

Rising seas, raising questions in low-lying Boston district

June 6 2018, by Philip Marcelo



In this May 14, 2018 photo passers-by make their way along a street near an intersection in Boston's Seaport District. In this old city's booming Seaport District, General Electric is building its new world headquarters, Amazon is bringing in thousands of new workers, and Reebok's red delta symbol sits atop the new office it opened last year. Three businesses are testing self-driving cars, other dynamic companies are planting their flag, and trendy restaurants and apartments have gone up virtually overnight. But after bad flooding during a storm this past winter, critics wonder whether it was a bright idea to invest so much in a man-made peninsula that sits barely above sea level. (AP Photo/Steven Senne)

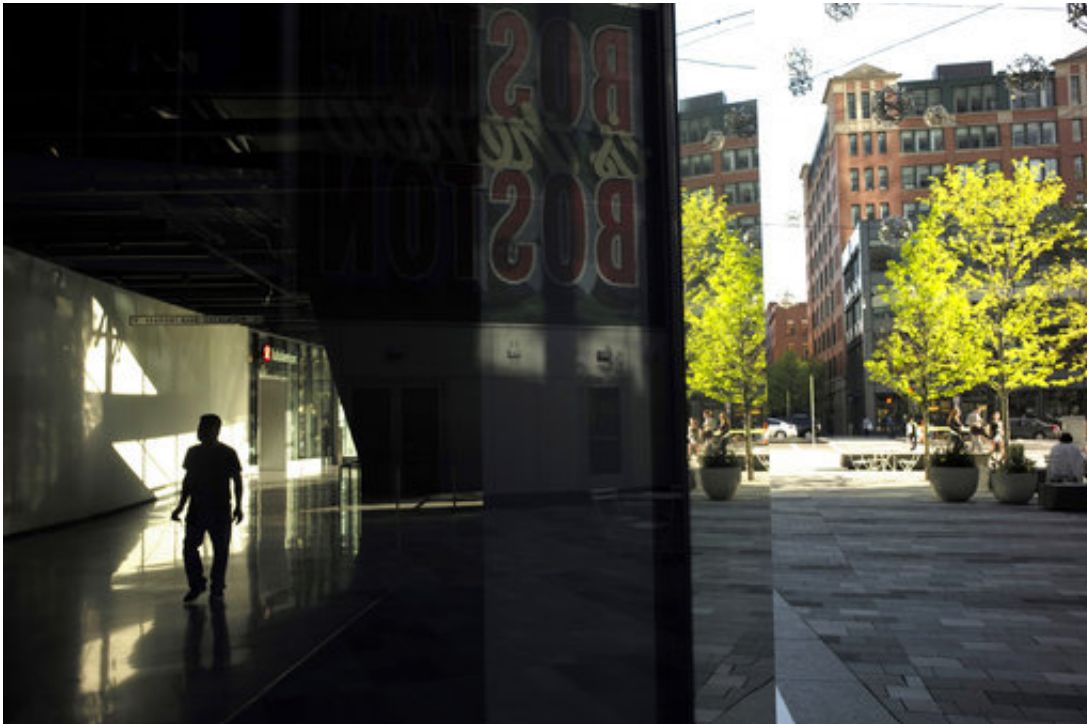
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"That was the first winter where we really saw waves splashing onto the boardwalk and water in the streets," said Greg Hoffmeister, who watched the flooding from the third-floor Seaport office of his real estate firm. "You start to think: Is that what we're in for, as sea levels rise?"

As they gear up to host the International Mayors Climate Summit on Thursday, municipal officials insist they're making the proper preparations for increased flooding and rising sea levels in a city that was less than 500 acres (202 hectares) when the Puritans settled it in 1630 but now includes more than 5,000 acres (2,023 hectares) of man-made landfill—one-sixth of its entire area.

"We know the water is going to be coming in through South Boston, pretty much from every direction, by 2070," said Richard McGuinness, a city planning deputy, referring to the neighborhood that includes the Seaport.



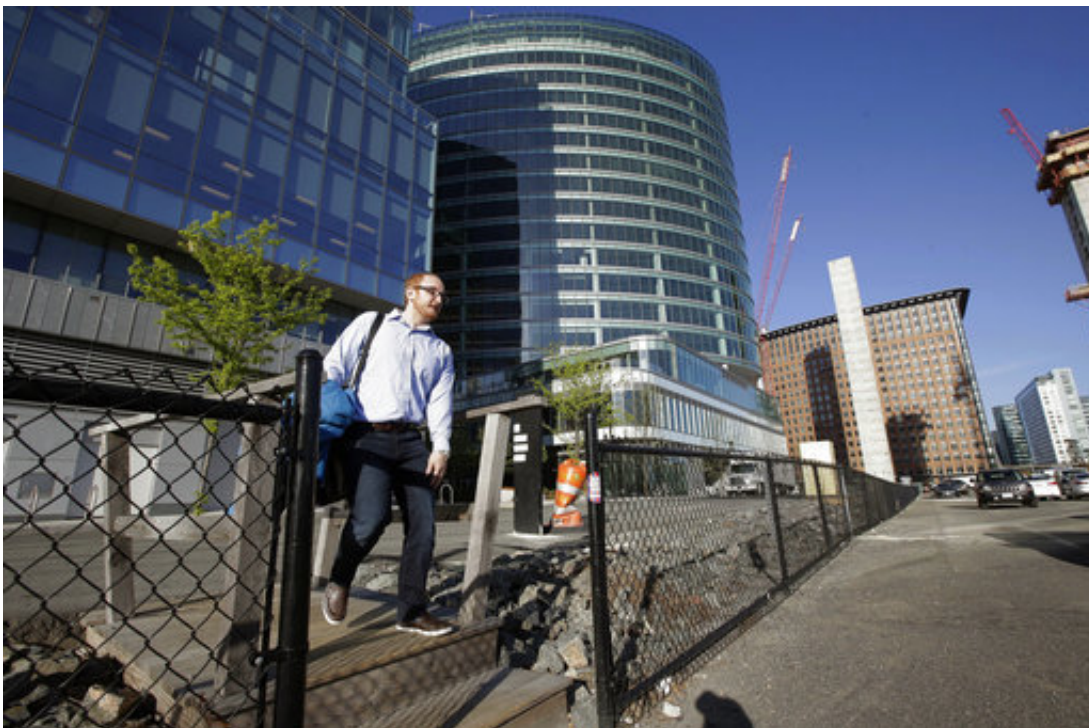
In this May 14, 2018 photo a passer-by walks through the lobby of a building in Boston's Seaport District. In this old city's booming Seaport District, General Electric is building its new world headquarters, Amazon is bringing in thousands of new workers, and Reebok's red delta symbol sits atop the new office it opened last year. Three businesses are testing self-driving cars, other dynamic companies are planting their flag, and trendy restaurants and apartments have gone up virtually overnight. But after bad flooding during a storm this past winter, critics wonder whether it was a bright idea to invest so much in a man-made peninsula that sits barely above sea level. (AP Photo/Steven Senne)

A 2016 city report projected Boston could see 8 inches (20 centimeters) of sea level rise by 2030, with the Seaport District the most vulnerable area. By 2070, seas could rise 36 inches (91 centimeters) higher than in 2000 levels, the report said. Some 90,000 residents and 12,000 buildings are in the area threatened by increased flooding, and the economic loss from a powerful storm could be more than \$14 billion.

While some new Seaport developers are building with climate change in mind—especially after 2012's Superstorm Sandy slammed New York and showed what a bad storm could do on the East Coast—many office towers and high-rise condos erected earlier simply didn't. And environmental activists and some researchers complain the city isn't moving quickly or aggressively enough to change development patterns.

City officials are looking at ways to revise Boston's zoning code, moving ahead on relatively inexpensive neighborhood-wide improvements, and assessing the need for the kinds of massive public works projects that European cities built long ago, said Austin Blackmon, Democratic Mayor Marty Walsh's environmental deputy.

The Boston Planning and Development Agency also revamped in October the "climate-ready checklist" developers have been required to submit since 2007 detailing strategies they're incorporating into their designs to mitigate climate change impacts.



In this May 14, 2018 photo a passer-by steps down a set of stairs that divides an elevated section of ground, left, and a lower level of ground in a parking lot, right, in Boston's Seaport District. Developers have raised the level of the ground before constructing buildings to protect them from flood waters as the sea level rises. A 2016 city report projected Boston could see 8 inches (20 centimeters) of sea level rise by 2030, with the Seaport District identified the most vulnerable area. (AP Photo/Steven Senne)

But despite the changes, there's still no requirement for developers to follow through, complained Bradley Campbell, president of the Conservation Law Foundation, an environmental advocacy group.

"It's a largely procedural requirement," he said.

Any design changes still need to be approved by the city, officials argue, and the checklist is just one way they're looking to steer development toward more proactive flood protection.

General Electric, which moved its corporate offices from Connecticut to temporary digs in Boston's Seaport in 2016, says the first floor of the new global headquarters it's building will be elevated nearly 5 feet (1.5 meters), or enough to protect it from the higher sea levels projected by 2070. Electrical systems are also being placed on the second floor, and emergency generators will be on the roof of the 12-story building.



In this May 14, 2018 photo a passer-by is reflected in the glass exterior of a new building in the Seaport District of Boston. While some new Seaport developers are building with climate change in mind - especially after 2012's Superstorm Sandy slammed New York and showed what a bad storm could do on the East Coast - many office towers and high-rise condos erected earlier simply didn't. And environmental activists and some researchers complain the city isn't moving quickly or aggressively enough to change development patterns. (AP Photo/Steven Senne)

The developers of Seaport Square, a 20-block complex of apartments, office buildings, and stores where Amazon has recently committed to leasing space for 2,000 workers, says its buildings stayed dry this winter, thanks to similar design features.

"We believe in science," said Yanni Tsipis, a senior vice president at WS Development. "We go into development in the Seaport with eyes wide open."

But environmental activists warn much of the district, transformed from a wasteland of surface parking lots, rotting piers and abandoned rail yards into an economic engine and one of the city's most expensive neighborhoods in a matter of years, simply isn't prepared for the long haul.

Among the most vulnerable properties are historic buildings that are extremely costly and sometimes impractical to retrofit, like some of the old brick factories and warehouses in the Fort Point section of the Seaport where GE is building, city officials said.



In this June 4, 2018 photo, buildings under construction and finished buildings line Seaport Boulevard in Boston's Seaport District. While some new Seaport developers are building with climate change in mind - especially after 2012's Superstorm Sandy slammed New York and showed what a bad storm could do on the East Coast - many office towers and high-rise condos erected earlier simply didn't. And environmental activists and some researchers complain the city isn't moving quickly or aggressively enough to change development patterns.

(AP Photo/Steven Senne)

Across the harbor in East Boston, home to Logan International Airport, the city is investing in a 7-foot (2-meter), temporary floodwall. And in Charlestown, the neighborhood where the Battle of Bunker Hill was fought, parts of flood-prone Main Street are being raised by 2 feet (0.6 meters).

In the Seaport, quick fixes include tide-control gates and other storm water drainage improvements in areas hardest hit by last winter's flooding.

Resident Deb Friedman wondered whether such steps would be enough. This winter, sea water poured into her luxury building's lobby and underground garage.

"They had fans airing everything out," Friedman said as she walked her dog near buzzing waterfront bars and restaurants. "It was not fun."



In this May 8, 2017 file photo the Boston skyline forms a backdrop at the site of General Electric's new headquarters prior to a groundbreaking ceremony, in Boston. GE is building its new world headquarters and Amazon is bringing in thousands of new workers to Boston's booming Seaport District. Trendy restaurants and apartments have gone up virtually overnight. But after bad flooding during a storm this past winter, critics wonder whether it was a bright idea to invest so much on a man-made peninsula barely above sea level. (AP Photo/Michael Dwyer, File)

But she and her husband don't plan on seeking higher ground anytime soon.

"We've watched this place grow, and it's been great," Friedman said. "Water has a mind of its own, anyway."



In this Feb. 7, 1982 aerial photo provided by The Boston Globe, Boston's Seaport District, foreground, rests in front of the Boston skyline, behind. General Electric is building its new world headquarters and Amazon is bringing in thousands of new workers to Boston's booming Seaport District. Trendy restaurants and apartments have gone up virtually overnight. But after bad flooding during a storm this past winter, critics wonder whether it was a bright idea to invest so much on a man-made peninsula barely above sea level. (Bob Dean/The Boston Globe via AP)



In this March 2, 2018 photo, a man walks through a flooded sidewalk in Boston's Seaport District. General Electric is building its new world headquarters and Amazon is bringing in thousands of new workers to Boston's booming Seaport District. Trendy restaurants and apartments have gone up virtually overnight. But after bad flooding during a storm this past winter, critics wonder whether it was a bright idea to invest so much on a man-made peninsula barely above sea level. (John Tlumacki, The Boston Globe via AP)

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