

**CLOUDBURST**  
**KISSENA HUB**  
**COMMUNITY MEETING #1**  
**05.23.2024**

# AGENDA

**INTRODUCTION**

**CLOUDBURST BACKGROUND**

**KISSENA HUB PROJECT AREA**

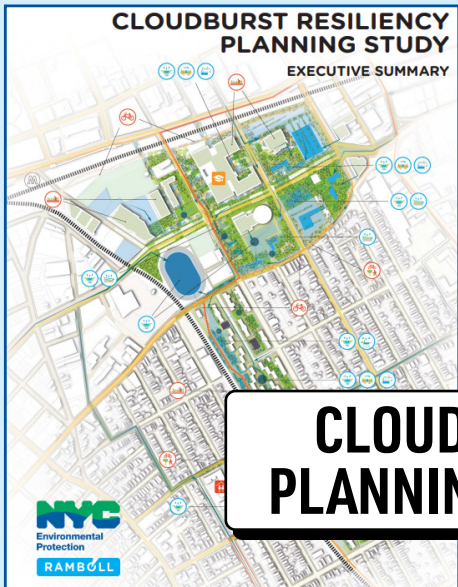
**PROJECT TIMELINE &  
ENGAGEMENT PROCESS**



# INTRODUCTION

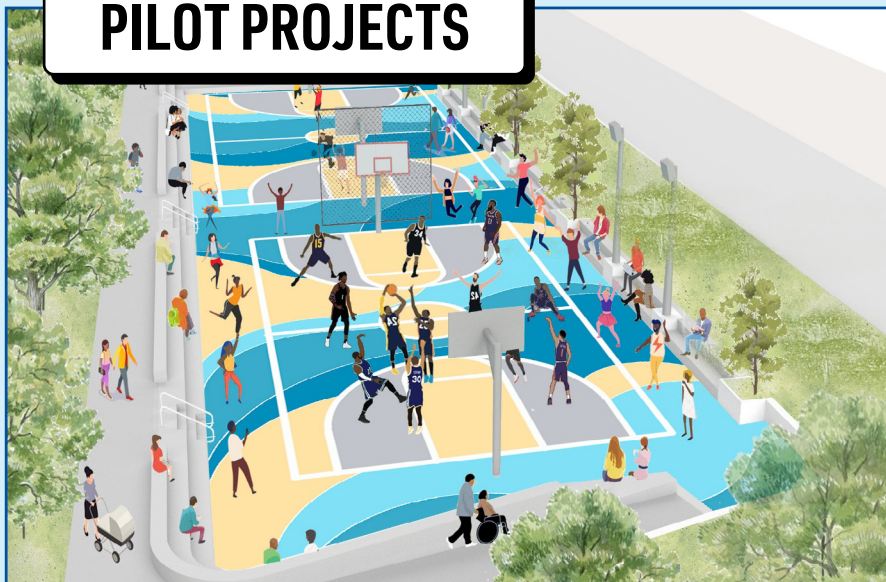
# CLOUDBURST PROGRAM & AGENCY PARTNERS

## SISTER CITY PARTNERSHIP

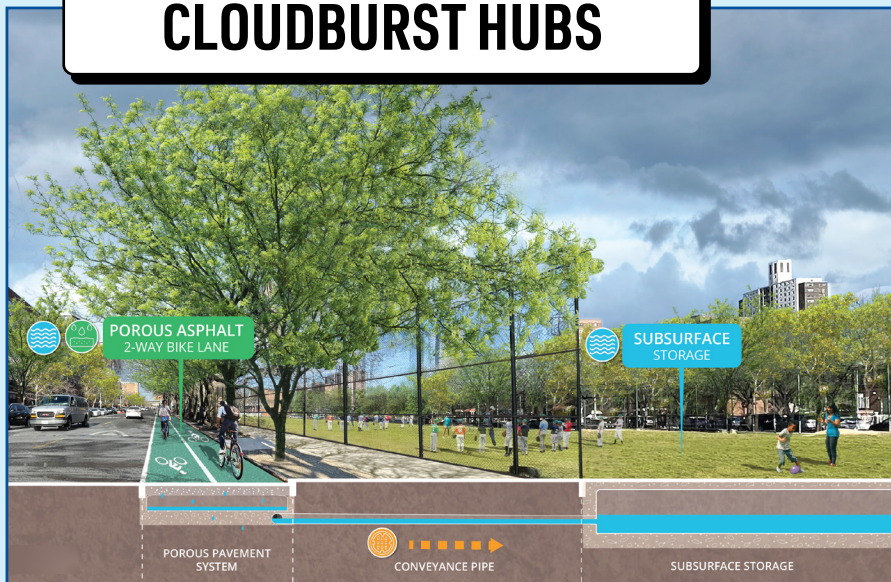


## CLOUDBURST PLANNING STUDY

## PILOT PROJECTS



## CLOUDBURST HUBS





# OUR TEAM



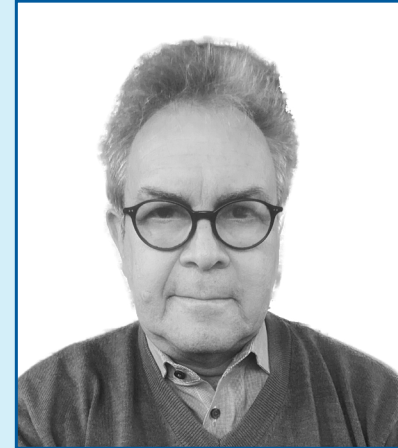
**KAREN APPELL**  
PROJECT MANAGER



**KATIE DALY**  
DEPUTY PROJECT  
MANAGER



**ERIC OLSEN**  
LANDSCAPE ARCHITECTURE  
& URBAN DESIGN LEAD



**RICK BELL**  
COMMUNITY ENGAGEMENT



**MARK TEPPER**  
PLACEMAKING LEAD



**ALAN VIERA**  
PROJECT ENGINEER



**DOUG KUBOVIC**  
SITE-CIVIL DESIGN LEAD



**FRANCO MONTALTO**  
EDESIGN



**JESS HAITZ**  
EDESIGN



**DAVID PACHECO**  
COMMUNITY ENGAGEMENT



**AMY MOTZNY**  
SECTION LEAD, CLIMATE &  
EQUITY, NYC DEP



**ELISIA LANGDON**  
RESILIENCY PROJECT  
MANAGER, NYC DEP

# LAYERED FLOOD MITIGATION APPROACH

DEP is implementing multiple short-and long-term solutions with different costs, timeframes, and degrees of intervention.

The Cloudburst Program is only one of these solutions.

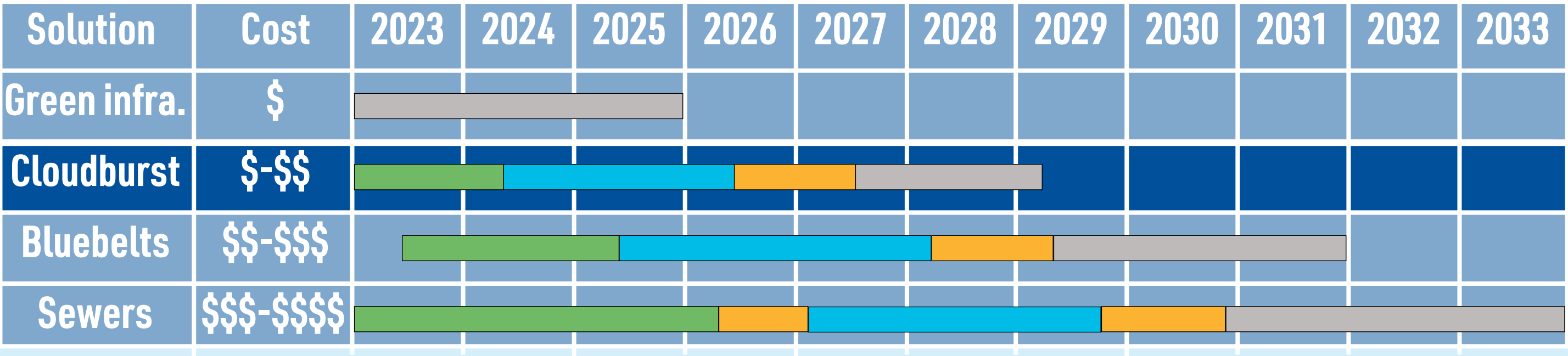
Key

Planning Phase

Design Phase

Procurement

Construction



# CLOUDBURST BACKGROUND

# CLOUDBURST IMPACTS

**A Cloudburst is a sudden, heavy downpour that drops a lot of rain in a short amount of time.**

**Cloudbursts can overwhelm the sewer system and cause flooding.**

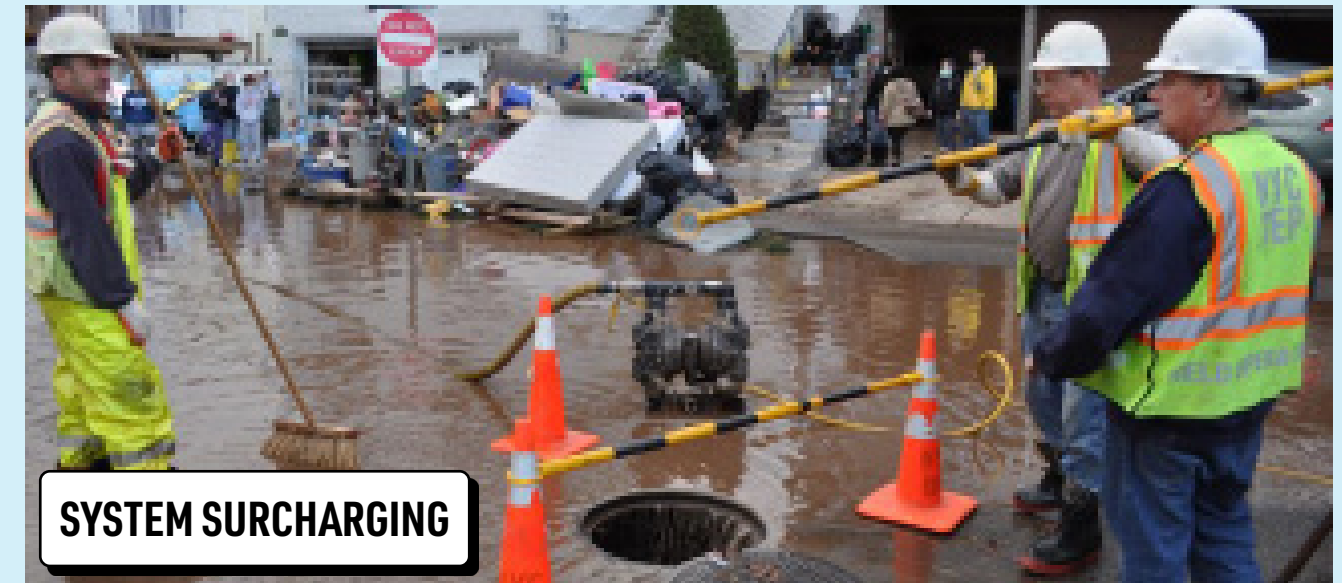
**Cloudburst impacts are causing more localized flooding across NYC.**





# TYPES OF FLOODING

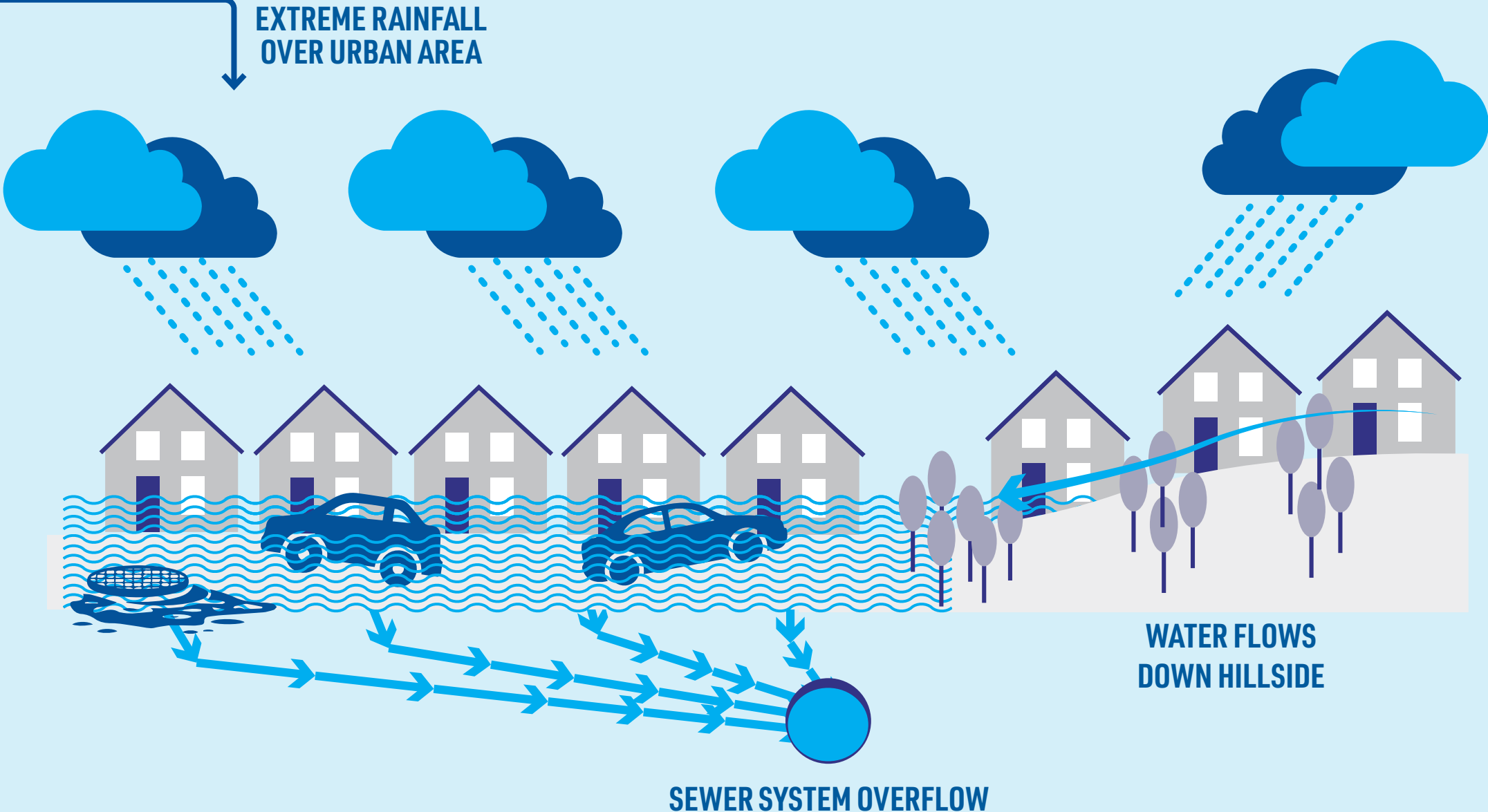
There are several different types of flooding that New Yorkers may experience, either combined or in isolation during a flooding event.



# OVERLAND FLOODING

## OVERLAND FLOODING

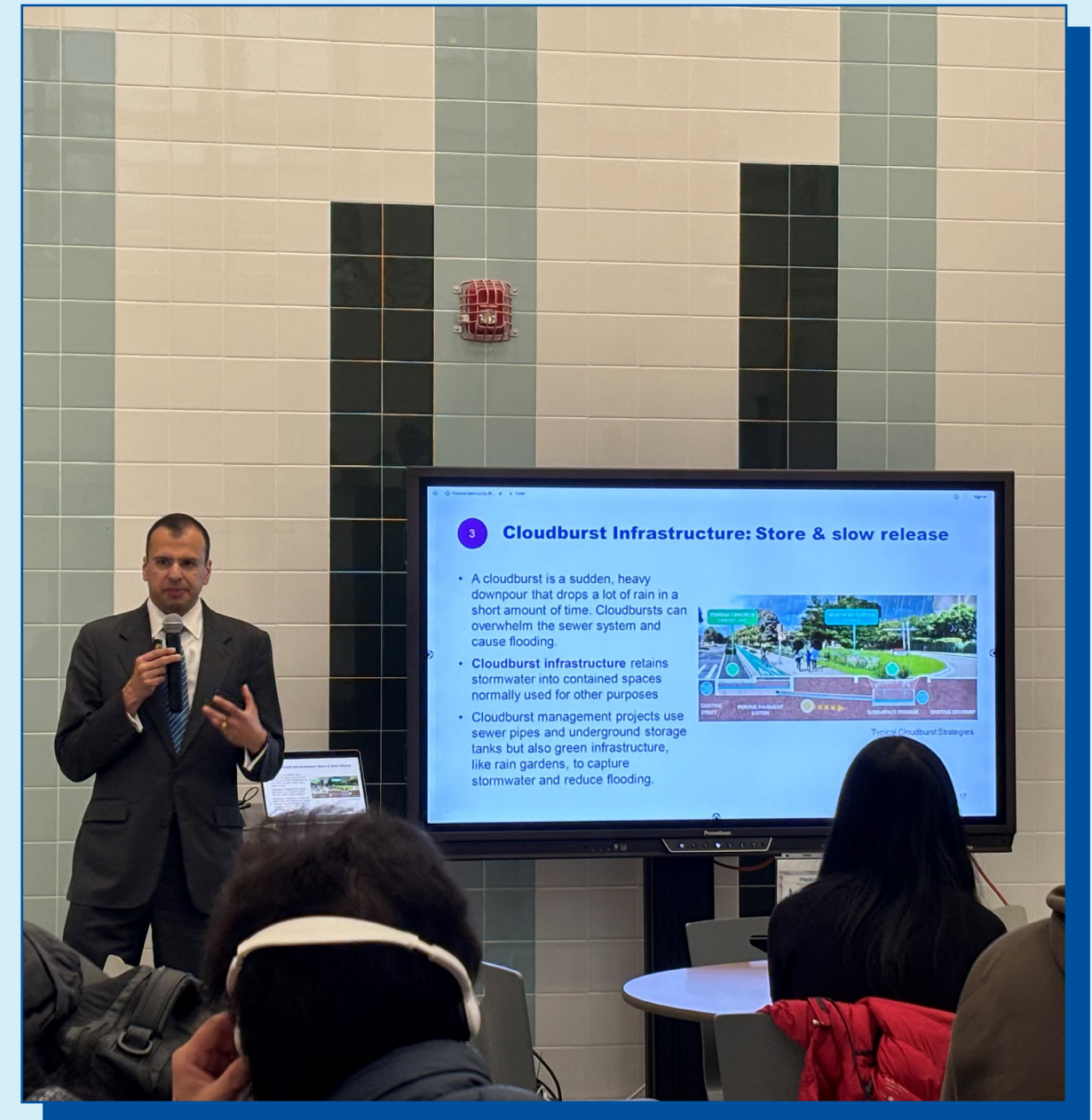
Occurs when rainwater flows downhill over the land and collects in low-lying areas



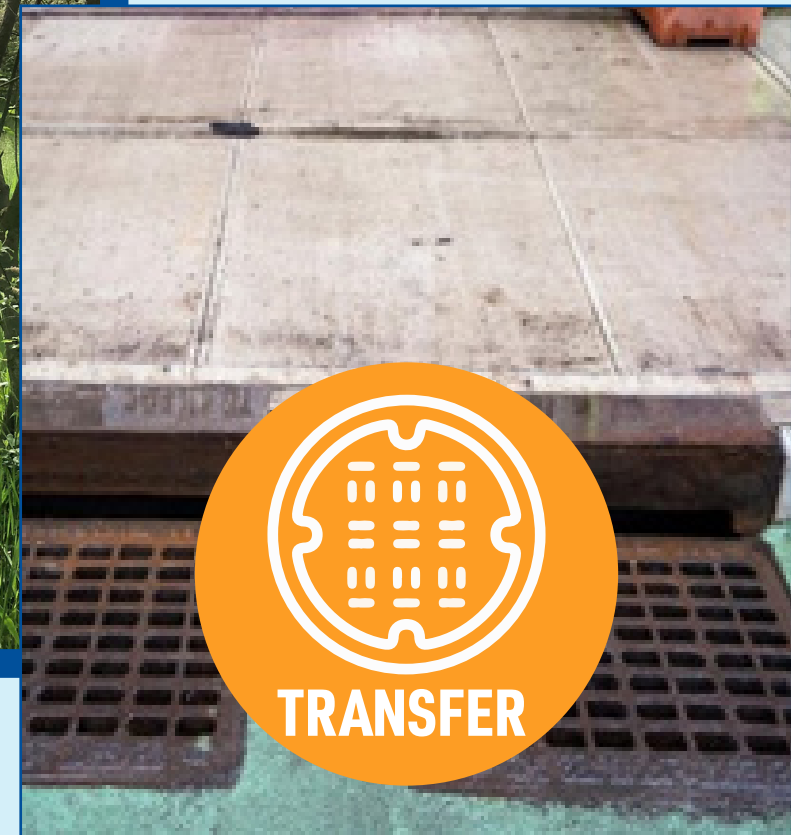


# CLOUDBURST IN NYC

The New York City Department of Environmental Protection (DEP) committed to **advancing innovative cloudburst solutions** in the Mayor's "The New Normal: Combating Storm-Related Extreme Weather in New York City" report issued in November 2021. **The City committed funding to initiating cloudburst mitigation projects in four neighborhoods in 2025**, while pursuing State and federal funding to implement additional projects.



# CLOUDBURST MANAGEMENT METHODS



# KISSENA PROJECT AREA



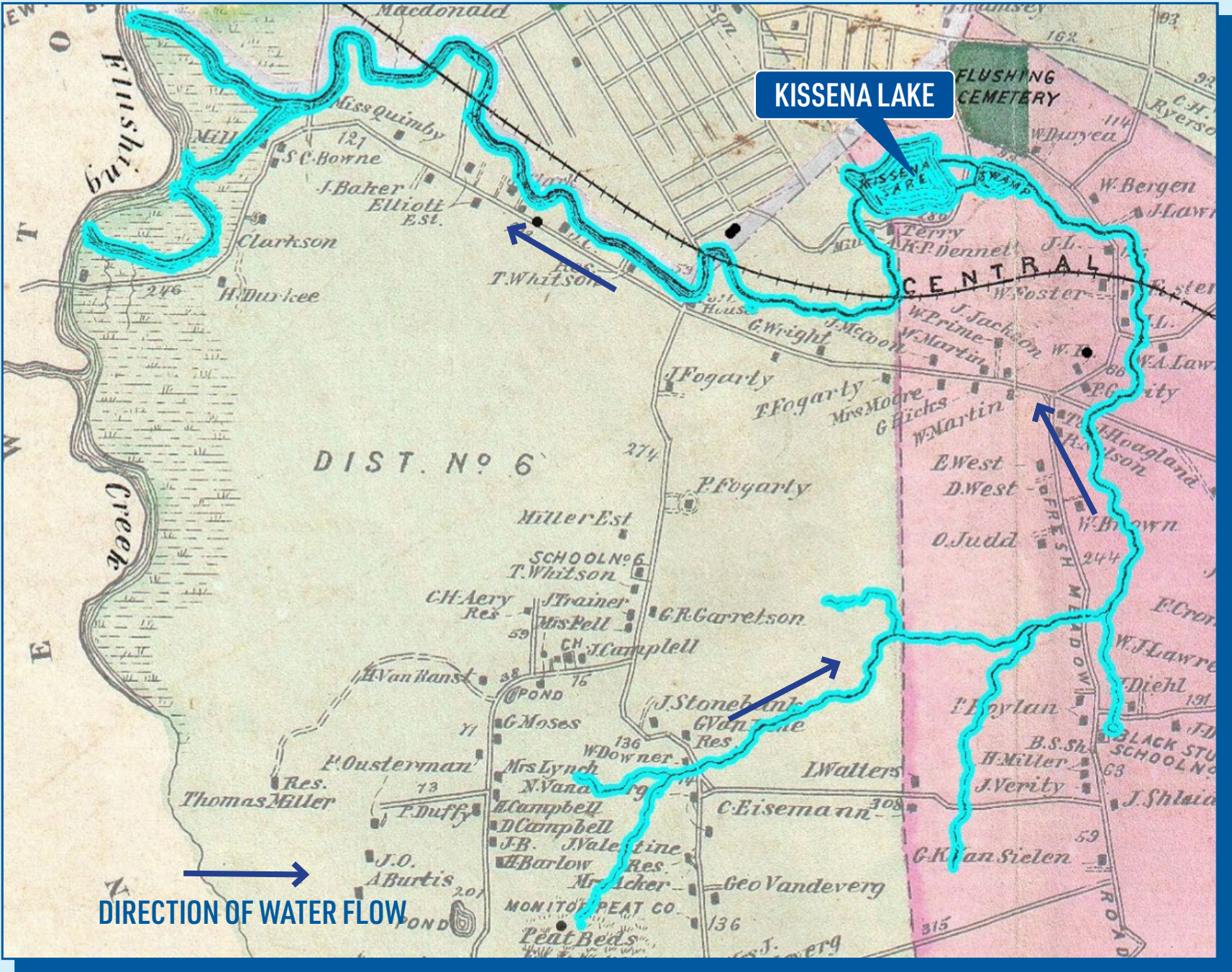
# PROJECT AREA HISTORY

GLACIAL HISTORY AND HUMAN INTERVENTION CREATED THE CURRENT LANDSCAPE THAT IS **PRONE TO FLOODING**

**KISSENA HUB IS THE LOWPOINT**

AN 1873 MAP OF QUEENS SHOWING THE ROUTE OF KISSENA CREEK (BLUE) AND THE CENTRAL RAILROAD

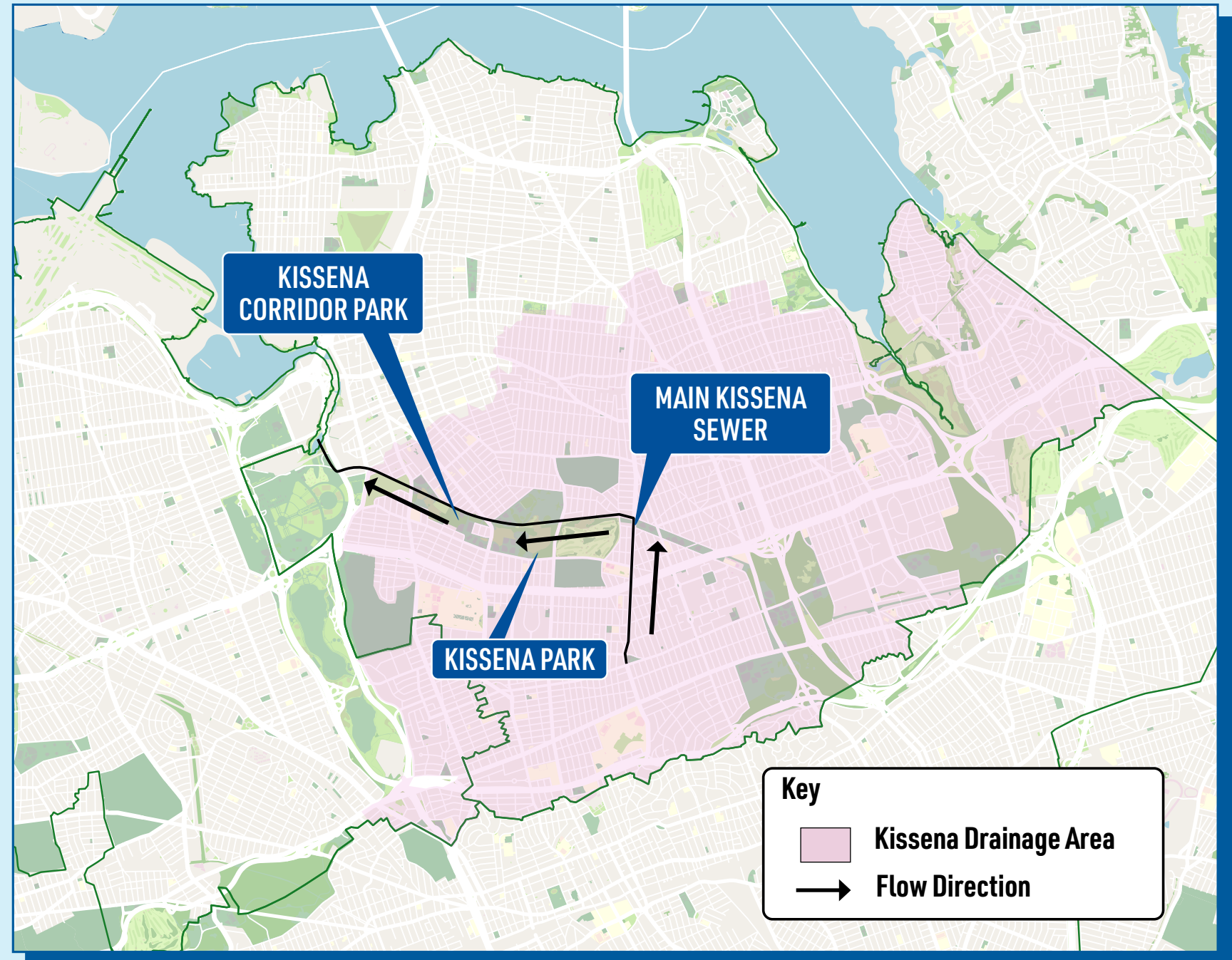
SOURCE: [https://en.wikipedia.org/wiki/Kissena\\_Creek](https://en.wikipedia.org/wiki/Kissena_Creek)





# KISSENA CSO DRAINAGE AREA

The trunk sewer mains running under Kissena Park handle stormwater from a massive drainage area, ~20% Queens.





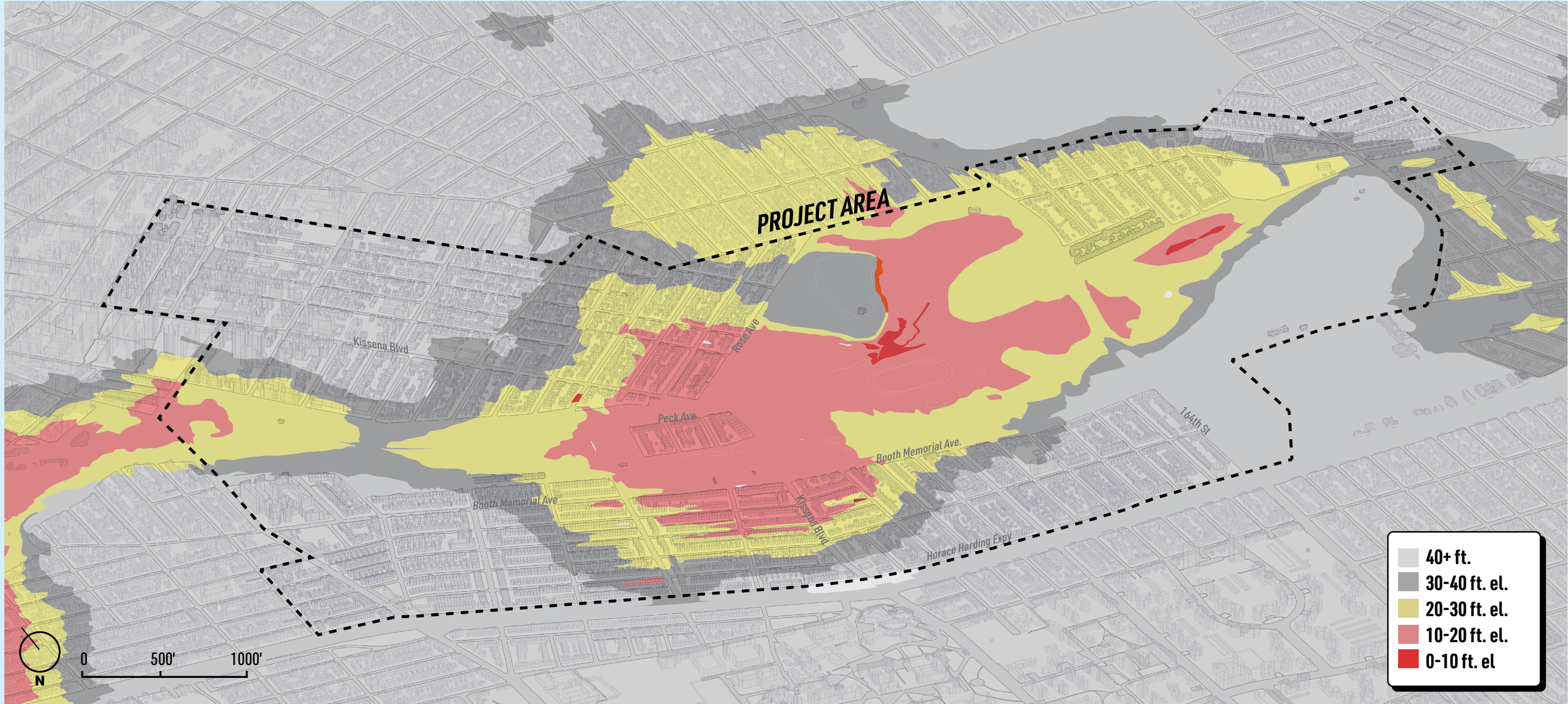
The map displays the Kissena Park area, with the project area highlighted in green and outlined by a dashed black line. The project area includes Kissena Park, Kissena Blvd, and surrounding streets. The map shows a dense grid of streets, with major thoroughfares like Kissena Blvd and 164th St. The project area is located in the center of the map, surrounded by residential areas. A north arrow and a scale bar (0 to 1000 feet) are provided in the bottom left corner.

**Streets shown on the map:**

- Ash Ave, Beech Ave, Cherry Ave, Elder Ave, Golden St, Kissena Blvd, Laburnum Ave, Megundo Ave, Oak Ave, Poplar Ave, Quince Ave, Rose Ave, 151st St, 153rd St, 155th St, 157th St, 159th St, 160th St, 161st St, 162nd St, 163rd St, 164th St, 165th St, 166th St, 167th St, 168th St, 169th St, 170th St, 171st St, 172nd St, 173rd St, 174th St, 175th St, 176th St, 177th St, 178th St, 179th St, 180th St, 181st St, 182nd St, 183rd St, 184th St, 185th St, 186th St, 187th St, 188th St, 189th St, 190th St, 191st St, 192nd St, 193rd St, 194th St, 195th St, 196th St, 197th St, 198th St, 199th St, 200th St, 201st St, 202nd St, 203rd St, 204th St, 205th St, 206th St, 207th St, 208th St, 209th St, 210th St, 211st St, 212nd St, 213rd St, 214th St, 215th St, 216th St, 217th St, 218th St, 219th St, 220th St, 221st St, 222nd St, 223rd St, 224th St, 225th St, 226th St, 227th St, 228th St, 229th St, 230th St, 231st St, 232nd St, 233rd St, 234th St, 235th St, 236th St, 237th St, 238th St, 239th St, 240th St, 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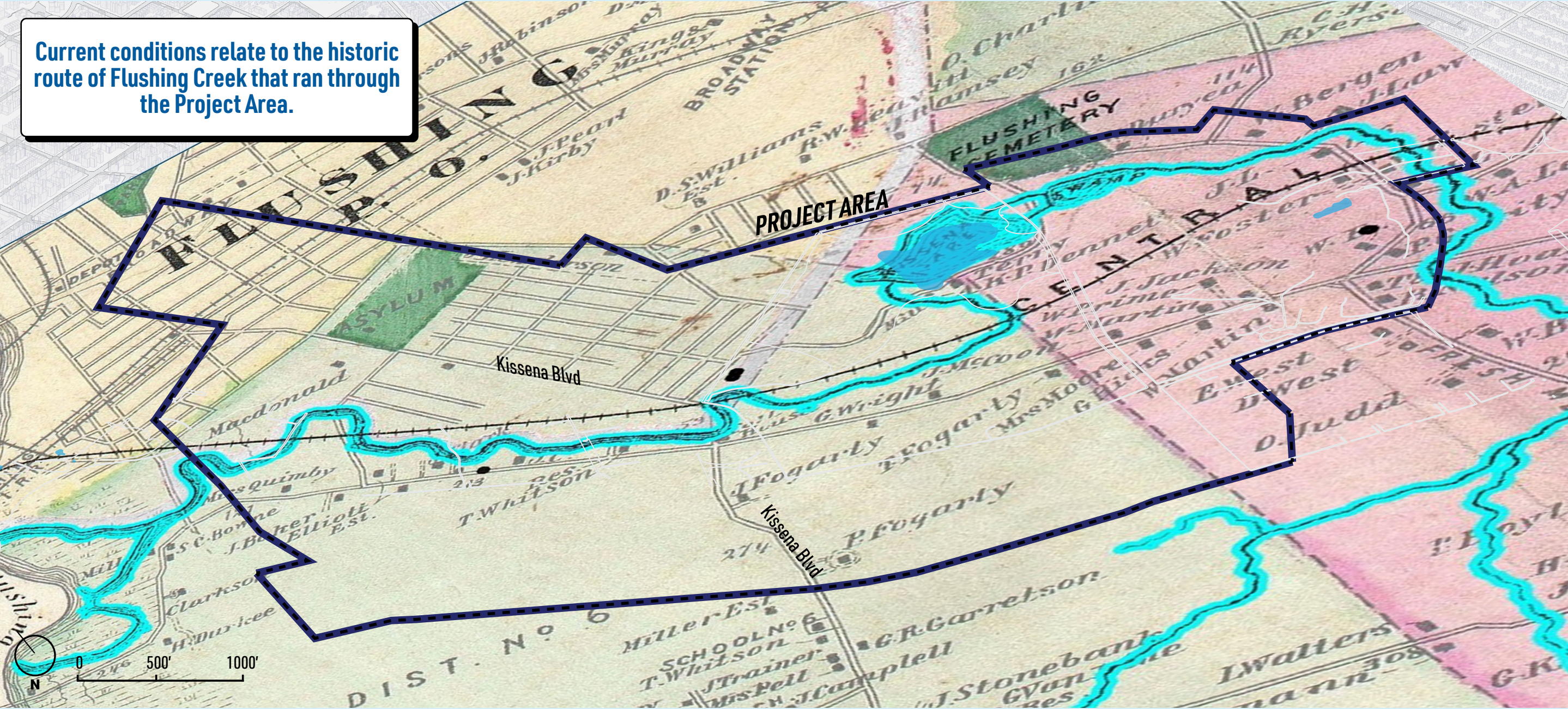
# TOPOGRAPHY





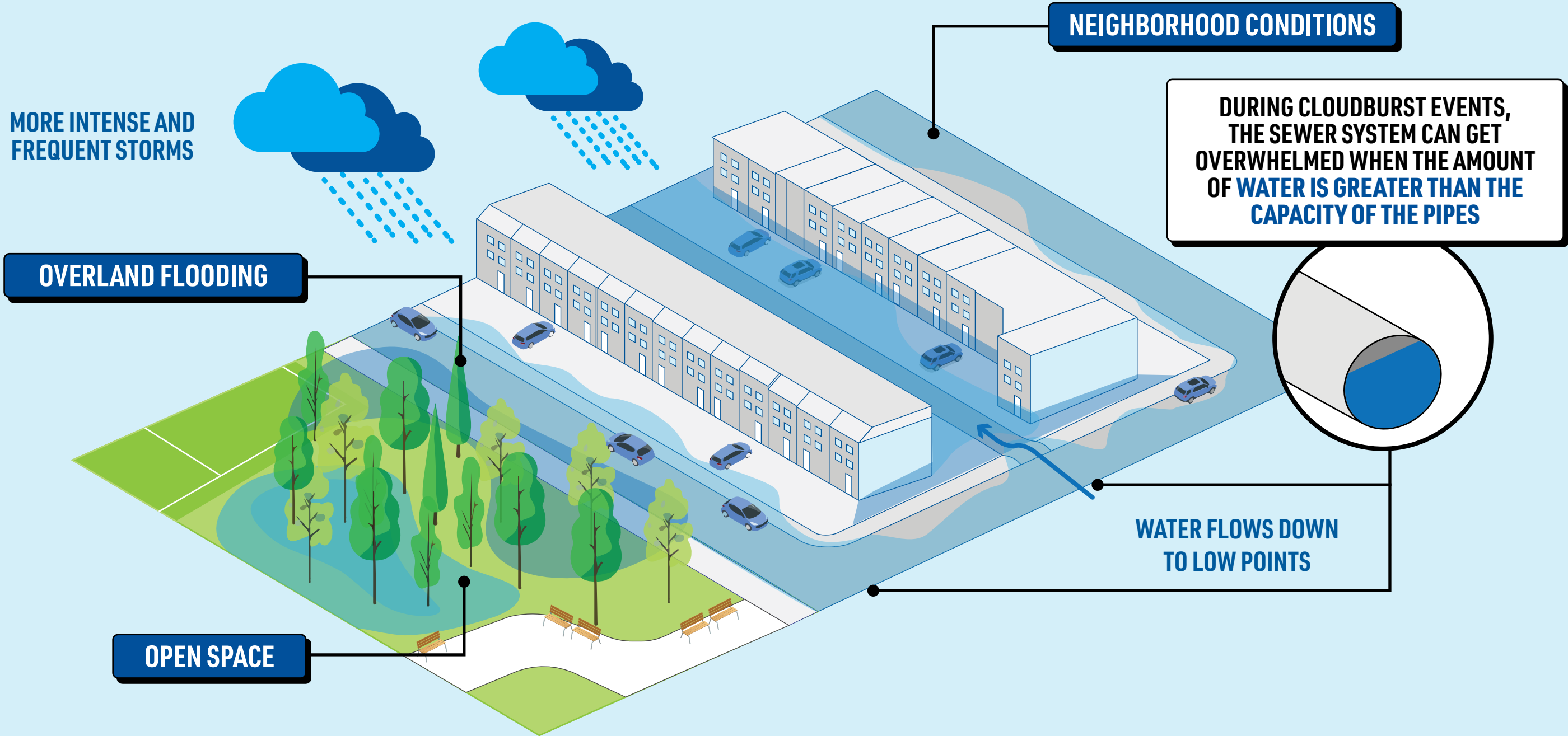
# HISTORIC HYDROLOGY

Current conditions relate to the historic route of Flushing Creek that ran through the Project Area.




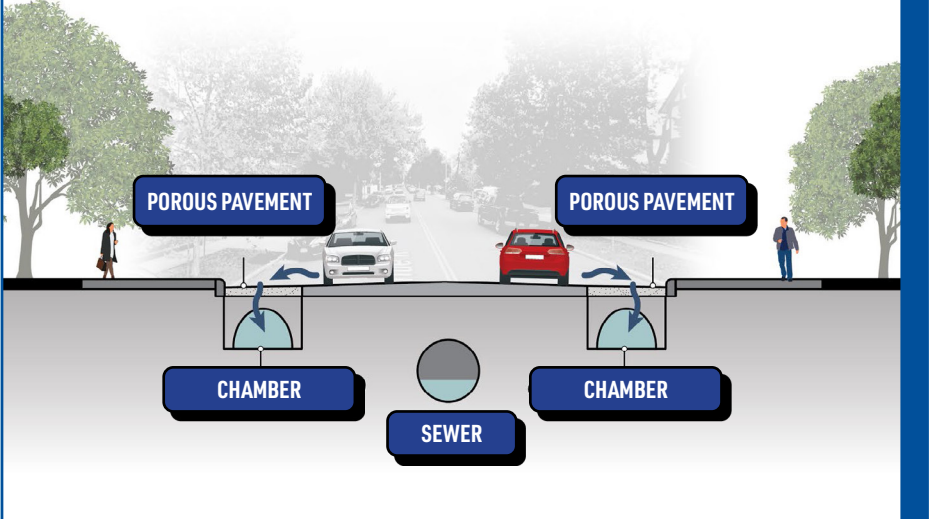


# LOW POINTS & LOCALIZED FLOODING




# PROJECT GOALS






The diagram illustrates a cross-section of a street with porous pavement. Arrows show rainwater infiltrating through the pavement into two underground chambers. These chambers are connected to a central sewer line. The labels 'POROUS PAVEMENT', 'CHAMBER', and 'SEWER' are included.

**CLOUDBURST INFRASTRUCTURE**  
Mitigate flooding caused by short and intense rain events





A photograph of a park area with trees, benches, and people. The benches are yellow and blue. A person is walking on a paved path. The background shows more trees and a building.

**PLACEMAKING**  
Enhance and signal cloudburst interventions with placemaking





A photograph of a group of people, including children and adults, holding small potted plants. They are standing in front of a building. The text 'Photo by BASF' is in the top right corner.

**EDUCATION**  
Community understanding of the local environment



# INTERVENTIONS TOOLKIT





# WHAT WE KNOW

## COMMUNITY UPDATES

### Kissena Park Flooding Progress Update

November 21, 2023

### Cloudburst Program Citywide Update

## TECHNICAL DOCUMENTS

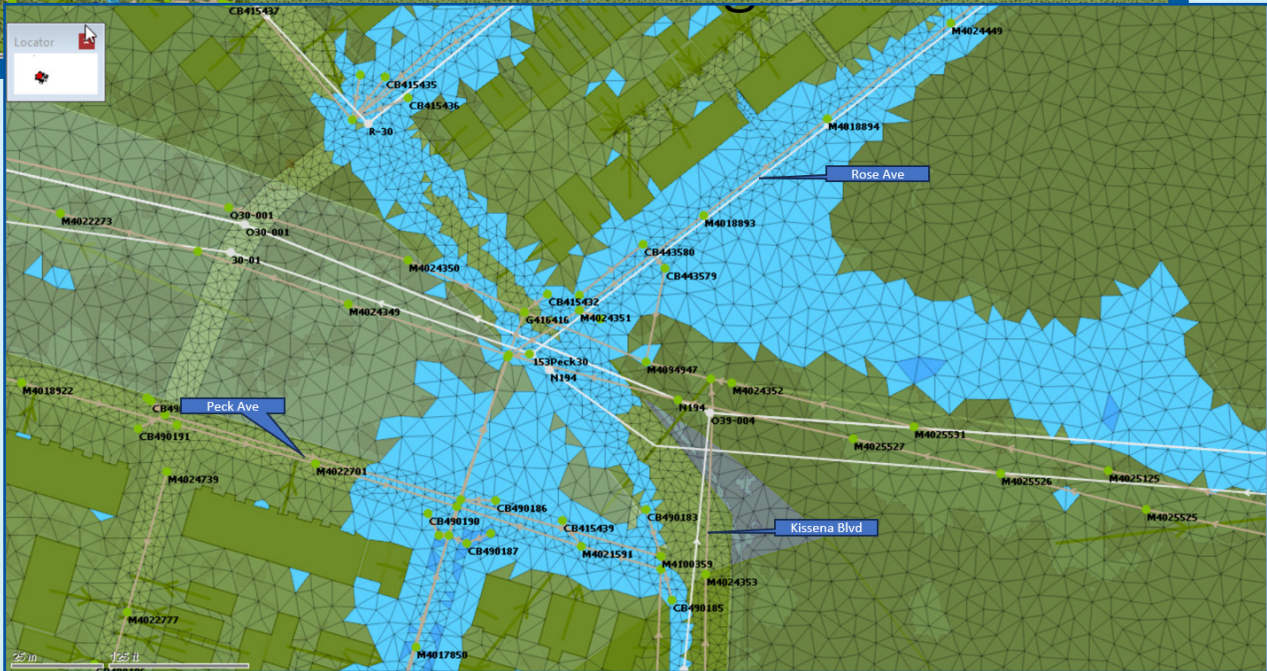
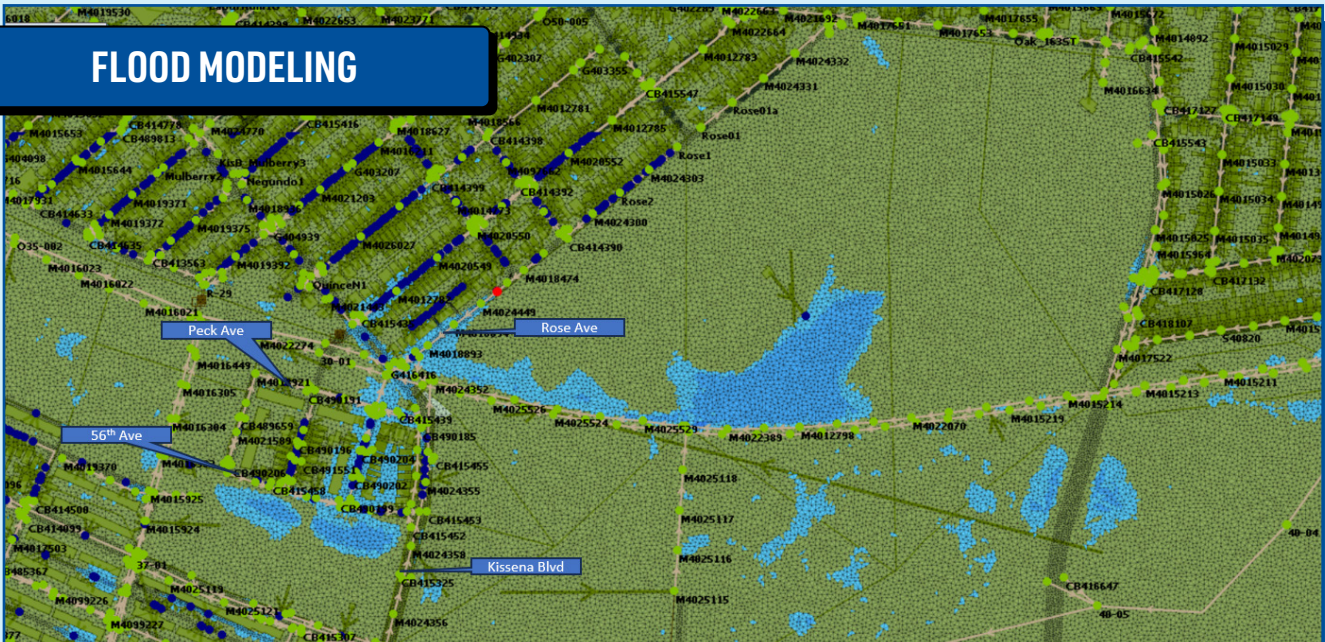


### NYC Cloudburst Program Cloudburst Feasibility Study Technical Memorandum

BEPA-IWMPA Contract  
June 13, 2023



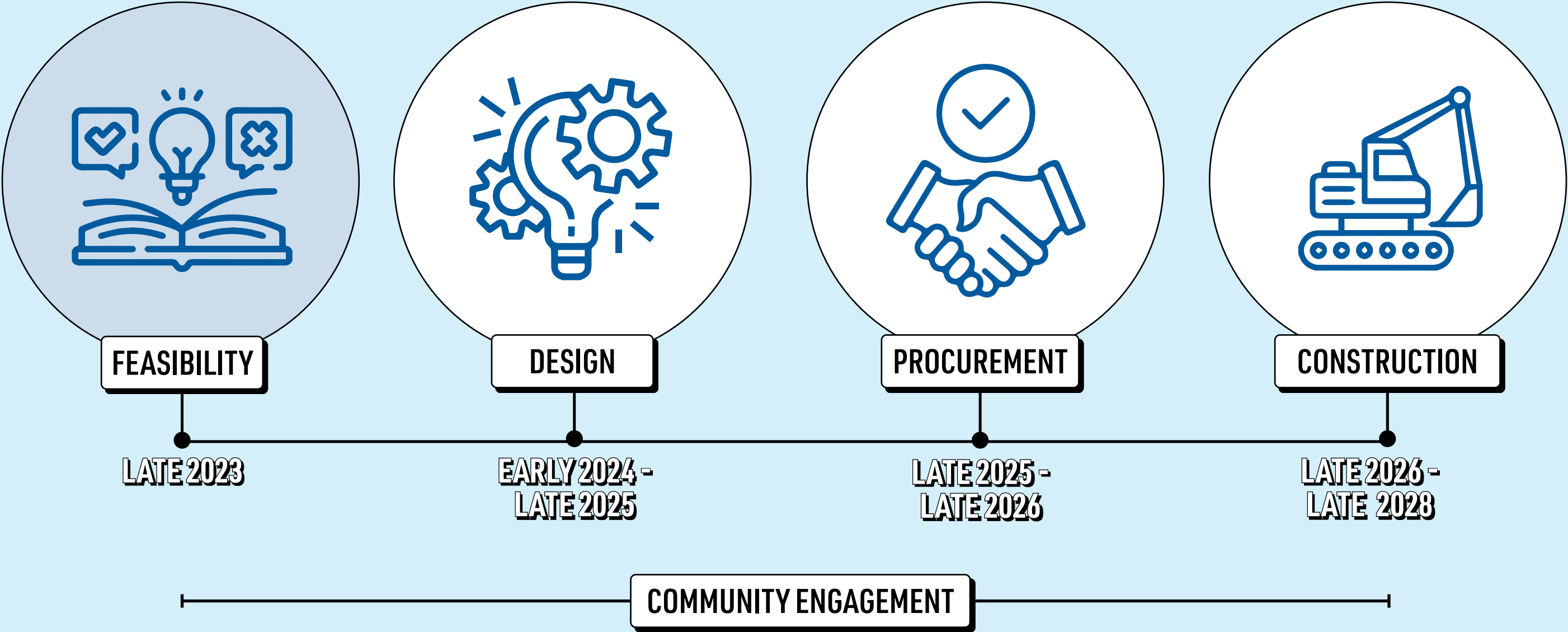
## FLOOD MODELING



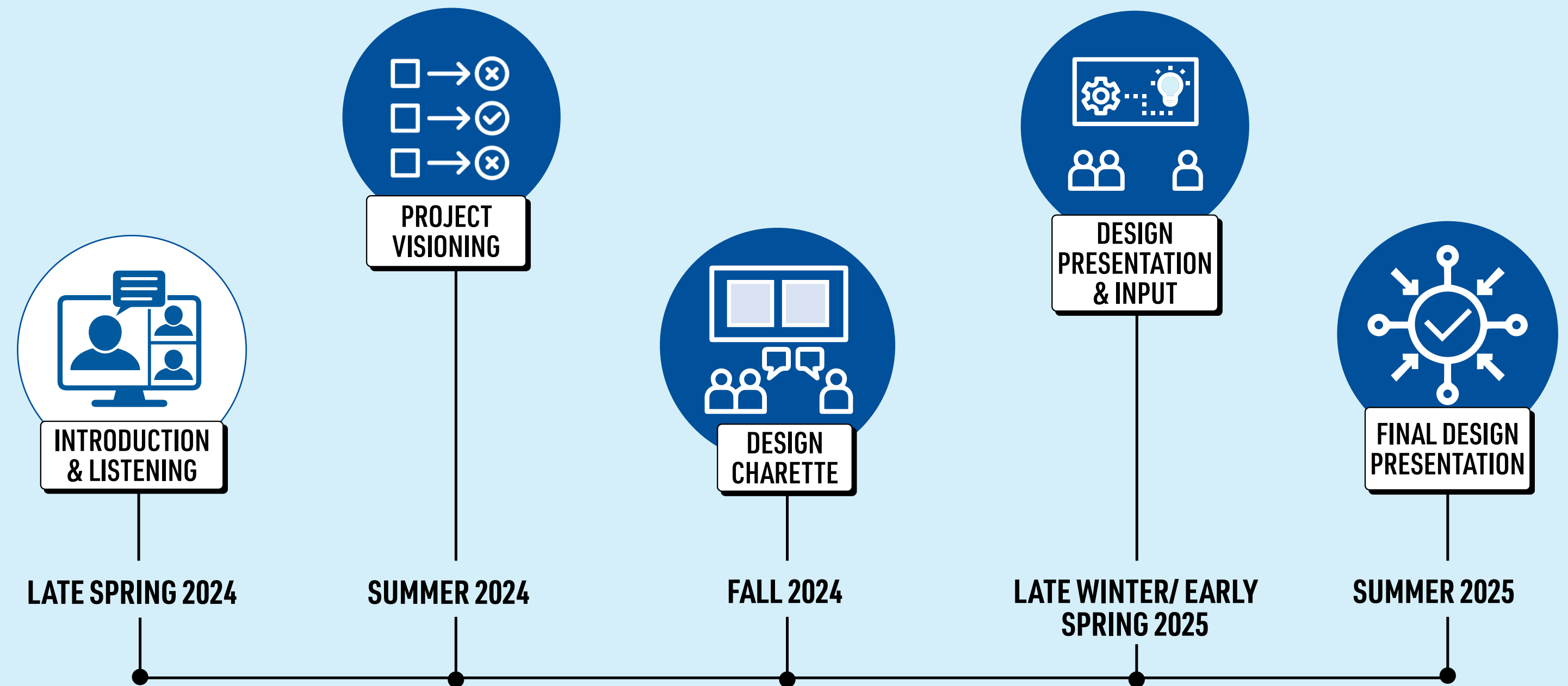


# PROJECT TIMELINE & ENGAGEMENT PROCESS

# PROJECT TIMELINE



# COMMUNITY ENGAGEMENT EVENTS



# LISTENING PHASE | COMMUNITY MEETINGS 1 & 2

## TO COMMUNICATE:

Types of flooding  
and Cloudburst  
background

Kissena Hub  
historical and  
existing context

Project goals and  
design objectives

## TO LEARN:

Community's lived  
experience with  
flooding

Community's  
understanding of  
flooding issues and  
causes

Local knowledge  
that can strengthen  
projects



# DESIGN PHASE | COMMUNITY MEETINGS 3 & 4

## TO COMMUNICATE:

Flood model results

Flood mitigation  
design strategies

Placemaking  
opportunities

## TO LEARN:

Community design  
preferences

Community public  
space priorities

Synergies for  
community benefits

# NEXT STEPS

01

If you live or work within the Kissena Hub Project Area, sign up for your hub's mailing list through the link below:

<https://nyc.gov/dep/newsletters>

HOW CAN YOU INFLUENCE OUTCOME?



02

**Survey links:**

English: <https://www.surveymonkey.com/r/G9QGDJF>

Spanish: <https://es.surveymonkey.com/r/ZV76FGQ>

Mandarin: <https://es.surveymonkey.com/r/CD5YRV9>

03

Next meeting: **COMMUNITY MEETING #2**  
**SUMMER 2024**

DEFINE PROJECT GOALS AND OBJECTIVES

**PROJECT VISIONING**

# EVENT REMINDER - KISSENA GI SITE VISIT

**Tuesday, June 4th at 11AM.**

**Site visit to green infrastructure construction at Kissena Boulevard and Booth Memorial.**

**Parks representatives will be on hand to answer questions about the ongoing work at the site.**



**THANK YOU!**