

Heat and Hurricanes: What Keeps the N.Y.C. Climate Chief Up at Night

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Rohit T. Aggarwala, the Department of Environmental Protection commissioner, in front of a wall that marks the height of storm surge on the east side of Manhattan. Credit...Jade Duskow for The New York Times

By Hilary Howard, Sept. 8, 2023, 3:00 a.m. ET

As New York City’s chief climate officer, Rohit T. Aggarwala oversees a slowly [sinking metropolis](#) surrounded by water, with an aging sewer system, little tree canopy, paved over natural resources, congestion, and over eight million residents. Sometimes the air

turns orange. Sometimes neighborhoods flood. Sometimes the power goes out.

But Mr. Aggarwala — who has long worked as a sustainability adviser, including under former Mayor Michael R. Bloomberg — remains a pragmatist, undaunted by existential dread. “We are in a climate change emergency,” he said. “And two things are unhelpful in an emergency: Panic and despair. You can’t let yourself dwell on those things, or else you can’t make progress.”

Recently, he spoke with The New York Times about his work to prepare the city for climate change. The following interview is an edited and condensed version of the conversation.



In 2012, flood waters from Hurricane Sandy overwhelmed vehicles on Avenue C in Manhattan. Credit...Michael Appleton for The New York Times

What extreme weather scenarios keep you up at night?

We’re coming to the height of hurricane season. From an acute event point of view, a

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major hurricane as we saw in Hurricane Sandy is clearly the biggest catastrophic threat facing New York City.

But heat waves kill a lot more people than hurricanes do. So I think those are the two scenarios, and then the third, obviously, is a massive rainfall event.

Related to these fears, what's the city's biggest infrastructure challenge?

I'd say there are two. First, there are the coastal and storm water defenses we have to build. The city's Department of Environmental Protection is going to be creating a [Bureau of Coastal Resilience](#), so that storm water and coastal inundation will be housed within the same agency. The first place flood water goes is down the drain, so there's this combined need to think about how you keep the water out and how you manage the water that falls, and that is a multibillion dollar, multi-decade long effort.

Climate Change in New York City

- **Composting:** [Here's what you need to know](#) as a program requiring New Yorkers to separate their food waste from regular trash rolls out across the city.
- **Renting an Electric Car:** A carless New Yorker was determined to rent an electric vehicle, but from booking to driving, [there's a learning curve](#).
- **A Climate Hub:** Mayor Eric Adams announced [a \\$700 million campus on Governors Island](#) dedicated to finding solutions to address the climate crisis. It is expected to open in 2028.
- **Holding Up Progress:** Many apartment buildings in the city are rushing to get in line with a sweeping new climate law. They [face some tough adjustments](#), but there is [a surprising fix](#).

Unfortunately, the climate has changed and is changing faster than we know how to build big engineering projects. We're talking about things — whether it's a [bluebelt](#) or a major sewer upgrade — that's at least five years from start to finish. There's also the [New York-New Jersey Harbor and Tributaries Study](#) that the U.S. Army Corps of Engineers is doing and that has a notional price tag of about 52 billion dollars, and will take at least 20 years to build.

Where are we on that?

The Army Corps is tweaking its plan to build shoreline defenses, instead of waterside defenses at maritime gateways. Let the inundation come into New York Harbor, but keep it away from the land. There are a couple of areas where there would be targeted water barriers; you can't really imagine hardening the coastline around all of Jamaica Bay.



An under-construction seawall along the East River, under the Franklin D. Roosevelt Drive. Credit...Jade Doskow for The New York Times

But there will, essentially, be a wall on the East Side.

To a certain extent; it will be a wall that you don't notice. There are a couple of areas where there's a wall, of course, but much of

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the view from street level is already blocked by the F.D.R. Drive, which is elevated at that point. But if you walk under the F.D.R., what you're going to find is a fantastic, elevated esplanade.

What's the second infrastructure challenge?

The upgrading of all of our buildings. We have [Local Law 97](#), part of the [Climate Mobilization Act](#), which is going to require the largest buildings over 25,000 square feet to do retrofits to reduce their carbon emissions.

We also need to think about resilience. We will need to establish a maximum indoor temperature. This effectively means we're going to mandate air conditioning. For new construction, that's fairly straightforward. But retrofitting all of the affordable housing in the city with air conditioning is a big task.



Cyclists in Copenhagen. Credit...Charlotte de la Fuente for The New York Times

Globally, which cities do you admire in terms of how they are taking on climate change?

Copenhagen's a standout in terms of transportation, with its pedestrianized streets, and how they've shifted away from the automobile to favor bikes. A number of Northern European cities are really strong in terms of the circular economy: They're collecting organics, they're doing a lot of

recycling. They are reusing all of their materials in one way or another.

Copenhagen had a Hurricane Ida-like event about a decade ago. It was disastrous, but it led them to develop a strategic storm water resilience plan. We are importing some of their insights, like [cloudburst design](#), which is when they do things like a sunken basketball court that can become a storage tank during heavy rainfall.

Singapore is very advanced in dealing with storm water. It has made the same decision that we have, in that they are housing coastal resilience efforts within their water utility. This is something I've been really focused on: How do we create the institutions that will solve these problems?

What makes New York City more of a challenge?

We are *really* vulnerable to storm water compared to many big cities. Because we are a city of islands. You have some cities of islands like Stockholm, but they tend to be a bit smaller.

We have a challenging government structure because so much of what we do is split up between the city and the state. It's one of the reasons that Singapore is doing so well; its city, state and federal governments are all rolled up into one entity.

Also, New York City has a permissive culture. Here, people somehow think it's a terrible injustice to get a fine for speeding.

Preparing for climate change involves discipline. If you look at Singapore or Copenhagen, these are cultures that are highly disciplined. You follow the rules to sort your trash, you follow the rules to maintain your building the way you're supposed to, you do those things. And that's what we need.

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If we get hit with a Sandy-like storm this season, would any neighborhoods be better prepared? Which ones would be the most vulnerable? Will there be a new warning system in place?

I'd say New York City is much better prepared than it was 11 years ago, but it's still quite vulnerable. One new tool is [Notify NYC](#), which is the service of the Office of Emergency Management. Every New Yorker ought to sign up for it.

The beach side of the Rockaways is better protected. The Army Corps completed a big project there, widening and elevating the beach. Two days before Christmas, we had a big storm and there was [significant flooding](#) on the bayside of the Rockaways, where the work has been delayed, but the beach side has done very well.

There's also a lot of building-level resilience that's been done. NYCHA has invested almost \$3 billion — and another \$1 billion is planned — to protect against what happened during Sandy, when flooding on the lower levels destroyed all of the electrical equipment and elevators were out of service for months. They've since moved that equipment to higher ground. So the building might still get flooded, but you won't lose all of your services.

What makes New York City an environmentally-friendly place to live?

New York City has every advantage in its DNA. Density is a pro-environment decision. Density helps us because it enables walking and biking and transit. Even for people who drive, they are driving a shorter distance. In an apartment building, we are sharing energy; the apartment above you is part of your insulation plan.

We also live in a fantastic ecosystem. If you think about what we've seen over the last several years in the harbor — the whales,

dolphins, seahorses — it's amazing. The hawks and owls and other birds are back. The environment here has gotten so much better than it was 30 or 40 years ago.