PlaNYC

UPDATE APRIL 2011

A GREENER, GREATER NEW YORK

Updated in 2011, PlaNYC addresses ten key issues

- Housing & Neighborhoods
- Parks & Public Space
- Brownfields
- Waterways
- Water Supply
- Transportation
- Energy
- Air Quality
- Solid Waste
- Climate Change

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- **Climate Change**

Increase the resilience of our communities, natural systems, and infrastructure to climate risks

1. Assess vulnerabilities and risks from climate change

2. Increase the resilience of our built and natural environments

3. Protect public health from the effects of climate change

4. Increase the city's preparedness for extreme climate events

5. Create resilient communities though public information and outreach

PlaNYC outlines a five-pronged approach to increase our climate resilience

Climate Change Projections for New York City[1]

	BASELINE 1971-2000	2020s	2050s	2080s
Air Temperature[2]	55°F	+ 1.5 to 3°F	+ 3 to 5°F	+ 4 to 7.5°F
Precipitation[2]	46.5 in	+ 0 to 5%	+ 0 to 10%	+ 5 to 10%
Sea Level Rise[2,3]	NA	+ 2 to 5 in	+ 7 to 12 in	+ 12 to 23 in
Rapid Ice-Melt Sea Level Rise[4]	NA	+ 5 to 10 in	+ 19 to 29 in	+ 41 to 55 in
Number of Days Per Year With Temperature Over 90°F	14	23 to 29	29 to 45	37 to 64
1-in-100 Year Flood to Reoccur, On Average[5]	once every 100 years	once every 65 to 85 years	once every 35 to 55 years	once every 15 to 35 years

1 Based on 16 Global Climate Models (GCMs) (7 GCMs for Sea Level Rise) and three emissions scenarios. Baseline is 1971-2000 for temperature and precipitation and 2000-2004 for sea level rise. Data from National Weather Service (NWS) and National Oceanic and Atmospheric Administration (NOAA). Temperature data are from Central Park; precipitation data are the mean of the Central Park and La Guardia Airport values; and sea level data is from the Battery at the southern tip of Manhattan (the only location in NYC for which comprehensive historic sea level rise data are available).

2 Projections represent the middle 67% of values from model-based probabilities; temperatures ranges are rounded to the nearest half-degree, precipitation to the nearest 5%, and sea level rise to the nearest inch.

3 The model-based sea level rise projections may represent the range of possible outcomes less completely than the temperature and precipitation projections.

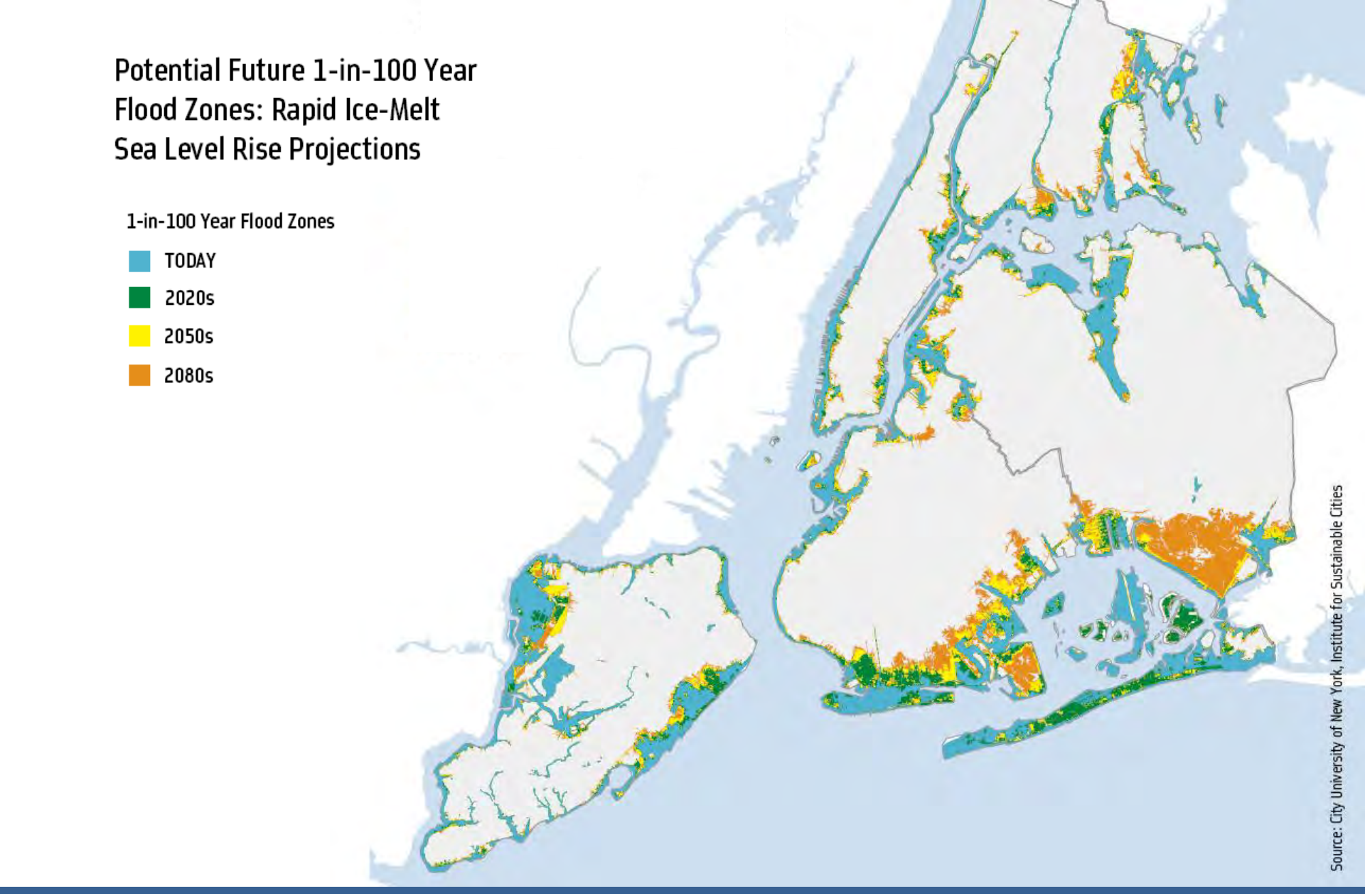
4 Rapid ice-melt scenario is based on acceleration of recent rates of ice melt in the Greenland and West Antarctic Ice sheets and paleoclimate studies.

5 Does not include the rapid ice-melt scenario.

Source: New York City Panel on Climate Change

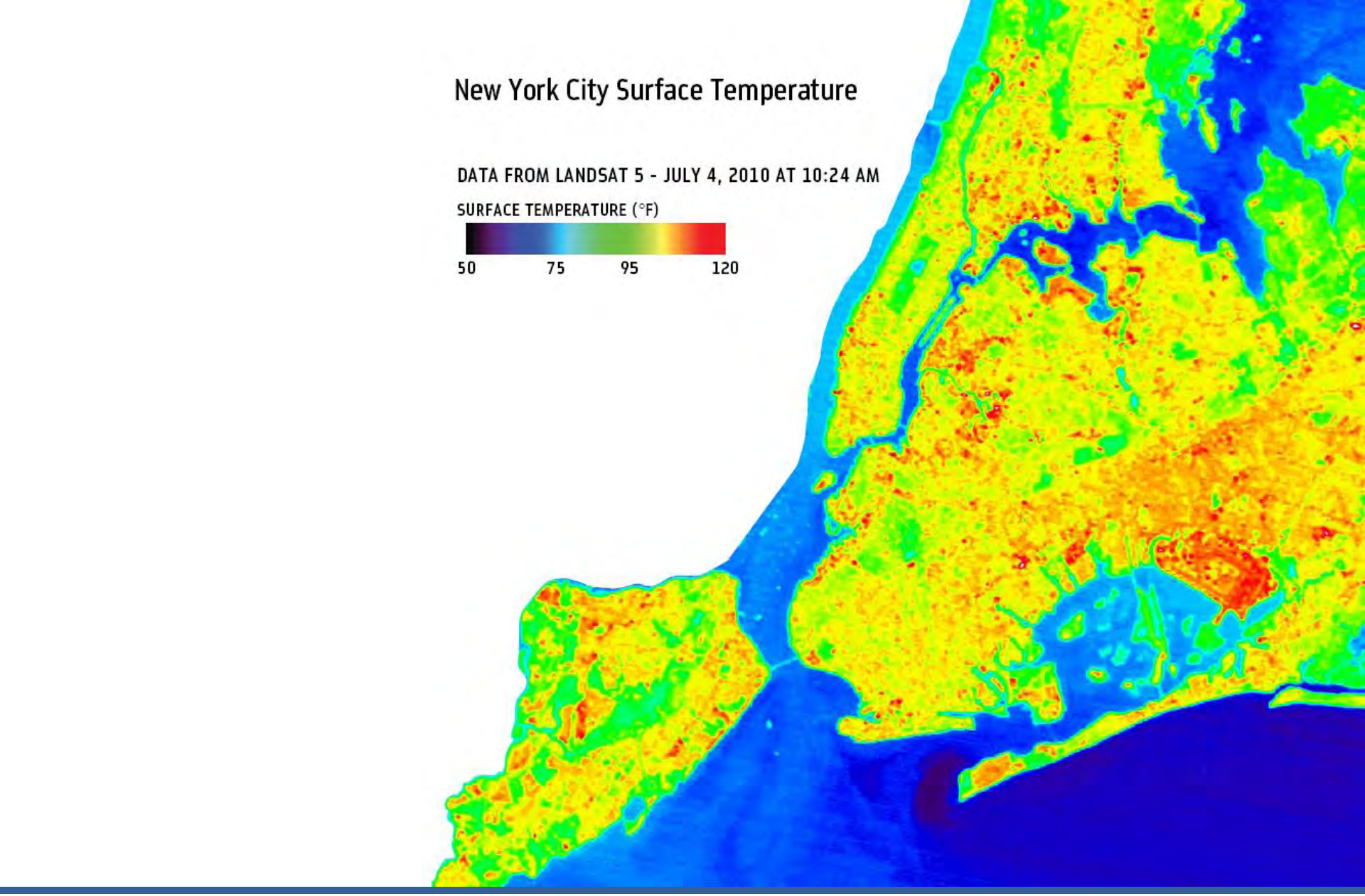
Assess vulnerabilities and risks from climate change:

Regularly assess climate change projections

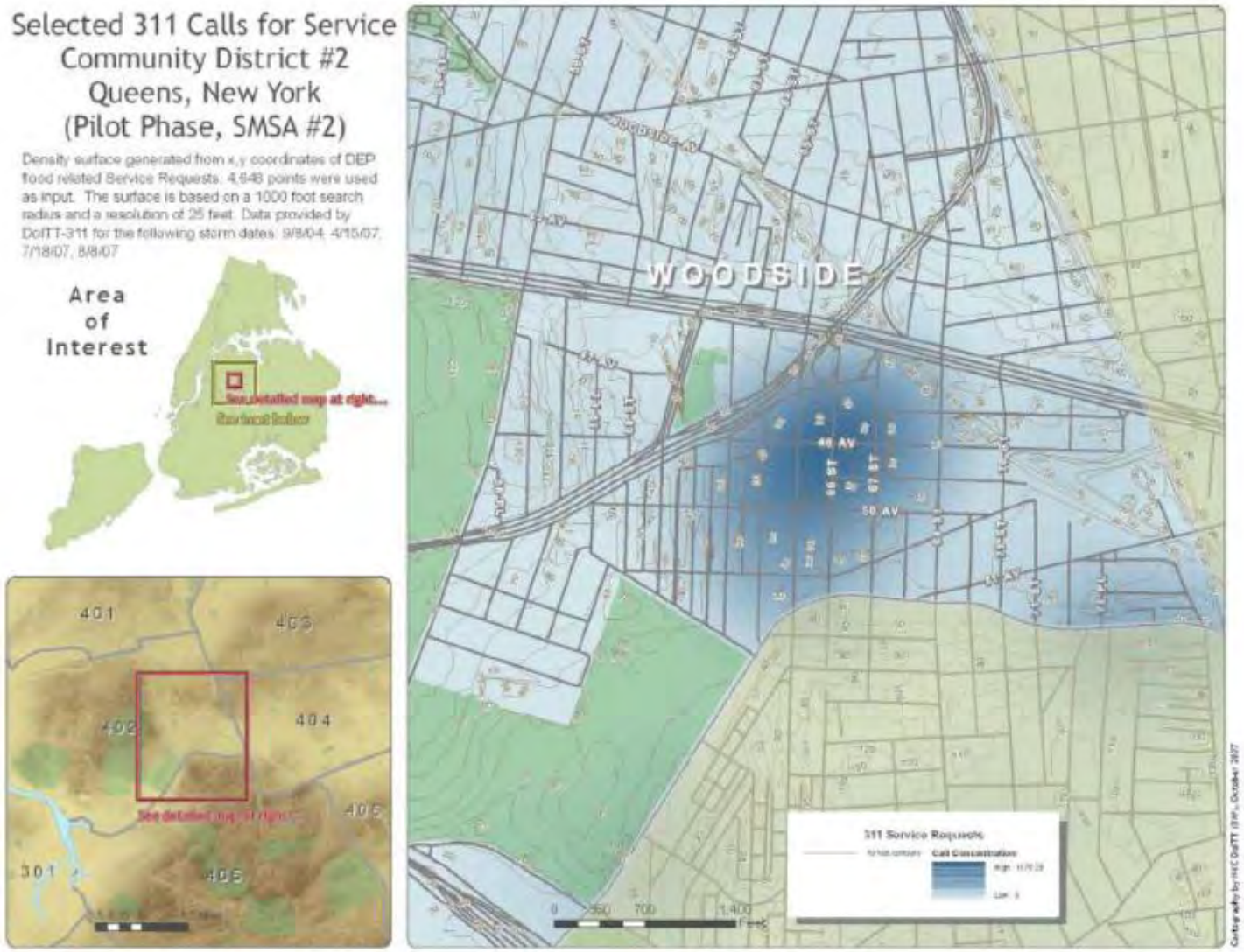


Assess vulnerabilities and risks from climate change:

Update the City's Flood Insurance Rate Maps



Assess vulnerabilities and risks from climate change:
Develop tools to measure our current and future climate exposure



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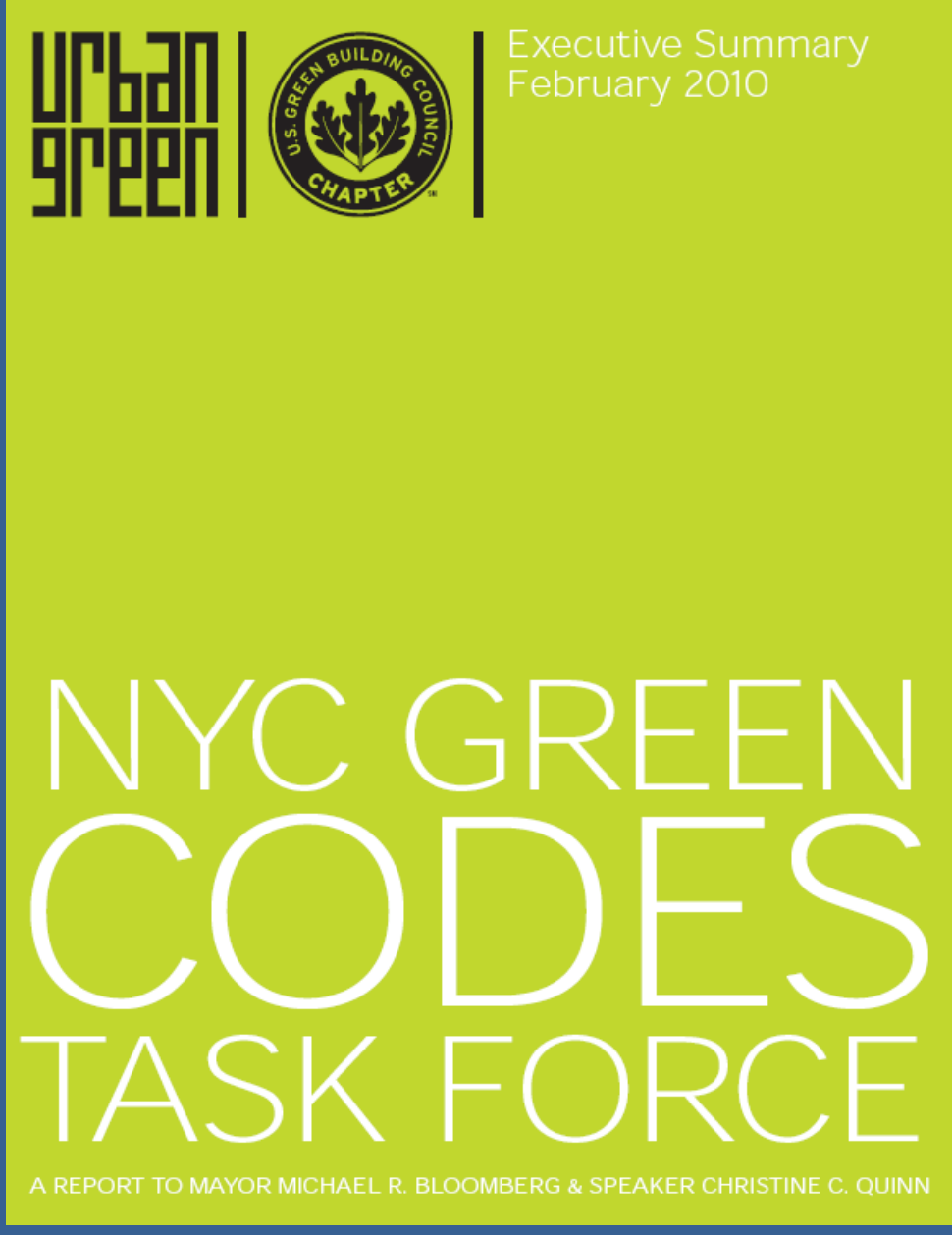
Increase the resilience of our built and natural environments:
Protect New York City's critical infrastructure

Over 200 technical experts identified 111 ways to “green” NYC’s construction codes.

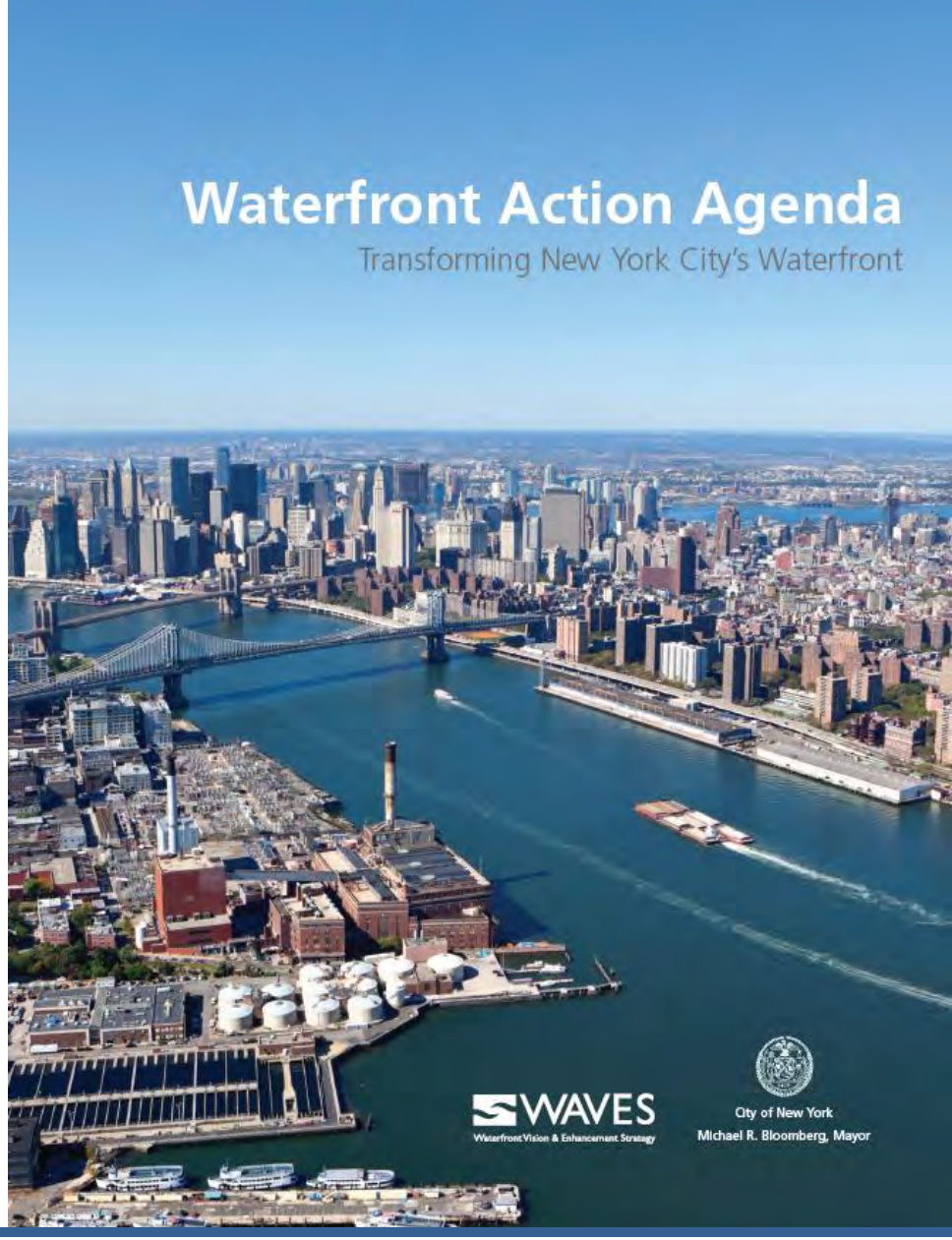
Recommendations include:

- Create and tie codes to flood maps with sea level rise
- Safeguard toxic materials in flood zones
- Ensure toilets and sinks can operate during blackouts
- Enhance building water supply
- Investigate passive survivability strategies



Increase the resilience of our built and natural environments:

Update regulations to increase the City’s resilience

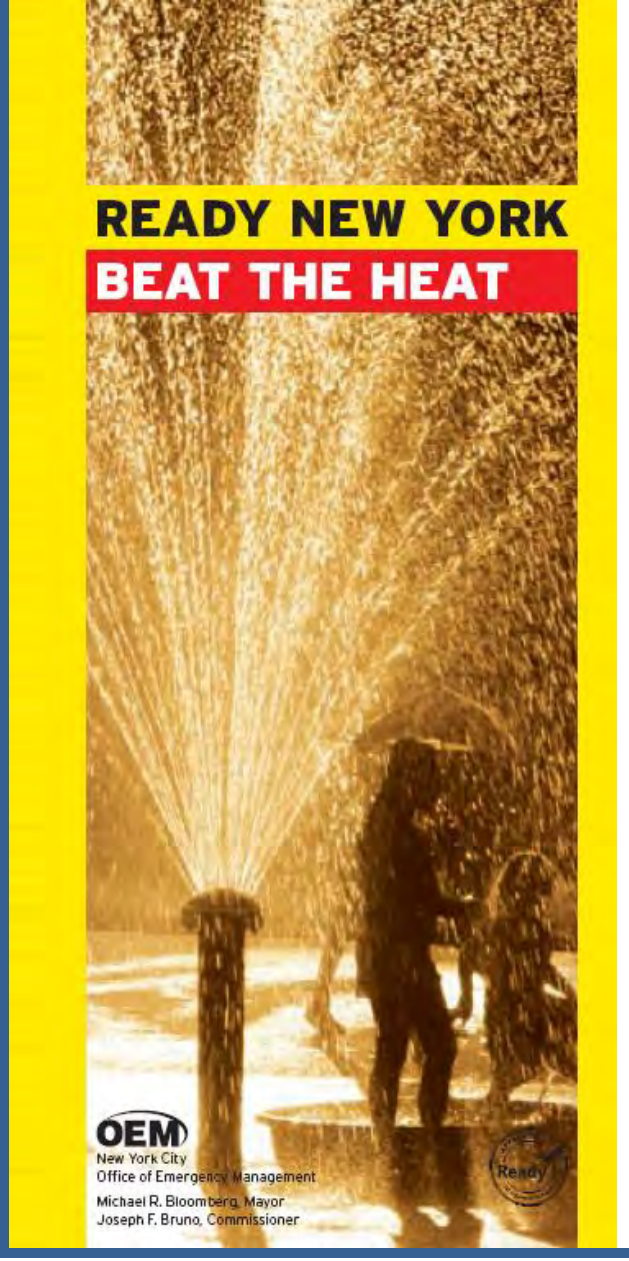


Increase the resilience of our built and natural environments:

Update regulations to increase the City's resilience

Increase the resilience of our built and natural environments:
Identify and evaluate citywide coastal protective measures

Protect public health from the effects of climate change:
Mitigate the urban heat island effect



Increase the city's preparedness for extreme climate events:
Integrate climate change projections into emergency management

HOUSING AND NEIGHBORHOODS

- Foster the creation of Greener, Greater Communities
- Increase the sustainability of City-financed and public housing

PARKS AND PUBLIC SPACE

- Create a network of green corridors
- Plant one million trees
- Support ecological connectivity
- Incorporate sustainability through the design and maintenance of all public space

WATERWAYS

- Complete cost-effective grey infrastructure projects to reduce CSOs and improve water quality
- Expand the sewer network
- Optimize the existing sewer system
- Expand the Bluebelt program
- Build public green infrastructure projects
- Engage and enlist communities in sustainable stormwater management
- Provide incentives for green infrastructure
- Enhance wetlands protection
- Restore and create wetlands

WATER SUPPLY

- Maintain and upgrade dams
- Increase operational efficiency with new technology
- Increase water conservation

ENERGY

- Implement the Greener, Greater Buildings Plan
- Improve our codes and regulations to increase the sustainability of our buildings
- Improve compliance with the energy code and track green building improvements citywide
- Improve energy efficiency in smaller buildings
- Improve energy efficiency in historic buildings
- Provide energy efficiency financing and information
- Support cost-effective repowering or replacement of our most inefficient and costly in-city power plants
- Encourage the development of clean distributed generation
- Foster the market for renewable energy in New York City
- Ensure the reliability of New York City power delivery
- Develop a smarter and cleaner electric utility grid for New York City

30 additional initiatives in other chapters will increase our climate resilience

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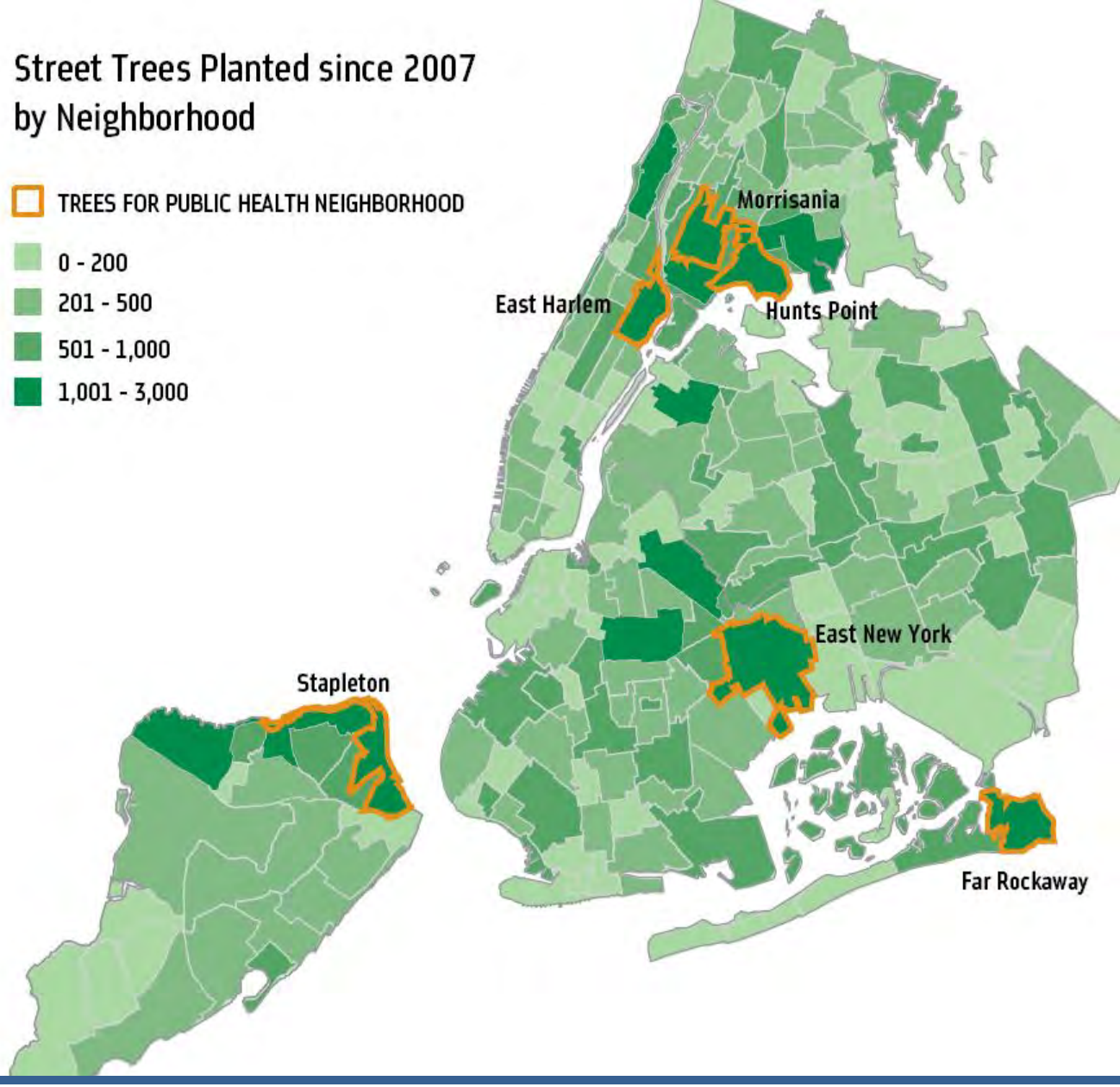
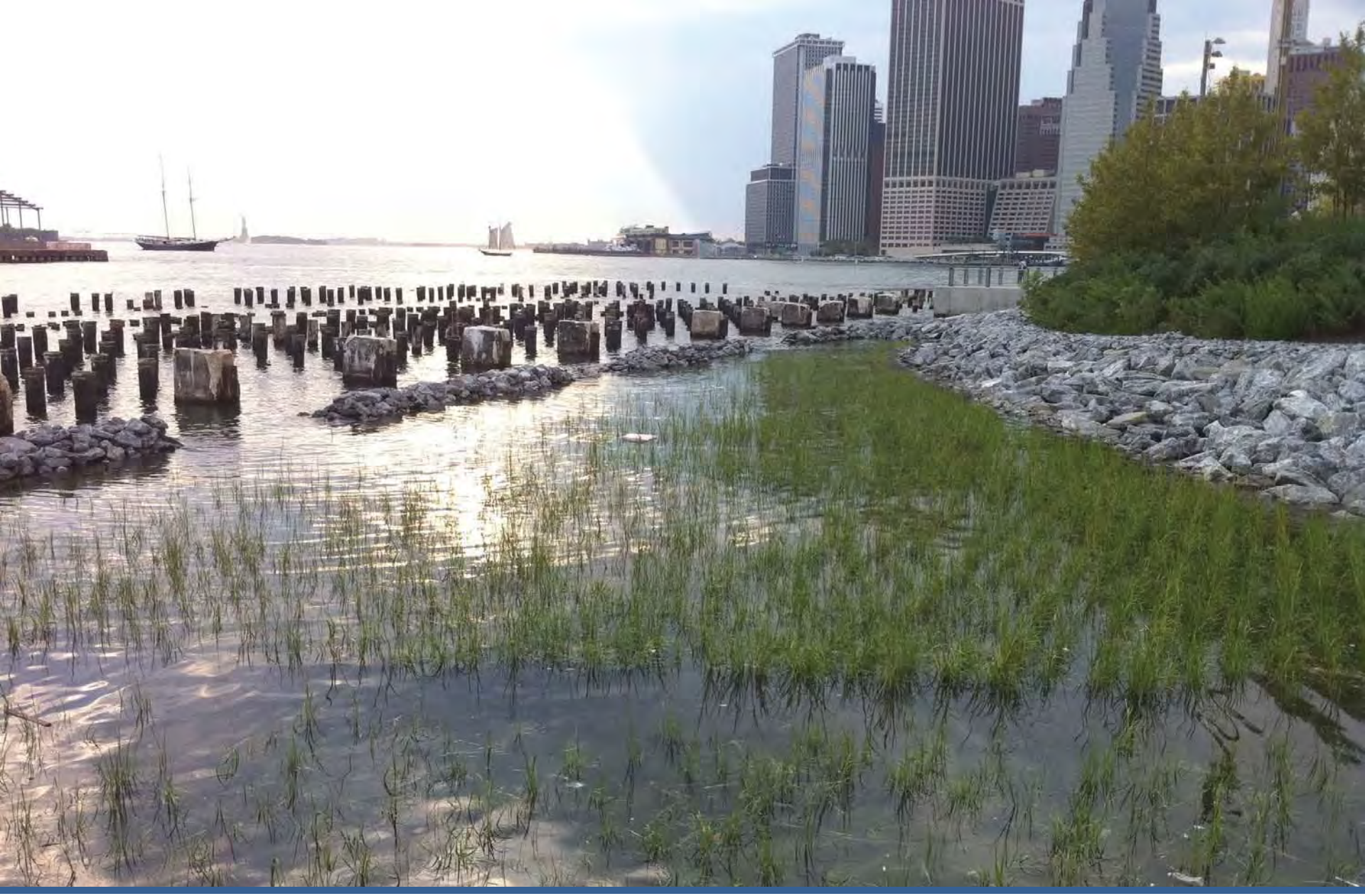


Planted over 500,000 trees as part of MillionTreesNYC



Designing parks and waterfront areas to accommodate water






Investing $1.5 billion as part of Green Infrastructure Plan

Developing a wetland protection strategy

Restoring and creating new wetlands in Jamaica Bay

Launched “Solar Empowerment Zones” to increase the use of solar energy

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