EAST SIDE COASTAL RESILIENCY PROJECT
Proposed Action Plan Amendment 13 Public Hearing
April 4, 2017
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnerships
5. Funding and Benefit Cost Analysis
6. Comment Period
1. **Action Plan Overview**

2. **ESCR Project Description**

3. **Public Outreach**

4. **Implementation Partnerships**

5. **Funding and Benefit Cost Analysis**

6. **Comment Period**
What Is An Action Plan?

• New York City received $4.2 billion from HUD for Hurricane Sandy disaster recovery

• $338 million allocated for the East Side Coastal Resiliency (ESCR) Project

• The Action Plan describes the City's plan for these funds
Why Are We Here Tonight?

- Rebuild By Design (RBD) was an international resiliency competition; NYC was one of the recipients of the award.
- Community engagement is a critical component of that process.
- Per HUD requirements, an Action Plan Amendment for the RBD ESCR Project is being completed to identify project updates.
- The ESCR Project has evolved since Substantial Amendment 8A (February 13, 2015) and 8B (April 13, 2015).
- Proposed Action Plan Amendment 13 describes these updates.
- Action Plan Amendments are subject to public review prior to HUD approval.
COMMENT PROCESS
At the hearing tonight

• Oral and written comments may be given at the public hearing today

• Please limit your comments to **3 MINUTES**

• If you wish to make an oral statement on the record, fill out a speaker card

• Speakers will be called in the order submitted, starting with elected officials

• Written comment cards are also available
COMMENT PROCESS
Online & By Mail

• Comments accepted through **APRIL 24, 2017**

• Proposed CDBG-DR Action Amendment 13 and public commenting forms are available at [http://www.nyc.gov/cdbg](http://www.nyc.gov/cdbg)

• Written comments may also be directed by mail to:

  Calvin Johnson  
  Assistant Director, CDBG-DR  
  NYC Office of Management and Budget  
  255 Greenwich Street, 8th Floor  
  New York, NY 10007
What Happens to Our Comments?

• All comments shall be reviewed and a City response will be incorporated into the City’s Responses to Public Comments document

• A summary of the comments and responses will be submitted to HUD for approval along with the revised Action Plan Amendment 13

• The revised Action Plan Amendment 13 will be posted at http://www.nyc.gov/cdbg
What Does The Proposed Action Plan Amendment Contain?

• Project Description
• Implementation Partnerships
• Outreach Plan
• Project Timeline
• Benefit Cost Analysis
Where Can I Find the Proposed Action Plan Amendment?

- Hard copies available today
- Proposed Action Plan Amendment 13 and public commenting forms are available at [http://www.nyc.gov/cdbg](http://www.nyc.gov/cdbg)
- Hard copy for reference:
  NYC OMB
  255 Greenwich Street, 8th Floor
  New York, NY 10007
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnerships
5. Funding and Benefit Cost Analysis
6. Comment Period
EAST SIDE COASTAL RESILIENCY

Context

HURRICANE SANDY

A STRONGER, MORE RESILIENT NEW YORK

REPORT PREPARATION
OCTOBER 2012

REBUILD BY DESIGN COMPETITION
WINTER 2013/2014

HUD FUNDING AWARD

ESCR PROJECT SCOPEING
WINTER 2014/2015

ONE NYC
The Plan for a Strong and Just City

A STRONGER MORE RESILIENT NEW YORK

HURRICANE SANDY

#ONENYC
EAST SIDE COASTAL RESILIENCY

Project Goals

• Provide an integrated flood protection system to help minimize flooding; minimize use of closure structures and deployables

• Improve waterfront open spaces and access

• Respond quickly to the urgent need for increased flood protection and resiliency

• Achieve implementation milestones and project funding allocations as established by HUD
EAST SIDE COASTAL RESILIENCY
Project Approach: Designing Social Infrastructure

PEOPLE

RESILIENCY
INFRASTRUCTURE
CURRENT AND FUTURE RISKS
2015 and 2050’s FEMA 100-YEAR FLOOD HAZARD AREAS

WATERFRONT OPEN SPACES AND UPLAND NEIGHBORHOODS WERE SEVERELY IMPACTED BY HURRICANE SANDY, AND ARE AT FURTHER RISK DUE TO FUTURE SEA LEVEL RISE AND INCREASING STORM FREQUENCIES.

*14th St. & FDR Drive

2015 FEMA 100-YEAR Flood Hazard Area
2050s FEMA 100-YEAR Flood Hazard Area
ESCR PROJECT AREA
From Montgomery St. To East 25th St.
BASELINE FLOOD PROTECTION COMPONENTS

Typical Cross-Sections

BERM / LEVEE

FLOODWALL

CLOSURE STRUCTURE
Baseline Flood Protection Components

Closure Structures

Single Swing Gate (x7)
Double Swing Gates (x2)
Single Roller Gates (x4)
Double Roller Gates (x1)
Pedestrian Gates (x3)
Miter Gates (x1)

*18 Total Closure Structures

Montgomery Street Tieback

25th Street Tieback

THE FLOOD PROTECTION ALIGNMENT, REACHING +16' ABOVE MEAN SEA LEVEL, Creates an Elevated Edge Typically 8'-9' Above Existing Ground Level, with Closure Structures Across Pedestrian, Cyclist and Vehicular Accessways
INTEGRATING PROTECTION WITH PUBLIC SPACE

STUYVESANT COVE PARK
MURPHY BROTHERS PLAYGROUND
EAST RIVER PARK
ASSER LEVY PLAYGROUND
MAINTAIN OR IMPROVE WATERFRONT CONNECTIONS

RECONSTRUCTED BRIDGES OR IMPROVED LANDINGS STRENGTHEN CONNECTIONS BETWEEN PARK AND NEIGHBORHOOD

FUTURE 20TH ST. FERRY

E. 23rd ST.
FERRY ACCESS

E. 20th ST.
RECONSTRUCTED BRIDGE

AVENUE C

E. 10th ST.
RECONSTRUCTED BRIDGE

E. 6th ST.
PARK SIDE IMPROVEMENT

DELANCEY ST.
RECONSTRUCTED BRIDGE

CHERRY ST.

FUTURE GRAND ST. FERRY

HOUSTON ST.
NEW WATERFRONT CONNECTION

#ONE NYC
A PROTECTED COMMUNITY AND IMPROVED WATERFRONT!

- 29th St. Tie-Back
- Asser Levy Playground
- Stuyvesant Cove Park
- Murphy Brothers Playground
- Con Ed Tie-In + FDR Gates
- East River Park
- Montgomery St. Tie-Back
MONTGOMERY STREET TO EAST 13TH STREET
MAJOR PROJECT COMPONENTS

- Montgomery Street Tie-Back
- Coordination with Pier 42
- Reconstructed Span and Landings at Delancey Street Bridge
- Plaza Landing at Houston Street Overpass
- Reconstructed Park-Side Landing at E. 6th Street Bridge
- Reconstructed Span and Landings at E. 10th St. Bridge
- Reconstructed Tennis Courts
- Reconstructed Ballfields and Play Areas

#OneNYC
EXISTING CONDITIONS – MONTGOMERY STREET
PROPOSED CONCEPT DESIGN – MONTGOMERY ST. TIE-BACK GATES STORED

NOTE: DRAFT ILLUSTRATIVE SKETCH FINISHES/MATERIALS/DETAILING TO BE DEVELOPED IN FINAL DESIGN
PROPOSED CONCEPT DESIGN – MONTGOMERY ST. TIE-BACK GATES CLOSED

NOTE: DRAFT ILLUSTRATIVE SKETCH
FINISHES/MATERIALS/DETAILING TO BE DEVELOPED IN FINAL DESIGN
EXISTING CONDITIONS – DELANCEY STREET ENTRANCE
PROPOSED CONCEPT DESIGN – DELANCEY STREET ENTRANCE

DRAFT
PROPOSED CONCEPT DESIGN – DELANCEY STREET ENTRANCE

Note: Rendering depicts condition 15 years post-completion in a storm scenario.
EAST 13TH STREET TO EAST 25TH STREET
MAJOR PROJECT COMPONENTS

CLOSEURE STRUCTURES

RECONSTRUCTION OF MURPHY BROTHERS PLAYGROUND. DESIGN FORTHCOMING

CLOSEURE STRUCTURES
NOTE: DRAFT ILLUSTRATIVE SKETCH
FLOOD PROTECTION FINISHES, MATERIAL & DETAILING TO BE DEVELOPED IN FINAL DESIGN
NOTE: DRAFT ILLUSTRATIVE SKETCH
FLOOD PROTECTION FINISHES, MATERIAL & DETAILING TO BE DEVELOPED IN FINAL DESIGN

PROPOSED CONCEPT DESIGN – FDR DRIVE GATE CROSSING
GATES CLOSING
NOTE: DRAFT ILLUSTRATIVE SKETCH
FLOOD PROTECTION FINISHES, MATERIAL & DETAILING TO BE DEVELOPED IN FINAL DESIGN
STUYVESANT COVE PARK
Proposed Concept Design
EXISTING CONDITIONS - STUYVESANT COVE PARK
NOTE: DRAFT ILLUSTRATIVE SKETCH
FLOOD PROTECTION FINISHES, MATERIAL & DETAILING TO BE DEVELOPED IN FINAL DESIGN

PROPOSED CONCEPT DESIGN - STUYVESANT COVE PARK
NOTE: DRAFT ILLUSTRATIVE SKETCH
FLOOD PROTECTION FINISHES, MATERIAL & DETAILING TO BE DEVELOPED IN FINAL DESIGN
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnerships
5. Funding and Benefit Cost Analysis
6. Comment Period
PUBLIC OUTREACH
2015 Community Engagement Recap

ROUND 1
X2 Meetings

MARCH 19 + 23, 2015
How do you use the waterfront?

ROUND 2
X3 Meetings

MAY 19, 20 + 28, 2015
Where should the flood protection alignment go?

ROUND 3
X4 Meetings

JULY 28, 29, 30 + SEPT. 10, 2015
What are the options for integrating the Park and the Protection?

ROUND 4
X2 Meetings

OCTOBER 6 + 8, 2015
Initial Design Direction: Feedback and Discussion

QUARTERLY TASK FORCE MEETINGS
(January, April, July, September)
PUBLIC OUTREACH
2016 - 2017 Community Engagement

CB3/CB6 JOINT TASK FORCE
How is the project being developed in response to the new constraints?

CB6 PARKS
How has the design of the parks been refined since the initial concept?

CB3 PARKS

MAY 23RD
SEPTEMBER 20TH
OCTOBER 4TH
OCTOBER 13TH
PUBLIC OUTREACH
2016 - 2017 Community Engagement

INPUT SESSION
How will the flood protection integrate with the playgrounds?

COMMUNITY ENGAGEMENT WORKSHOPS
How have the flood protection alignments and design been updated since last year?

NOVEMBER 14, 2016
FEbruary 16, 2017
Asser Levy Playground and Murphy Brothers Playground

NOVEMBER 28TH
Project Area 2

DECEMBER 1ST
Project Area 1 South

DECEMBER 7TH
Project Area 1 North
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnerships
5. Funding and Benefit Cost Analysis
6. Comment Period
IMPLEMENTATION PARTNERSHIPS

Partner Agencies

- NYC Mayor’s Office of Recovery and Resiliency
- NYC Department of Design and Construction
- NYC Office of Management and Budget
- NYC Parks
- NYCEDC
- Environmental Protection
- NYC Small Business Services
## IMPLEMENTATION PARTNERSHIPS
Cooperating, Involved, and Interested Agencies

<table>
<thead>
<tr>
<th>Federal</th>
<th>State</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>• FEMA</td>
<td>• MTA</td>
<td>• DCP</td>
</tr>
<tr>
<td>• HUD</td>
<td>• NYCHA</td>
<td>• DOB</td>
</tr>
<tr>
<td>• NMFS</td>
<td>• NYSDEC</td>
<td>• EM</td>
</tr>
<tr>
<td>• NPS</td>
<td>• NYSDOS</td>
<td>• FDNY</td>
</tr>
<tr>
<td>• USACE</td>
<td>• NYSDOT</td>
<td>• HPD</td>
</tr>
<tr>
<td>• USCG</td>
<td>• NYSOGS</td>
<td></td>
</tr>
<tr>
<td>• USEPA</td>
<td>• NYPAR</td>
<td></td>
</tr>
<tr>
<td>• USFWS</td>
<td>• OPRHP</td>
<td></td>
</tr>
<tr>
<td>• VA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Federal Agencies: FEMA, HUD, NMFS, NPS, USACE, USCG, USEPA, USFWS, VA
- State Agencies: MTA, NYCHA, NYSDEC, NYSDOS, NYSDOT, NYSOGS, NYPAR, OPRHP
- City Agencies: DCP, DOB, EM, FDNY, HPD, LPC, MOEC, NYPD, OER, PDC
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnerships
5. Funding and Benefit Cost Analysis
6. Comment Period
The City and HUD have committed $760 million:

- $338 million in HUD CDBG-DR funds
- $170 million in City capital funding for interior drainage management
- $252 million in additional City capital (will be reflected in an upcoming financial plan)
BENEFIT COST ANALYSIS
Overview

• Demonstrates how ESCR achieves resiliency, social, economic, and environmental project benefits
• Considers losses avoided and value added
• A Benefit Cost Ratio greater than one indicates a cost effective project

• The ESCR Benefit Cost Ratio is 2.84 (7% Discount Rate)
How is the Benefit Cost Ratio Calculated?

**Benefits**
- **Value Added**
  - Environment
    - Air Quality
    - Water Quality
    - Carbon Emissions
  - Improved Aesthetics
  - Increased Property Value
- **Duplication of Benefits (Double-Counting)**
  - Other resiliency investments
  - Existing resilient assets

**Costs**
- **Project Costs**
  - Capital cost
  - Lifetime Operations & Maintenance
1. Action Plan Overview
2. ESCR Project Description
3. Public Outreach
4. Implementation Partnership
5. Funding and Benefit Cost Analysis
6. Comment Period
PUBLIC COMMENT PERIOD OPEN