A Tale of Two Rivers

Waterfront Infrastructure, Economic Revitalization, & Community Resiliency for East Harlem's East River Esplanade

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Waterfront Infrastructure, Economic Revitalization, and Community Resiliency From 90th to 125th Streets

Contents

Acknowledgements

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Born and raised in East Harlem, I know that the East River Waterfront has been in decay for far too long. With new waterfront revitalization programs on the books for New York City, the section of the East River Esplanade that is part of East Harlem has been ignored. The goal of our report is to frame the revitalization project within a historical and environmental context and to build awareness and consensus within the community to improve and protect our valuable waterfront resource.

Assemblymember Robert J. Rodriguez
District 68
East Harlem/El Barrio & the Upper East Side

Executive Summary

Executive Summary

Waterfronts in New York City have undergone a radical transformation in the last century. Historically, coastal edges, particularly those near highways, were ideally situated for manufacturing purposes. Goods could quickly, and cost effectively, be transported to and from those facilities by water and by land. As manufacturing was a noisy and an occasionally polluting enterprise, residential uses did not frequently mix, and many New Yorkers did not have access to the waterways.

As the United States has transitioned economically, reducing manufacturing production in the urban cores and relying more on foreign products, these waterfronts have transitioned. Frequently following years of abandonment, waterfronts have become a source of real estate speculation and rapid development of primarily market-rate housing. In some cases, this economic change has also brought new parks, promenades, bike paths, and other features granting New Yorkers readmission to their waterfronts.

Waterfront development in East Harlem deviated from this history in two ways. Most significantly, large amounts of public housing were built in proximity to the East River. These developments, mostly built during the 1960's and 1970's, with significant federal investment, are the housing foundation of East Harlem. With rent increasing dramatically, public housing is one of the most essential resources to supply affordable housing in an increasingly expensive city.

While East Harlem's waterfront did not have a significant manufacturing presence, it has been shaped by its transportation infrastructure. This includes the New York and Harlem Railroad constructed during the 1830's on Park Avenue, and the Robert-Moses-led Franklin D. Roosevelt East River Drive. This expressway, from 92nd street to 125th, exists essentially as it did when it was constructed in 1934. Unlike other areas of the FDR drive which were built in conjunction with green space visions, this six lane highway sits between the neighborhood and the narrow esplanade. With its highly trafficked lanes and limited crossing opportunities, the FDR drive has served as a barrier, obstructing the access of the waterfront to the members of this community.

In the current era of waterfront revitalization, the section of the East River Esplanade which abuts East Harlem has been consistently ignored. The walking and biking path is in disrepair, with sections of the thin path crumbing into the river below. Holes in the path have been boarded over with plywood, fencing has decayed, and many of the benches have been rendered unusable. The other assets of the waterfront have suffered from a similar fate. The pier at 107th Street has been fenced off after the roof collapsed, and has been declared structurally unsafe. Pilings are all that remain of a former pier at 117th Street.

As we think about the future waterfront development, it must be done expressly through the lens of climate change. Climate events like Hurricanes Sandy and Irene have shown that threats of stronger storms, which bring extreme winds and flooding, are a new reality. East Harlem, because of its pre-development ecological conditions, is particularly at risk. The district, which was originally composed of salt marshes, a tidal river, and other features of a low lying estuary, is one of the most vulnerable communities in the entire city in the climate change era.

In looking at the East River Esplanade to improve waterfront access and vitality for those in East Harlem, we are taking a multi-faceted approach. We will explore the existing conditions including: the health of the Esplanade's infrastructure and associated piers, the currently available park space, the housing stock, and the areas of most severe climate change threat. Based on these adjacent conditions, we will then target areas that require investment and revitalization on the following terms: **1) Immediate (1-2 years) 2) Intermediate (3-10 years) and 3) Long Term**

(10-30 years). This approach will allow us to prioritize, while also keeping a focus on two of the most important community needs: preserving and increasing housing affordability and increasing access to our waterfront.

Immediate

1. Repurpose 107th Street Pier with programming and vendors

2. Make Esplanade repairs and replace benches

3. Initiate Master Planning process

Intermediate

1. Construct New Pier 107

2. Form consensus around master plan and establish Esplanade Governance

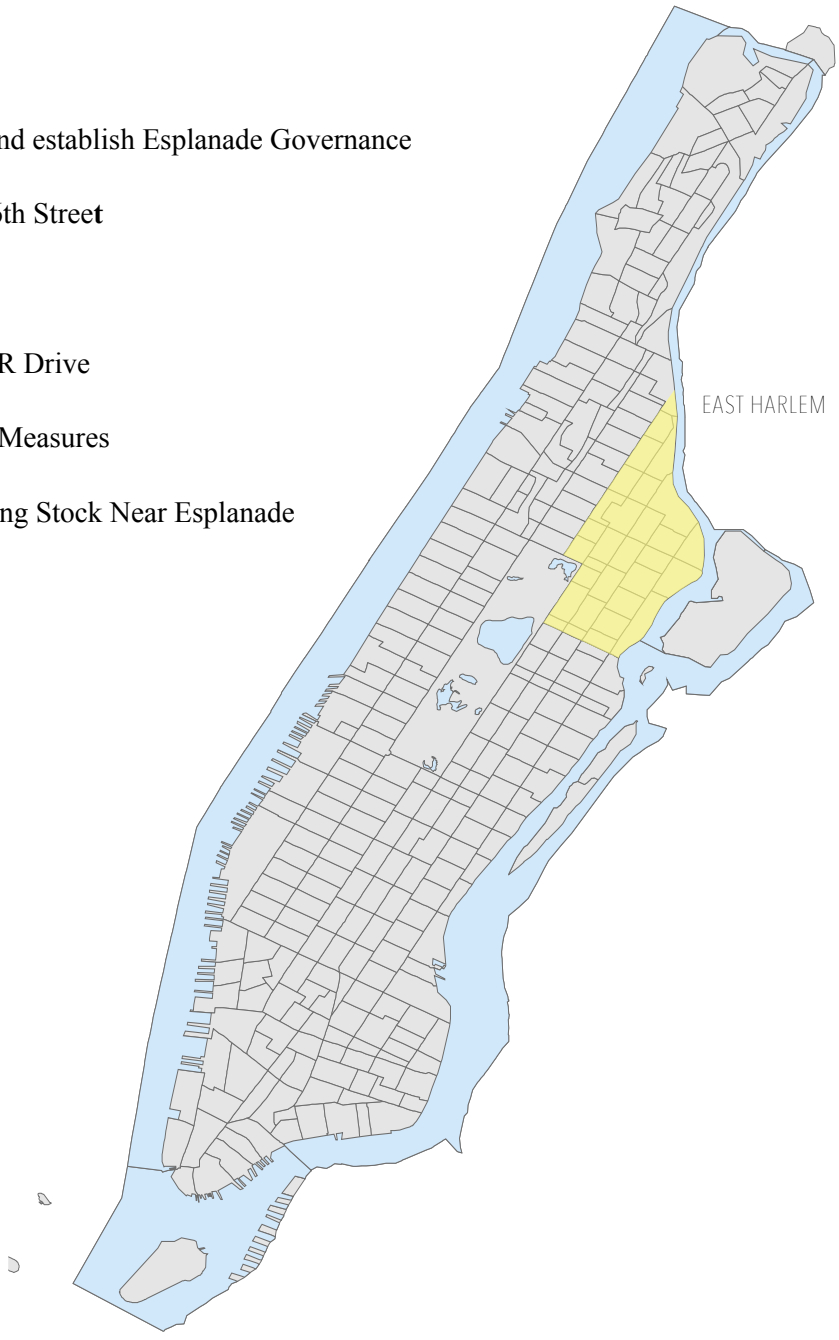
3. Fund and install boat storage under 96th Street

Long Term

1. Fund and Build Decking Over the FDR Drive

2. Fund and Build Enhanced Resiliency Measures

3. Preserve and Create Affordable Housing Stock Near Esplanade



History

Ecological History

Prior to the industrial and commercial revolutions, the East River was an ecological treasure. The shoreline was covered in marsh grasses and tidal wetlands with creeks extending deep into the island of Manhattan. A large variety of fish and other kinds of wildlife prospered in the area. Although its name may be deceiving, the East River is not actually a river; it is an estuary. An estuary is a region of transition between fresh and saltwater and because of this dual identity, it acts as a habitat for large amounts of biodiversity because it links two unique water habitats. Originally, the river was home to an expansive array of species, including oysters, striped bass, bluefish, weakfish, spotted sea trout, sea turtles, and even the occasional seals and harbor porpoises. The waterfront was bustling, not because of transatlantic trade or industrial production, but because of the large quantity and variety of wildlife.

Several of these species actively helped protect and maintain the waterfront. Oysters, for example, were not only a viable food source for both Native Americans and early New Yorkers, but also acted as natural filters, actively cleansing all the water in the river within a 24-hour period. Additionally, oysters promoted biodiversity of the river, serving as nurseries and feeding grounds for small fish, crabs, and shrimp. Oysters can no longer be found in the river due to excessive overharvesting. The salt marshes located along the entire shoreline of Manhattan served as a natural barrier from exceptionally high tides and later protected waterfront development, including both commercial and residential structures, from flooding and destruction.

The population drastically increased during the creation of New York after the Revolutionary War. As the city became a more popular destination for European migrants, the original watershed designed by the original colonists was not built to handle the volume of human debris and raw sewage that began to spill into the river. Randall's and Ward's Islands were used as garbage dumps, cemeteries, housing for the poor, and, due to their isolated nature, became sites for the quarantine of disease ridden and psychotic individuals. The New York Harbor became a major port for the American oil industry. Oil and raw sewage spills were frequent, destroying the estuary and ecosystems inside it. The East River began to be known for its waste, both in terms of garbage and social outcasts. In the early 1900s, four power plants and six sewage treatment plants were built along the river. Nearby warehouses also used the river as a convenient location to dispose of refuse and excess chemicals created during production. With each new industrial establishment came massive dumps of toxins and pollutants.

Conditions in the East River only began to improve in 1972 when the federal government passed the Clean Water Act, aiming to restore and preserve the chemical, physical, and biological integrity of the nation's waterways. Last year NYC Swim, the leading organizer of swimming events in New York City, held the annual Brooklyn Bridge Swim, and nearly 400 New Yorkers swam across the East River from Manhattan to Brooklyn. Today, the East River is the cleanest it has been in nearly 150 years; however, drastic improvements can still be made. There are high levels of mercury and visible litter throughout the river. The wildlife and biodiversity in the river are a small percentage of what they once were. Today, overflow sewage and rainwater continue to flow into the river.

Community Board 197-A Plan

In 1999, Manhattan Community Board 11 (CB 11) produced a revised 197-a plan for East Harlem*. In assessing the waterfront conditions between 96th-125th, the plan lamented the missed opportunity of connecting Stanley Isaacs Park with the Esplanade at 96th.

"Upland, Stanley Isaacs Park, on the north and south sides of 96th Streets, acts as a natural draw to bring people closer to the waterfront; the problem is that people are reluctant to cross under the Drive to get to the esplanade. Currently, the area under the FDR Drive is used for parking. The quality of the at-grade access here is greatly lessened by the constant vehicle-pedestrian conflict which disrupts the continuity of the esplanade and creates a division between the Upper East Side portion of the esplanade and the East Harlem portion." CB 11 Report

Additional suggestions included the improvement of signage, a comprehensive way finding system that would draw people from Stanley Isaacs Park to the water.

Above 96th, CB 11 found serious access issues. Pedestrian overpasses, which only exist at 103rd, 111th, and 120th, are insufficient for the population density. Beyond failing to serve the population seeking to cross the FDR drive to access the Esplanade, other resources, like Randall's Island, are underserved.

That plan focused on the waterfront and offered the following neighborhood strategy recommendations:

> *1. The City should develop the East Harlem Beach Esplanade (East 125th to 142nd Streets). The City must commit design and capital funds to implement this project.*
>
> *2. The City and the Upper Manhattan Empowerment Zone Development Corporation should conduct a study that examines the feasibility of ferry service from the East 107th Street Recreation Pier or waterfront area adjacent to the East River Plaza near 116th and 117th Streets.*
>
> *3. The City should eliminate parking under the FDR Drive at Stanley Isaacs Park (First Avenue and East 96th Street) and instead develop this area for waterfront related uses that would attract people to the nearby esplanade. In the short-term, signs and painted walkways would make pedestrian access easier. This would reinforce the waterfront area as a natural extension between the Upper East Side and the East Harlem neighborhoods.*

In the creation of this analysis we have reviewed and updated these proposals and provide recommendations in the policy and budget priorities section.

* A full copy of East Harlem's 197-a plan can be accessed at: http://www.east-harlem.com/cb11_197A_index.htm

Existing Conditions

Esplanade Infrastructure Review

The existing esplanade infrastructure is characterized by issues regarding accessibility, noise, maintenance, disjointedness, security, and destination status.

Accessibility to the East River Esplanade is very limited, which is largely due to its proximity to the FDR Drive. There are only three points between 96th st. and 125th st. that allow for pedestrian traffic to cross the FDR Drive. There are three pedestrian bridges (at 103rd St.., 111th St. and 120th St.) that pass over the FDR Drive and connect to the esplanade. These access points are not well-marked, and without previously knowing they exist or looking at an overhead map, it is difficult to identify entrances, which likely discourages many people from using the Esplanade. Despite being in such close proximity to a major roadway, and an important river, the East River Esplanade is isolated from all other forms of transportation and paths. There is no point at which a person could quickly and relatively directly access the park from a car or a boat. Additionally, the existing pedestrian bridges are in poor condition, and the entrances are tucked away out of public sight.

Situated between two high-traffic transportation routes, the esplanade is polluted with the noise of its neighbors. Noise from the FDR Drive and nearby air traffic is significant.

The physical structure of the esplanade has been poorly maintained, and the current condition of the path, fences, rails, and bridges have also been significantly affected recently by Hurricane Sandy. At several locations, the concrete edge nearest the river has deteriorated to a crumbling state. According to "Special Initiative: For Rebuilding and Resiliency," Hurricane Sandy produced waves greater than 12 ft. With an anticipated sea-level rise somewhere between 4-8 inches for 2020 and 11-24 inches in 2050, there's a high risk of the esplanade structure collapsing in the future during a severe storm. According to a UWAS study, East Harlem is particularly vulnerable to flooding and erosion due to "low-lying land formations" that "consist largely of outwash plains and post-glacial deposits." Instead of settling for a short-term solution to make the absolute essential repairs on the esplanade, it would likely be more cost-effective in the long-run to invest in a more integrated flood protection system.

In addition to lacking accessibility, the existing esplanade fails to engage with the East River. The one slight exception to this claim is the existing pier at 107th st. The pier needs drastic repairs to retain any sort of usability, and the NYC Parks Department has deemed its condition as "unacceptable." But even with repairs, Pier 107 is no more than a historical landmark of an industrial bygone era of New York. Overall, the existing design and condition of the East River Esplanade hardly acknowledges its proximity to the river.

Limited accessibility, proximity to the FDR Drive, inadequate lighting, deteriorating street furniture, and a lack of pedestrians, contribute to security concerns for the area. There are no "eyes on the street," since there are no small businesses or residences that would encourage a steady population flow through the pathway at all different times of the day. This discourages visitors and community members alike to engage with the esplanade.

As a result of the conditions listed above, the East River Esplanade is neither a destination for community members, nor for tourists. It is a complete contrast to the High Line, for example which works as both a path through Chelsea and a tourist attraction, bringing traffic through the neighborhood, while benefiting local businesses and boosting the economy of the community.

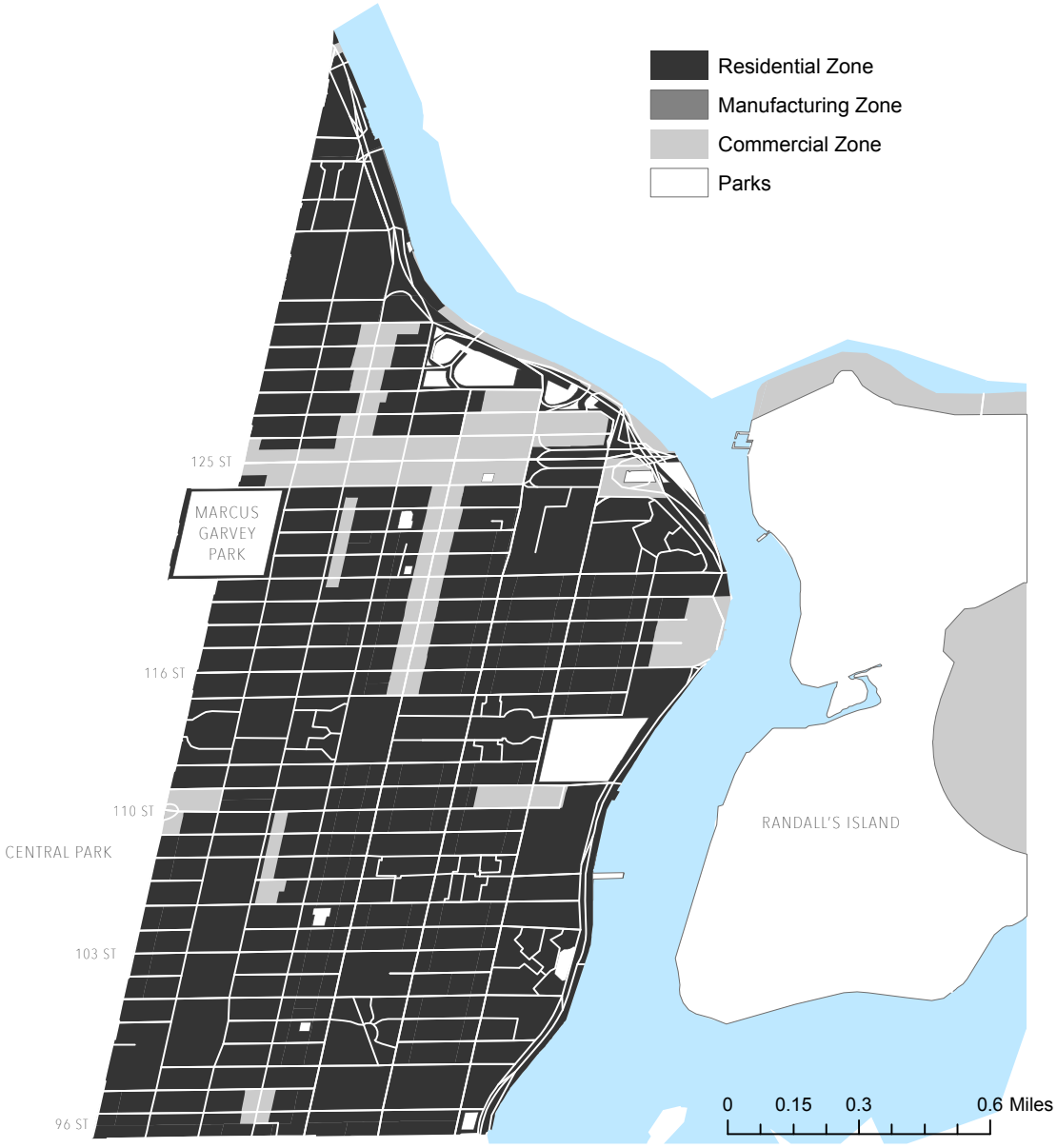
Community Organizations, Assets, and Concerns

Developing resiliency and sustainability is expensive, and funding is especially a concern for the East River Esplanade in East Harlem. Considering the drastic changes in property values after the development of the High Line and Central Park, it makes sense that neighboring property owners might invest in a project to redevelop and revitalize a somewhat deteriorated public area. The issue here is that the government owns most of the land that borders the esplanade and the FDR Drive, and this is predominantly subsidized housing managed by New York City Housing Authority (NYCHA). The largest concentration of public housing units in Manhattan is in East Harlem. Acknowledging a deficiency in funds and the fact that 1/3rd of these NYCHA-controlled housing units will have rent protections which expire by 2040, there must be more consideration of the maintenance of affordable housing integrated into this project.

CIVITAS, a non-profit dedicated to improving the quality of life on the Upper East Side and in East Harlem through sustainable development and planning, surveyed East Harlem residents to get a sense of the concerns of the community. The survey results demonstrated concern for the maintenance and creation of new affordable housing in the neighborhood. With this in mind, it is critical that improvements to the waterfront, be undertaken in a manner that does not adversely impact these concerns.

Friends of the East River Esplanade is a conservancy group committed to the revitalization of the esplanade. They have been diligently working to fundraise the necessary resources to improve the 107th Street Pier, as well as provide temporary art installations along the waterfront to draw more individuals to the area and reconnect the surrounding communities to the East River. In addition, Rockefeller University, a biomedical research institute located on the East Side of Manhattan, has agreed to create a $1 million endowment to help maintain the Esplanade and donated $150,000 to Friends of the East River Esplanade.

Maps



DATA SOURCES: ZONING DATA AS OF JUNE 2014 PROVIDED BY THE NYC DEPARTMENT OF CITY PLANNING

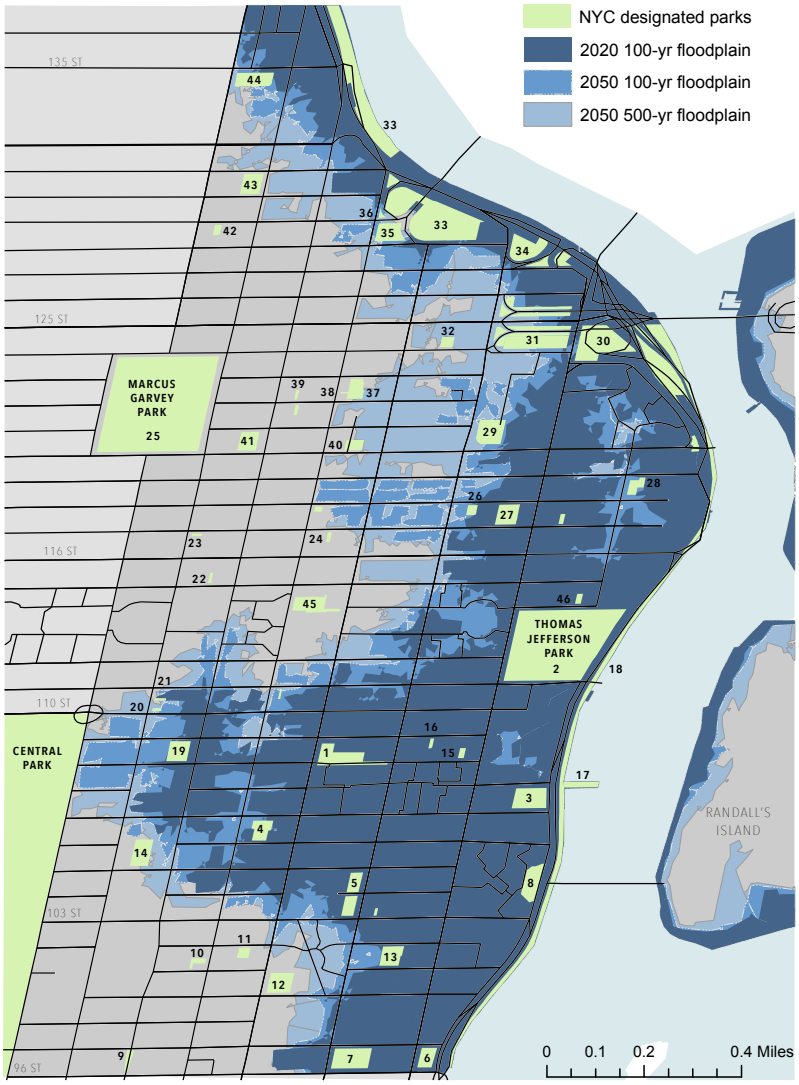
Zoning in East Harlem

This map depicts the variety, or lack thereof, of zoning types in East Harlem/El Barrio and the Upper East Side. The area, dense in residential zones, lacks both parks, showing the importance of reconstructing the esplanade and providing residents with access to green spaces, and manufacturing, denoting the change in industry of the area over time.

Parks in East Harlem and Predicted Flood Plains

This map juxtaposes two major issues concerning the residents of East Harlem/El Barrio and the Upper East Side, green space and storm damage. First, the area lacks green space. Although the map appears to describe more than 40 parks, many of these green areas are small community gardens that are not available for public recreation. Second, the map illustrates the effect of potential storms if no legislative action is taken. By 2050, without appropriate renovations more than 75% of green spaces in the area risk storm damage.

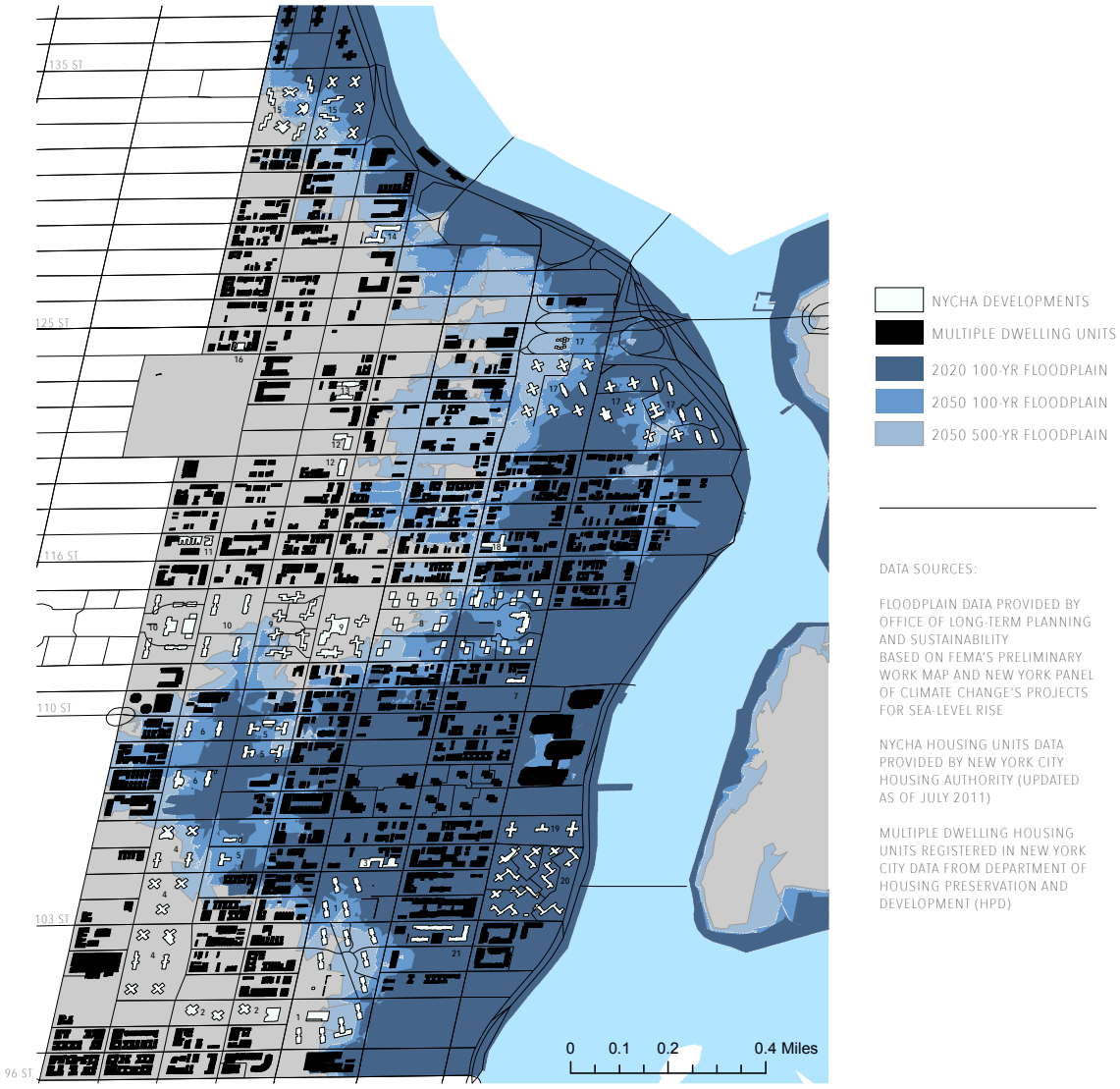
PARKS IN EAST HARLEM AND PREDICTED FLOODPLAINS



SOURCES:
FLOODPLAIN DATA PROVIDED BY OFFICE OF LONG-TERM PLANNING AND SUSTAINABILITY
BASED ON FEMA'S PRELIMINARY WORK MAP AND NEW YORK PANEL OF CLIMATE CHANGE'S PROJECTS FOR SEA-LEVEL RISE
NYC PARKS PROPERTY DATA FROM THE DEPARTMENT OF PARKS AND RECREATION

1 - POOR RICHARD'S PLAYGROUND
2 - THOMAS JEFFERSON PARK
3 - EAST RIVER PLAYGROUND
4 - WHITE PLAYGROUND
5 - BLAKE HOBBS PLAYGROUND
6 - STANLEY ISAACS PLAYGROUND
7 - MARX BROTHERS PLAYGROUND
8 - PLAYGROUND 103 CIII
9 - PARK AVE MALLS
10 - EBENEZER WESLEYAN GARDEN
11 - SUNSHINE PLAYGROUND
12 - CHERRY TREE PARK
13 - HARLEM RBI
14 - MAE GRANT PLAYGROUND
15 - NEIGHBORS OF VEGA BAJA
16 - HUMACAO COMMUNITY GARDEN
17 - PIER 107 CVII
18 - EAST RIVER ESPLANADE
19 - PETER MINUIT PLAYGROUND
20 - 110TH ST BLOCK ASSOC. GARDEN
21 - PUEBLE UNIDO GARDEN
22 - LA CUEVITA GARDEN
23 - PEACEFUL VALLEY GARDEN
24 - 117TH ST COMMUNITY GARDEN
25 - MARCUS GARVEY PARK
26 - DIAMANTE GARDEN
27 - P.S. 155 PLAYGROUND
28 - PLEASANT VILLAGE COMMUNITY GARDEN
29 - WAGNER PLAYGROUND
30 - LOUIS CUVILLIER PARK
31 - TRIBORO PLAZA
32 - CARVER COMMUNITY GARDEN/DREAM ST PARK
33 - HARLEM RIVER PARK
34 - CRACK IS WACK PLAYGROUND
35 - ALICE KORNEGAY TRIANGLE
36 - EACH ONE TEACH ONE FACILITIES
37 - DR. RONALD E. MCNAIR PLAYGROUND
38 - LIFE SPIRE GARDEN
39 - JACKIE ROBINSON COMMUNITY GARDEN
40 - HARLEM ART PARK (GROWTH)
41 - EUGENE MCCABE FIELD
42 - HARLEM ROSE GARDEN
43 - MOORE PLAYGROUND
44 - ABRAHAM LINCOLN PLAYGROUND
45 - JAMES WELDON JOHNSON PLAYGROUND
46 - PLEASANT PARK GARDEN

NYCHA AND OTHER MULTIPLE DWELLING UNITS (HOUSING)
SHOWN WITH PREDICTED FLOODPLAINS



1 - WASHINGTON
2 - LEXINGTON
3 - WHITE
4 - CARVER
5 - CLINTON
6 - LEHMAN VILLAGE
7 - 335 E 111TH ST
8 - JEFFERSON
9 - JOHNSON
10 - TAFT
11 - MILBANK-FRAWLEY
12 - UPACA SITES
13 - PARK AVE EAST - 122-123 ST
14 - ROBINSON
15 - LINCOLN
16 - MORRIS PARK SR. CITIZENS HOME
17 - WAGNER
18 - CORSI HOUSES
19 - WILSON
20 - EAST RIVER
21 - NORTH PLAZA

East Harlem Housing and Predicted Flood Plains

This map shows the effect of potential storms on residential developments. Without relevant repair and maintenance of the esplanade, large amounts of both public and private housing risk storm damage.

Case Studies

Case Studies

In New York City, waterfront revitilization has occured in a variety of different forms and time frames. In some cases, large swaths of land, burdened with pollutants of the industrial past, were given back to the city to redevelop. In other instances, developer-driven land speculation, led to public-private agreements, breathing new life back into neglected areas of the city. The three case studies below, Riverbank State Park, Hudson River Park Trust, and Harlem Piers Park, were selected because of their parrallels with the challenges and opportunities of the Esplanade. These cases will help serve to guide the decisions our community will need to make regarding how best to manage and develop parkland, how to mitigate against environmental harm and waste transfer facilities, and how to best navigate the funding and political structures.

Riverbank State Park

The North River Sewage Treatment Plant, also known as the Riverbank Sewage Treatment Plant, was first proposed in 1914 by the Metropolitan Sewer Commission. For decades millions of gallons of raw sewage generated by hundreds of thousands of Manhattan's West Side inhabitants continued to pour directly into the Hudson River. This created an unsanitary environment and strained local ecosystems as it seeped into New York City's waterways. The Commission acknowledged the hazards were "too great to ignore" and proposed dozens of small sewage treatment plants throughout Manhattan, including seven plants along the Hudson River. Following the proposal, several sites were considered based on their ability to manage the sewage flow from western Manhattan.

In the early 1950's, the Department of Public Works (DPW) ultimately decided all sewage from Manhattan's West Side would be channeled to one treatment plant. Plans initially called for a facility built on unused land by the Hudson River between West 70th and 72nd Street. To deal with all the waste generated by nearly one million people and counting, however, the small site would require a costly two-story structure or more land.

On March 28, 1962, the NYC Planning Commission held a closed hearing to discuss a proposed modification of the Master Plan of Sewage Treatment Plant Site. The proposal was to change the location of the plant from West 70th-West 72nd Streets to West 135th-West 145th Streets. The Commission unanimously approved the adjustment, disregarding previous findings declaring the site unsuitable for other City facilities. Following the decision the City pushed through the regulatory process over the next several years to gain approval to build the facility at the West Harlem site. Amidst this six year process West Harlem's residents were never informed about impending plans and health and environmental experts were never consulted. Design drafts for the plant began in the early 1960s and detailed designs were completed by 1971.The regulatory and approval process was well underway before John Lindsay was elected Mayor of New York City in 1965. Under his term, the New York State Legislature passed the Open Meetings Law in 1968, beginning a new era of transparency and public participation in New York State. This act, also known as the "Sunshine Law," required all New York public agencies to open all meetings to the people, especially those concerning the use of public funds, in sharp contrast to the closed door negotiations of previous administrations. The Board held three public hearings in early 1968, marking the first time West Harlem residents learned of the City's plan to construct a sewage treatment plant in their community.

Despite immediate strong opposition from the West Harlem community, by the time they discovered the plan's existence all that remained of the regulatory process was the Board of Estimate's approval to spend City monies on construction. In an attempt to mollify the community Mayor Lindsay appointed architect Philip Johnson to creatively transform the facility into a visually appealing addition to the neighborhood. The park designs and elaborate fountains Johnson envisioned did nothing to quell community outrage over the treatment facility's location. The

foundation's platform was finished in 1978.

The foul odors emitted by the facility affected quality of life in the area and community members also developed respiratory issues. Noxious emissions from the treatment facilities, including what many believed to be hydrogen sulfide gas, stretched along the coast of West Harlem and united discontented residents, leading to community mobilization and civil disobedience in the 1980's. The use of Northern Manhattan as "New York City's dumping ground" and the exclusion of communities of color in the democratic decision making process led to the formation of WE ACT, New York City's first environmental justice organizations run by people of color, in 1988. In the same year WE ACT sued the New York City Department of Environmental Protection (DEP) for running the North River Sewage Treatment Plant as a "public and private nuisance." WE ACT also organized other acts of civil disobedience. In 1994 the lawsuit was settled and WE ACT was awarded $1.1 million.

The situation deteriorated until new laws dictating tighter environmental regulations led the Federal government to sue New York City. After the lawsuit New York City was required to treat its raw sewage before discharging it. Although tensions have settled regarding Riverbank State Park, its negative impacts continue to affect the community on a daily basis.

In order to make the noxious Treatment Plant less a blight on the community, Riverbank State Park was built in 1993. This 28-acre park provides the community with an Olympic size swimming pool, athletic complex, ice-skating rink, restaurant and greenway path.

Several aspects of the history of River Bank State Park development apply to this report. The first is the importance of public knowledge and opinion in the design process. Residents on the Upper West Side were infuriated by the mere thought of a waste treatment plant in the vicinity of the residential community. Because they were aware of the prospective plan, they were able to voice their opinions enough for the city to transfer the plant to another location. The residents of West Harlem, however, were unaware of the immediate plans for the treatment center and were not as prompt in opposing the construction. The second detail to take away from Riverbank State Park is the negative effects it had on the quality of life. Not only are the odors unsettling, but also harmful, causing excessive cases of asthma and other respiratory problems in the surrounding area.

As we explore later in the report, East Harlem is currently in the midst of a similiar situation with the construction of the E. 91st Waste Transfer Station. .Through conversations with the community and the administration, we hope we can learn from this example and achieve a solution that mitigates the impact of the dump.Ideally, this would involve expansion of usable Esplanade recreational space, while also building in measures that protect residents from increased truck traffic and foul odors.

Riverbank State Park

Hudson River Park Trust

Once a public safety hazard with buckling piers separated from the mainland, Hudson River Park has been transformed into the largest open-space project developed in Manhattan since Central Park. The revitalization of Hudson River Park has improved quality of life on Manhattan's West Side, helped spur the boom of families living downtown, and served as a catalyst for economic development in surrounding neighborhoods. It generated:

- 167% return on the public investment in construction of the Park since 2003
- $1.1 billion increase in surrounding property's market value directly attributed to the Park's development
- $3 in billion new construction adjacent to the Park in the last decade.
- 94 new or renovated buildings adjacent to the Park since ground-breaking in 2003.

The Hudson River Park Trust is an organization created by the 1998 Hudson River Park Act, which was sponsored by Assemblymember Richard Gottfried. The act stated that the role of the Trust is to facilitate the planning, construction, management, and operation of the park. It was created under the presumption that the Hudson River is a public resource and a state concern. The goal of this organization is to enhance the ability of New Yorkers to enjoy the park, protect the wildlife, specifically the striped bass, and create economic development in the surrounding area. The governing board is composed of 13 individuals, five appointed by the mayor, five appointed by the governor, and one appointed from each of the three communities affected by the park . Today, roughly 70% of the park construction is completed and renovations and new developments are completed every year.

According to their bylaws, the trust has five main responsibilities:

1. To continue advancing park construction to achieve the full vision for a magnificent water front park as outlined in the HRPA.
2. To operate and maintain the park at a high level so it remains an asset and an economic generator.
3. To improve the park's estuarine sanctuary through public education, research, and habitat enhancement.
4. To provide free or low cost recreation opportunities for New York City residents.
5. To ensure the park's future financial self-sufficiency by developing the remaining major commercial nodes.

The Trust replaced the Hudson River Park Conservancy, a city-state agency that had been responsible for the maintenance of the park and waterfront. Prior to the development of the HRPT, the Conservancy had already been developing plans for a 4.5-mile waterfront park stretching from 59th Street to the Battery, the same dimensions as the current Hudson River Park. Before the conservancy, the leading Hudson River controversy revolved around constructing Westway, a 700 acre freeway along the Hudson River. Politicians argued that it would be beneficial to extend the interstate highway system into Manhattan. Westway had the support of both President Ronald Reagan and US Army Corps of Engineers. The project, however, lacked the support of Governor Hugh Carey and MayorEd Koch, both of whom believed the $2 billion project would be a waste of government funds. The project was abandoned in the early 1980s because Judge Thomas Griesa of the US district court said that the new highway would be detrimental to the striped bass, demonstrating a priority in the preservation of Hudson River wildlife, something that continues to remain important to all construction plans today.

The success of the creation of the Hudson River Park Trust can be attributed to its persistent supporters. The HRPT essentially grew out of the Hudson River Park alliance, a group of 35 environmental and civic groups in favor of the park . The HRPA was created in 1996 to save the Hudson River Park, which at that time was only a proposed idea. The Alliance gained the support of Governor Pataki and Mayor Giuliani in 1997, who pledged $200 million of

state and federal money to rebuild the park . Some of the major groups included in the Alliance were The Environmental Defense Fund, the Natural Resources Defense Council, the Regional Plan Association, and the Municipal Arts Society.

The River Project, a Tribeca-based marine science field research station that works to protect and restore the ecosystems of the Hudson River estuary, was also a leading advocate for the HRPT. Environmental agencies often had conflicting views of the HRPT. On one hand, the Trust promised to preserve the ecosystems of the Hudson and ensure the protection of the sea bass. On the other hand, many environmental protection groups believed that the construction along the river would harm the ecosystem rather than protect it.

Both during the development of the trust and after implementation, the Trust faced many challenges and setbacks. The first issue was creating a cohesive board. The Trust requires 13 highly dedicated, energetic, and focused individuals with a vision for the future of the park. Selecting the appropriate people was an important and delicate process for the mayor and governor.

There were also several issues involving financing. When the park was first created, Pataki and Giuliani pledged $100 million per year to construct the park; however, only a small fraction of these funds were actually available to project managers. This required park advocates to continue to campaign for funds in future state and federal budgets. The second issue involved unrealistic expectations of the Hudson River Park Act. The act stated that the maintenance of the park would be financed from the revenue raised by commercial uses on major locations throughout the park. Many kinds of commercial development which traditionally are high sources of revenue, including hotels, offices, gambling, and cruise ships, were banned, however, preventing the park from raising enough income to cover the maintenance costs. Today, expenses are paid through a combination of public and private financing.

The Trust also experienced several problems that lead to significant delays in construction of the park. First, it took many months of negotiating for the Army Corps of Engineers to agree to the desired building plans along the river. Second, many of the top management positions remained empty, some for as long as three years. The delay in naming a construction manager for the Greenwich Village region of the site could have cost the park up to $50 million.

Recently, the HRPT has been engrossed by two major issues, repairing damages from Hurricane Sandy and finding new ways to finance park restoration considering future similar storms.Originally, the Trust had planned for the Park to finance itself, through tax revenue generated from the economic development in the area. However, due to restrictions in the types of development approved in the area, the Trust struggles to finance repairs and desired expansion. As of March, 2014, the Trust was authorized to sell the park's air rights through an amendment in the Hudson River Park Act. The Trust had hopes to sell as much as 1.6 million square feet of unused development rights to pay for infrastructure improvements, including the restoration of Pier 40, a 14-acre deteriorating pier in the West Village.

The Hudson River Park Trust was a massive success, in terms of structural restoration, ecological recovery, and economic development. Structurally, the Trust was able to repair and reconstruct the pathway and park surrounding the Hudson River to make it more pleasant for park-goers. It reconnected the river to the surrounding neighborhoods, proving the community with a greater connection to and appreciation for the nature of the River. Ecologically, the Trust created the Hudson River sanctuary to protect the striped bass and other wildlife in the river and provides regular ecological education opportunities for both children and adults. Finally, the economic development as a result of the Trust could be seen as the greatest success, citing a 167% return on the public investment of the park since 2003.

The East River Esplanade can also result in these kinds of successes. By reconstructing the physical landscape of

the park incorporating ecological and sustainable solutions, the community will be more likely to engage with the River, thus generating economic development, which will benefit both businesses and residents of the surrounding area.

Pier 55 Rendering, Hudson River Park

West Harlem Piers Park

Between the Hudson River and the 125th exit of the Henry Hudson Parkway lies the West Harlem Piers Park, a state-of-the-art recreation space completed in May of 2009. Although it is small in scale, a modest 2 acre park, this beautiful waterfront space contains a fishing pier, a boat dock, a kayak launch, several lawns and seating areas for visitors and community members. The northern shoreline of the Hudson has not always been this pleasant. It was the creation of the West Harlem Piers Park that transformed the underutilized, abandoned, and dangerous space between 125th and 135th Streets.

The rehabilitation of this park was a long time coming. Community members and WE ACT began discussion of renovating the neglected space in 1998. After several community design workshops, members of the Harlem-on-the-River steering committee agreed to pinpoint their focus on economic development and job creation, riverfront access, parks, and open space, transportation and parking, art, culture and education, urban design and streetscape improvements, environmental restoration, history and architecture revitalization. Once a design plan was finalized, WE ACT and the steering committee were able to apply for state financing. In 2001, they received support from Governor Pataki and two grants that totaled $800,000, plus a $500,000 grant from the Clean Water/Clean Air Bond Act from the State Office of Parks, Recreation and Historic Preservation to advance the construction of the park. Although these funds allowed the project

to gain momentum, no headway was made until 2009 when Mayor Bloomberg announced the City's Five Borough Economic Opportunity Plan. This Plan was created to counter the recession, through creating jobs and stimulating economic growth by building affordable, attractive neighborhoods.

The Five Borough Economic Opportunity Plan was seen as a huge success, especially in the sector of job creation. Although this plan lead to the development of more attractive city spaces, it is important to recognize that they may lead to the neighborhoods becoming progressively more unaffordable. West Harlem is currently experiencing large amounts of gentrification, especially with Columbia University's expansion into Manhattanville.

The park cost a total of $20 million and was funded through city and state investments, coming from the Federal Stimulus Program, and capital funds from Assemblymember Herman D. Farrell and the Upper Manhattan Empowerment Zone.

It was an instant success and could not have happened without support from WE ACT and Manhattan Community Board 2. The project also had support from Mayor Michael R. Bloomberg, Governor David A. Paterson, Congressman Charles B. Rangel, and Deputy Mayor for Economic Development Robert C. Lieber. This development project is similar in scale and level of investment to what we'd like to see done along the East River, more specifically at the 107th Street Pier. The Pier would benefit from similar investment to make the Pier a more pleasant destination and increase the community's interaction with the space.

West Harlem Piers Park

Policy and Budget Priorities

Infrastructure Needs

E. 107th Street Pier

Based on its current state of degradation, community desire for redevelopment, and potential economic impact, our first priority is the rehabilitation of the E. 107th Street Pier. As mentioned in the previously cited Office of Management and Budget report from 2013, the cost to return the pier to its original functioning state was estimated at $11 million.

Our vision plan incorporates the designs offered by CIVITAS in their recently released East River Esplanade Report. Acknowledging that acquiring the funding to do a full rehabilitation of the pier can often be a lengthy process, we are proposing to start with short term design improvements. These improvements would be low-cost interventions, which would encourage use of the abandoned space. Low-cost interventions like these have proven to be very successful in improving street vibrancy in the city and across the country in other urban locations. Some examples of similar temporary pedestrian plazas are the Sunset Triangle Plaza in Los Angeles, Gansevoort Plaza in the Meatpacking District, and the most dramatic, the pedestrian walkway in Time Square.

The short term plan begins with the roof, which had previously collapsed, and should be removed. Temporary interventions, including street furniture and sunshades on the elevated portion of the pier have been installed. The decking of the pier should also be replaced. Opportunities for street vendors, particularly those with a connection to the community, could also be pursued to increase the draw to the pier.

We acknowledge a design solution like the one discussed above is only temporary, and given the roughly ten-years of usable life of the pier, we must present a longer-term vision strategy for the completion of the project. Rather than re-create the existing structure, when rebuilding the pier a more expansive vision must be accomplished. We once again agree with CIVITAS in their suggestion to separate uses in the new pier.

For example, the new pier can be split into three sections. The new pier could service the needs of those wanting to fish, a launch for boats, and a space for recreation or to simply observe the river. Other suggestions include a temporary barge location, which could either provide refreshments or serve

Previous page top (Time Square), Previous page bottom (Gansvoort Plaza NYC),
Above (Sunset Triangle Plaza Los Angeles

as an educational center. This design should cover the same square footage as the old pier, so it should not run up against Department of Environment Conservation regulations which are designed to limit encroachment of the river by built structures.

E. 91st Street Marine Transfer Station

Asphalt Green, a not-for-profit organization committed to promoting healthy lifestyles, has developed a park plan to mitigate against the negative environmental impacts of the East 91st Street Marine Transfer Station and provide the community most impacted by the facility with additional amenities. The proposed amenities are mainly an elevated highline-like walkway, called Linear Park, and a Green Roof Park, which will include green walls on the facade of the building, rock climbing walls, a running track, several exercise stations, and overlooks and quiet pathways. Although the community would benefit from this park, this proposed development is not the proper solution to the East 91st Street Marine Transfer Station.

Unfortunately, Asphalt Green's design creates a concrete walkway rather than a park. By covering the pre-existing pathways along the river, it actually minimizes the green space available to the residents and further alienates the East River from the community. By decreasing access to the East River Esplanade, it decreases New Yorker's ability to connect with nature. Additionally, it neglects to recognize the importance of the esplanade park and the river in the lives of the community members.

The suggested Linear Park is not the right solution to this problem. While it is universally agreed that turning abandoned elevated railroad tracks on the west side of Manhattan into an above ground park was a fantastic innovation, that is not a universal resolution to all urban or park-related complications. Creating a park should be about maximizing green spaces and connecting people to the natural environment, not decreasing access to pre-existing spaces.

E. 91st Waste Transfer Station Rendering, Michael Singer Studios

It is also important to recognize that this MTS Green Roof Park would not be the first roof-top park to be built in Manhattan on a waste treatment plant. Riverbank State Park, mentioned before, came about as a way to offset the burden on the community. It should also be noted that placing a recreational space on a facility of this nature can be a challenge from a design perspective. And while it has become one of the most heavily used State parks in New York, the park has had to work to reduce odors and remedy design flaws.96th Street Underpass

Today, the underpass is an extremely unpleasant area in which to spend any amount of time, even the minute it takes to walk to the Esplanade. It is poorly maintained, littered with trash, and neglected. The suggestion is to revitalize the underpass, making it more aesthetically pleasing and creating a more efficient use of the space. Installing a boat shed on both sides of the underpass would not only provided a needed amenity, but it would also revitalize the space. This construction would successfully encourage more community members to visit the river and reconnect these individuals with the surrounding natural beauty.

Esplanade Governance

Five Models of Park Management: From Public to Private

There are five potential models that can be applied to the governance of the East River Esplanade. Each model has unique strengths and weakness and can be evaluated by the East River Esplanade Trust as to which will be the most efficient in this situation.

1. A Fully Public Model
In this model, the park is entirely owned and operated by the government. It is funded only through tax dollars and is available to all members of the community. However, those who do not use the park as a park resource and engage in commerical activities are required to pay. In this example, transparency is legally required.

2. Parks as Public Utilities
In this second model, the park is treated as a public utility, similar to water or electricity. Users of the resource pay some or all costs and nonusers have no tax burden. This model is still entirely owned and operated by the government. This model, however, often prevents lower-income individuals from partaking in the benefits of the space.

3. Outsourcing Management
In this model of governance, the public sector provides funding for the park, but private firms compete for production rights. This operating procedure keeps construction costs low and maintains flexibility for public operation.

4. Private Ownership by a Non-for-profit Organization
In this model, the public sector has no inherent role. The organization both owns and operates the park and is entirely self-sustaining. It is beneficial because non-users have no tax burden. The corporation is not subject to transparency because it is not in the public sector.

5. Private Ownership by a For-profit Organization
In this model, private firms purchase and operate natural areas on a for-profit basis. They operate efficiently and do not generate a tax burden for non-users. The profit is created by excluding those not willing to pay. Similar to the utilities model, this also usually excludes lower income families from access to park and green spaces.

We suggest a combination of models 1, 3 and 4 for the governance of the East River Esplanade. When combined, the Esplanade will be owned by both the government, be able to receive contributions from private donors, and will be operated preferably by a non-for-profit organization.

Recommendations

Immediate (1-2 years)

Create East River Esplanade Trust Legislation
By creating an East River Esplanade Trust, modeled after the Hudson River Park Trust (HRPT), the governance and preservation of the Esplanade will become a priority. The Esplanade requires a coherent vision, executed by one authority, with representation across a variety of levels of government.

Encourage increased activity on the Esplanade (recreational and economic)
An initial primary focus of the renovation of the Esplanade is to reconnect the community to the river and increase activity on all planes. By providing locations for bike rental (or a Citibike station directly on the Esplanade), space for venders, and bait and tackle stations, individuals will be drawn to the riverfront and both recreational and economic activity will increase.

Replace Esplanade Benches
Replacing the benches is a simple and practical way to make the esplanade more desirable for visitors. In warmer months or on sunny days, sitting by the river will give residents a break from the hustle and bustle of the City and a moment to enjoy the natural resources around them.

Tear down roof of 107th Street Pier and invest in inexpensive street furniture, paint, and other improvements
The 107th Street Pier is an extraordinary resource for the residents of East Harlem that often goes unused due to its poor, and excessively unsafe, condition. Aside from providing more park space in a neighborhood where green space is lacking, it is also is an area where there is little noise pollution. By making the necessary repairs and adding basic furniture and paint, the pier will undoubtedly become a greater draw for community involvement.

Install Green Sound Proofing Barriers
Due to the excessive noise pollution from the FDR Drive, few visit the Esplanade because, although the river is pleasant, the sound is not. Green soundproofing is a simple solution to this problem and would make the Esplanade a more desirable location for recreational activity.

Lower Manhattan, Rebuild By Design

Intermediate (3-10 years)

Secure Funding for Replacement/ Redesign of 107th Street Pier
According to recent studies, the 107th Street Pier only has a maximum lifespan of 10 more years. As previously mentioned, this pier is an important resource for the surrounding communities and cannot be lost. It is vital to secure the appropriate funds to replace the Pier before its lifespan runs out.

Pass Legislation and Create East River Esplanade Trust
It is necessary to pass the legislation to create an East River Esplanade Trust so that the new improvements and construction in the park are maintained and future improvements can gain momentum. The Trust will be the lead advocate for all future development around the river, and allow for the pursuit of private and philanthropic resources to allow the Esplanade to continue to develop and thrive, while it meets both their operating and capital needs and objectives.

Design and Form Consensus Around a Master Plan
For the Esplanade to continue to thrive, it must remain in the spotlight and continue to be a constant thought in the minds of the surrounding community members. Continuous polling in the relevant neighborhoods will ensure that the proposed construction reflects the desires of the community. We must keep the momentum going from the CIVITAS Design Competition and CIVITAS Esplanade Report, as well as the Friends of the East River Esplanade. In May of 2014, city council agreed to invest $35 into the repair of the Esplanade over 7 years.

Fund and Install Boat Storage Under 96th Street Overpass

Although many New Yorkers do not realize it, there is a fairly large boating presence in the East River. Every Tuesday and Thursday evening, dozens of rowers enter the East River through the 96th Street boat launching station. Installing a boat storage area under the overpass would be an extremely efficient use of the space and further encourage more individuals to use the river for recreation.

Present, Pier 107

Long Term (10-30 years)

Fund and Build Decking Over the FDR Drive, Increasing Access and Park Space
A deck over the FDR is the largest vision suggested by CIVITAS. By covering the FDR and creating a green deck, green space in East Harlem would dramatically increase . The deck would connect the Esplanade to Thomas Jefferson Park and make the Esplanade more than a walkway but an entire park space. The park is extremely popular; though today, crossing from the park to the Esplanade is a rarity, due to the unpleasant walk around and over the FDR. With the right vision, this plan could enhance city life for all New Yorkers.

Proposed Decking of A7 highway, Hamburg, Germany

Expand Esplanade Walking/Biking Paths
Expanding the walking/biking paths of the Esplanade will further encourage greater activity in the area, both economically and recreationally. It will provide greater health benefits to the community through an increased focus on exercise and use of parks.

Fund and Build Enhanced Resiliency Measures
A portion of the submissions in the CIVITAS Design Competition highlighted environmental restoration, specifically of preexisting marshes and oyster beds. These ecological improvements would both promote increased biodiversity of the river and act as natural barriers from future, potentially dangerous, storms. Other design options include the installation of rip-rap, and other soft barriers, which allow for water to pass through and be absorbed before damage can occur.

Coastal Edge, Rebuild by Design Vision

Brooklyn Bride Park Affordable Housing Rendering

Preserve and Create Housing Stock Near Esplanade

Waterfront redevelopment has traditionally been an economic development driver, leading to real estate speculation and increased rents. While East Harlem has significant levels of State and City-owned subsidized housing, we must be proactive in protecting lower and middle-income residents. To protect long-term affordability, we must rely on Article 11, J-51 program, and land use methods that reduce intense speculation. Structurally, a trust must be created that serves dual purposes, redeveloping waterfront while protecting and potentially creating affordable housing.

Economic Development and Gentrification Concerns

Economic Development projects should always be undertaken in a sensitive manner, in a way that both weighs current community needs while also accounting for broader city-wide goals. Waterfront projects are a perfect embodiment of this. The Hudson River Park Trust was extremely successful in promoting riverside development in lower Manhattan, including $3 billion of new construction adjacent to the Park in the last decade. This development, however, comes at a cost. A large majority of the buildings are luxury apartment buildings and condominiums, preventing low and middle-income families from the pleasure of living by the river, one that now is only available to a select few. It is important to remain keenly aware of potential rises in real estate prices and rents in the area, thus displacing the original residents of the community. Although the Trust would support economic development and improving the conditions of the Esplanade, it must also be a force in continuing to provide affordable housing in surrounding neighborhoods, ensuring that those who currently reside in the area can continue to live there.

Concluding Visions

Concluding Visions

Two years after Superstorm Sandy, life has returned to normal for some New Yorkers, while others still wait for relief. As shown in the maps provided, the waterfront communities in Northern Manhattan will face this same threat, with increasing frequency. On the most fundamental level, our vision for the waterfront is one that utilizes a variety of flood protection and mitigation measures, reducing the impact on our community and its resources.

While this is undoubtedly a challenge, it is also an incredible opportunity. In addressing the changes necessitated by climate change, we can go beyond simply repairing the Esplanade and create an area which invites use through recreation, economic activity, and leisure. Some short-term improvements could help, but a bold long-term solution is needed; specifically, creating much needed green space, while also protecting the roadway from flood damage, by creating a deck over the FDR, is just the sort of vision needed to solve this complex problem.

Our vision is also community-based. While waterfront redevelopment has started to occur throughout the city, the needs of the neighboring communities have been prioritized less than those of the City's global vision and desire to be a draw for tourists. We will also build in protections to preserve and build affordable housing. A waterfront that is not a representation and expression of our community is simply not acceptable.

Hoboken, New Jersey, Rebuild by Design Vision

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