the design overhaul and rift it has caused throughout the Lower East Side appears to stem from differing priorities from designers and the City agencies. From the

perspective of its harshest critics, it is a disingenuous appropriation of funds that were won by tenants, not bureaucrats or planners. Left to interpret the political fallout of an embattled, the model of participatory design, in this iteration, shares some of the blame. Following this line of argument, the gap between City engineers and local leaders would theoretically be addressed through the natural antagonism of a more traditional political process, and participatory design insulated the BIG U from that process. However, the de Blasio administration's failure to communicate its priorities from 2013, or to even make the project leads aware of them is its own issue.

The ULURP process was not a sufficient political instrument for activists to influence the final design, either. Though they were able to win concessions on peripheral issues of construction and mitigation, the highly coordinated and relatively savvy East River Alliance and East River Park ACTION found that these were as much as the procedure would afford them. This may be a result of the "pre-ULURP" coordination between agencies and political bodies, the appointment structure for the Community Board, the political incentives the Mayor can create for a Councilmember, or some combination thereof, ESCR unfolded like other initiatives thus mentioned – in close, if not total resemblance to how it was presented at its inception. The drafting of the Environmental Impact Statement was, in this case, equally deficient. With trust already in short supply, the public was unwilling to accept the City's claims in its EIS. Relevant political actors concurred and commissioned their own study, but DDC ultimately failed procure the necessary documents. Barring a stronger, independent environmental review, the reality is that projects of this scale and significance will routinely advance without a full assessment of relevant factors.

Finally, the social and political frenzy which began on the Lower East Side in October of 2018 and continues today is, at its core, a creature of climate change. Urban development, even on the tight timeframe of ULURP, doesn't occur anywhere near the necessary speed to respond to the threats posed by rising sea levels and flooding, urban heat island effect, or the daily crises of poor air quality and its associated public health ramifications. This project, which aims to address one of those issues, is only a mile and a half of New York City's 520 miles of waterfront. Many of those waterfront communities have their own histories, as rich and as deep as the Lower East Side's, with their own activists and artists. Increasingly, these hyperlocal cultures, traditions, and structures will come to face climate change, and in the process, new ideological lines will be drawn. As the reality of climate change sets in, those who seek to preserve will be called sentimentalist NIMBYs, and those who pursue bold adaptation will be viewed suspiciously as insensitive or greedy outsiders. Climate change, a sprawling and global phenomenon, will by many be experienced first in places and people very familiar to them, a prospect that could mire communities further in deadly inaction. The sooner these conversations begin, and the franker they are about the values and needs each coastal community faces, the more likely they are to produce results that weather the storms of tomorrow.

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