
# Fort Point Channel Coastal Resilience Update

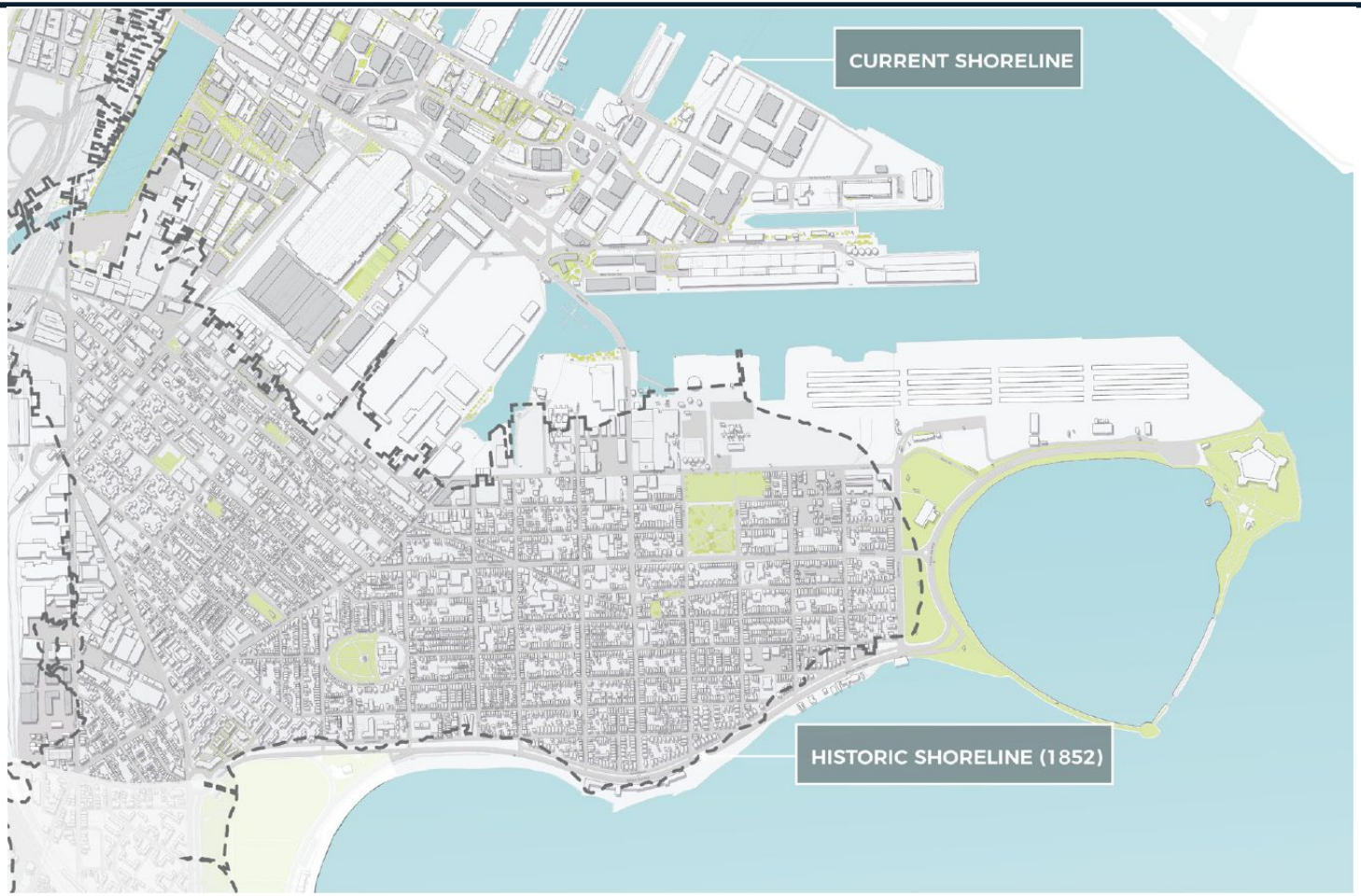
*October 28, 2025*

# Agenda

- **Flood Risk Overview** for the Fort Point Channel overview and projections
- **Near Term Actions:** Updates, including status, funding, and designs,
  - *Interim Deployable Projects*
  - *Resilient Fort Point Channel Berm Project -- Status & Alternatives*
  - *Permitted private developments*
- **Longer-term Opportunities:** Collaboration with the Army Corps
  - *BWSC stormwater study*
  - *USACE Collaboration*
- **Summary & Next Steps**

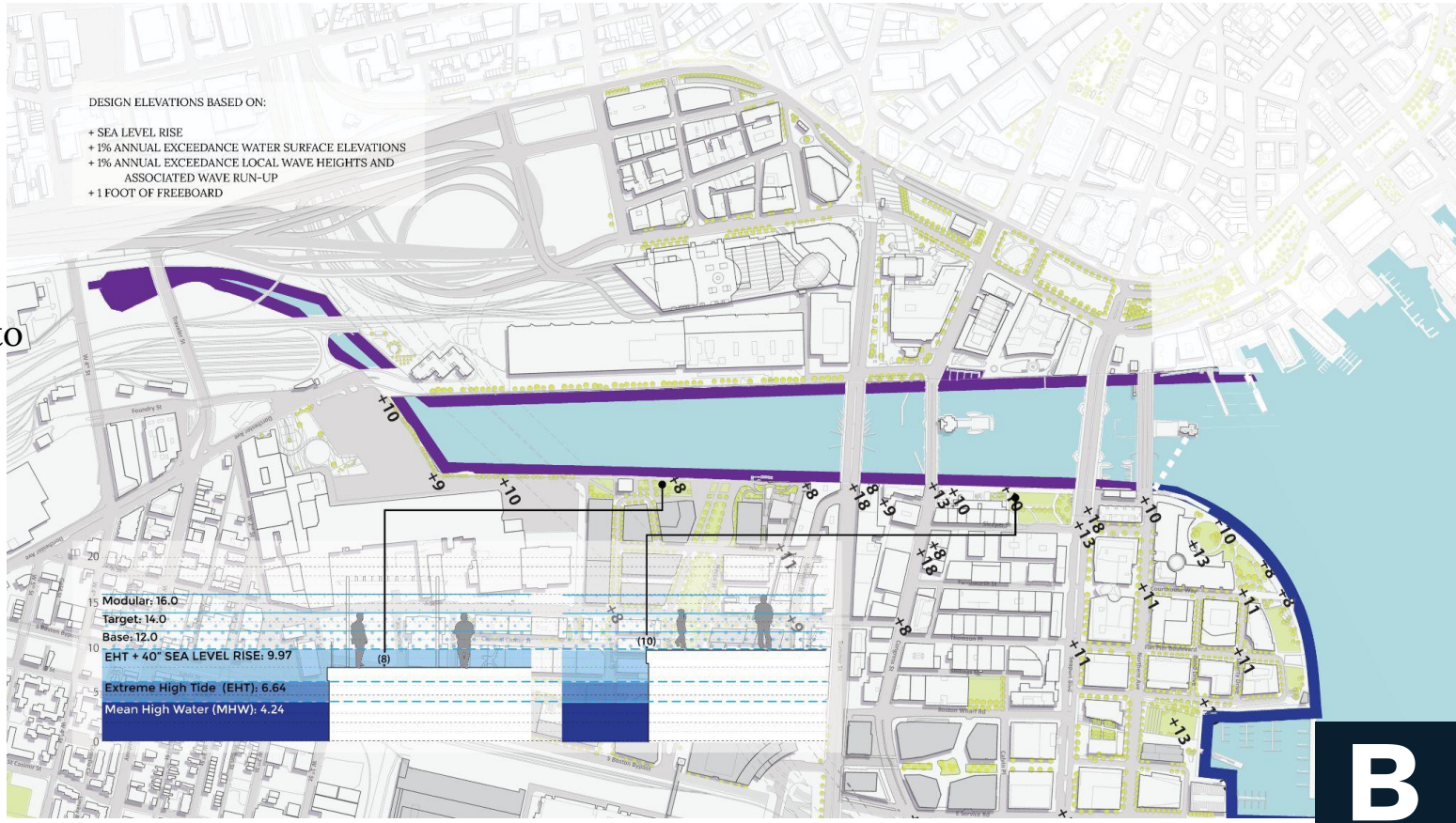

# Flood Risk Overview

# Historic (1852) Shoreline

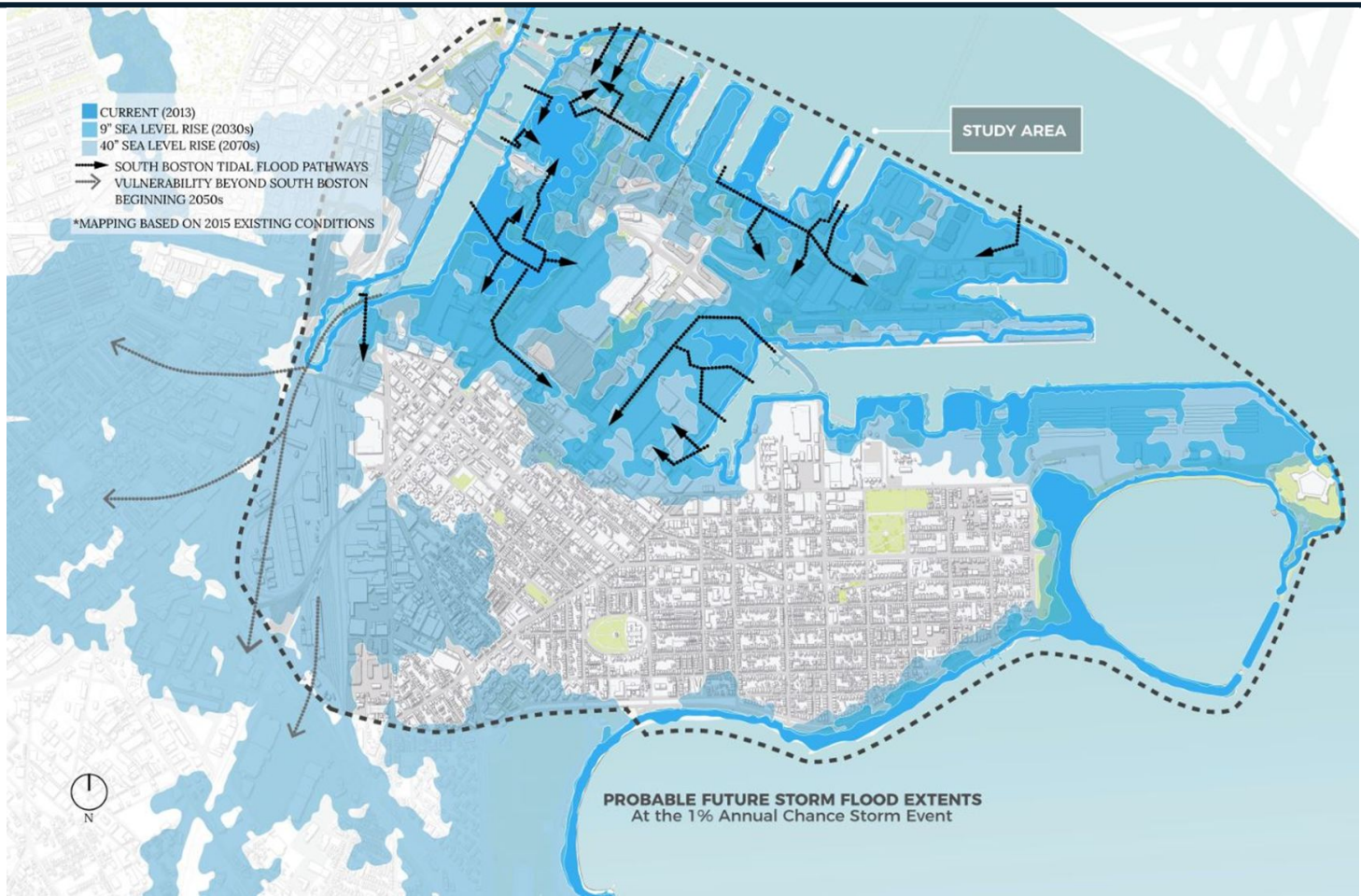


# Existing Ground Elevations

- Elevations are in NAVD88
- To convert to BCB, add 6.46' to elevation shown



# Flood Paths


CURRENT (2013)
9" SEA LEVEL RISE (2030s)
40" SEA LEVEL RISE (2070s)
SOUTH BOSTON TIDAL FLOOD PATHWAYS
VULNERABILITY BEYOND SOUTH BOSTON BEGINNING 2050s
*MAPPING BASED ON 2015 EXISTING CONDITIONS
STUDY AREA
N
PROBABLE FUTURE STORM FLOOD EXTENTS
At the 1% Annual Chance Storm Event

# Projected Design Flood Elevations (DFE) by Timeframe

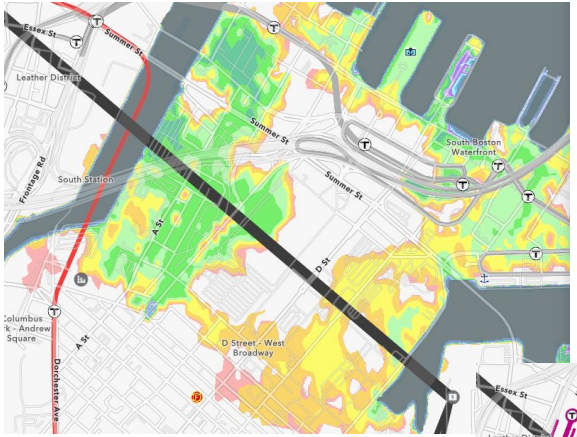
## *Projected Sea Level Rise and 1% Annual Chance Flood Elevations*

*Flood elevations vary across the district and across the City. The example here shows how elevations change over time as a result of sea level rise in South Boston at one location along Fort Point Channel.* (8')

*Data sources: Climate Ready Boston projections and Boston Harbor Flood Risk Model (BH-FRM). Elevations are reported with respect to the North American Vertical Datum of 1998 (NAVD88). NAVD88 elevations are 6.46 feet lower than Boston City Base.*

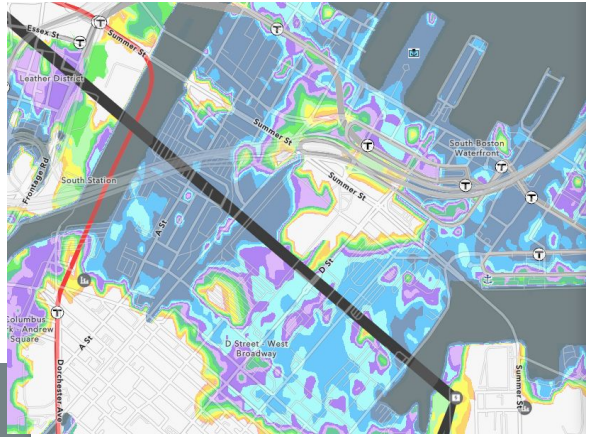
| | 2030s | 2050s | 2070s |
|---|---|---|---|
| RELATIVE SEA LEVEL RISE | 9 inches | 21 inches | 40 inches |
| 1 % ANNUAL CHANCE FLOOD ELEVATION AT EXAMPLE LOCATION | 10.2 feet | 11.3 feet | 12.8 feet |
| 1 % ANNUAL CHANCE FLOOD DEPTH ABOVE GROUND AT EXAMPLE LOCATION | 2.2 feet | 3.3 feet | 4.8 feet |

# State-Projected Flood Depths by Timeframe

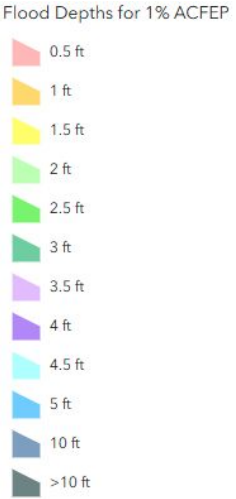



2030


2050




2070



# Flood Path Summary for the Fort Point Neighborhood

- **Near Term (Today & 2030s)**
  Priority flood paths to address both north and south of Congress Street along the Fort Point Channel

- **Mid Term (2050s)**
  Increasing probability of flood paths that can reach Fort Point neighborhood from Seaport Boulevard and the Reserved Channel

- **Mid - to Long-Term (2050s +)**
  Increasing depth of flood risk from storm surge within the Fort Point Channel


# Near Term Actions

* Interim Measures
* Fort Point Berm (Status & Alternatives)
* Permitted Private Projects

## Moving from Planning to Action: Three Concurrent Strategies

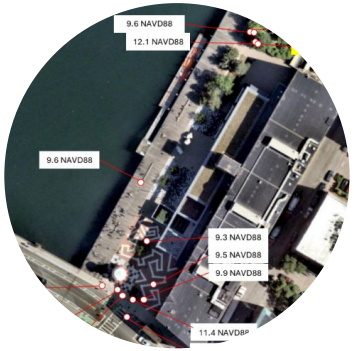
**Today's Storms** → **Implementing Interim Measures**

**This Decade's Storms** → **Building Projects to Close Floodpaths**

**Beyond 2030** → **Collaborating with the Army Corps**

# Interim Measures


## Martin's Park



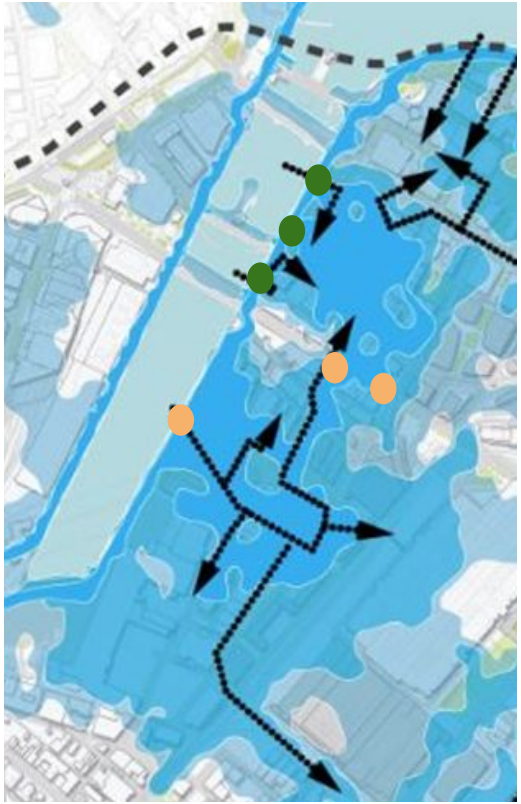

## Children's Museum

## Sleeper St Extension Passageway

## Charlestown Main Street

*Fort Point Channel*

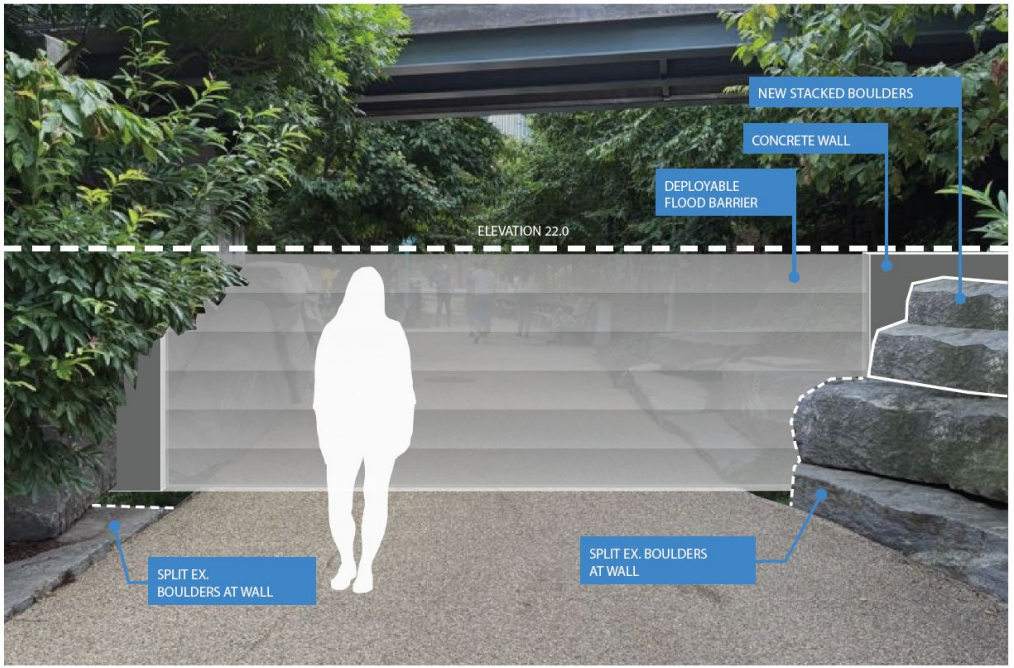
# Interim Measures: Fort Point Channel



- Currently planned near-term project
- Previously planned as part of FEMA grant application

# Martin's Park

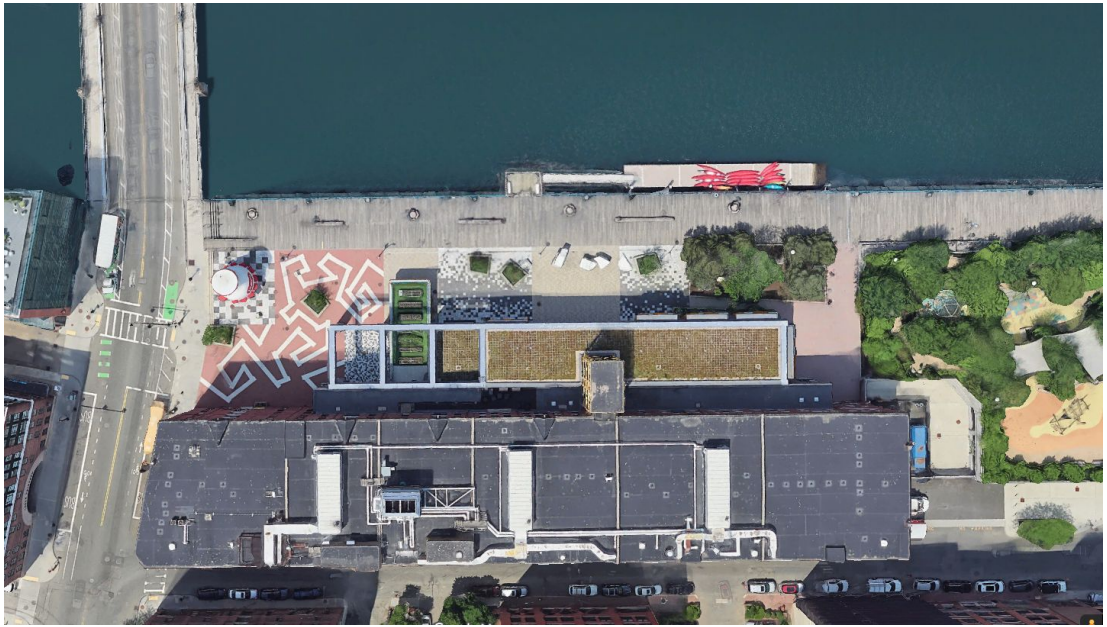
- Estimated completion of construction: **Spring 2026**
- City is **currently** reviewing bids




*Eastern Approach - Proposed Barrier Integration*

# Boston Children's Museum

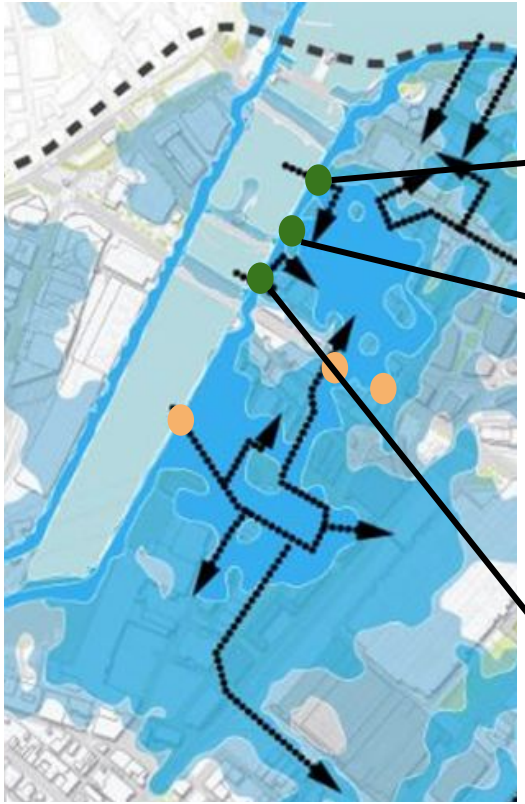
- Estimated completion of construction: Late 2026
- City is continuing conversations with Museum leadership about placement and technical considerations
- Exploring a low concrete wall and deployable barriers in the public area in front of the museum
- Tie into high ground on both sides of the Museum

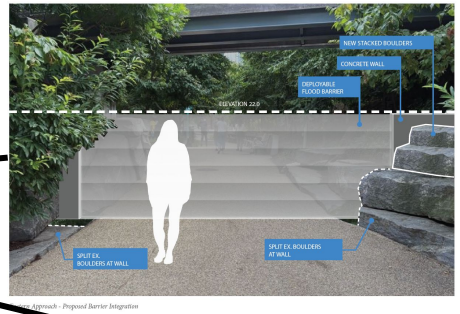


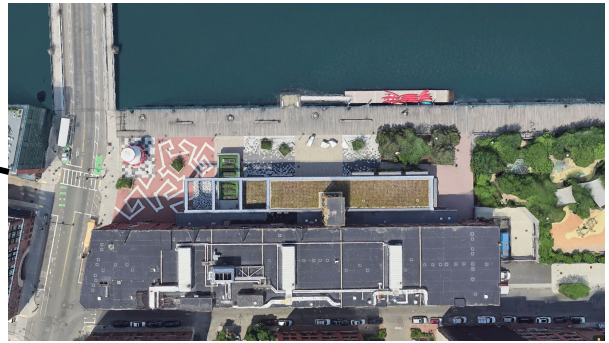
# Sleeper Street Extension Passageway

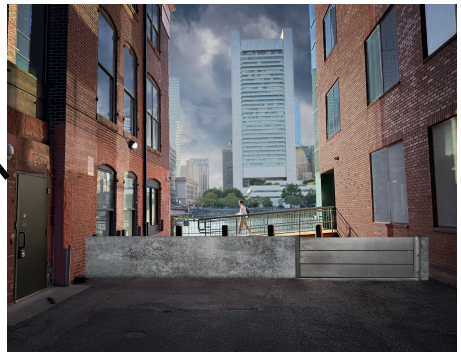
- Estimated completion of construction: Mid 2026
- City is continuing conversations with property owners
- The project would tie into buildings on both sides of the passageway

# Interim Measures: Fort Point Channel







# Interim Measure: Charlestown Main Street

- Estimated completion of construction: **Spring 2026**
- City is **currently** reviewing bids
- Concrete knee-wall
- Deployable barriers



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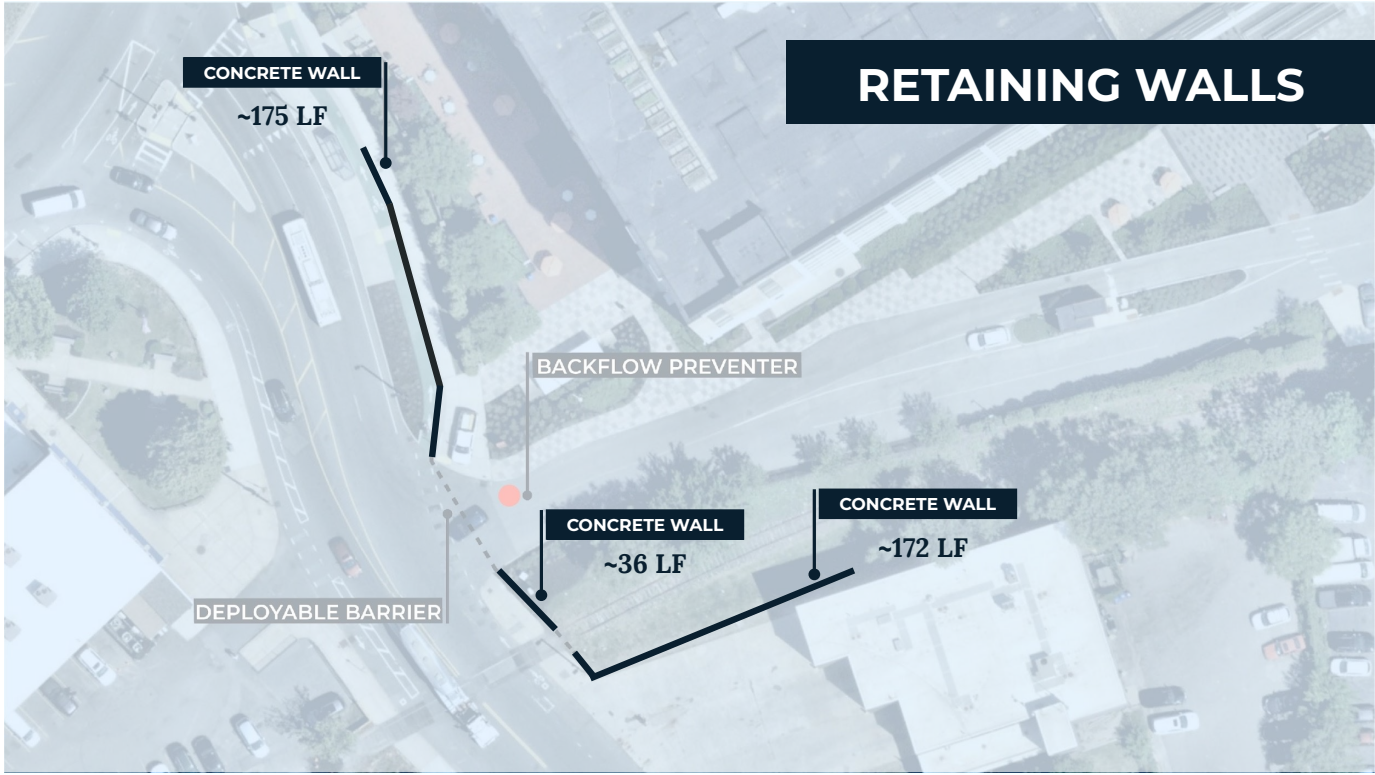

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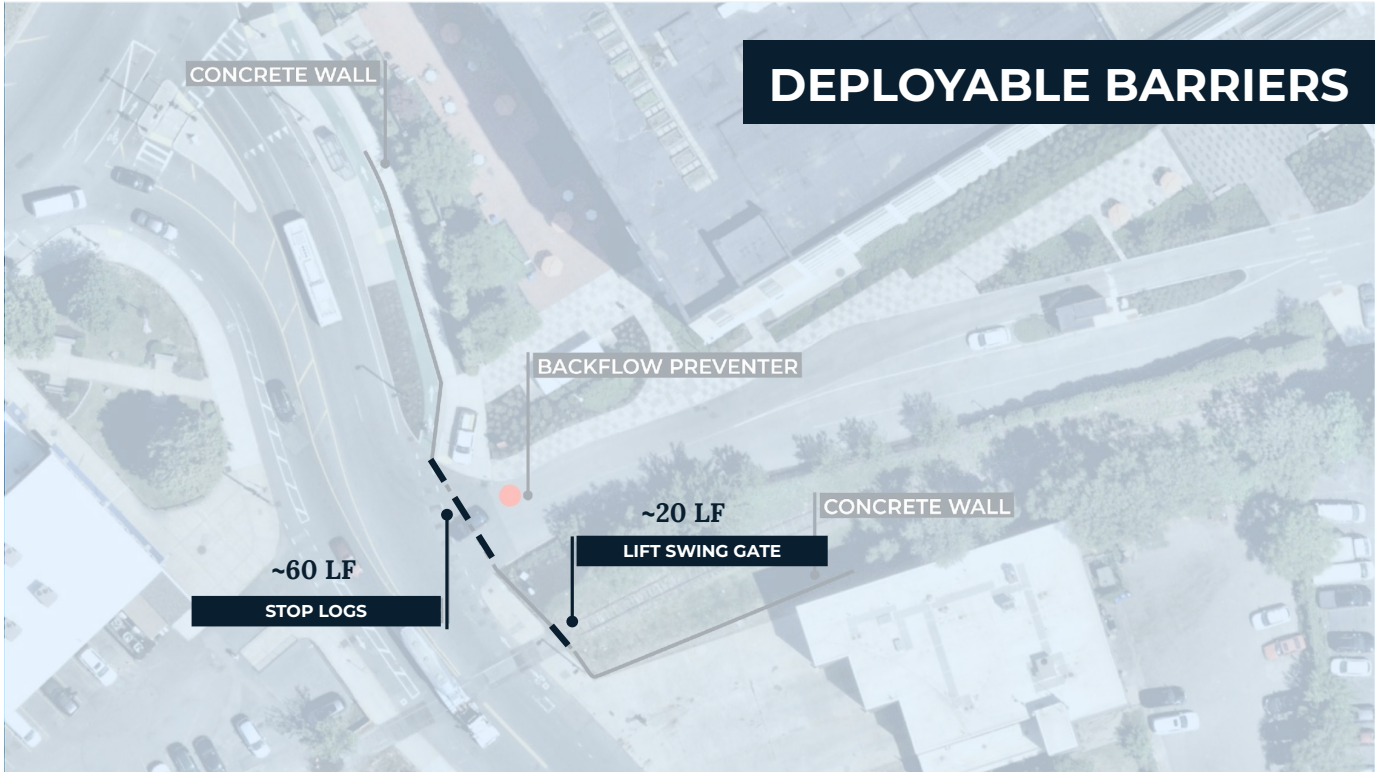
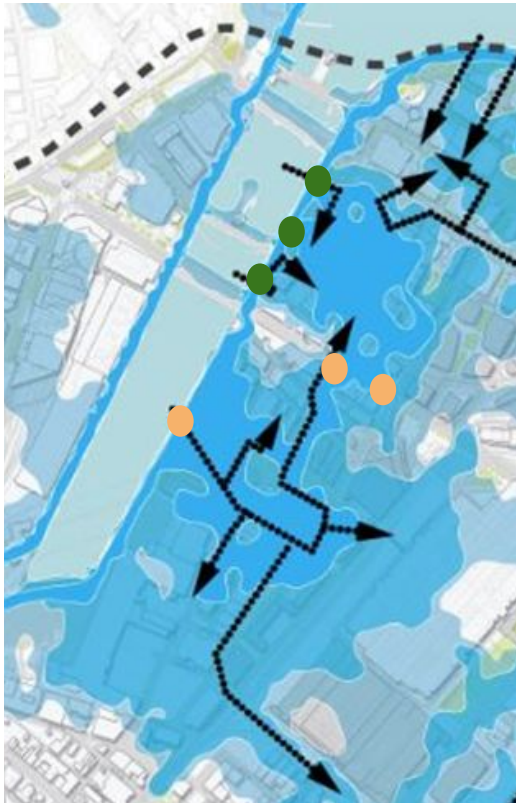
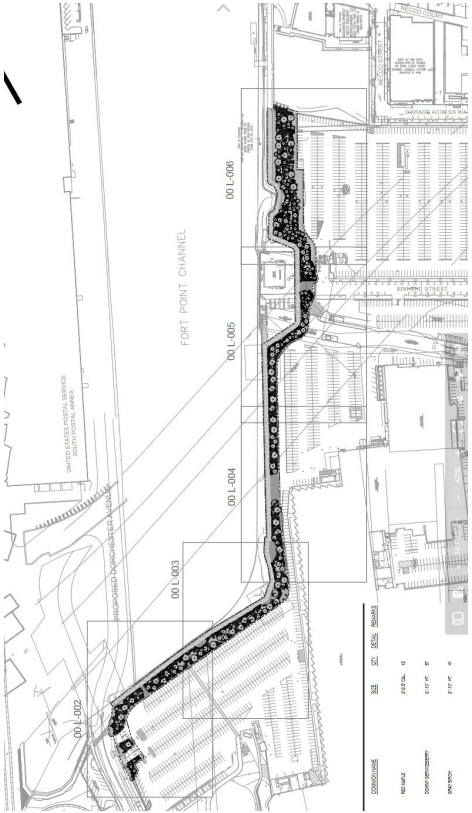
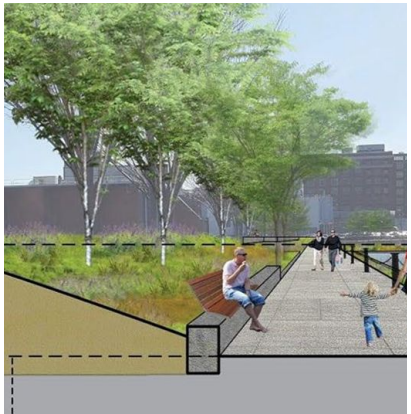


# Fort Point Berm: Overview







# Fort Point: Berm Status

- The estimated $20M project was funded with $10M from FEMA and $10M from the City
- FEMA has issued a determination cancelling their investment in the project.
- The City is seeking reconsideration from FEMA.
- The City is also exploring alternatives including:
    - Seeking additional funding (e.g. earmarks)
    - Exploring Near Term Alternative Designs

# Fort Point: Near Term Alternative to the Berm

- Would meet 2030s design flood elevations (DFE) instead of 2070s DFEs
- Exploring various measures: deployable barriers, low seat-wall, for example
- 3’ feet high in majority of project area
- Some elements of the previous design can be used

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# Fort Point Channel: Private Development

- Multiple development projects at various stages of permitting or completion along the Fort Point Channel.
- All will provide coastal resilience measures.
- Properties will have the right to remove, modify, and reconstruct, if there is an interim solution constructed.

| Project | Resilience Strategy | Status |
|---|---|---|
| 232A St (Tishman and Speyer) | Raised grade across the site, El. 21.5, berm with minimized footprint | Board Approved |
| 244- 284 A St (Related Beal) | Raised grade across the site, integration with berm, El. 21.5; harborwalk elevated to address 2070 HAT | Board Approved |
| 15 Necco (National Development) | Raised grade across the site, integration with berm, El. 21.5; | Completed |
| 5-6 Necco (National Development) | Resilience Retrofit of 5 Necco; FFE 19.5' Necco Court and Necco St improvements | Completed |
| 20 Gillette Park | Proposed new raised Harborwalk at El. 22 inland of existing Harborwalk | In discussion |

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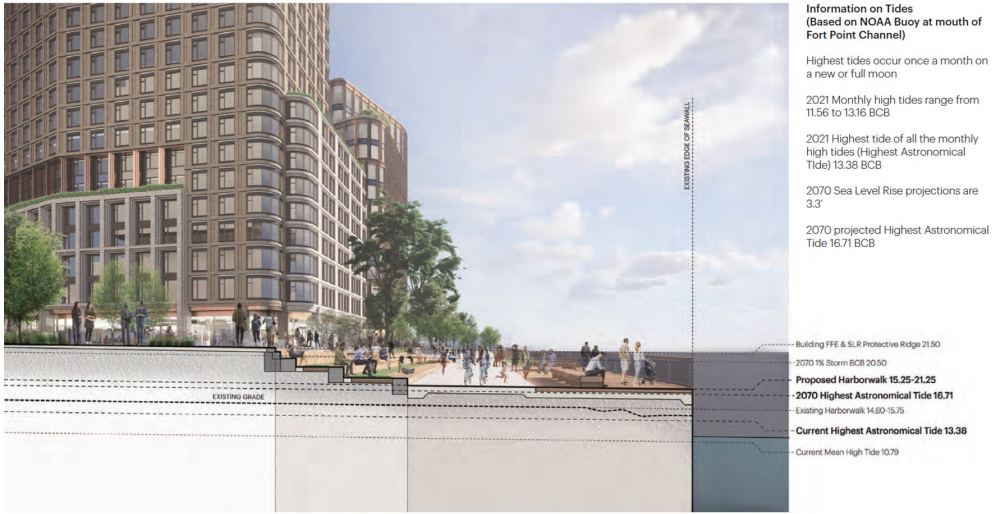


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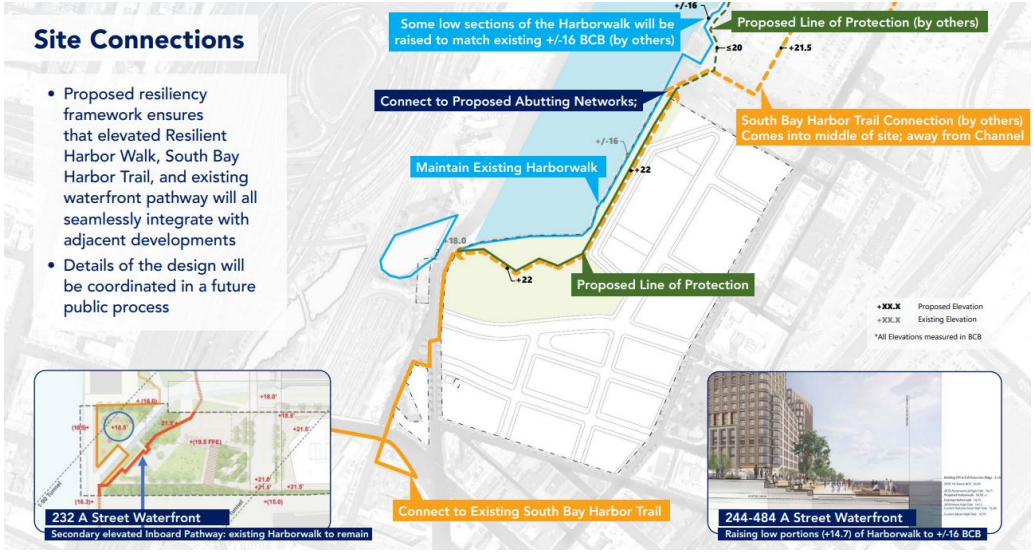


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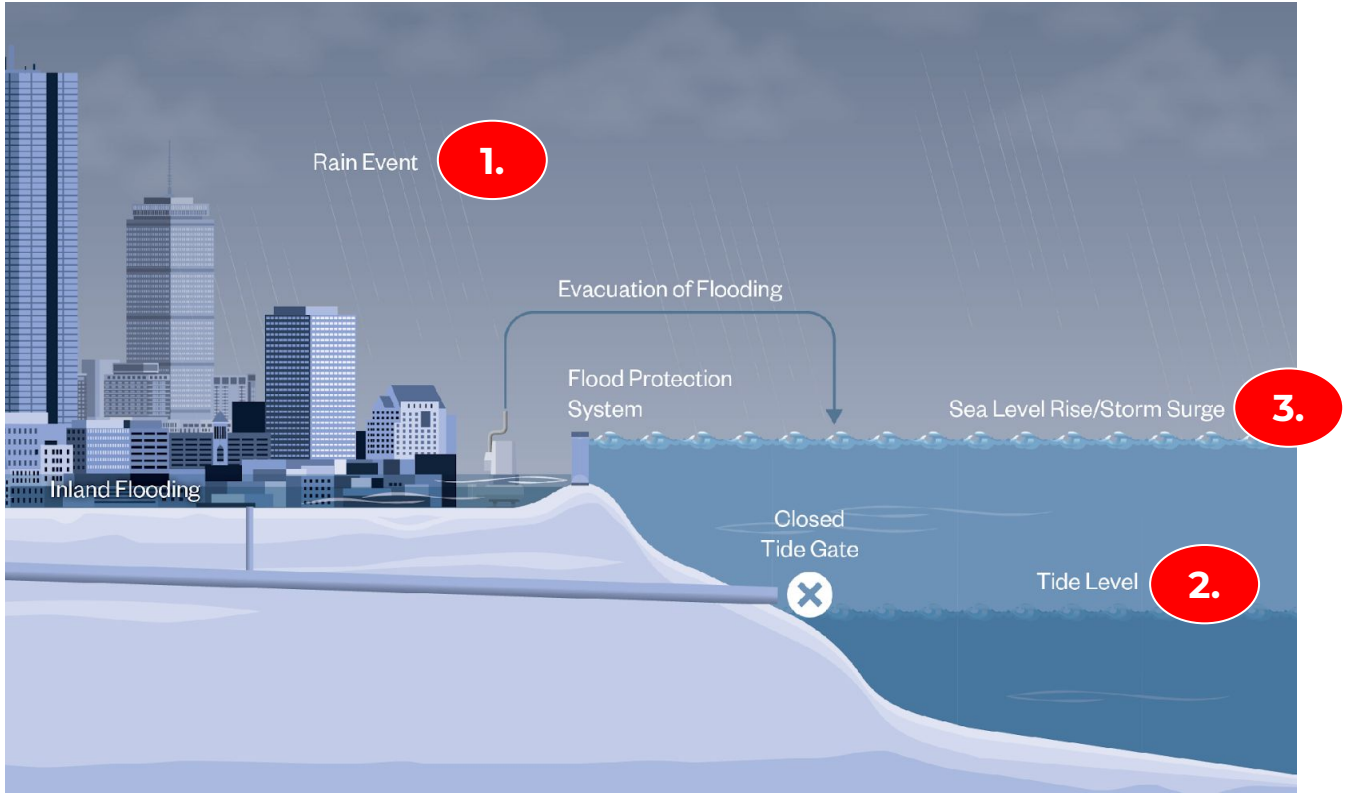
# Longer-term Opportunities

** Boston Water and Sewer Commission*
** USACE Boston CSRM*

# Boston Water & Sewer: Coastal & Stormwater Inundation Study

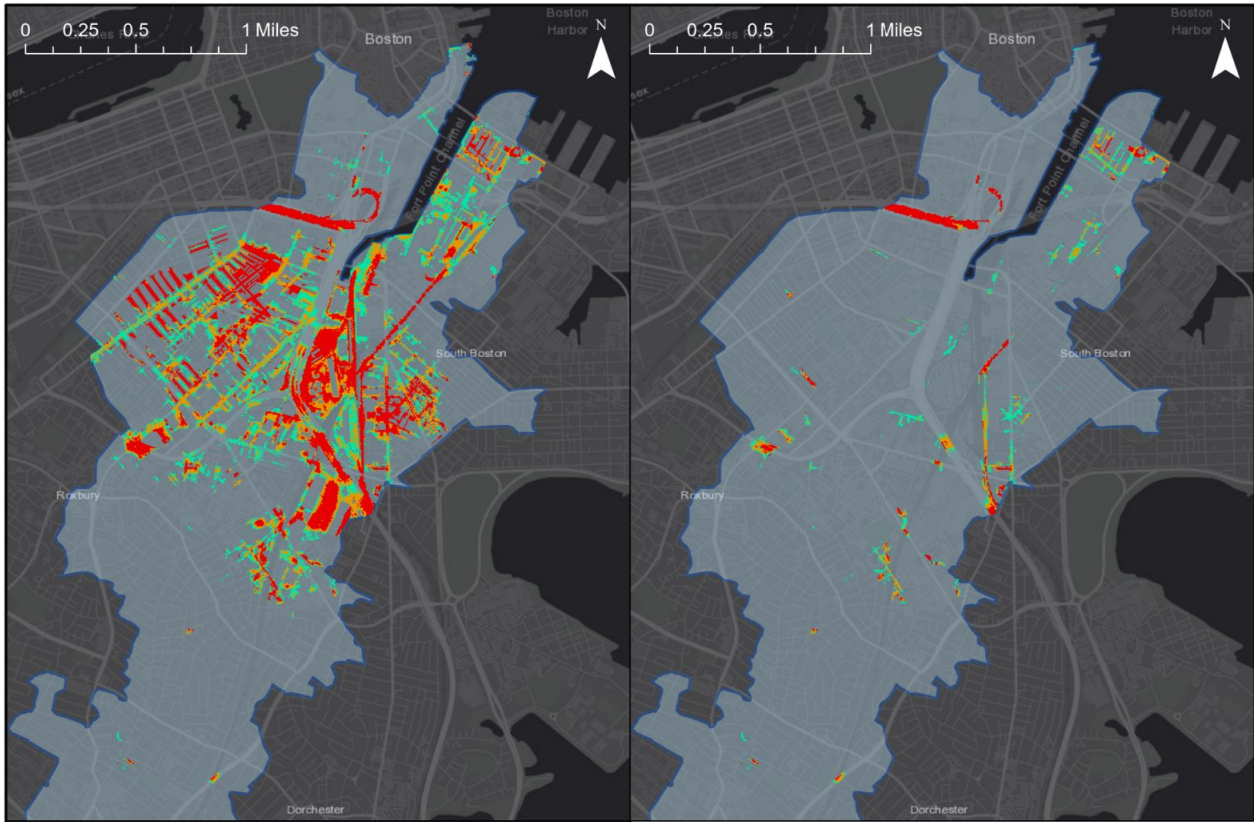
*Identify infrastructure impacted by:*

- *Sea level rise*
- *Storm surge*
- *Other adaptations (like Climate Ready Boston)*
- *Develop conceptual designs to protect core function – stormwater drainage.*
- *Designs may include holistic "strategies"*




*Need to evaluate performance considering:*
*1 & 2: Rainfall and Sea Level Rise ("routine" conditions)*
*3: Storm surge (nor'easter or tropical event)*

# Boston Water & Sewer: Coastal & Stormwater Inundation Study



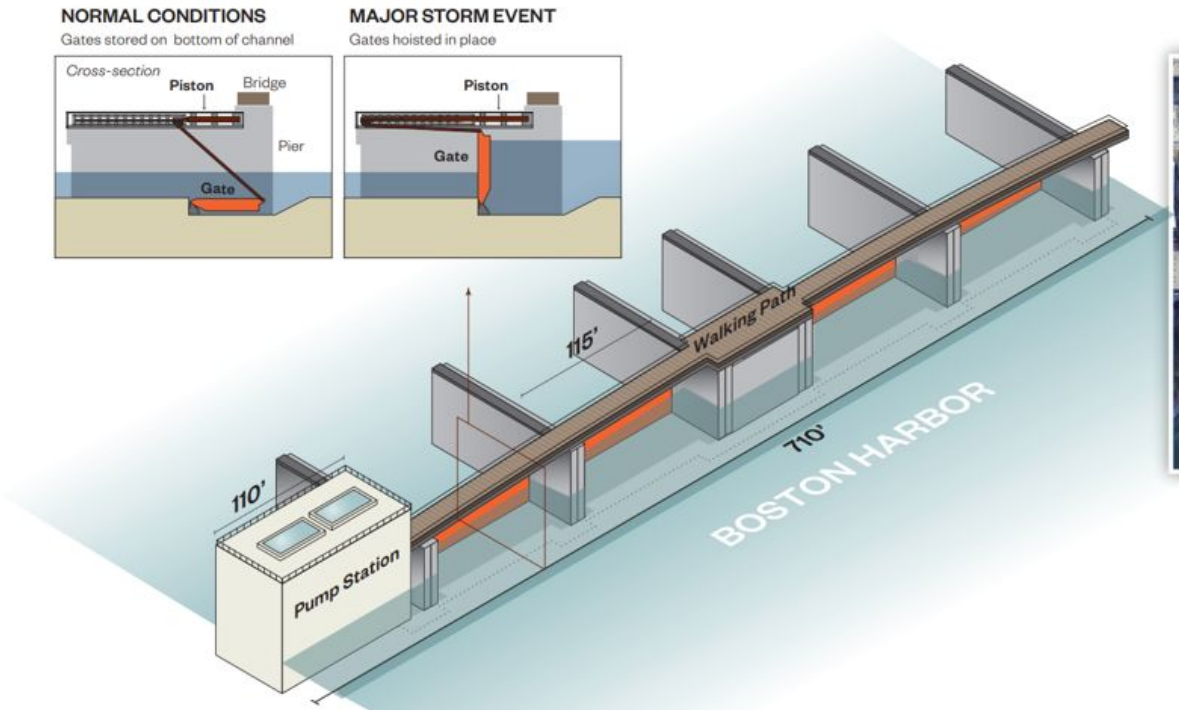

## Legend

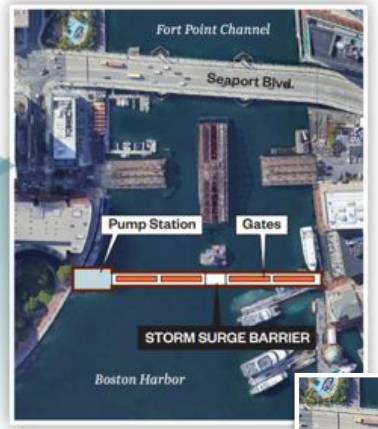
- Flood Depth > 4 in and < 1 ft
- Flood Depth > 1 ft and < 2 ft
- Flood Depth > 2 ft
- Drainage Area Analyzed

**Simulation Parameters**

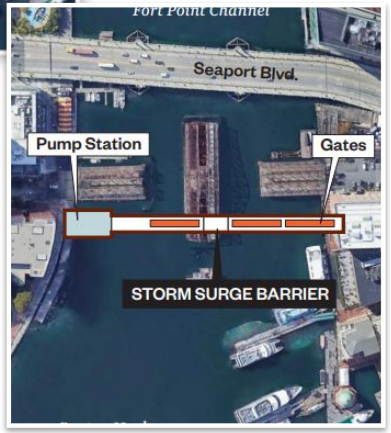
| | |
|---|---|
| Storm Type | 100yr Tropical Storm |
| Rainfall Depth | 9.6 inches |
| Peak WSE 2070 SLR + 100yr Surge | 13.8 feet NAVD88 |

# Boston Water & Sewer: Fort Point Channel Concept



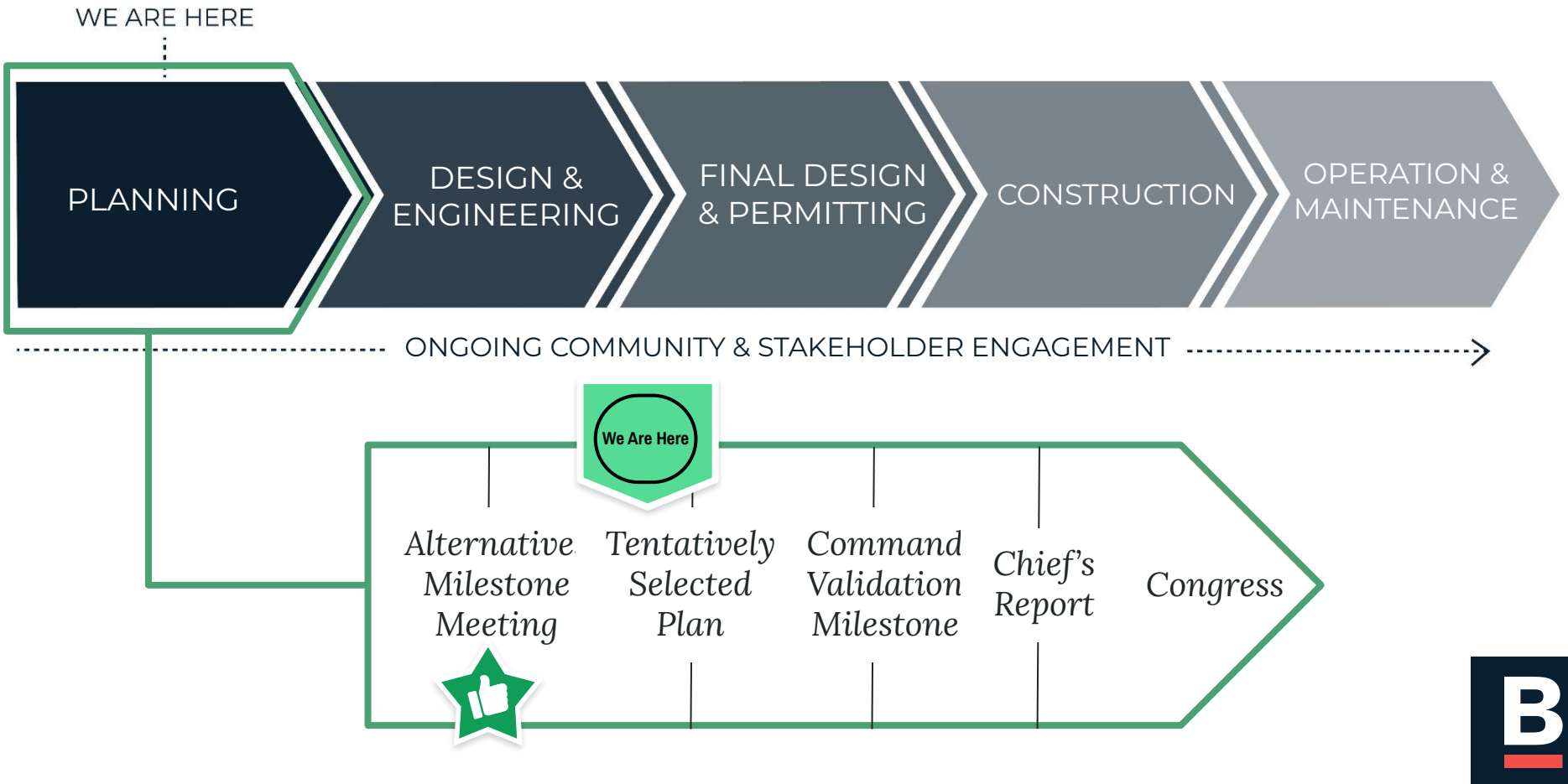




*SSB location*




*Alternative SSB location*

# Army Corps: What is the Coastal Storm Risk Management Study Process



# Army Corps: What is the Coastal Storm Risk Management Study Process

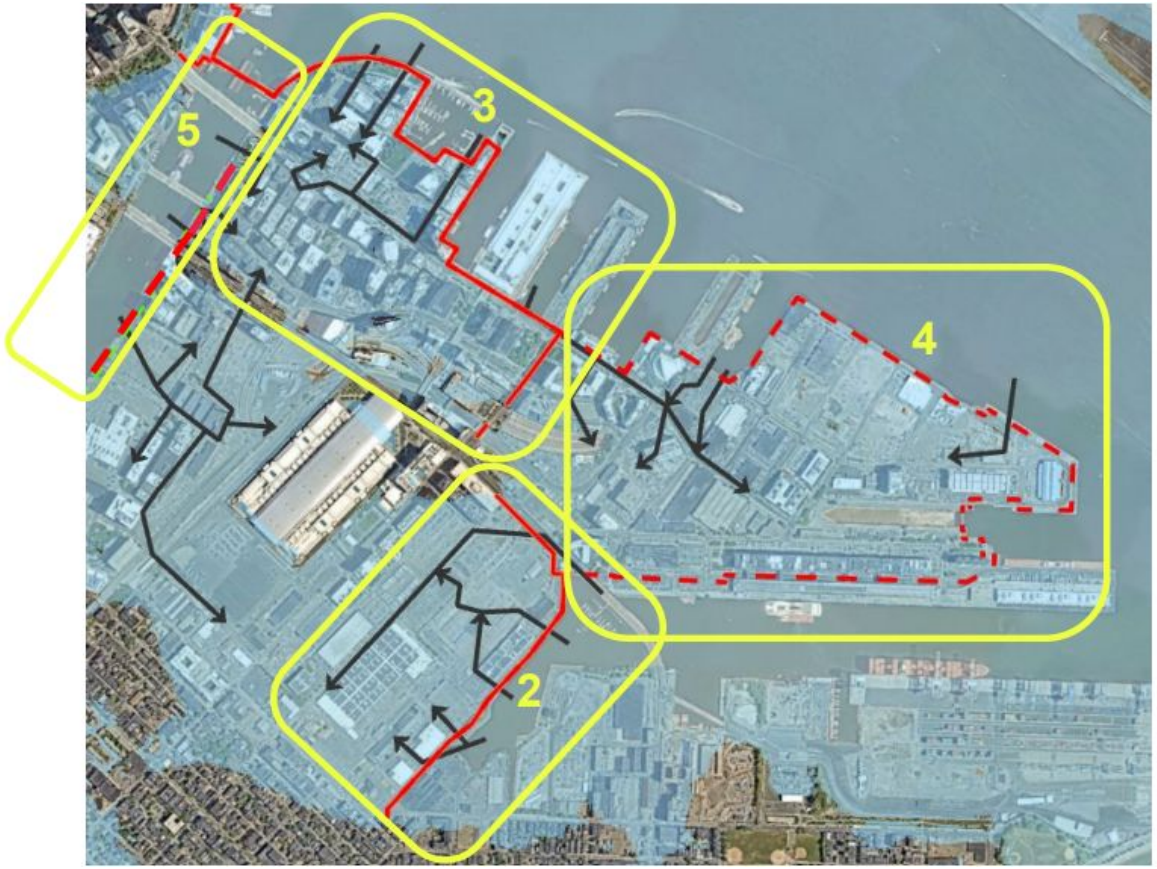
**SPRING - AUTUMN 2025**
*Community engagements and workshops with USACE to present draft alternatives*

**WINTER 2025-26**
*Feedback review, report out to community and incorporation of feedback into the Net Benefit Analysis*

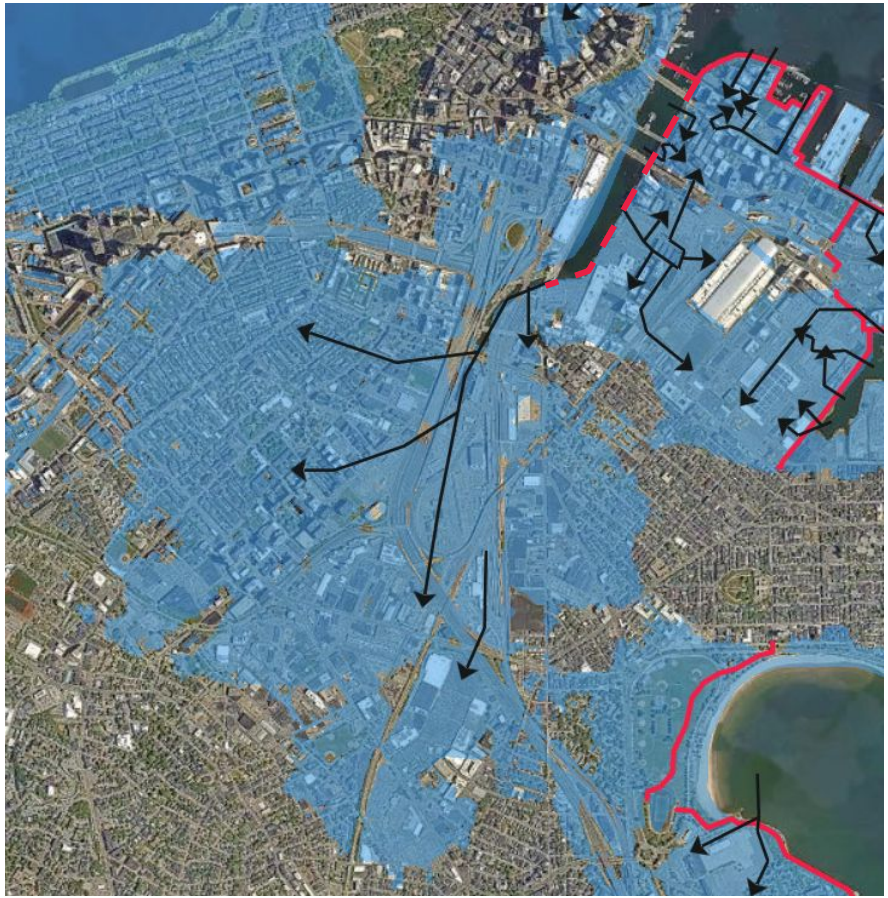
**WINTER 2025-26**
*Community engagements with USACE to review the final alternatives*

**SPRING 2026**
*Release of Draft Plan and public presentations with USACE*

# Army Corps: Current South Boston Alignments

# #5. - FORT POINT CHANNEL - THE COASTAL FLOOD RISK



LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC

Flood Pathways

U.S. ARMY

US Army Corps of Engineers.

# #5. - FORT POINT CHANNEL - DESIGN CHALLENGES

U.S. ARMY

US Army Corps of Engineers.

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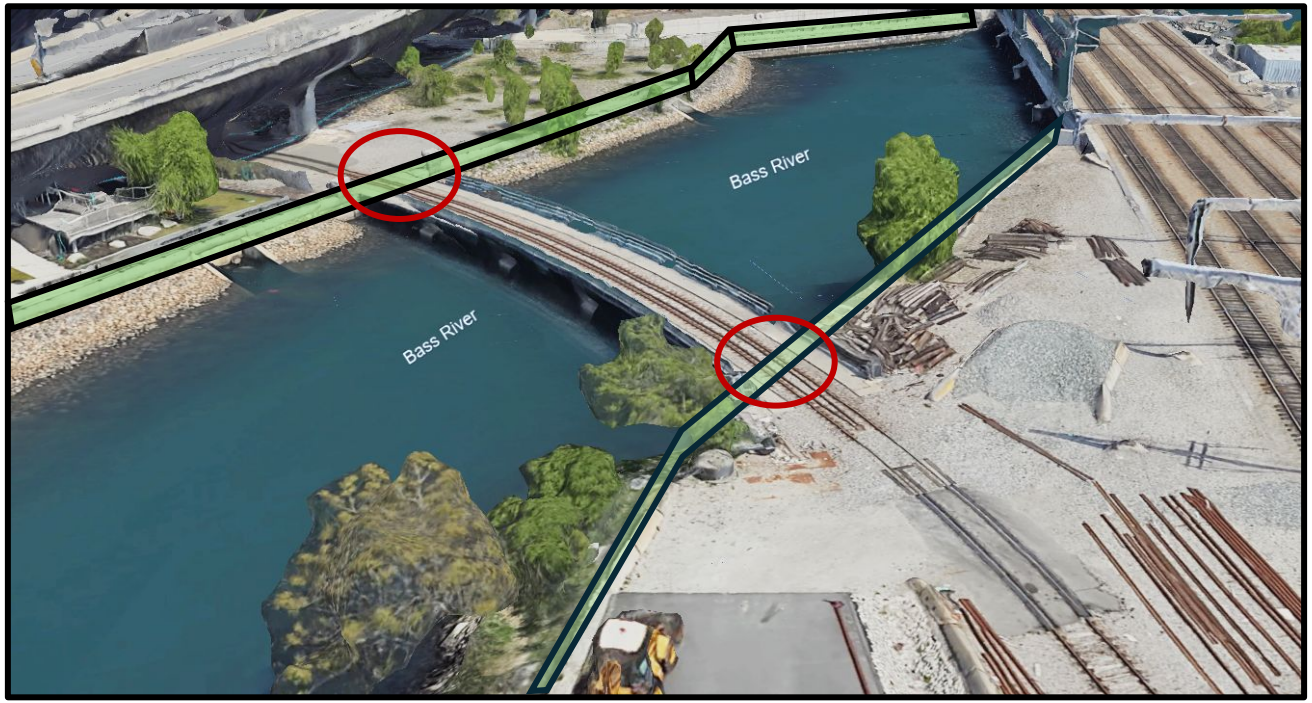
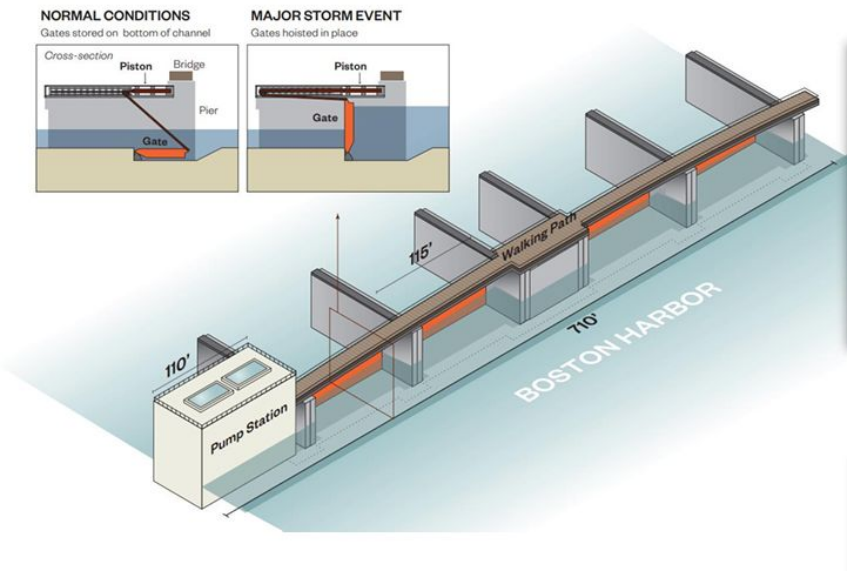



U.S. ARMY

US Army Corps of Engineers.

# #5. - FORT POINT CHANNEL - STORM SURGE BARRIER

**Fox Point Hurricane Barrier, Providence, RI**
*Image source: USACE, New England District*




**BWSC Fort Point Storm Surge Barrier Concept, 2023**
*Image source: Hazen & Sawyer, Boston Water & Sewer Commission*

U.S. ARMY
US Army Corps of Engineers

## How to Provide Feedback: *boston.gov/usace-study*

**Submit Comments Online**

**Book an Appointment with us**

U.S. ARMY

US Army Corps of Engineers.


# Summary & Next Steps

# Summary & Next Steps

**To address the most urgent flood risk:**

2025 - 2026

1 Construction of 3 interim projects at the north end of the channel.

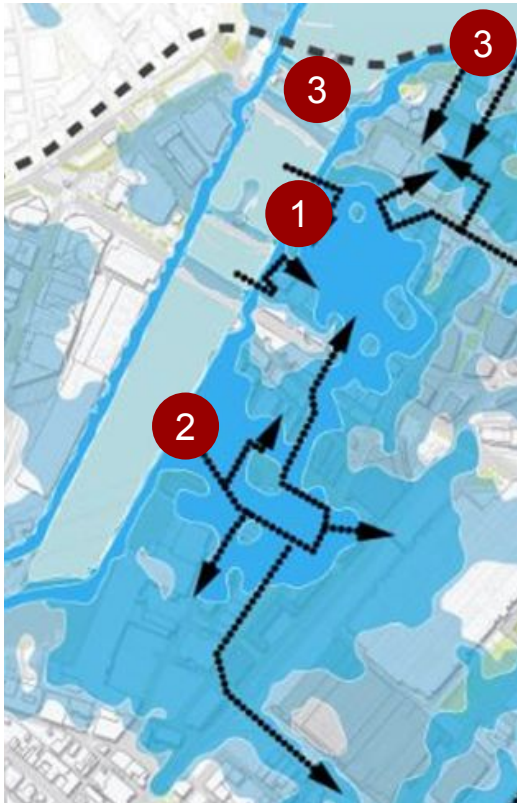
2025 - 2028+

2 Construction of a solution at the south end of the channel, either City-led (quicker to build but lower) or City & Partner-funded (likely slower to build but higher)

**To address longer term flood risk:**

Longer Term

3 Design and implement longer term flood-risk reduction infrastructure at the mouth of the Fort Point Channel, as well as Seaport Blvd. and Reserved Channel. (Army Corps designs in 2025-2028; Army Corps construction 2030s+).




*Development anticipated to preserve / extend flood protection while enhancing the public realm.*

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*Feedback to the City on preferred approach*

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*Feedback to the USACE and City on preferred designs*

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# Thank You

# BWSC Wet Weather Emergency Planning Tool

Real Time Weather Mode

On

Hazen

## Flood Impact Report Center

### Scenario

Current Weather Forecast | Inundation Model Simulation Database

12/24/24 - 12/25/25
5.2" rainfall
18.5' BCB tide level

Storm Type: Rainfall

Sea Level Rise and Storm Surge

### Critical Facility Selection

**Type**

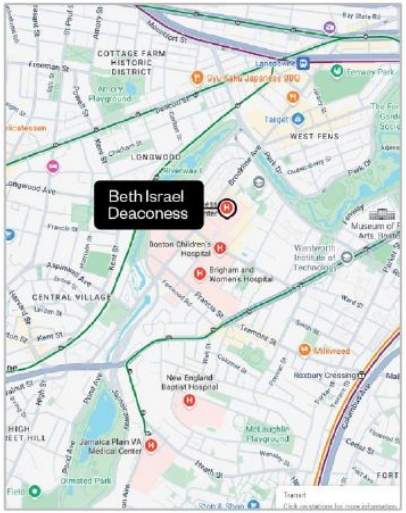
- Hospital
- Fire Station
- Police Station

**Location**

- All
- Longwood
- Downtown

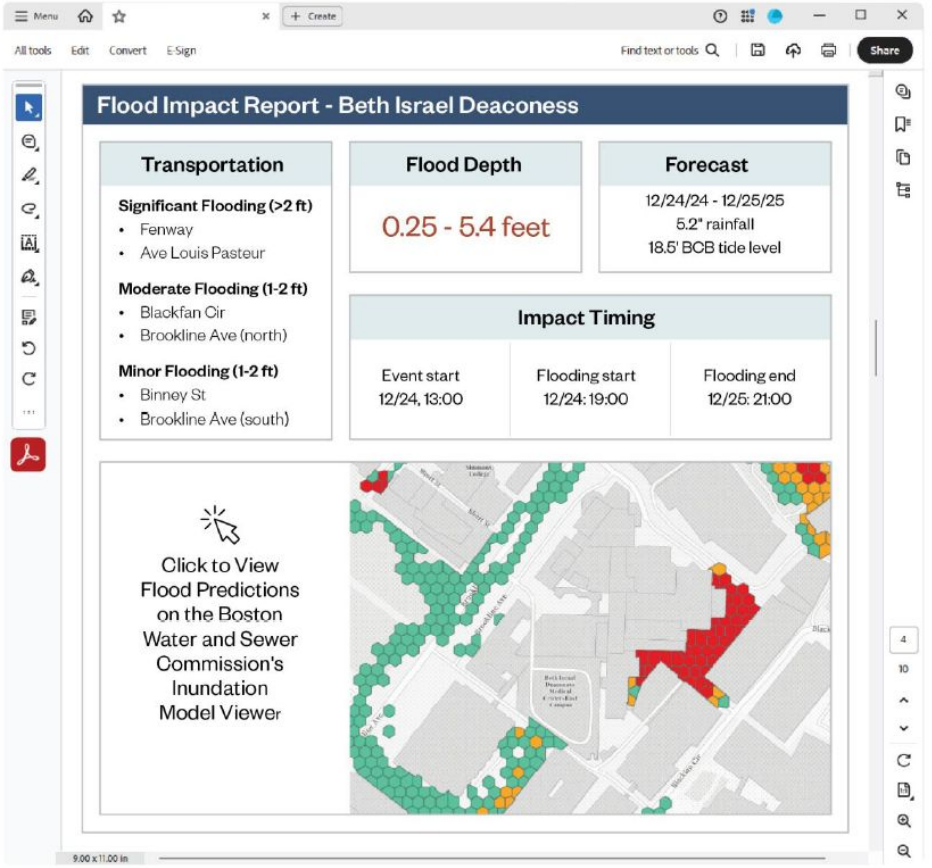
**Facilities**

- Beth Israel Deaconess
- Boston Children's Hospital
- New England Baptist Hospital




Click to View Report

Click to Transmit Report

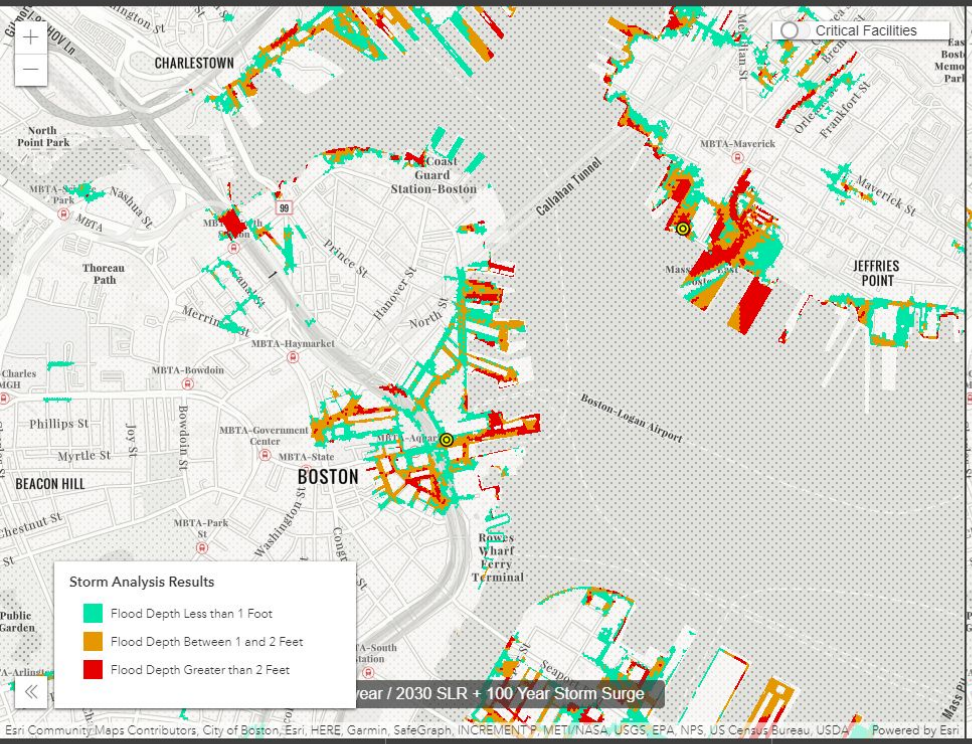


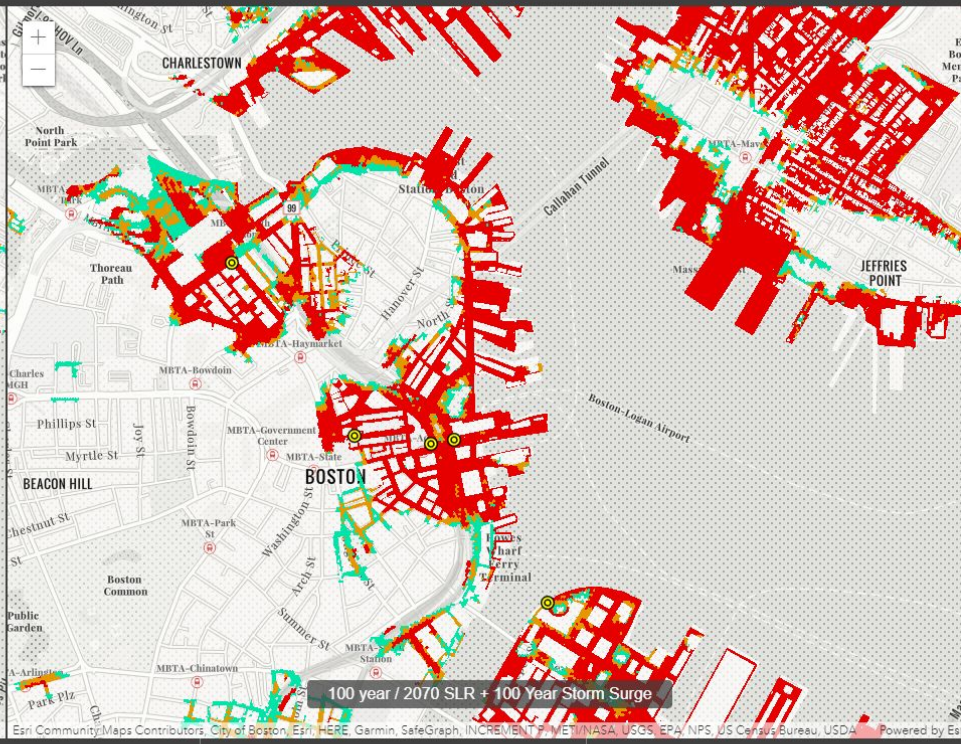

Inundation Overview | Depth, Duration, & Population Impacted | Critical Facilities Neighborhood Impacts | Critical Facilities Risk Summary | Emergency Planning Tool | Transportation Impacts | Commission Impacts

Boston Water and Sewer Commission

# Inundation Model Viewer

Find address or place




## 1 Extreme Weather Event

- T-storm
- Nor'easter
- Tropical
- Frontal

## 2 Amount of Rainfall

| 10 year | 100 year | 500 year |
|---|---|---|
| 5.84 in | 9.58 in | 13.9 in |

(over a period of 48 hours)

## 3 Sea Level Rise (SLR) and Storm Surge from Baseline Condition

| 3.05 ft | 5.95 ft |
|---|---|
| 2030 SLR | 2070 SLR |

100 Year Storm Surge

Compare 2030 & 2070

## 4 360 Tour

Click on Map

## 5 Impact Forecast

| School | Health Facility | Police Department |
|---|---|---|
| -- | -- | -- |

| EMS/Fire Station | MBTA Station |
|---|---|
| -- | -- |