欢迎来到金融-海港虚拟开放日活动

As you're waiting for the meeting to start, please take a moment to share your name and connection to the FiDi and Seaport neighborhoods using the Teams "chat" function.

Financial District & Seaport Climate Resilience Plan

February 2021

Welcome to Teams!

A few requests for the open house:

1. *When in a Teams meeting, please mute yourself while others are speaking. You will have time in the workshops to unmute and discuss.*
2. *Add questions to the chat box during presentations.*
3. *Turn on your camera if you can!*

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

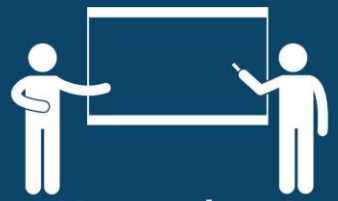
What should I expect during today's Virtual Open House?

Welcome presentations and workshops will begin every 30 min. on the half hour.

Project Q&A will take place throughout the entire evening.

1

WELCOME



You are here!

Learn more about the format of this evening's Open House, the project itself, our goals, and next steps in the planning process. Here the team will explain the various opportunities and challenges we face as it relates to key aspects of the project.

Español

中文

2

WORKSHOP

We want to hear from you!

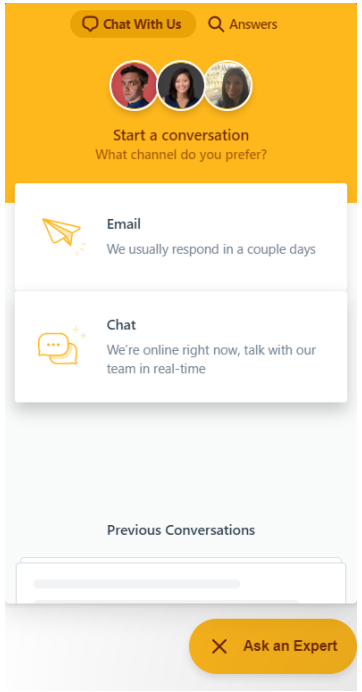
Join members of the project team in small-group workshops to discuss public open space, transportation and mobility, and community resources. Tell us what you feel should be protected and preserved as well as would could be improved.

3

PROJECT Q&A

Still have questions?

Join here to speak with members of New York City Economic Development Coproration (NYCEDC), the Mayor's Office of Resiliency (MOR) and the consultant team.

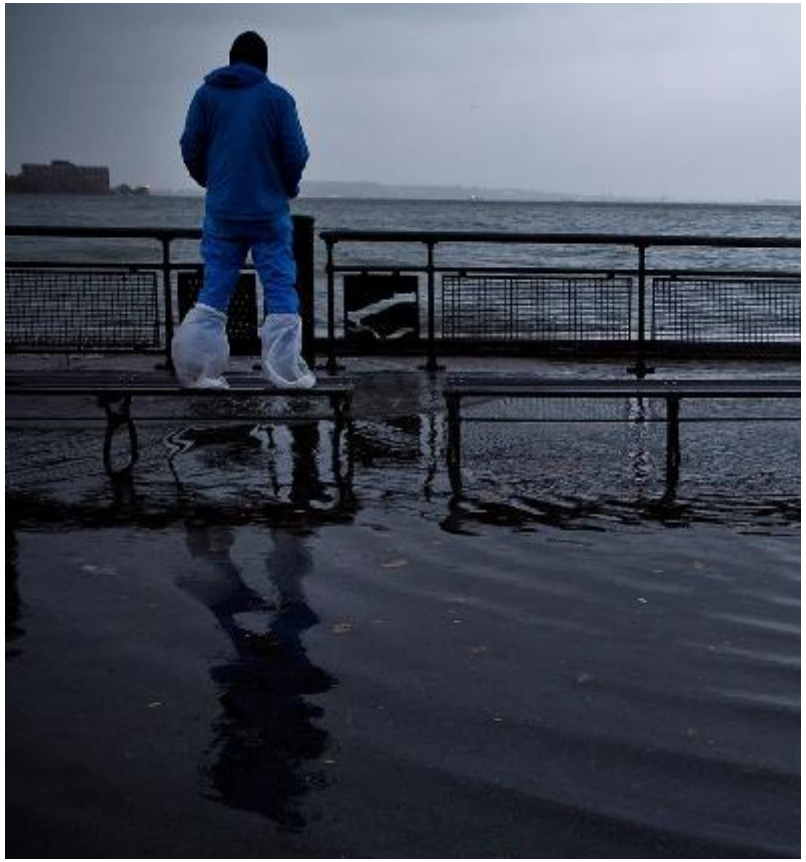


Click the 'Ask an Expert' button in the bottom right to chat with someone from our team at any time!

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

为什么我们需要防洪基础设施？

气候变化不是即将到来，而是它就在这里。



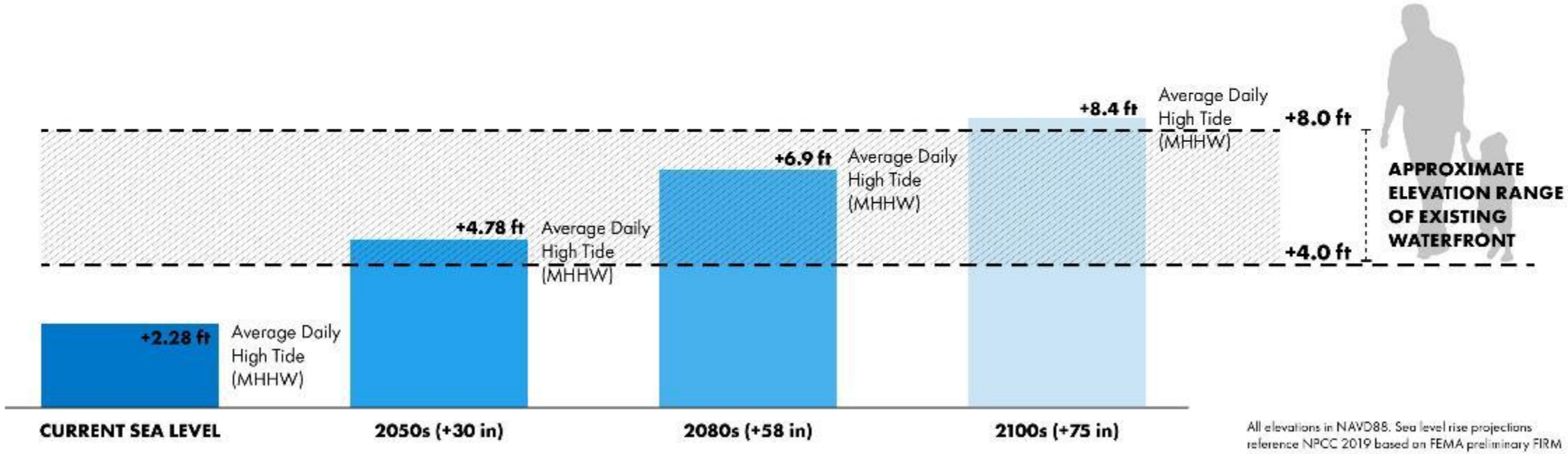
每日潮汐洪水与海平面上升相结合，使沿海地区的水位上升，在低洼地区造成更多洪水。

沿海风暴的频率和强度都在增加，给我们的周边带来了巨大冲击。

极端降雨的发生频率更高，给我们的下水道系统带来压力，并淹没我们的街道。

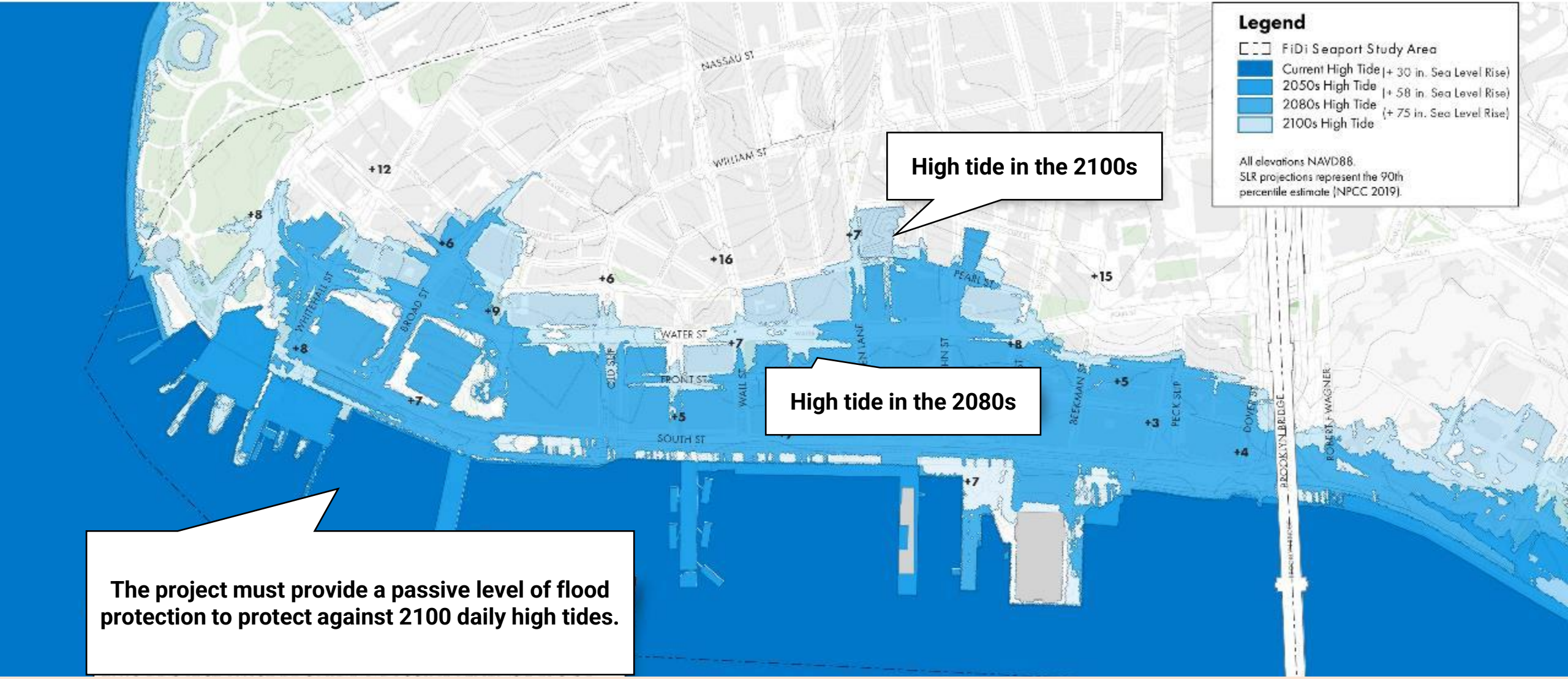
Presentation in progress. Presentation will re-start at the beginning of every half-hour.

到2080年代，几乎每天都会有潮水淹没海边区域



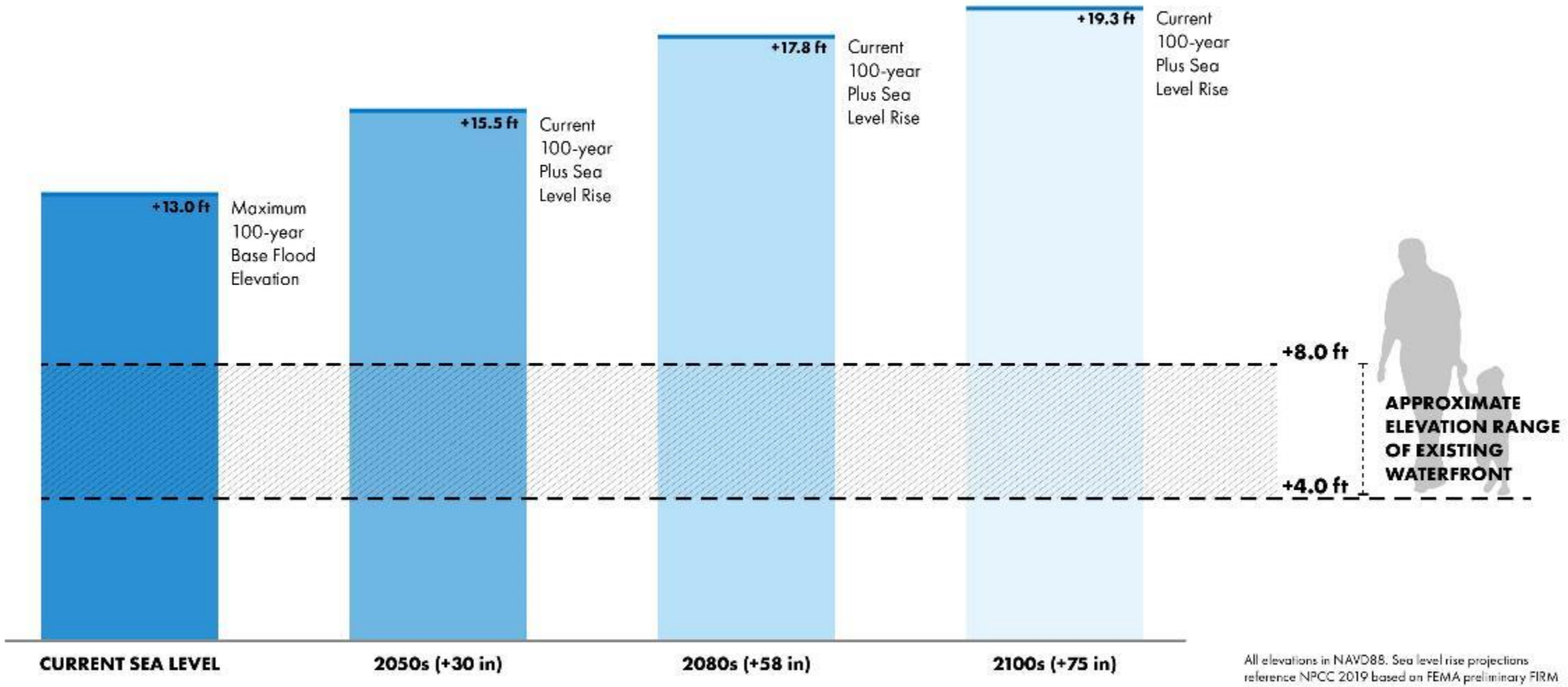
Presentation in progress. Presentation will re-start at the beginning of every half-hour.

到2100年，金融区和南街海港社区的大部分地区每天都可能被淹没



Presentation in progress. Presentation will re-start at the beginning of every half-hour.

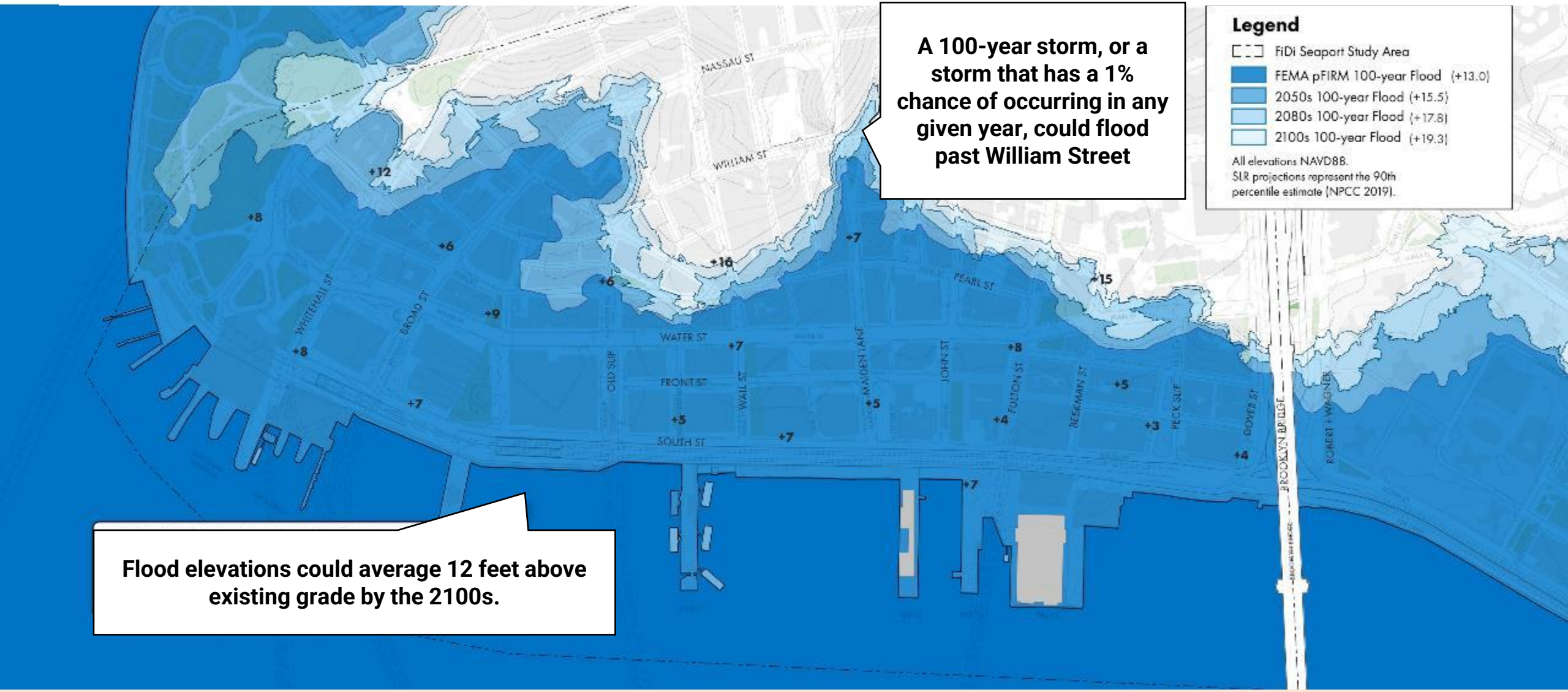
未来的风暴变得越来越频繁和激烈



All elevations in NAVD88. Sea level rise projections reference NPCC 2019 based on FEMA preliminary FIRM data. MHHW is based off of the 2001 NOAA National Tidal Datum Epoch (NTDE). Additional modeling / wave studies to be completed later in Phase II.

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

与飓风桑迪相比，未来的风暴可能带来更深更广的洪水，在曼哈顿下城造成广泛破坏。



Presentation in progress. Presentation will re-start at the beginning of every half-hour.

什么是金融区和南街海港气候变化适应性规划？

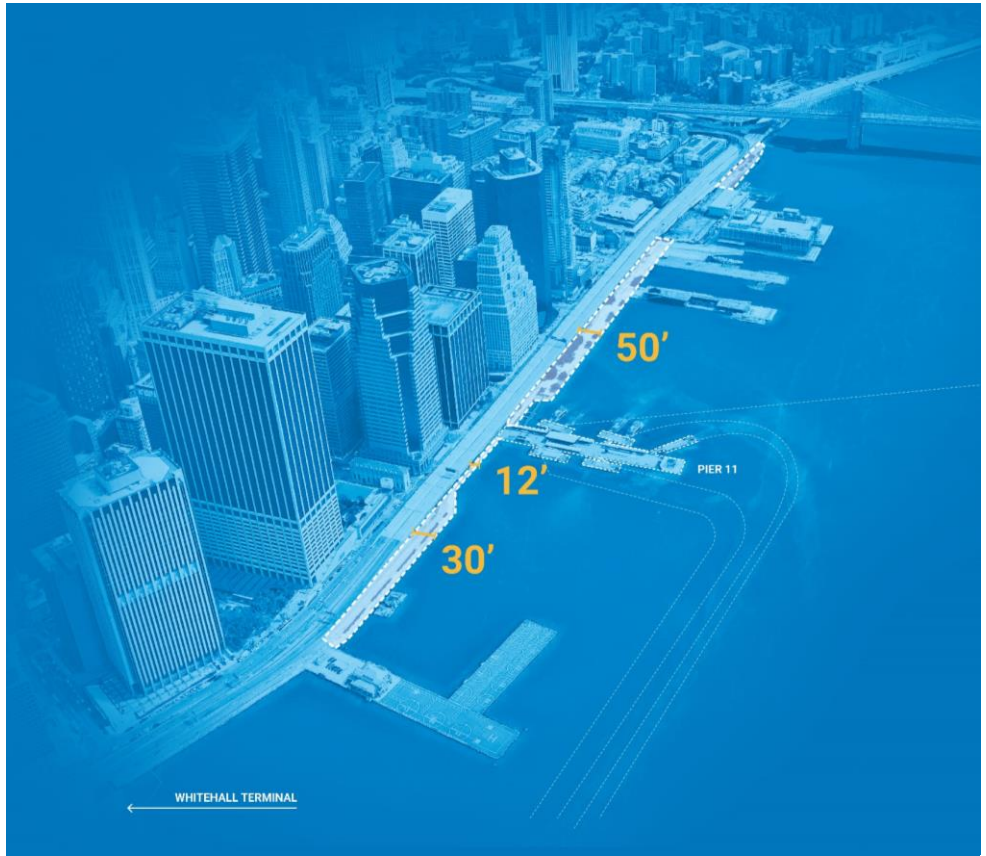
在曼哈顿下城，纽约市正在推进**5**亿美元的气候适应项目，以保护区内的各个区域

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

金融区和南街海港气候变化适应性规划将是一项全面的长期适应计划，以保护金融区和南街海港地区

2021年我们能做什么？

- 制定海防基础设施的概念设计，并确定第一阶段的项目选择
- 创建路线图，详细说明实施，资金，建设和治理框架
- 与监管机构合作，确定许可和批准的途径
- 制定一个排水策略以管理雨水和废水
- 为代际联合奠定基础，以推动该项目的发展



The Financial District and Seaport have unique space constraints that make siting coastal defense and drainage infrastructure on-land very challenging.

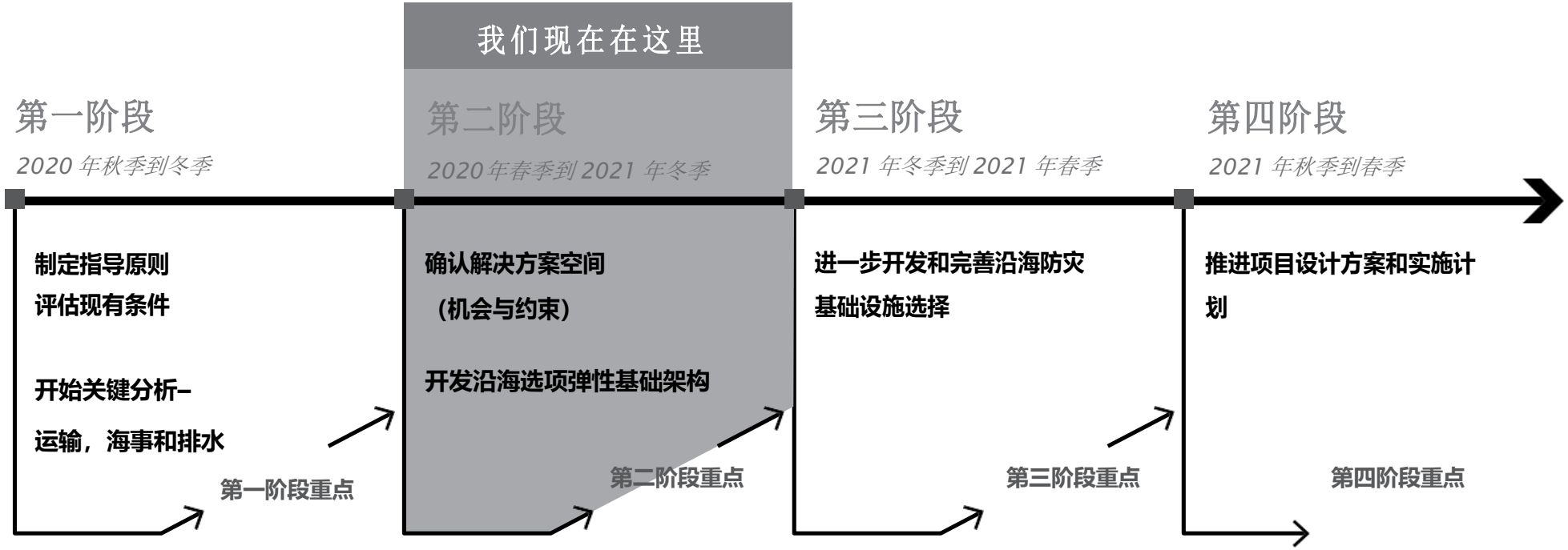
我们的项目团队

纽约市经济发展局 (NYCEDC) 和纽约市市长防灾办公室 (MOR) 负责领导气候变化适应性规划的制定。 交通局、城市规划局、环境保护局、公园与康乐局等外围的纽约市政府机构是项目团队的一部分，并将在整个过程中提供指导。

由工程公司Arcadis 领导的跨学科顾问团队为我们的工作提供支持，**One Architecture & Urbanism** 与 **SCAPE Landscape Architecture** 帮助设计开发。

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

我们一直在做什么?



- 确定项目目标
- 评估洪水风险和现有条件

- 加深对洪水风险和气候变化的现实经验
- 完善对场地限制的理解
- 制定远景规划
- 确定实施方法

- 测试和完善防洪和其他基础设施的潜在选择
- 制定概念以改善公共领域和其他设施
- 完善实施方法

- 确定最佳设计方案和定相策略
- 制定持续参与计划并建立实施联盟

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

我们的指导原则是在曼哈顿下城气候联盟(CCLM)，城市机构和广大公众的帮助下起草的

Ensure a **secure future for those who live in, work in, or depend upon Lower Manhattan** by addressing near and long-term climate risks.

Strengthen Lower Manhattan as a **central hub of the region's workforce, transportation network and economy**.

Plan a project that is **feasible, financeable, and implementable**, with a broad coalition of support and clear regulatory and permitting pathways.

Create an **equitable and inclusive public engagement process** that advances widespread understanding of climate risks and fosters the development of a shared vision for Lower Manhattan.

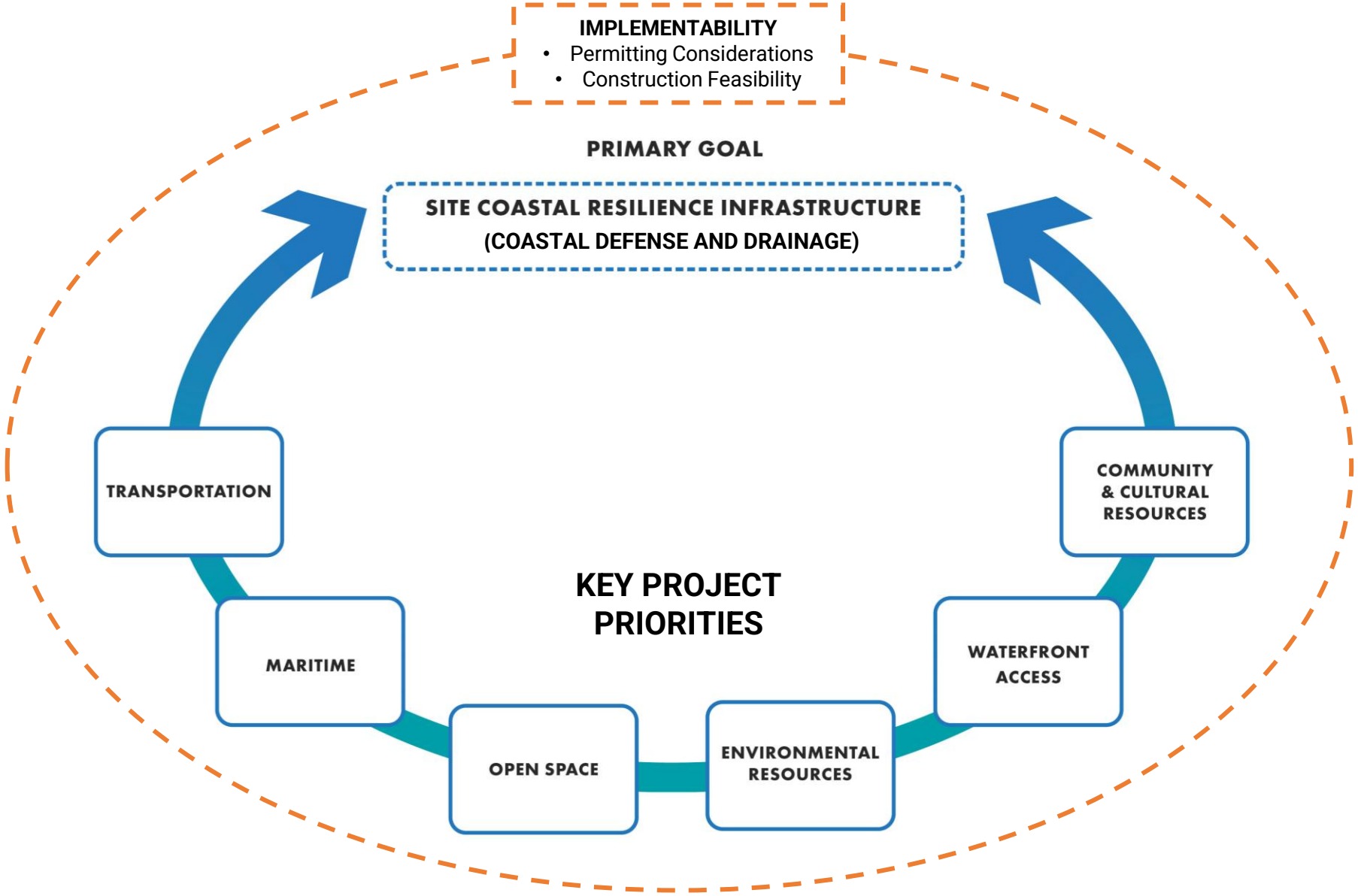
Plan for resiliency infrastructure that protects **key historic assets**, **maximizes ecologically-sensitive design** and **sustainability**, and is **adaptable over time**.

Maintain and look to improve infrastructure that creates **an accessible public realm for all**.

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

我们的项目目标是什么？

该项目旨在全面保护曼哈顿下城免受洪水威胁，同时实现其他关键优先事项：



该项目的主要目标是为金融海港区提供到2100年风暴和潮汐洪水的海岸防御

海岸防御包括：防洪墙，护堤，提高街道高度，沉箱，舱壁隔板， 护岸等。

Floodwalls

Levees / Berms

Street Raising

Caissons

Bulkheads

Fill & Revetment

Photo sources (clockwise): Arcadis; Brooklynbridgepark.org; NYCDDC Broad Channel; iStock; Hosoya Schaefer Architects; Crandall / Alamy Stock Photo

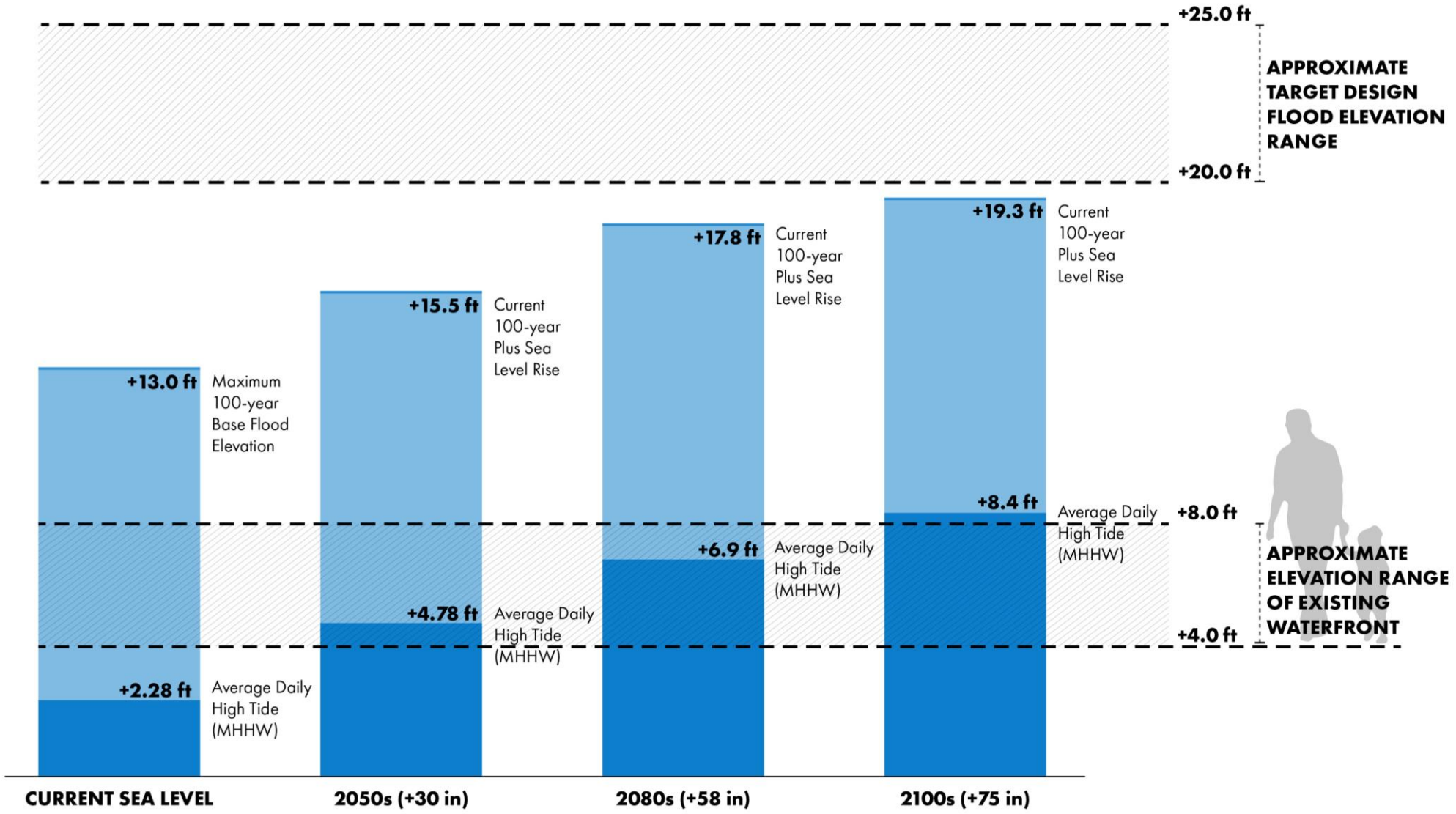
Presentation in progress. Presentation will re-start at the beginning of every half-hour.

但是，未来最终不确定。我们必须相应地制定计划。

设计洪水高程(DFE)

The level of protection provided by the coastal defense system

该项目的设计洪水高度（DFE）必须满足保护长达20-25英尺的洪水，并且/或者设计成可适应将来的。



Presentation in progress. Presentation will re-start at the beginning of every half-hour.

还需要新的排水基础设施以确保防洪系统正常工作

- To ensure that stormwater does not “pond” or collect behind the coastal defense, a combination of **pumping, storage, and green infrastructure** solutions to manage stormwater are being considered.
- New drainage infrastructure will also ensure that the existing drainage system provides the same **level of service** under future sea level rise conditions.

Examples of Drainage Solutions in an Urban Environment

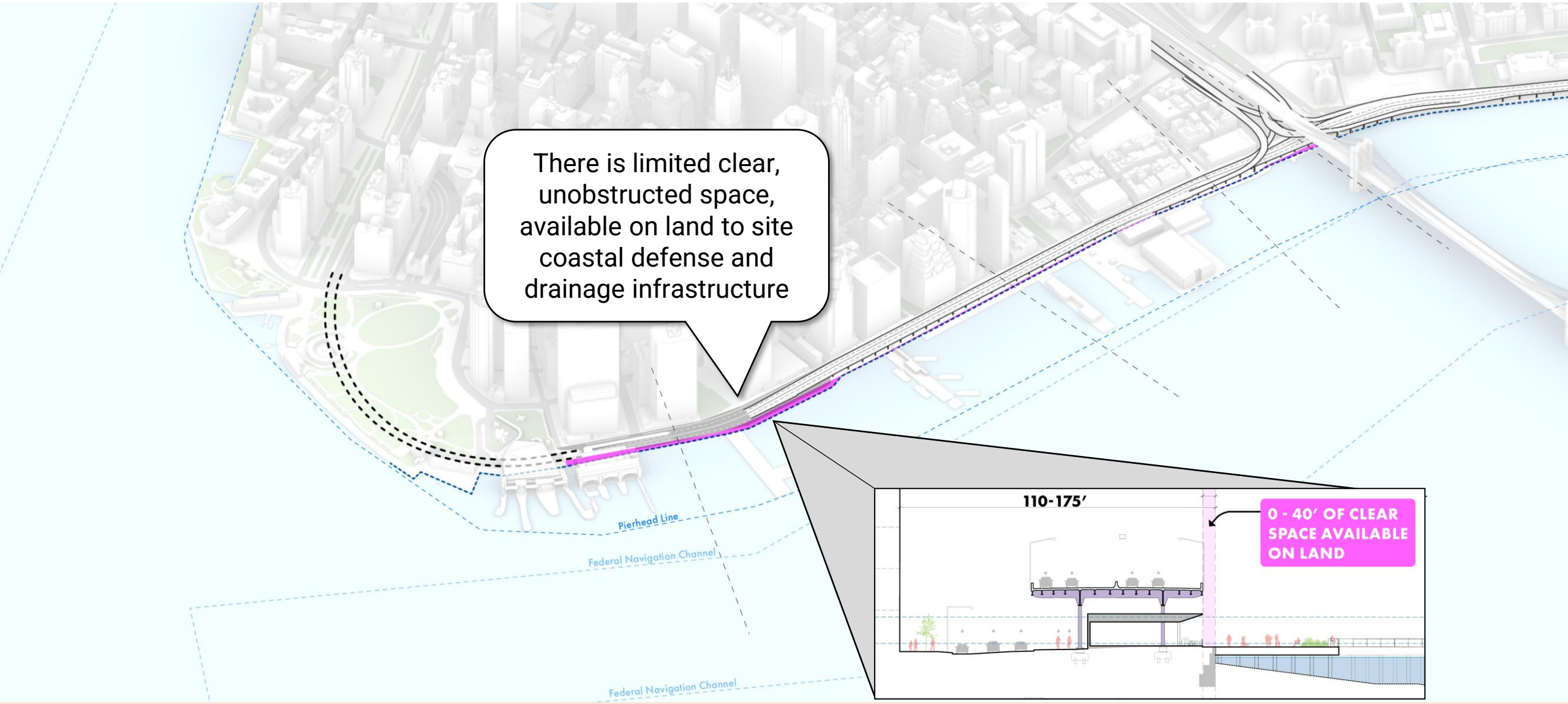
Manhattan Pump Station; Manhattan, NY
Pump Station

Climate Tile; Copenhagen, Denmark
Green Infrastructure

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

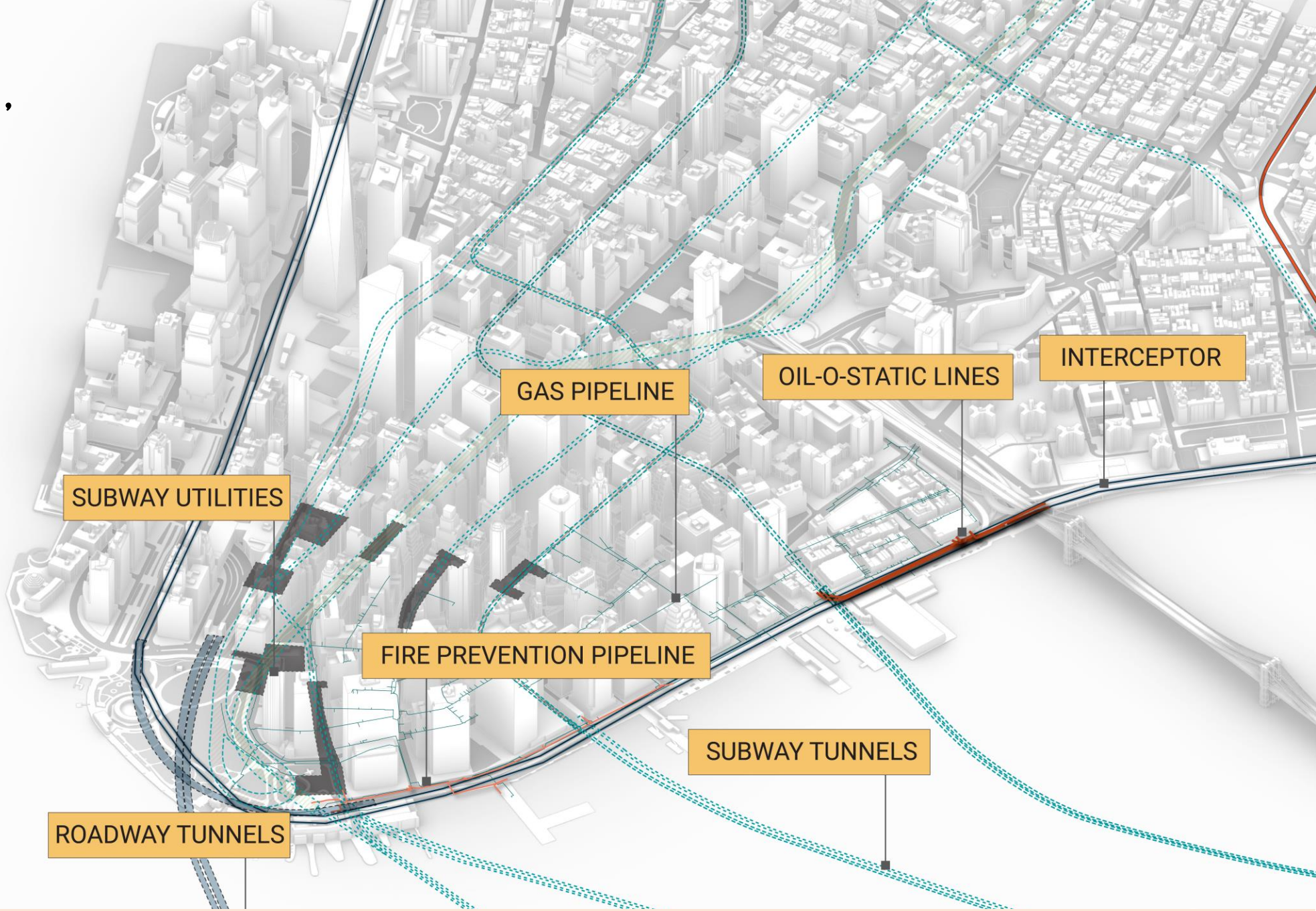
沿海防御基础设施以及支持该基础设施的排水设施，在地面上和地下占用了大量空间。

金融区和南街海港海岸线的陆地空间有限，无法容纳基础设施

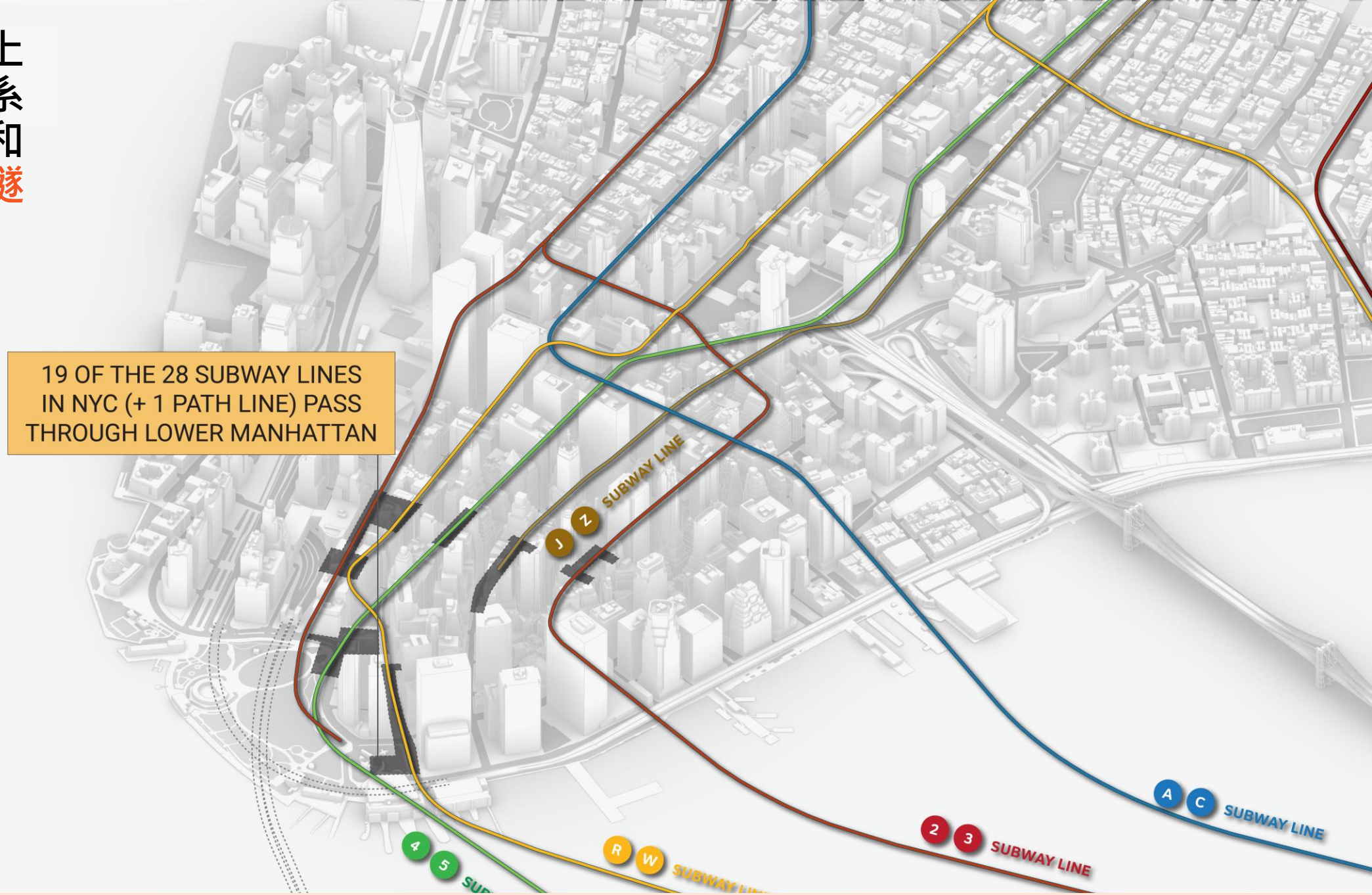


Presentation in progress. Presentation will re-start at the beginning of every half-hour.

该地区拥有复杂的地下基础设施网络，这也给在地基以下的基础设施的建设带来挑战。



如果是在陆地上建造，我们的系统还必须保护和穿越地下地铁隧道



Presentation in progress. Presentation will re-start at the beginning of every half-hour.

延长海岸线将是有益的

Due to limited space along the water's edge, we need to consider going into the water to site **coastal defense infrastructure**

Our goal is to construct a flood protection system to keep water out during a storm or high tides while maintaining **access to the waterfront** and preserving **open space & historic assets**

但是由于以下原因，我们扩展海岸线的量是有限的：

At the same time, we recognize that the East River serves many vital functions, including home to many **fish, invertebrates, and microorganisms**. The potential impacts of any in-water option must be minimized and mitigated.

The East River also serves as an important **waterway** for the Coast Guard, emergency services, commuters, and in-water options cannot negatively impact navigation.

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

在制定项目方案时，必须遵守州和联邦法规，因为这些将决定项目是否进行。这包括：

1. **避免:** Fully assessing if an on-land option is possible to implement based on technical feasibility, impacts, and cost.

2. **最小化:** If we must go into the water to site our coastal resilience infrastructure, we must justify every inch and demonstrate that we are minimizing our impact.

3. **减轻:** If we must go into the water, we must understand all potential impacts – including ecological, navigation, and scour (eroding of soils, piers, or other surfaces) – and demonstrate to the State and Federal government that we can mitigate, or reduce the severity of, any negative impacts.

我们目前正在进行抽样，以更好地了解东河生态系统

- Conducting one-year (Fall 2020-Summer 2021) aquatic sampling within the project area
  - **Phytoplankton and zooplankton**: Summer
  - **Benthic macroinvertebrates**: Fall, Spring, Summer
  - **Fish**: Fall, Winter, Spring, Summer
  - **Sediment characteristics**
  - **Water quality** (temperature, salinity, total nitrogen, etc.), **water depth**, and **current velocity**
- Preliminary results from October 2020 samples being analyzed

Grab sampling (East River channel)

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

考虑这些其他关键优先事项对于我们开发早期项目选择至关重要：

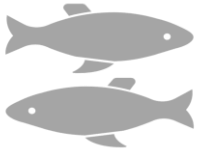
The project must…

Maintain functionality and reliability of the regional **transportation** network, supporting future capacity needs while allowing for adaptation to future trends.

Protect and ensure continuous ferry service at the many **maritime** hubs in the area.

Maintain the area's public **open space** as a valuable amenity for residents and visitors.

Ensure continuous public access to and along the **waterfront** and water-based transportation.



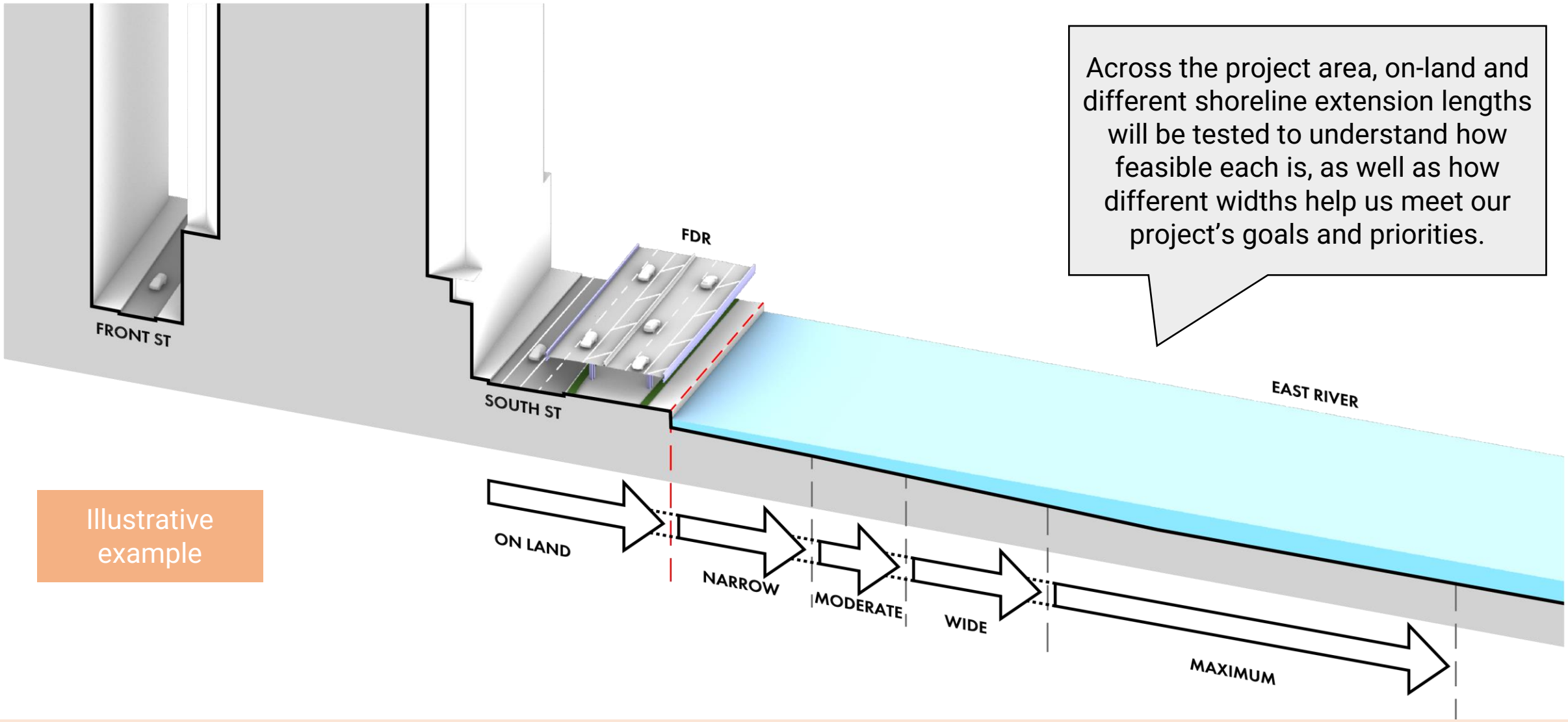
Avoid or minimize negative impacts on existing **environmental resources** or ecosystem services, especially aquatic resources.

Protect and preserve the area's **community and cultural resources**, including historic assets, wherever possible.

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

我们早期的项目选择是什么样的？

我们早期的项目选择是什么样的？



Across the project area, on-land and different shoreline extension lengths will be tested to understand how feasible each is, as well as how different widths help us meet our project's goals and priorities.

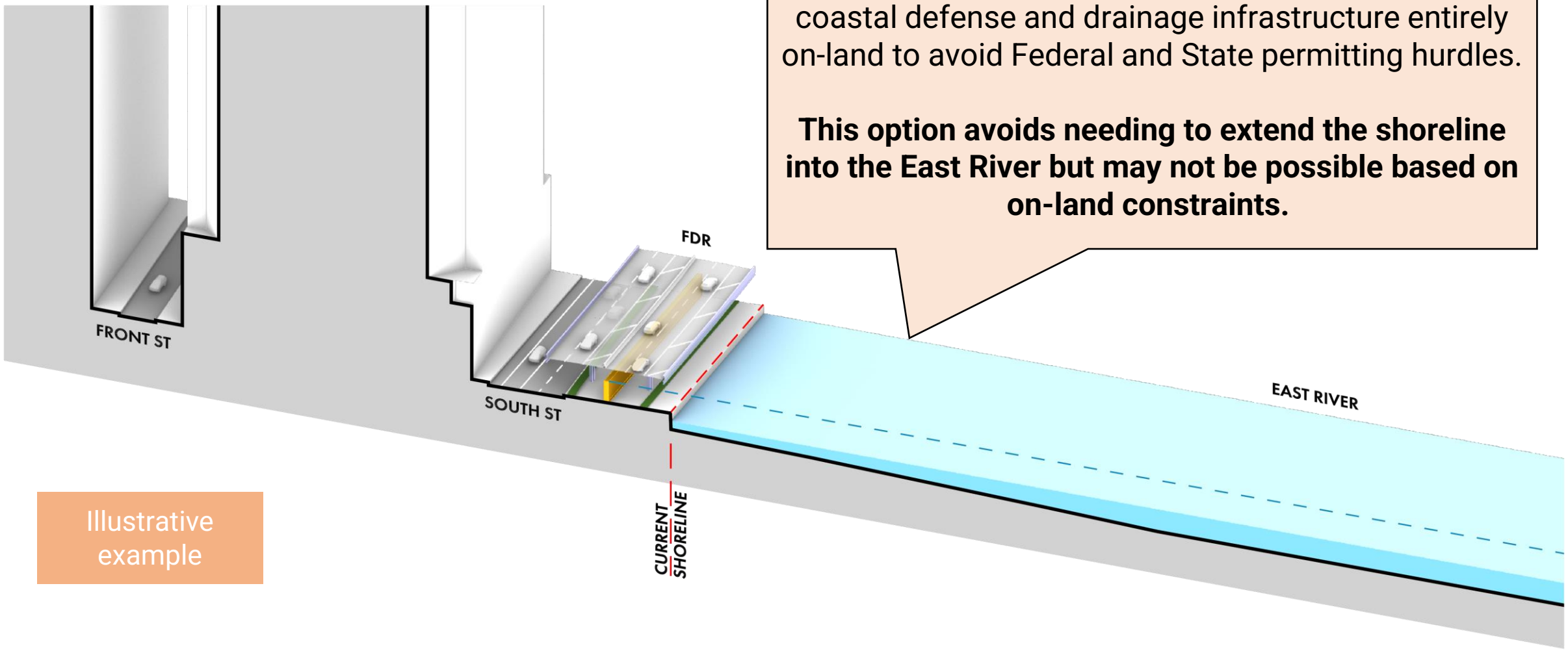
Illustrative example

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

陆上项目选择

This project option tests how possible it is to site the coastal defense and drainage infrastructure entirely on-land to avoid Federal and State permitting hurdles.

This option avoids needing to extend the shoreline into the East River but may not be possible based on on-land constraints.



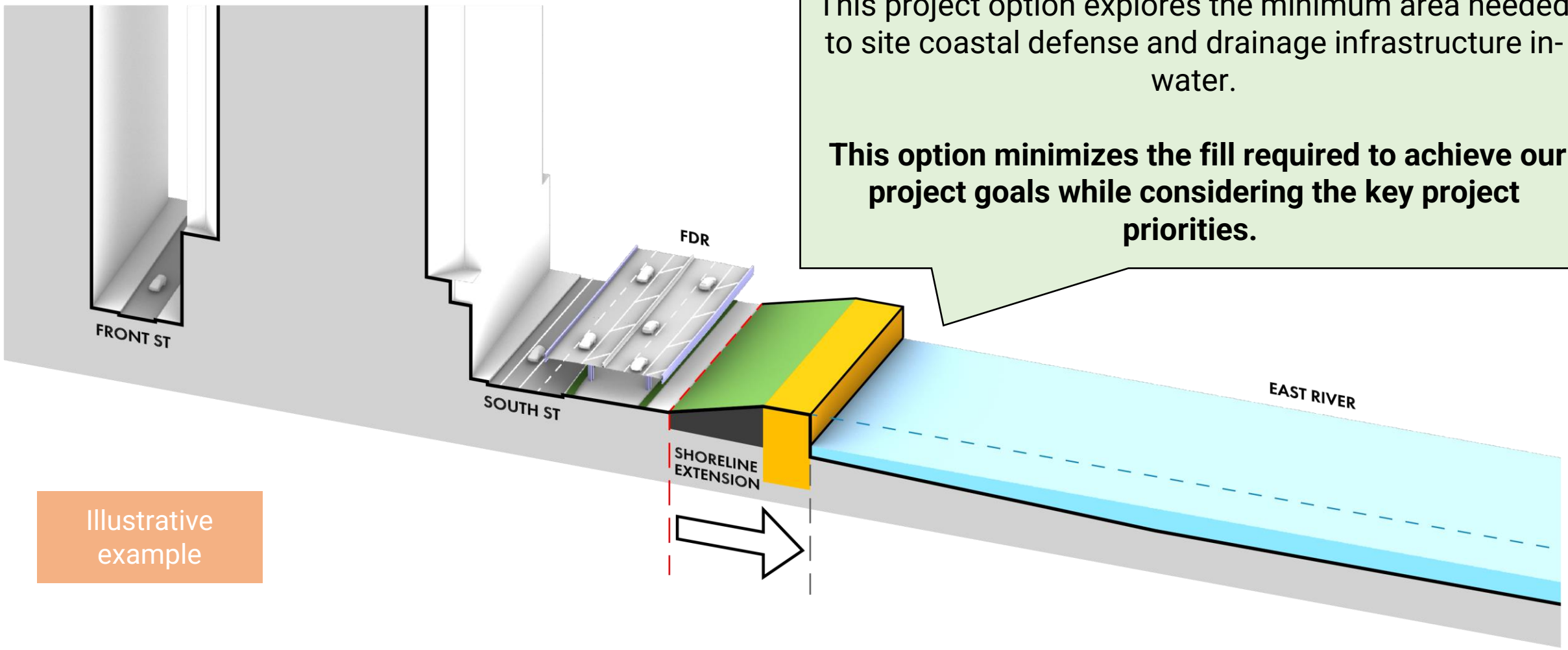
Illustrative example

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

最少海岸线扩展项目选项

This project option explores the minimum area needed to site coastal defense and drainage infrastructure in-water.

This option minimizes the fill required to achieve our project goals while considering the key project priorities.



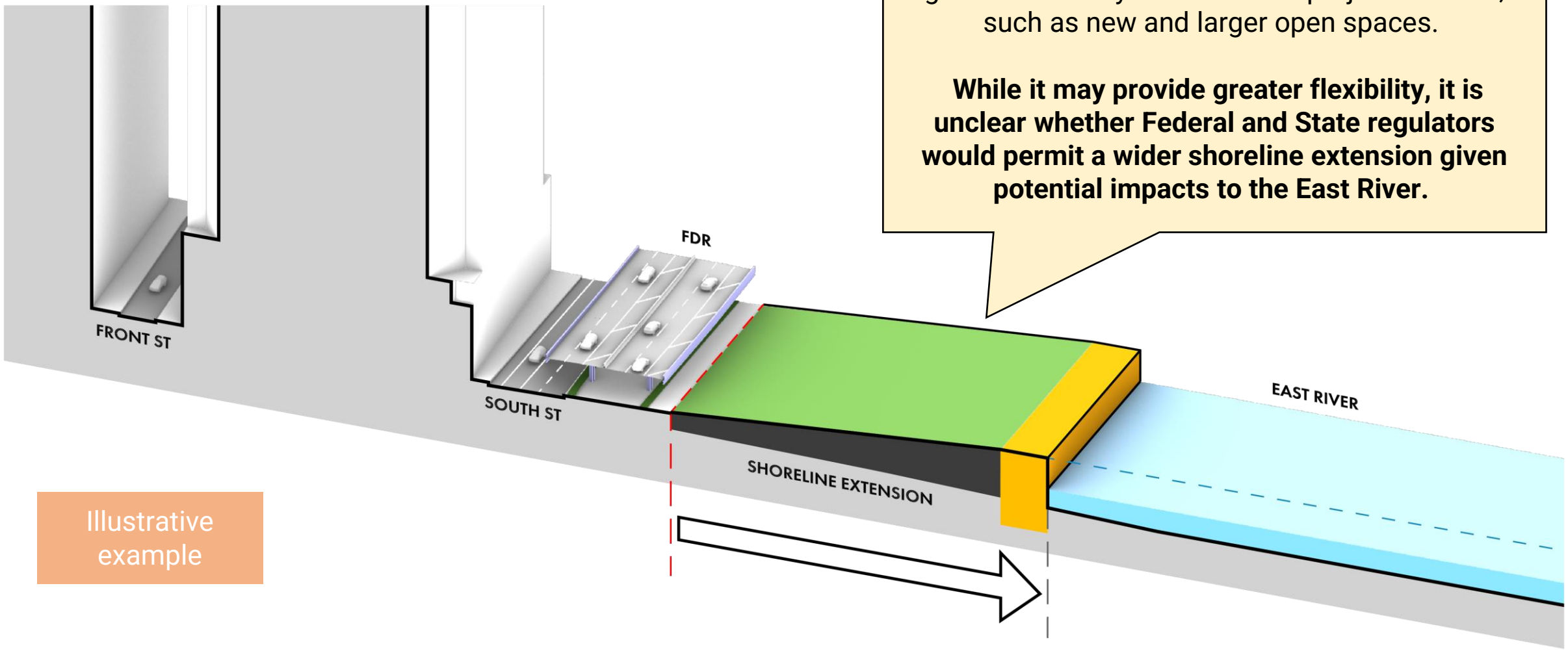
Illustrative example

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

拓宽海岸线扩展项目的选择

This option considers how the project can provide greater flexibility for additional project benefits, such as new and larger open spaces.

While it may provide greater flexibility, it is unclear whether Federal and State regulators would permit a wider shoreline extension given potential impacts to the East River.

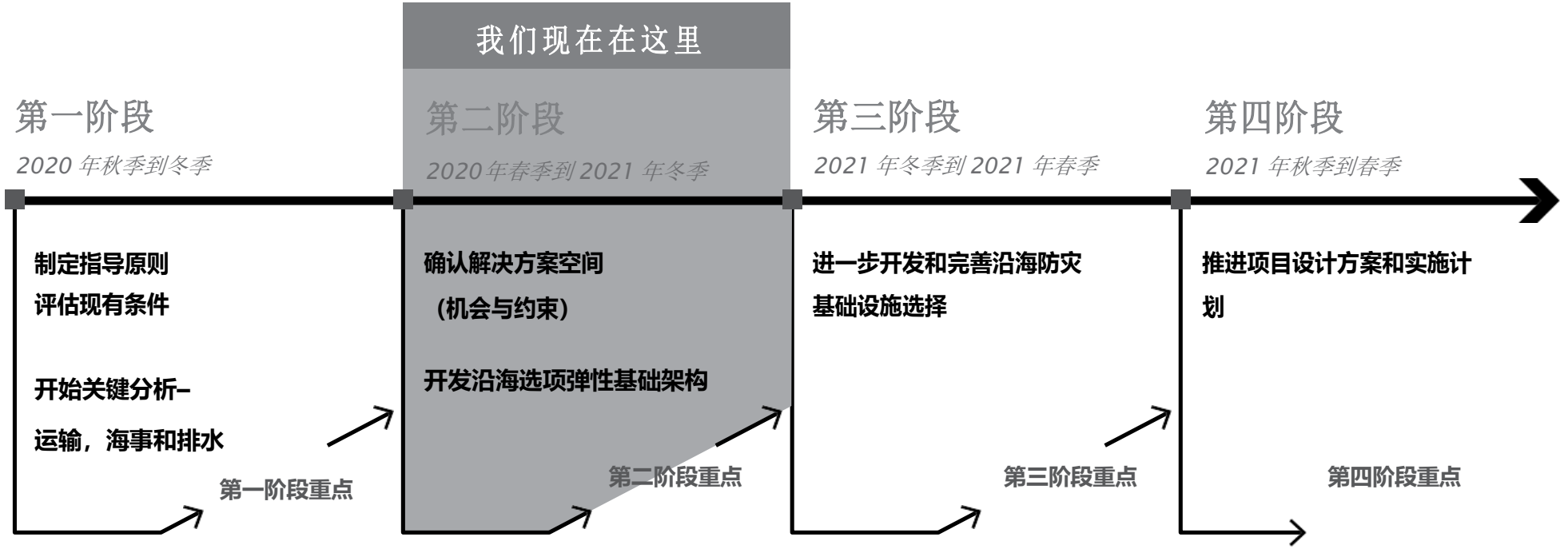


Illustrative example

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

项目的下一步是什么？

我们现在在哪个阶段?



- 确定项目目标
- 评估洪水风险和现有条件

- 加深对洪水风险和气候变化的现实经验
- 完善对场地限制的理解
- 制定远景规划
- 确定实施方法

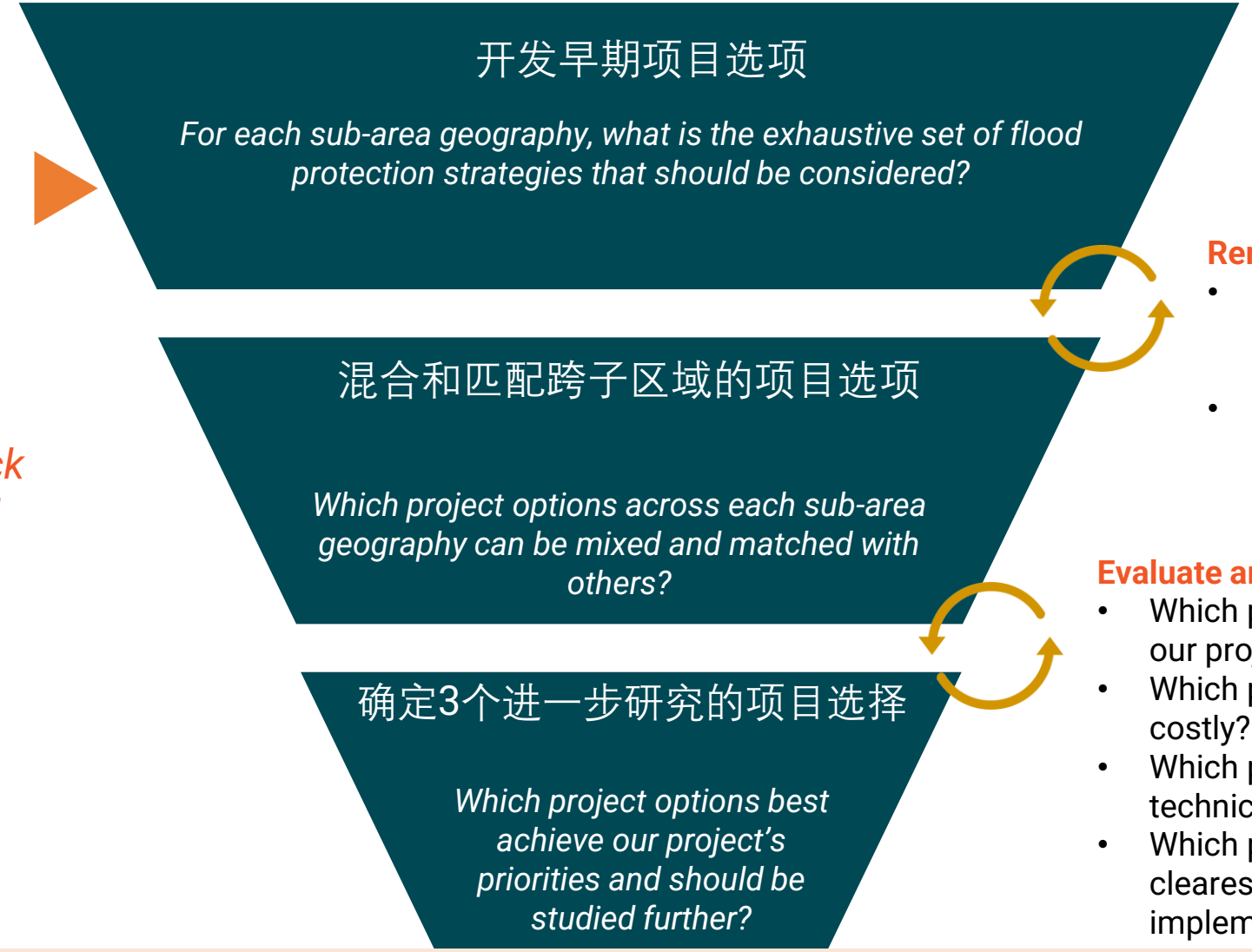
- 测试和完善防洪和其他基础设施的潜在选择
- 制定概念以改善公共领域和其他设施
- 完善实施方法

- 确定最佳设计方案和定相策略
- 制定持续参与计划并建立实施联盟

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

我们的设计过程来确定项目选项

WE ARE HERE



Remove from Future Study:

- What project options do not meet our project's priorities?
- What project options are not technically feasible?

Evaluate and Refine:

- Which project options best achieve our project's priorities?
- Which project options are the least costly?
- Which project options are the most technically feasible to construct?
- Which project options have the clearest pathway for implementation?

Your feedback is essential!

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

如何保持参与?

1. **继续在线对话:** Explore our engagement portal to learn more about other aspects of this project and share your feedback through interactive features (https://fidiseaportclimate.nyc/)
2. **询问专家:** Using our website, submit questions and comments to our team of engineers, urban planners, designers, and more!
3. **四月开放日活动**: We plan to share more details on potential project options and we look forward to your feedback!
4. **保持联系!** Sign up for our email newsletter to stay up-to-date on our website!

下一步?

步骤1：项目和开放日概述

进入房间

欢迎！请加入此会议室，以了解有关非洲裔美国气候恢复计划的更多信息，并获得有关对我们的项目和开放日的更多信息！

在这里，项目团队将解释该虚拟事件的格式，并提供有关项目的更多信息，包括我们的目标和计划过程中的后续步骤。

给团队成员的问题

该演示文稿每
半小时30分钟开始

步骤#2：小组研讨会

进入房间

我们希望收到你的来信！

与项目团队的成员一起参加小组研讨会，讨论公共开放空间、交通和出行以及社区资源。告诉我们您认为应该保护和保留的内容以及可以改进的内容！

这些研讨会每
半小时30分钟开始，从下午4:30开始

步骤#3：还有问题吗？

进入房间

还有问题吗？
想了解下一步吗？
我们在这里为您提供帮助！

加入这里与纽约市经济发展公司（NYCEDC）和市长律师办公室（MOR）顾问团队的成员交谈。

项目问答将在整个晚上进行！
随时停止。

Presentation in progress. Presentation will re-start at the beginning of every half-hour.

What should I expect in the workshops and how will my feedback be used?

1

OPEN SPACE

*[1] To help us to **evaluate and prioritize the open space alternatives***

*[2] To test that our select alternatives are addressing the **open space needs** of these stakeholders*

2

TRANSPORTATION & MOBILITY

*[1] To help us to **evaluate and prioritize the transportation and mobility alternatives***

*[2] To test that our select alternatives are addressing the **access and mobility needs** of these stakeholders*

3

COMMUNITY RESOURCES

*[1] To help us to **evaluate and prioritize the spaces people value most** within the framework of our alternatives*

*[2] To test that our select alternatives are addressing the **community's needs***

Presentation in progress. Presentation will re-start at the beginning of every half-hour.