

# **BK Bridge - Montgomery Coastal Resilience**

Design to Upcoming Construction and Operations

May 11, 2021





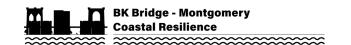






#### **AGENDA**

- 1. PROJECT INTRODUCTION + RECAP
- 2. DESIGN PHASE RECAP Q+A
- 3. CONSTRUCTION Q+A
- 4. EMERGENCY RESPONSE PLAN, FROM 2025 ONWARD Q+A
- 5. OPERATIONS + MAINTENANCE, FROM 2025 ONWARD Q+A
- 6. CDBG-NDR ACTION PLAN AMENDMENT 1 PUBLIC HEARING
  - PUBLIC COMMENT



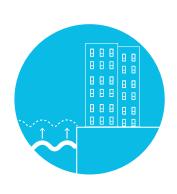
## LOWER MANHATTAN COASTAL RESILIENCY

## Types of Flood Risk Facing Lower Manhattan



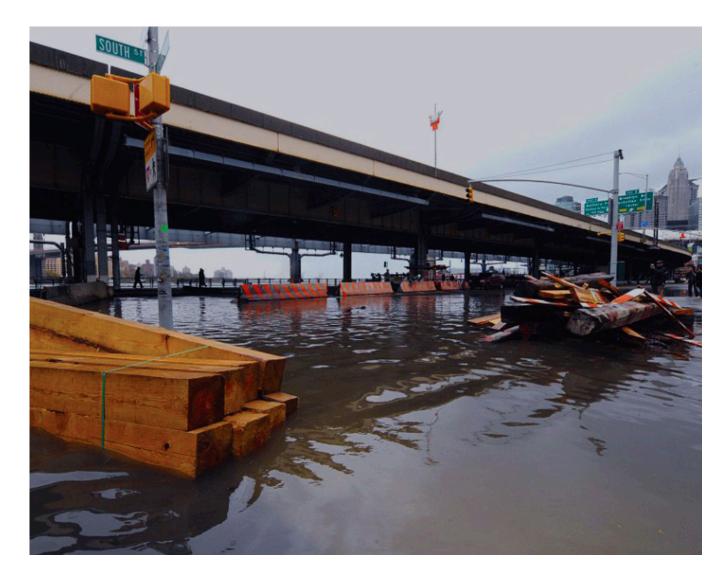
#### **Storm Surge**

The temporary increase, at a particular location, in the height of the sea due to extreme weather conditions.



#### Sea Level Rise (SLR)

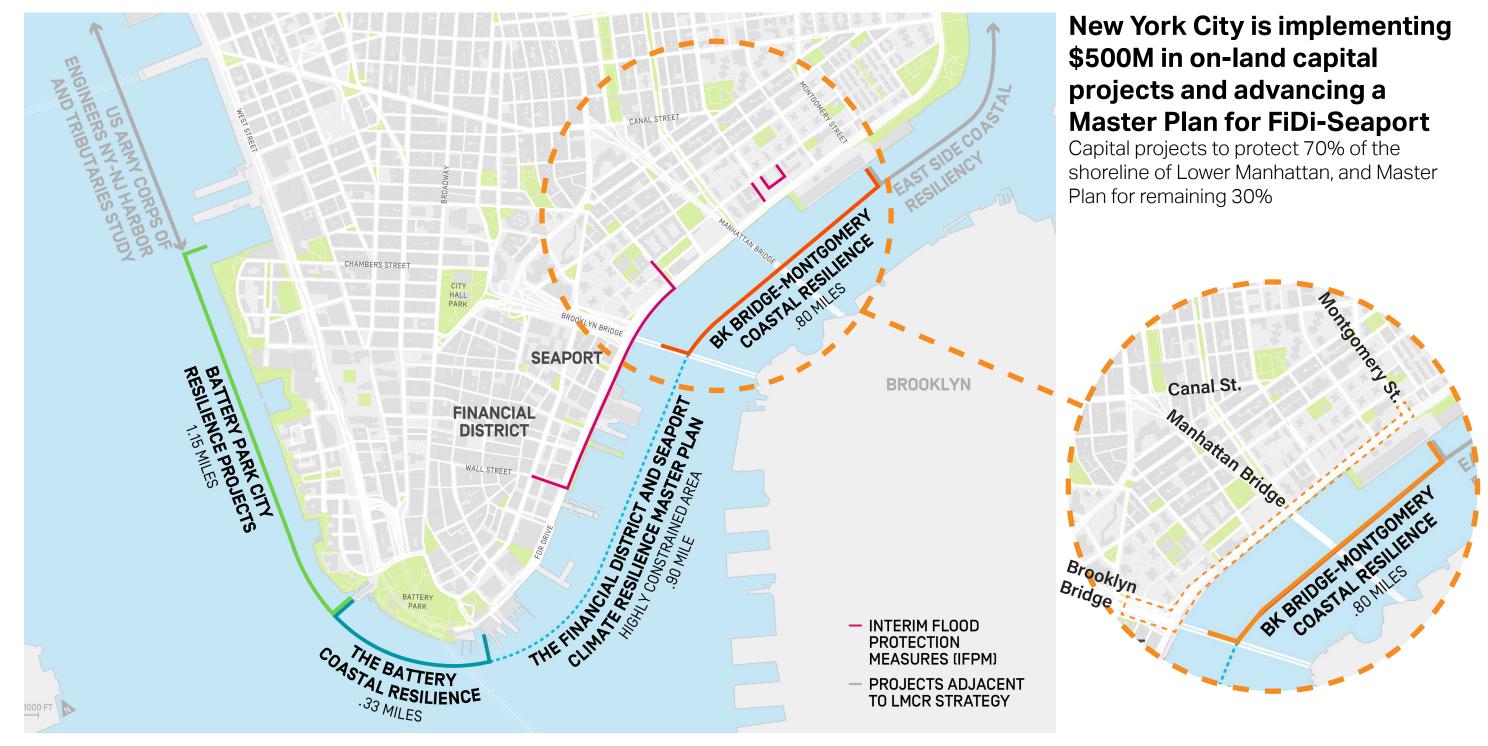
Refers to the increase in sea level caused by a change in the volume of the world's oceans due to temperature increase, ice melt, and deglaciation (uncovering of glaciated land because of melting of the glacier).



South Street Post-Hurricane Sandy



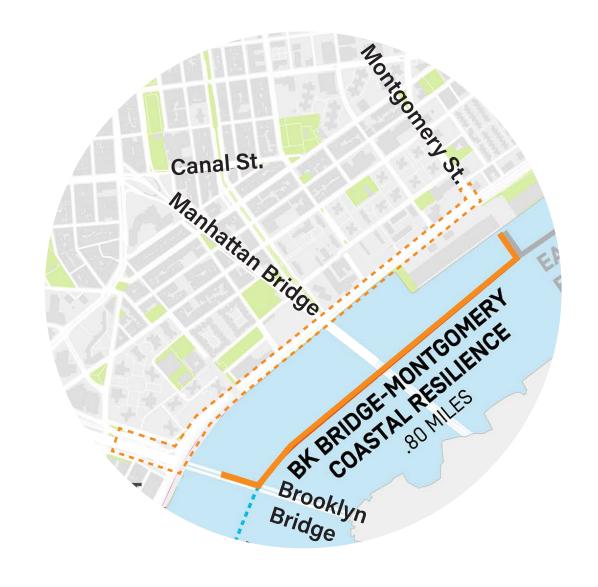
## LOWER MANHATTAN COASTAL RESILIENCY



## PROJECT DESCRIPTION

The BK Bridge-Montgomery Coastal Resilience (BMCR) project is a section of the LMCR project stretching from the Brooklyn Bridge to Montgomery Street.

The infrastructure, when deployed, will protect the Two Bridges neighborhood from flooding while maintaining the community's views and access to the waterfront.













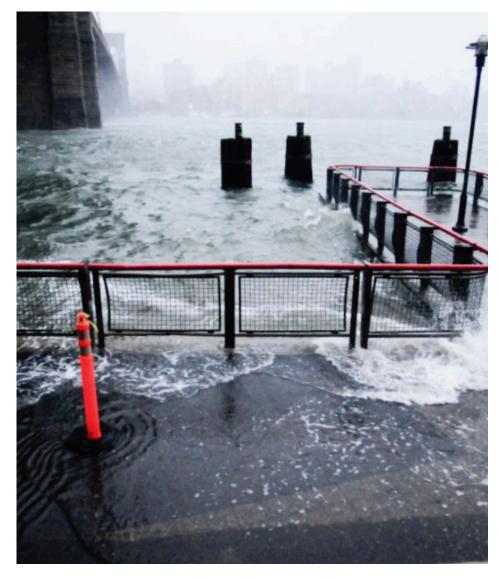






## LOWER MANHATTAN COASTAL RESILIENCY

Flood damage in Two Bridges from Hurricane Sandy







## LOWER MANHATTAN COASTAL RESILIENCY

Two Bridges Neighborhood - 2050s 100-Year Floodplain



2016 to 2021



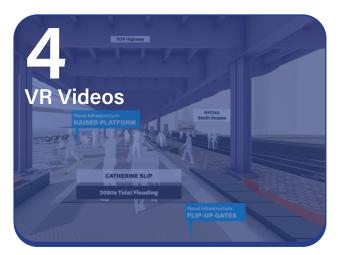


Community
Tabling
Sessions

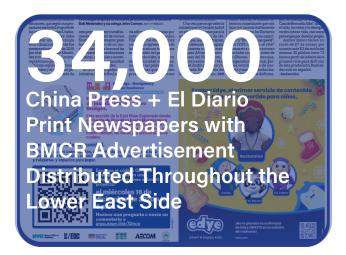




#### **Fall 2020**



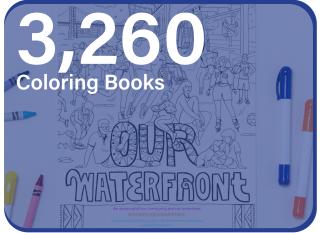






















VR Videos

3
Waterfront
Banners

108
Mini Banners

34,000
China Press + El Diario
Newspapers with BMCR
Advertisement







T2
Easy-to-Share Social Media
Graphics

128
Webinar Attendees

604
YouTube Views of Webinar Recordings\*

\*As of 4/1/2021

3,260
Coloring Books







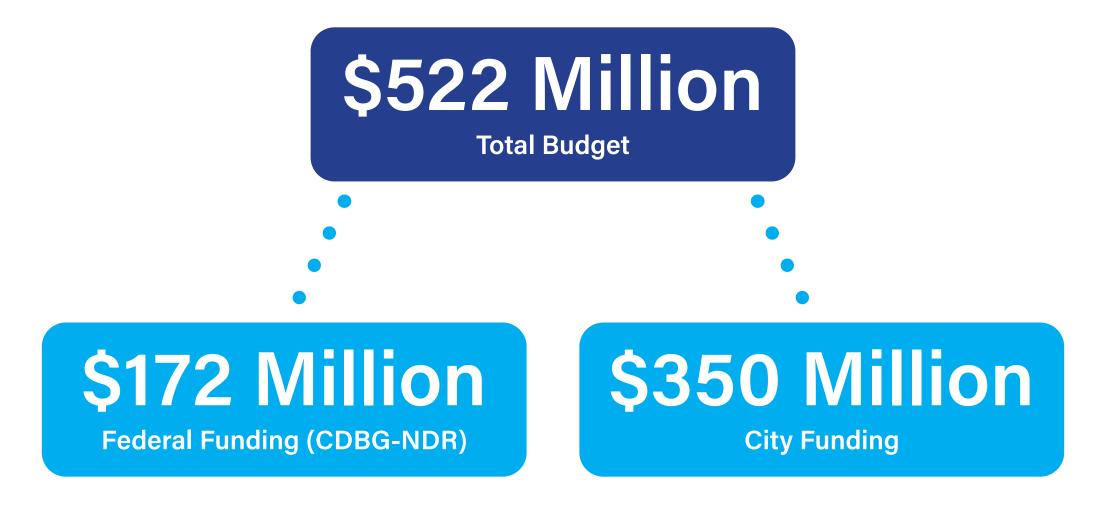
8,470
Flyers

510 Posters

10
Bulletin Boards

## **BMCR FUNDING**

# BMCR is fully funded through the addition of new city capital funding.



## WHAT DOES \$522 MILLION DELIVER FOR OUR COMMUNITY?

- Flip-up gates
- Continued waterfront access
- Community amenities
- Addition of raised sill (platform) to protect against sea level rise in addition to storm surge.
- Drainage and parallel conveyance
- Replacement of water main in project area that broke in both 2018 and 2020.

Work below ground accounts for **more than** half of all material costs

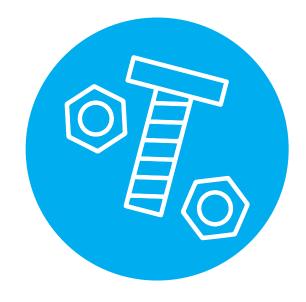
## WHAT DOES \$522 MILLION DELIVER FOR OUR COMMUNITY?



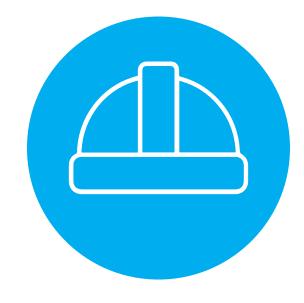
- Pre-Design
- Design
- Community
   Engagement
- Environmental Review
- Permitting



- Construction
   Management
- Contingency
- Community Construction Liaison



Material Costs



Labor Costs

#### **AGENDA**

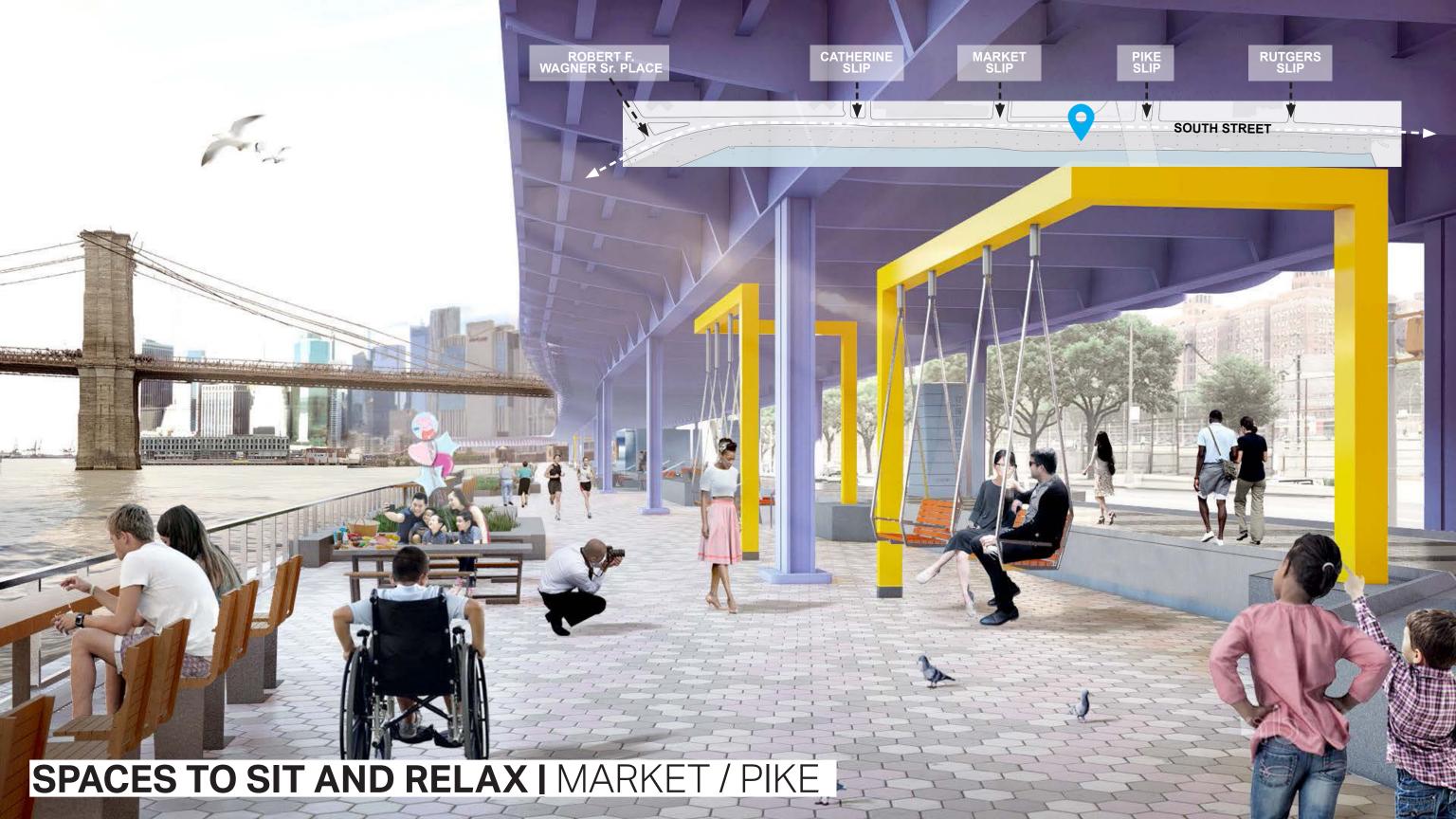
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## **DESIGNED FOR COMMUNITY**

The final design features spaces to socialize, spaces to sit and relax, spaces to move, and spaces to play.





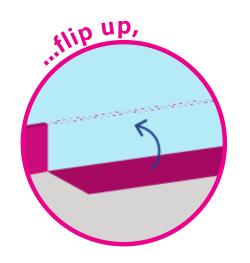


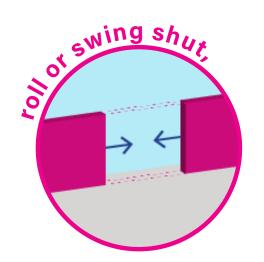


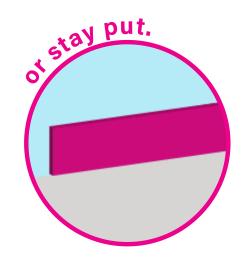


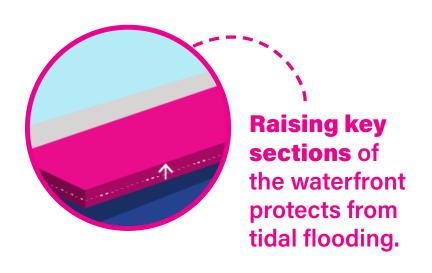
## **DESIGNED TO PROTECT THE SURROUNDING COMMUNITY**

During major flooding events and regular tidal flooding, the flood protection will either...















NYC ECONOMIC DEVELOPMENT CORPORATION (EDC) + NYC DEPARTMENT OF PARKS AND RECREATION (DPR) + AECOM

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## **AGENCY RESPONSIBILITY**

Design + Planning

#### **LEAD AGENCY**



#### **SUPPORTING AGENCIES**



## **AGENCY HANDOFF**



#### **LEAD AGENCY**





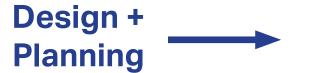
#### **SUPPORTING AGENCIES**







## **AGENCY HANDOFF**



**Procurement + Construction** 

**Built Project** 

**LEAD AGENCY** 





Operations and Maintenance

Flood Infrastructure





Operations and Maintenance

Landscape









#### **SUPPORTING AGENCIES**















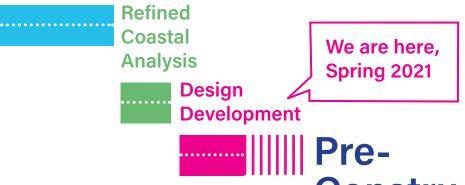






### **CONSTRUCTION TIMELINE**

## **Feasibility Study**



## Construction

- Regular community updates from DDC at CB3 meeting
- Procurement process, including contractor selection

## Construction



- Regular community updates from DDC at CB3 meetings
- Working on behalf of DDC as the first point of contact for local community members and stakeholders, the Community Construction Liaison (CCL) is responsible for communicating construction impacts and helping to resolve construction-related inquiries.
- Single-phase project with one contractor (no phasing)
- Ongoing communication through DDC's Community Engagement, Intergovernmental Affairs, and CCL, as well as the project's email listserv.



Winter 2022 to Summer 2025



## DDC COASTAL RESILIENCY, COMMUNITY ENGAGEMENT

During
Construction,
DDC will
become the
main point of
contact.

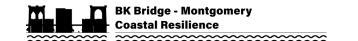


Your Community
Construction Liaison



Kiumars Amiri (Q)
Deputy Director, Coastal Resiliency
AmiriKi@ddc.nyc.gov

Fay Lee Borough Outreach Coordinator LeeFa@ddc.nyc.gov



## A DEDICATED CONSTRUCTION POINT OF CONTACT

Community
Construction
Liaison

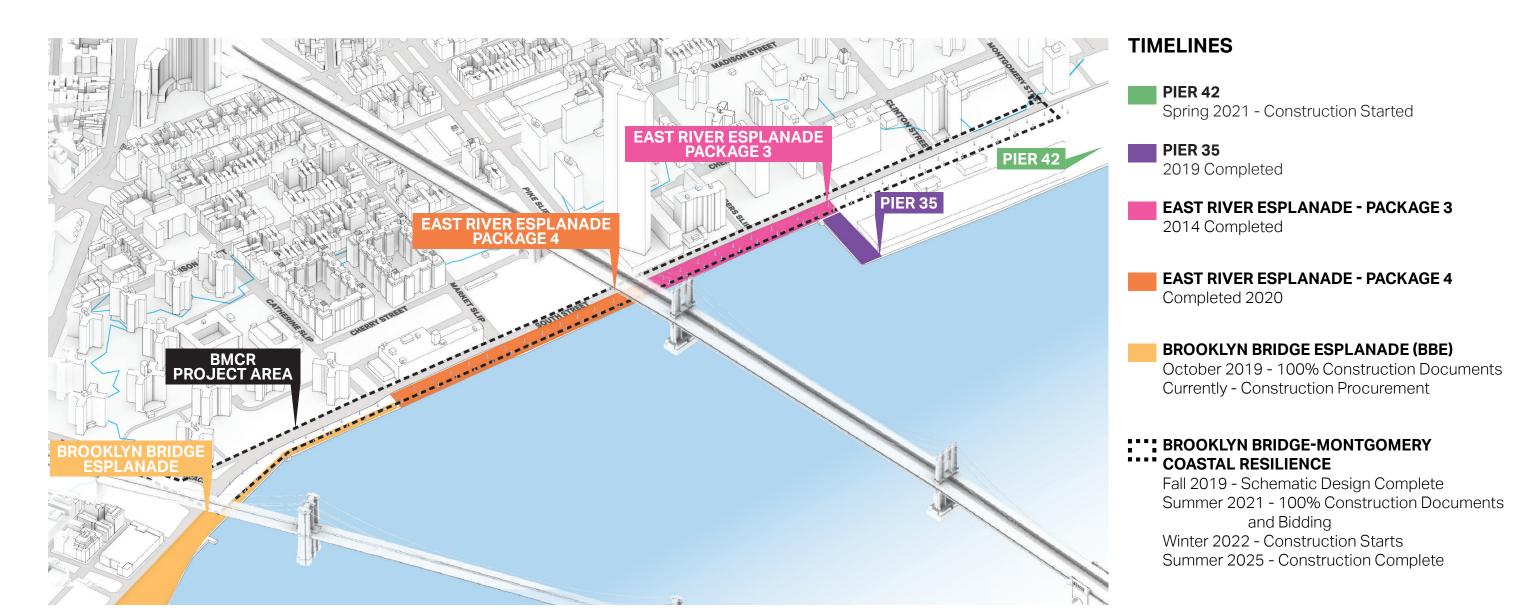
First point of contact for local community members and stakeholders including residents, small and large businesses, local schools, and emergency responders.

DDC will introduce the project CCL

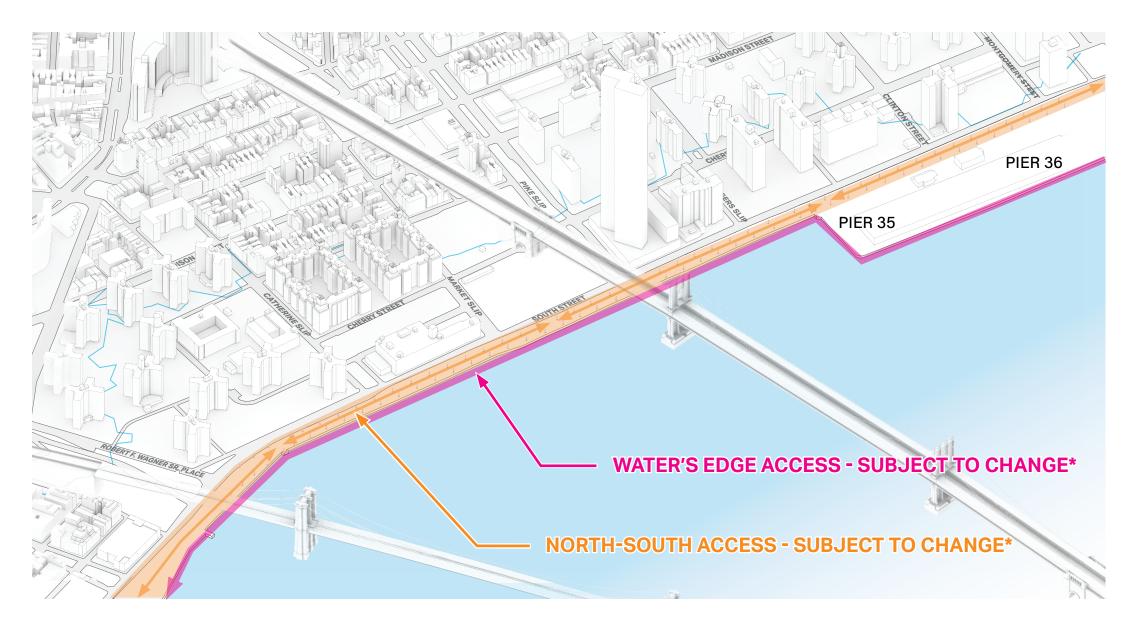
## **Responsibilities:**

- Inform neighbors of construction activities & impacts
- Resolve any project-related impacts to neighbors
- Attend community meetings such as Community Board meetings to provide project updates

## **COORDINATING ACROSS PROJECTS**



## WHAT TO EXPECT DURING CONSTRUCTION



\*DETAILS TO BE CONFIRMED BY DDC ONCE BMCR PROJECT CONTRACTOR IS ONBOARDED

THE DESIGN TEAM IS
WORKING WITH DOT TO KEEP
THE TEMPORARY BIKE ROUTE
AS CLOSE TO THE EXISTING
ROUTE AS POSSIBLE.



**NYC DEPARTMENT OF DESIGN + CONSTRUCTION (DDC)** 

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## WHAT TO EXPECT

Q: How much warning should lexpect to have before a major flood event?

A: Storm notifications will be sent between 5 days and 36 hours before arrival of sustained tropical storm force winds. The time of arrival of these winds is referred to as "Zero Hour".

Zero Hour: Time of arrival of sustained tropical storm force winds (39 mph or greater).

A: In most cases, deployment of flood gates will accompany an evacuation order.

Q: If flood gates are deployed, should I expect to be evacuated?

## **ZERO HOUR**

Zero Hour: Time of arrival of sustained tropical storm force winds (39 mph or greater).









## **ZERO HOUR**

Potential citywide messaging channels include press releases, NYC.gov websites, Notify NYC, 311, and social media channels

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**STORM** 



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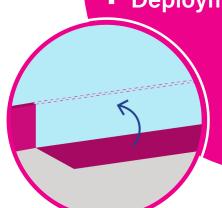
**STORM** 

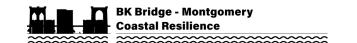
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Storm monitoring and forecasting

Pre-storm inspections of flood protection measures

- Cross-agency coordination
- Notification of potential event
- Deployment of infrastructure
  - Closing the Esplanade
  - Setup vehicular detour





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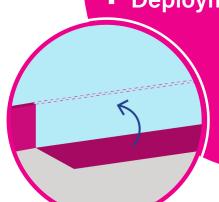
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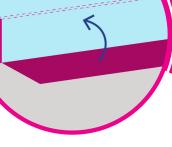
- Cross-agency coordination
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- Continuous & fle

**STORM** 

- Monitor Notify NYC for emergency alerts and updates







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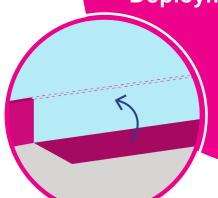
**STORM** 

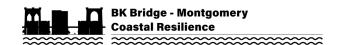
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POSY STORM Removal of debris

- Cleanup and repairs of flood barriers unable to be stowed away due to damage / debris
- Document damages
  - Stow barriers







#### **STAYING INFORMED**

Are you signed up for emergency alerts through **NotifyNYC?** 





AECOM + NYC OFFICE OF EMERGENCY MANAGEMENT + NYC DEPARTMENT OF TRANSPORTATION (DOT)

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#### **AGENCY RESPONSIBILITIES FOR SYSTEM COMPONENTS**



- Interceptor Gate Chamber and House
- Tide Gates
- Isolation Gate Valve

 New combined sewers at various upland areas on City right-of-way and on non-City areas



- Above grade floodwalls
- Roller, Flip-Up, & Swing Gates
- Gate Manual Deployment Telehandlers
- HPU at Flip-Up Gates. Hydraulic Power Units (HPUs) provide power for the flip-up gates, and are housed in a series of concrete columns.



- Sport & Fitness Equipment
- Playground Equipment & Surfacing
- Bike Path (from Pier 35 South to Whitehall Street)

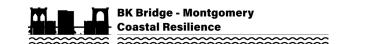
- Seating (static and swing seats)
- Lighting
- Plumbing
- Pavers







• Pier 36 Security Gates



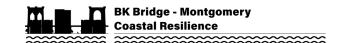
#### **SYSTEM TESTING**

# **Special Inspections:**

Conducted following tropical or extra-tropical storm events, earthquakes, or significant vehicle strike of floodwall or flood gate

## **Inspection Schedule**

#### Quarterly Visual assessment of maintenance needs, and items to monitor in the future Occurs prior to hurricane season **Annually** Deploy gates to inspect More thorough inspection of **Every** structural integrity of system 5 years Conducted by a multi-disciplinary engineering team Conduct assessments to identify **Every** changes in storm threat 10 years Review updated sea level rise projections to plan for any future flood protection needs.

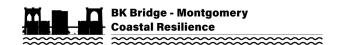




**AECOM + NYC DEPARTMENT OF TRANSPORTATION** 

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# CDBG-NDR ACTION PLAN AMENDMENT 1 PUBLIC HEARING

#### WHAT IS AN ACTION PLAN?

- The City of New York received \$176 million of CDBG-NDR funding from the U.S.
   Department of Housing and Urban Development in January 2016 for coastal protection in Lower Manhattan, including BMCR.
- The City's NDR Action Plan describes activities the City will fund with the grant and related funding sources.
- The City makes amendments to the Action Plan from time to time to reflect program updates, additional investments, and other significant changes.
- In accordance with NDR funding requirements, NYC is proposing a substantial amendment to its CDBG-NDR Action Plan and releasing Amendment 1 for public comment.

#### SUMMARY OF ACTION PLAN AMENDMENT CHANGES

- Updates project descriptions and other project information to be consistent with current framing including details on BMCR and Green Infrastructure Playgrounds
- Provides other updates to the BMCR project description, milestones, and beneficiaries based on 95% level design
- Announces additional funding commitments made by the City, particularly \$318 million for BMCR
- Updates the CDBG-NDR grant deadline from September 2022 to September 2023
- Reallocates \$3.0 million from Planning funds to BMCR project costs
- Reallocates \$3.8 million from Administration funds to BMCR project costs

### HOW TO COMMENT ON THE ACTION PLAN AMENDMENT

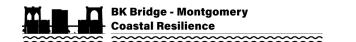
Means	Instructions
Comment at Tonight's Hearing	Use Q&A during tonight's Public Hearing
NYCROCOMY Supposed based on the Control of C	Visit www.nyc.gov/cdbgdr to review the proposed CDBG- NDR Action Plan Amendment 1 and leave comments
Mail	Send to: CDBG-NDR Action Plan Amendment c/o Calvin Johnson, Senior Assistant Director NYC Mayor's Office of Management and Budget 255 Greenwich Street, 8th Floor New York, NY 10007

The comment period ends on **Sunday June 6, 2021 at 11:59pm** 



# **NEXT STEPS**

Action	Time / Duration
Public Hearing	Tonight
Submit Public Comment	Comment Period Closes Sunday June 6, 2021 at 11:59pm
After the Comment Period: All comments will be reviewed, and a summary of the comments and the City's responses will be made publicly available and submitted to HUD	One to Two Weeks (est.)
Submit for HUD Approval	Mid-June, 2021
HUD Approval of Action Plan Amendment	60 days after submission to HUD (approx. mid-August, 2021)



# PUBLIC COMMENT

**NYC OFFICE OF MANAGEMENT & BUDGET** 

# STAY IN TOUCH:









@NYClimate



By Mail 253 Broadway - 14th Floor



**In Person** 



Imcr@cityhall.nyc.gov