

Hunts Point

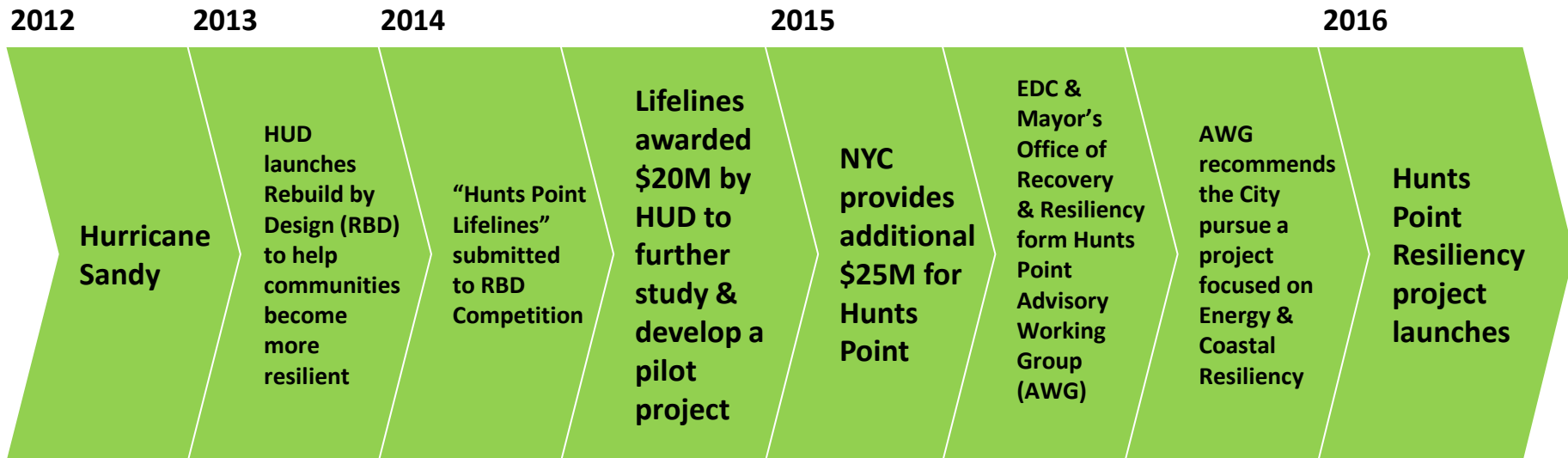
RESILIENCY

PUBLIC MEETING
October 19, 2016



Project Background

- US Department of Housing & Urban Development (HUD) launched the Rebuild by Design Competition in 2013, in response to Hurricane Sandy
- *Hunts Point Lifelines* was selected; a total of \$45 million was awarded to advance resiliency concepts from the proposal
- The City convened an Advisory Working Group to identify resiliency concepts to study and implement projects on (1) Energy Resiliency (*funded pilot project*) and Flood Risk Reduction.



On April 22nd, 2015, Mayor Bill de Blasio released a new long-term strategic plan to address our most pressing challenges.

This plan builds on existing efforts and strengthens and expands the City's commitment to a multilayered approach to resiliency.

Our Four Visions



Our Resilient City



Neighborhoods



Every city neighborhood will be safer by strengthening community, social, and economic resiliency



Buildings



The city's buildings will be upgraded against changing climate impacts



Infrastructure



Infrastructure systems across the region will adapt to enable continue services



Coastal Defense



New York City's coastal defenses will be strengthened against flooding and sea level rise

Project Goals

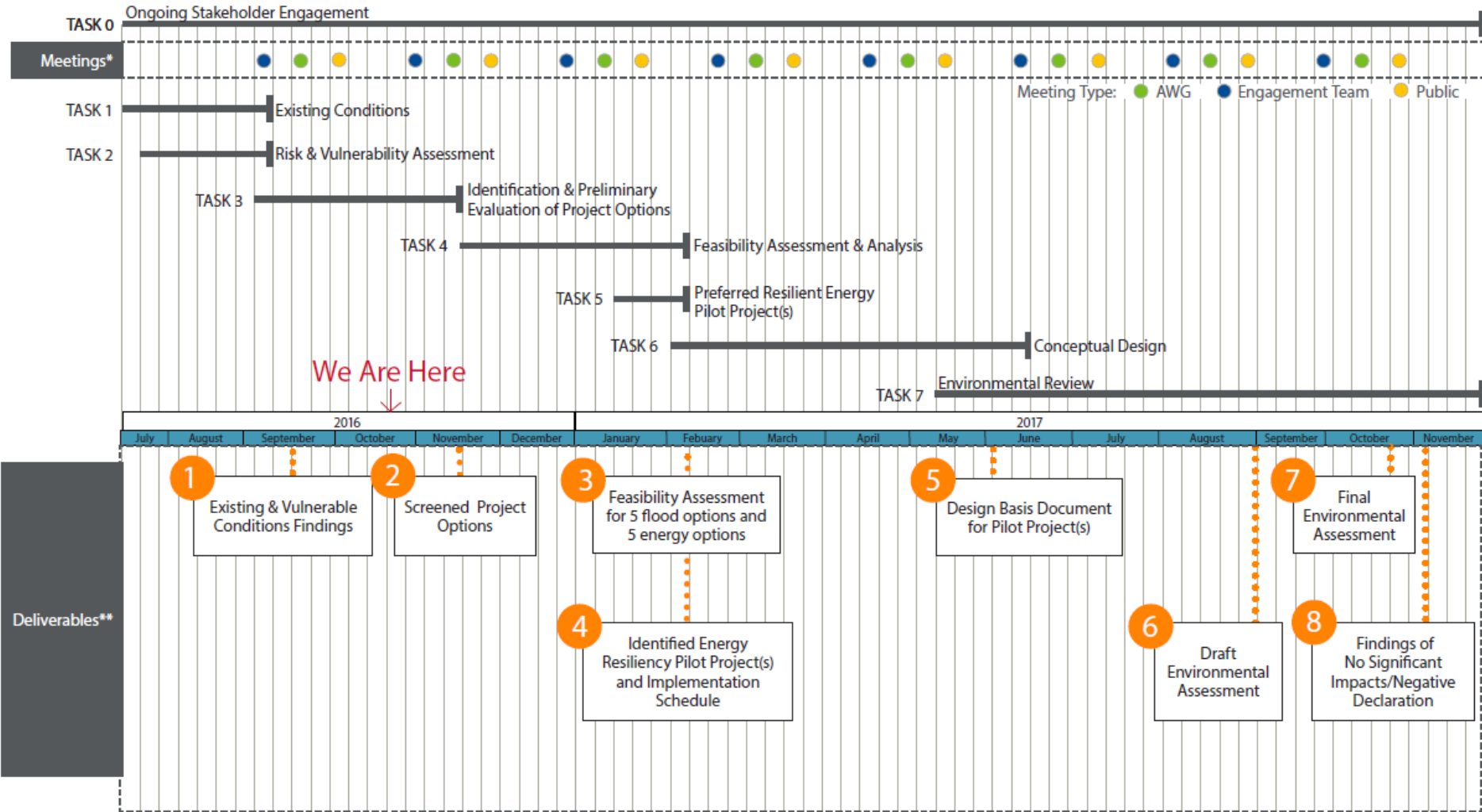
The Hunts Point Resiliency Project will result in the **implementation of a Resilient Energy pilot project** and the **identification of feasible Flood Risk Reduction projects** for which to seek additional funding.

The Hunts Point Resiliency Project seeks to advance solutions that:

- Address critical vulnerabilities for both community and industry
- Protect important citywide infrastructure
- Protect existing and future industrial businesses and jobs
- Support the community's social, economic, and environmental assets
- Use sustainable, ecologically sensitive infrastructure



Project Timeline



* The first meeting of the AWG will be held on May 23, 2016, prior to the start of this timeline.

** HUD Timeline Obligations: Selected Pilot Project and Completed BCA by March 2017

Meeting Today

1. Desired outcomes
2. Key vulnerability findings
3. Group discussions
 - Critical facilities
 - Consequences
 - Project options
4. Stakeholder engagement

Key Vulnerability Findings

One goal of this study is to address critical vulnerabilities for both community and industry. Based on a vulnerability assessment, the key findings are:

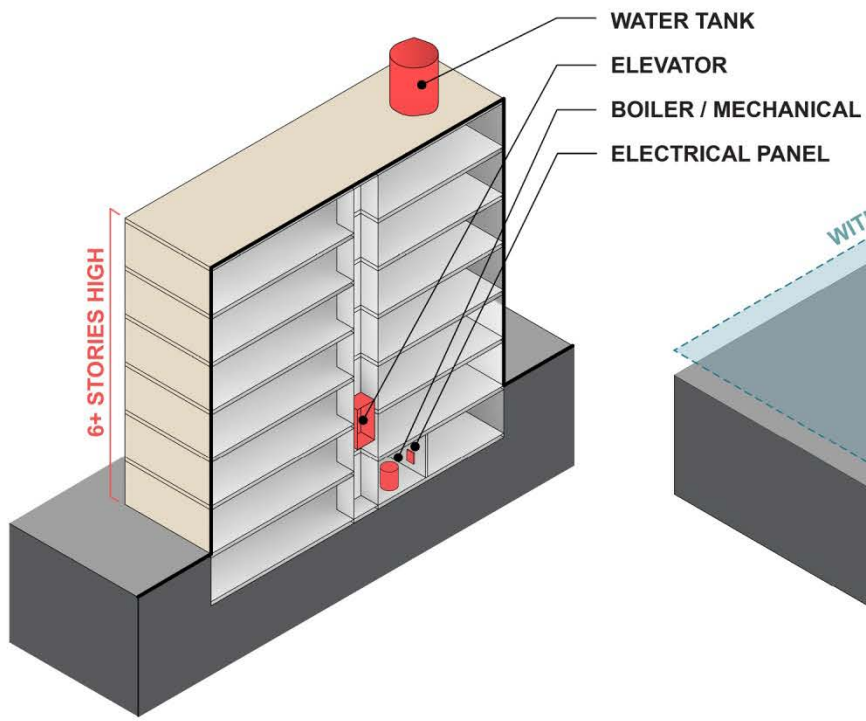
1. Building-level power outages are a significant and shared threat to residents and businesses in Hunts Point.
2. Due to considerable elevation change, the low-lying areas face significant threats from coastal flooding while the upland residential area does not.
3. Extreme rain/snow storms are not a major threat in Hunts Point.
4. The number of community organizations and history of organizing in Hunts Point can lay the foundation for strong social resiliency.

Key Finding #1: Building-level Power Outages

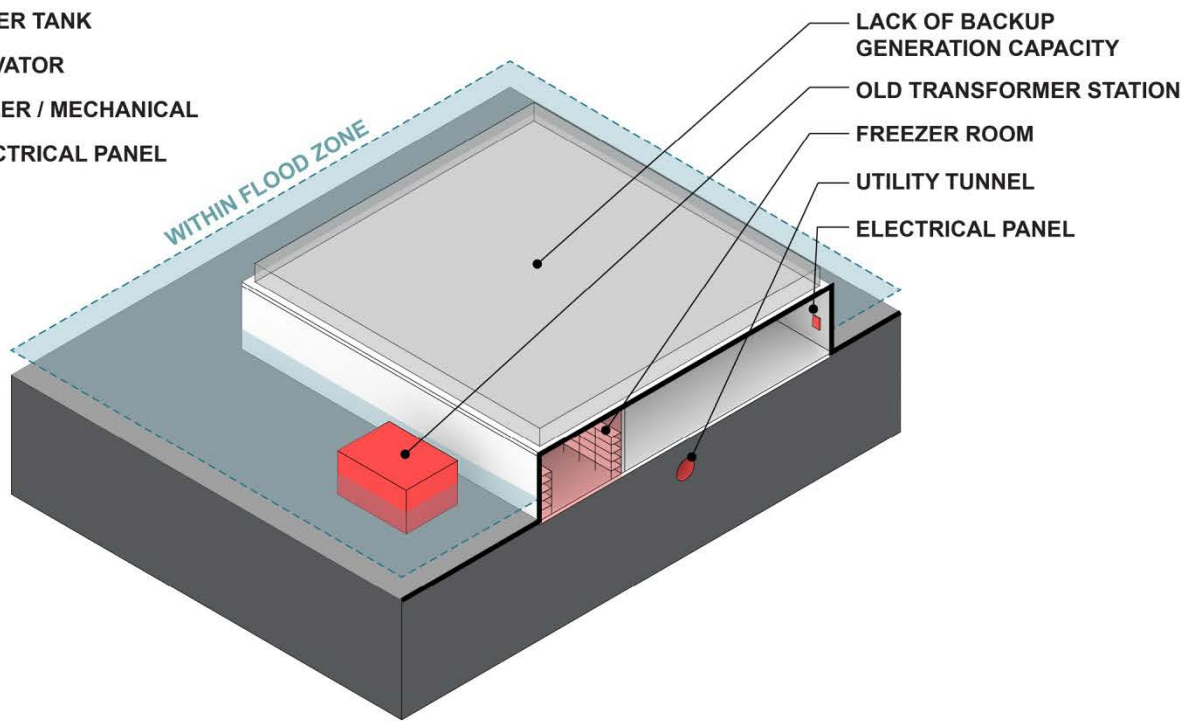
Building-level power outages are a significant and shared threat to residents and businesses in Hunts Point.

Key Finding #1: Building-level Power Outages

RESIDENTIAL



INDUSTRIAL



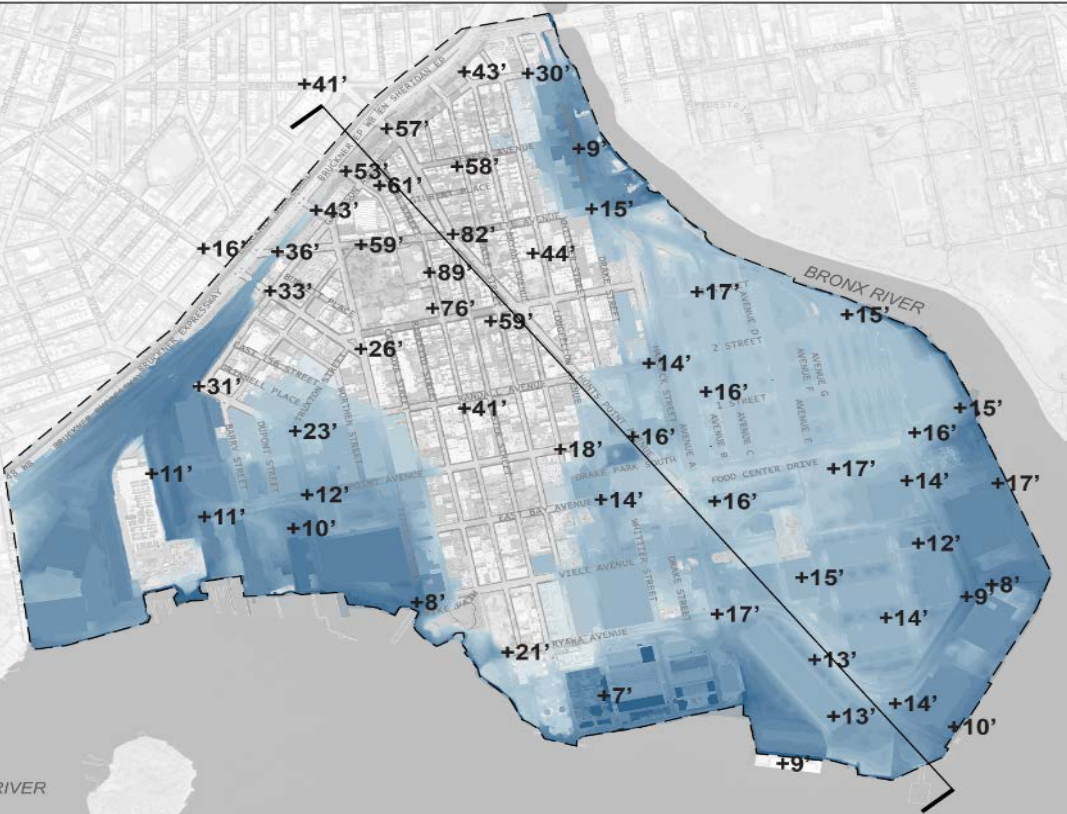
Almost all residential buildings in Hunts Point are outside of the floodplain.

- | BUILDING VULNERABILITY FACTORS | |
|---|------------------------------|
| ▪ Location within floodplains | ▪ Elevators |
| ▪ Basement below grade and in floodplain | ▪ Water tank |
| ▪ Age of infrastructure | ▪ Backup generation capacity |
| ▪ Location of boiler, mechanicals, and electrical service | ▪ Perishable contents |

Key Finding #2: Coastal Flooding

Due to considerable elevation change, the upland and low-lying areas face different levels of risk from coastal flooding now and in the future.

Key Finding #2: Coastal Flooding

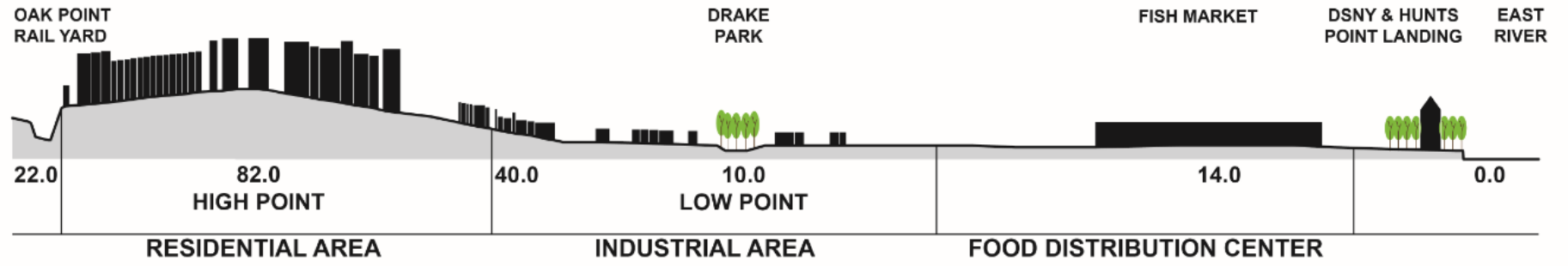
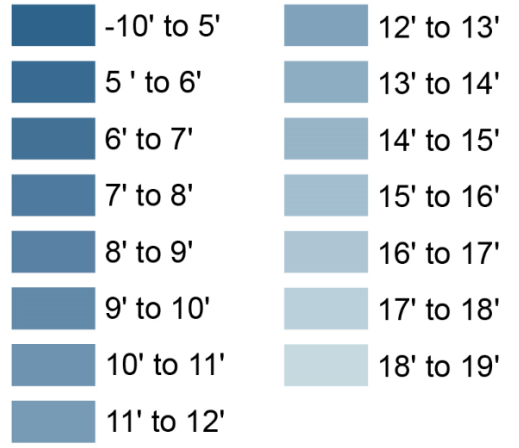


LEGEND

Study Area

LAND ELEVATION

+0' Spot Elevation



VERTICALLY SCALED 500%

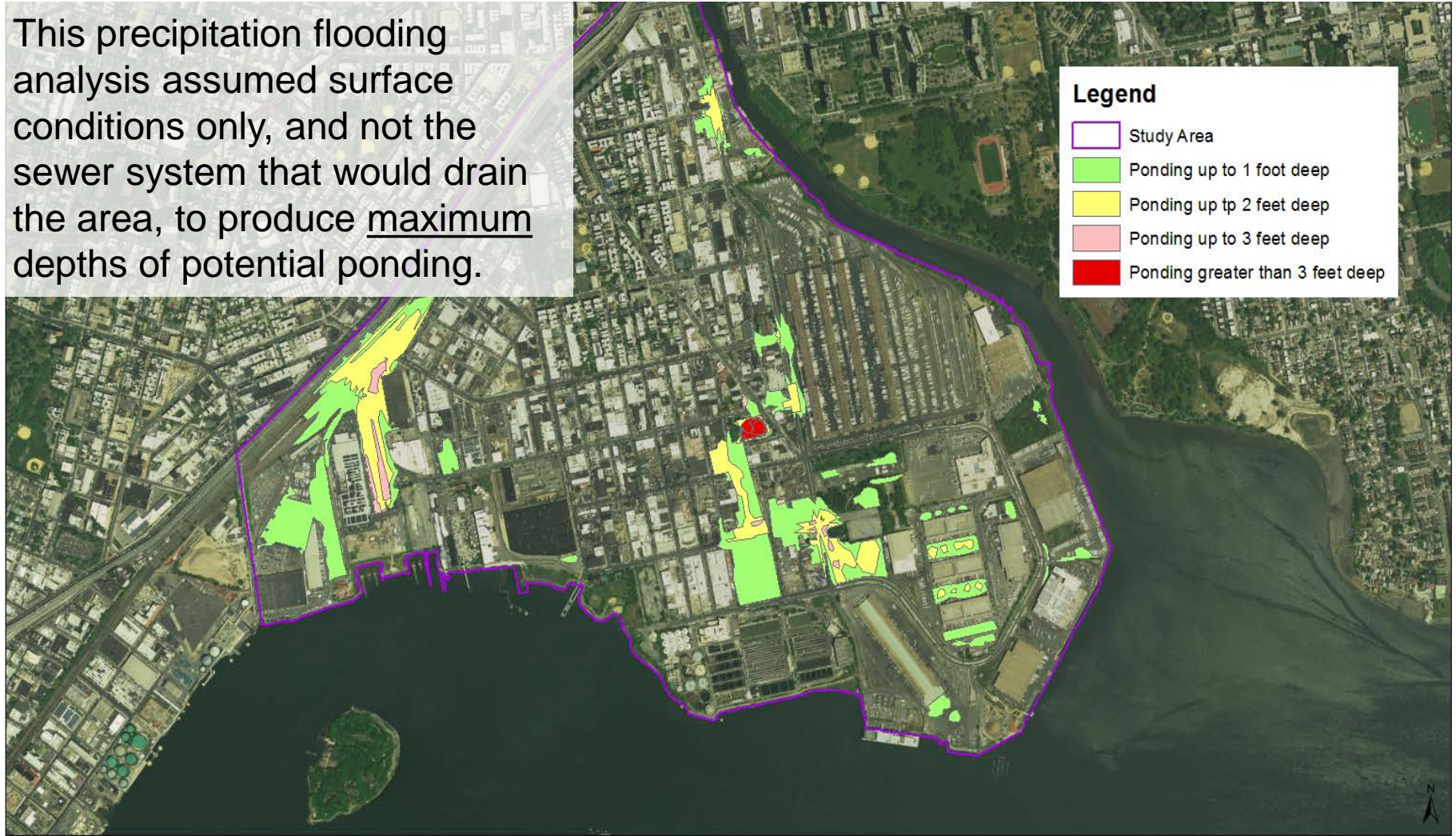
Key Finding #3: Extreme Rain/Snow Storms

Extreme rain/snow storms are not a major threat in Hunts Point.

Key Finding #3: Extreme Rain/Snow Storms

Date: 9/1/2

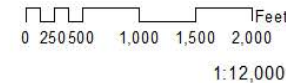
This precipitation flooding analysis assumed surface conditions only, and not the sewer system that would drain the area, to produce maximum depths of potential ponding.



Legend

- Study Area
- Ponding up to 1 foot deep
- Ponding up to 2 feet deep
- Ponding up to 3 feet deep
- Ponding greater than 3 feet deep

Interior Flood Potential Ponding



Key Finding #4: Building on Social Resiliency Assets

The number of community organizations and history of organizing in Hunts Point can lay the foundation for strong social resiliency.

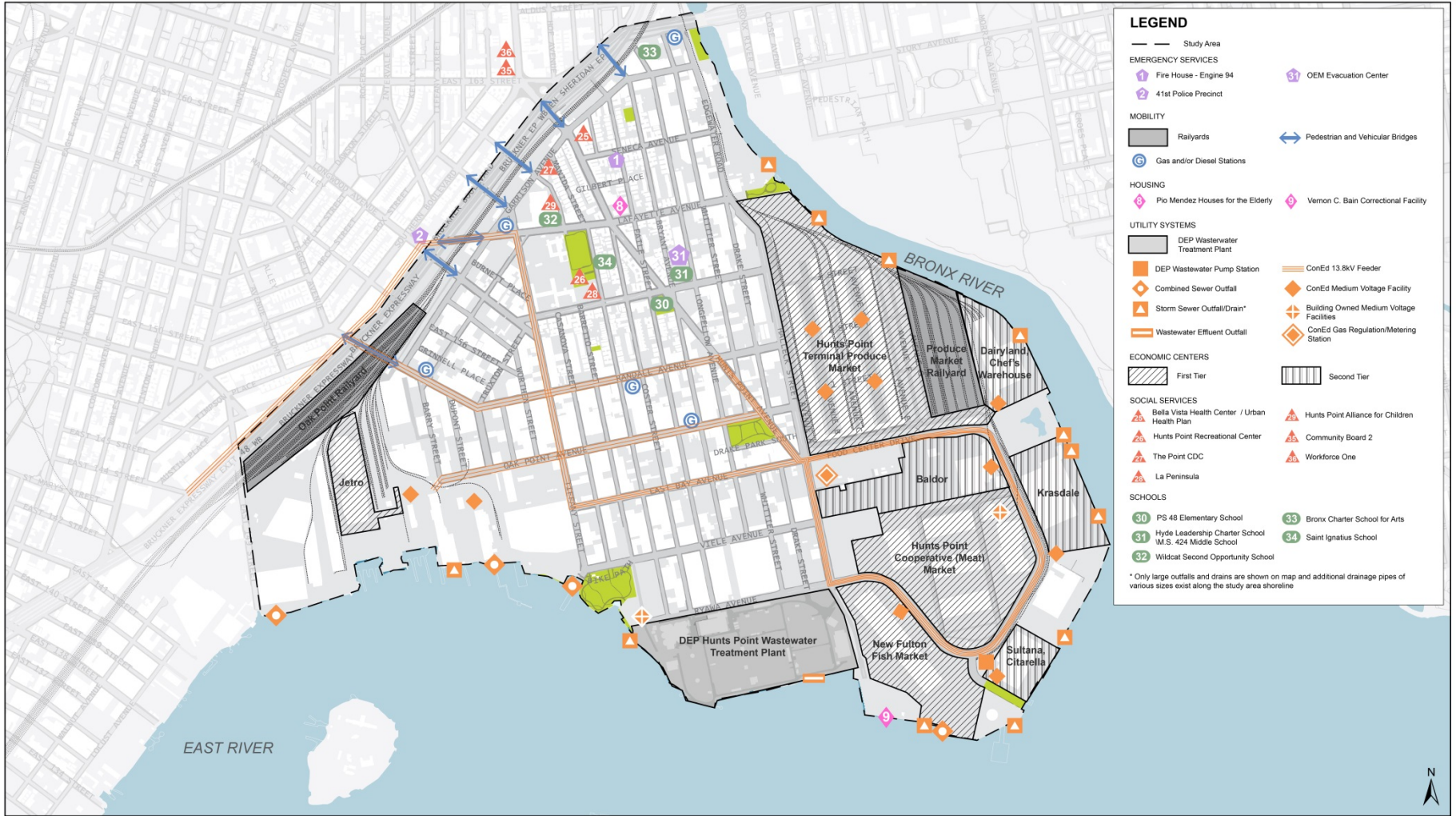
Key Finding #4: Building on Social Resiliency Assets



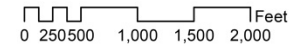
Summary of Vulnerabilities and Strengths

	Vulnerabilities	Strengths
Residential	<ul style="list-style-type: none">▪ Lack of back-up generation▪ Limited access to cooling centers▪ Socioeconomic factors	<ul style="list-style-type: none">▪ High ground▪ Community assets▪ Open mobility and access▪ Low- and mid-rise buildings (which are not vulnerable to loss of water during prolonged power outages)
Industrial	<ul style="list-style-type: none">▪ Old, critical transformers and electrical systems▪ Location in floodplain▪ Perishable products	<ul style="list-style-type: none">▪ Loading docks create opportunities for elevation▪ Initial investments in backup generation

Resiliency and Critical Facilities



Critical Facilities



1:12,000

Hunts Point
RESILIENCY

**LARGE GROUP DISCUSSION:
WHAT 3 PUBLIC PLACES DO YOU, FAMILY
MEMBERS, FRIENDS OR CO-WORKERS
REGULARLY USE THAT MIGHT BE A
GATHERING POINT IN THE EVENT OF AN
EMERGENCY (FOR ASSISTANCE, SOCIAL
CONNECTION, INFORMATION)?**

**WHAT ARE THE CONSEQUENCES OF
DIFFERENT THREATS TO THESE PUBLIC
PLACES?**

Preliminary Project Technologies

Resilient Energy

- Backup generation/storage
- Microgrids (building/facility scale)
- Anaerobic digestion
- Fuel cells
- Combined heat and power (CHP)
- Tidal power
- Building level retrofits
- Electrification of trailers



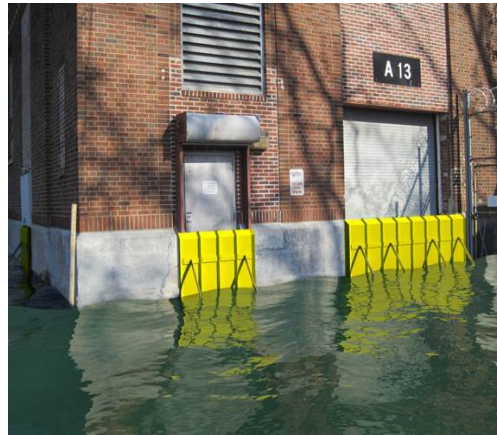
Preliminary Project Technologies

Coastal Flood Risk Reduction

- Levees
- Floodwalls
- Elevating building
- Elevating critical equipment
- Building floodwalls
- Deployable pumps

Additional Elements For Consideration in Combination with Flood Risk Reduction Technologies:

- Stormwater retrofits
- Backflow prevention
- Green infrastructure
- Shoreline stabilization



Project Options Screening Criteria

Hunts Point ENERGY RESILIENCY PROJECT OPTION 1 RESILIENCY ROOFTOP SOLAR PV (FOR EXAMPLE)

ER1



Information to be included here:

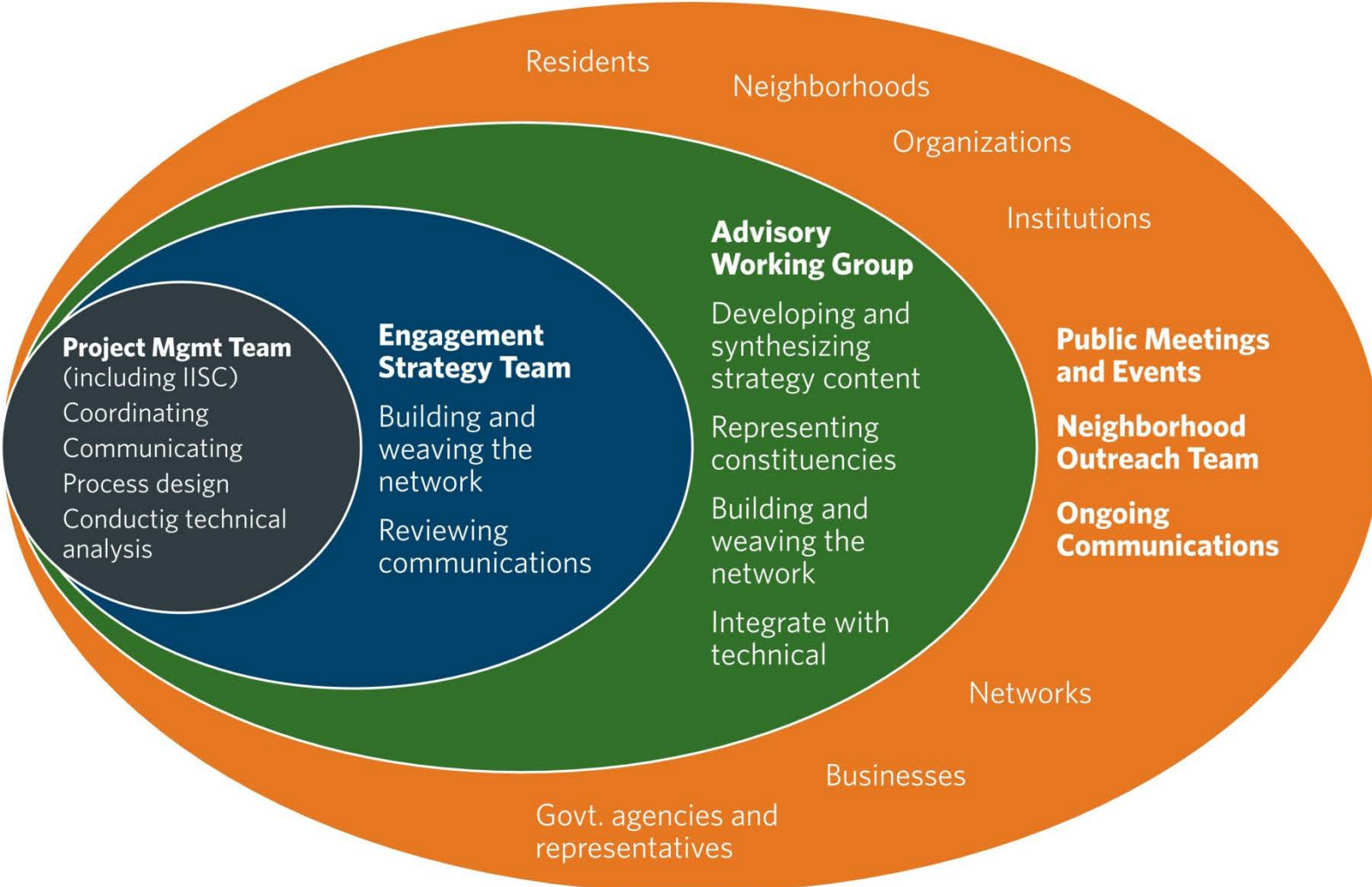
- General description of technology
- Maximum energy supply/power provided
- How will technology address a real vulnerability in Hunts Point?
- Potential locations

RESILIENCY		SUSTAINABILITY		IMPLEMENTATION SCHEDULE		
	PASS NEUTRAL FAIL		PASS NEUTRAL FAIL			
Applicable to Vulnerable, Critical Facilities	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Energy Efficient	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			
Scalable	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Clean Fuel Type	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			
Proven Technology	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Air Emissions Benefit	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			
Reliable Technology	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>					
Dispatchable/Operable during Emergencies	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			<th>FINANCIAL</th>		FINANCIAL
	PASS NEUTRAL FAIL		PASS NEUTRAL FAIL			
Available & Suitable Space	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Workforce Development (hiring and training)	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			
Required Infrastructure (gas, water)	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Multi-purpose (educational, recreational, or social)	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			
Ease of Permitting	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Potential to Leverage Public or Private Funds	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>			

**WHAT INFORMATION CAN WE PROVIDE
SO THAT YOU CAN UNDERSTAND
DIFFERENT PROJECT TYPES?**

**ARE THERE IDEAS FOR OTHER KINDS OF
PROJECT OPTIONS TO CONSIDER?**

Engagement Structure



The rings of engagement for Hunts Point Resiliency illustrate how specific teams are embedded within others for communications flow and to fulfill different functions. The graphic is not intended to represent decision-making.

Engagement Strategy Team: 7 Suggestions

1. Focus on real outcomes and the timeline for making things happen.
2. Make sure we have an answer to this question for anyone we engage – “Why does this matter to me?”
3. Help people understand limits on grant money and the City’s commitment to bring more money into the community.
4. Make sure that, whichever project gets selected, protects people and not just buildings.
5. Talk about risks but also strengths of the community and what we are already doing in Hunts Point.
6. Look for opportunities to engage new leadership in the Hunts Point community.
7. Keep the Implementation Principles front and center.

Upcoming Public Meetings

Date and Time	Topic
January 17, 6:00-8:00	Evaluation of project options
March 21, 6:00-8:00	Identification of pilot project

Staying in Touch

- Website – www.huntspointresiliency.nyc
- Email - Huntspointsresiliency@edc.nyc
- Social media (Twitter and Instagram)
 - EDC @NYCEDC
 - ORR @NYClimate
- Regular mail
 - New York City Economic Development Corporation
Attn: Charlie Samboy
110 William Street
New York, NY 10038

Hunts Point

RESILIENCY

ADVISORY WORKING GROUP MEETING
September 27, 2016

