

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEE ON RESILIENCY
AND WATERFRONTS

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October 27, 2020
Start: 11:06 a.m.
Recess: 12:58 p.m.

HELD AT: Remote Hearing

B E F O R E: Justin L. Brannan
Chairperson

COUNCIL MEMBERS: Justin L. Brannan
Costa Constantinides
Ruben Diaz, Sr.
Deborah L. Rose
Eric A. Ulrich

A P P E A R A N C E S (CONTINUED)

Dr. William Sweet
National Oceanic and Atmospheric
Administration

Jamie Bavishi
Director
Mayor's Office of Resiliency

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JOHANNA CASTRO: We're live.

SERGEANT AT ARMS MARTINEZ: Sergeants, if you could begin your recording.

SERGEANT AT ARMS PEREZ: Backup is rolling.

SERGEANT AT ARMS MARTINEZ: PC recording is going. Waiting on cloud.

SERGEANT AT ARMS KOTOWSKI: Cloud is going.

SERGEANT AT ARMS MARTINEZ: Sgt. Leonardo, I'll leave it to you. Thank you.

SERGEANT AT ARMS LEONARDO: Good morning and welcome to the New York City Council remote hearing on the Committee on Resiliency and Waterfronts. At this time we ask that all council members and council staff turn on their video for verification purposes. Please place all cell phones and electronic devices to silent or vibrate. If you wish to submit testimony you can do so by sending it to testimony@council.nyc.gov. Once again, that is testimony@council.nyc.gov. We thank you for your cooperation. Chair, we are ready to begin.

1
2 CHAIRPERSON BRANNAN: Thank you, Sergeant.
3 [gavel] Thank you for joining our virtual hearing
4 today on the eighth anniversary of Superstorm Sandy.
5 My name is Council Member Justin Brannan. I'm the
6 chair of the Committee on Resiliency and Waterfronts.
7 I want to acknowledge Council Member Debbie Rose who
8 has joined us so far for today's hearing. And I'm
9 going to now turn it over to committee counsel,
10 Jessica Steinberg-Alban, who is going to go over some
11 procedural items before we get started.

12 COMMITTEE COUNSEL: Thank you. I am
13 Jessica Steinberg-Alban, counsel to the Resiliency
14 and Waterfronts Committee of the New York City
15 Council. Before we begin I want to remind everyone
16 that you will be on mute until you are called on to
17 testify, when you will be unmuted by the host. I
18 will be calling on panelists to testify. Please
19 listen for your name to be called. I will be
20 periodically announcing who the next panelist will
21 be. Before we hear testimony from the administration
22 we will first have a single person public panel. The
23 first panelist to give testimony will be Dr. William
24 Sweet of the National Oceanic and Atmospheric
25 Administration. I will call you when it is your turn

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2 to speak. During the hearing if council members
3 would like to ask a question of the administration or
4 a specific panelist please use the Zoom raise hand
5 function and I will call on you in order. We will
6 be limiting council member questions to five minutes,
7 which includes the time it takes to answer your
8 questions. Thank you. I will now pass it to Chair
9 Brannan to give an opening statement.

10 CHAIRPERSON BRANNAN: Thank you. Thank
11 you, Jessica. Um, good morning, everybody. My name
12 is Justin Brannan and I have the privilege of
13 chairing the Committee on Resiliency and Waterfronts.
14 I want to welcome you today to the oversight hearing
15 on the eighth anniversary of Superstorm Sandy and the
16 2020 hurricane season. New York City's 520 miles of
17 coastline are particularly vulnerable to the impacts
18 of sea level rise, storm surge, and flooding. Areas
19 such as Broad Channel, Hamilton Beach, and Howard
20 Beach already experience monthly tidal flooding. The
21 New York Panel on Climate Change predicts that by
22 2050 more areas throughout the city will see regular
23 tidal flooding because of sea level rise. Eight
24 years ago this week Superstorm Sandy devastated the
25 city, inundating areas with seawater, leaving almost

1 two million people without power, destroying
2 approximately 300 homes, causing an estimated 19
3 billion dollars in damages and lost economic
4 activity. Two months ago Tropical Storm Isaias hit
5 the city with winds up to 78 mph in some parts. This
6 most recent storm left more than 100,000 customers in
7 the city without power and thousands remained without
8 power up to one week after the storm hit. There is
9 still more than a money left and what has become one
10 of the most active hurricane seasons in history. In
11 fact, this past weekend Hurricane Zeta became the
12 27th named storm and yesterday it became the eleventh
13 hurricane. So not only are we in the midst of a
14 hyperactive hurricane season, but we're also in the
15 midst of a global pandemic. Communities of color are
16 disproportionately impacted by climate change, sea
17 level rise, and coastal flooding. 28% of NYCHA
18 developments are located in the flood plain.
19 Superstorm Sandy caused almost 2 billion dollars in
20 damage to NYCHA developments, knocking out power,
21 heat, and hot water to 10% of NYCHA properties. Four
22 hundred buildings had no power and 386 buildings also
23 had no heat or hot water for weeks. We need real
24 coastal flood protections and those coastal
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2 protections should include both green and gray
3 infrastructure, which is incorporating wetlands,
4 living shorelines, and nature-based features, in
5 addition to or in some areas instead of sea walls and
6 levees. Last year we discussed the city's resiliency
7 projects and emergency preparedness. The Mayor's
8 Office of Resiliency testified that four major
9 groundbreakings were to take place in 2020 - the
10 Staten Island Coastal Storm Risk Management Project,
11 the Atlantic Side Rockaway Reformulation Project, the
12 East Side Coastal Resiliency Project, and lastly New
13 York State's Living Breakwaters. We look forward to
14 receive an update from the administration on these
15 projects today and how these projects will be funded,
16 and how the funding status of all resiliency projects
17 is progressing in the city's portfolio. As we are
18 about to enter the last money of one the most active
19 hurricane seasons in recorded history while also
20 dealing with COVID, the COVID-19 pandemic, we need to
21 know what plans are in place to keep residents and
22 emergency workers safe if they must evacuate. The
23 Centers for Disease Control and Prevention and the
24 Federal Emergency Management Agency both recommend
25 that small shelters like hotels, dormitories, and

1 classrooms should be used over traditional large
2 congregate shelters because of COVID. New York City
3 Emergency Management's public guidelines state that
4 residents who must evacuate should include hand
5 sanitizer and face coverings in their go bag. But
6 their guidance does not include how social distancing
7 will be maintained if residents must evacuate to the
8 various public schools that New York City Emergency
9 Management currently uses as evacuation shelters. So
10 we look forward to hearing their plans and how those
11 plans will be communicated to the public well in
12 advance of a next storm. To ensure that the city is
13 resilient, we must plan and build intelligently now
14 in every borough, not just Manhattan. We must
15 continue to incorporate the New York City Panel on
16 Climate Change's projections for sea level rise,
17 precipitation, and future temperatures in the city's
18 future planning efforts. Only then will we be able
19 to protect the city's residents, visitors, and
20 property from future storms and the impact on climate
21 change. We can do better and we must do better.
22 It's simply not a choice. I look forward to hearing
23 testimony from the Mayor's Office of Resiliency and
24 New York City Emergency Management and their answers
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2 to our questions today about how we are proactively
3 preparing for future storms and not just reacting to
4 them afterwards. I also look forward to hearing from
5 the experts who study sea level rise and coastal
6 flooding issues. Before we begin today I want to
7 thank my committee staff, committee counsel Jessica
8 Steinberg-Alban, senior policy analyst Patrick
9 Mulvahill, senior finance analyst Jonathan Seltzer,
10 and my senior advisor, Jonathan Gedden, for all their
11 hard work in putting this hearing together. I could
12 not do it without this great team. I now want of the
13 hand it back over to committee counsel, j Jessica
14 Steinberg-Alban.

15 COMMITTEE COUNSEL: Thank you. And I
16 would also just like to recognize that Council Member
17 Ruben Diaz, Sr. has joined us as well. We will now
18 call on Dr. William Sweet of the National Oceanic and
19 Atmospheric Administration to testify. Dr. Sweet,
20 you may begin your testimony once you are unmuted.

21 SERGEANT AT ARMS: Starting time.

22 DR. SWEET: Great. Good morning. Can
23 you hear me OK?

24 COMMITTEE COUNSEL: Yes, we can hear you,
25 Dr. Sweet.

1
2 DR. SWEET: Super. Um, well, thank you
3 for this opportunity to testify. As mentioned, my
4 name is William Sweet. I'm a sea level scientist for
5 the National Ocean Service at NOAA. I study the tide
6 gauges and help make projections of sea level rise
7 and coastal flood risk, ah, changes as they're
8 experienced, ah, by communities around the coast,
9 such as, ah, as in New York City and the surrounding
10 region, ah, and help provide guidance for sound
11 decision-making. Hopefully you all have some slides
12 that I'll be speaking to, and if so we'll go on to
13 the second slide, please. So I don't need to tell
14 you about, ah, the risks and the impacts of sea level
15 rise as they're playing out in your community. You
16 know them as well as any. You're not uncommon in
17 terms of this phenomena. It's an East Coast and
18 Gulf Coast phenomena that's occurring largely right
19 now, ah, sea level rise is caught up. Um, what we
20 are trying to do is connect sea level rise-related
21 flooding to impacts on the ground and our starting
22 point in the conversation is really the day to day
23 impression acts that are experienced whether it's
24 from [inaudible] or tides, or you name it, that are
25 experienced and forecasted by our National Weather

1 Service with conjunction of local emergency room
2 managers. So in this image here, taken from a local
3 weather forecasting office sort of gives sort of an
4 illustrious example of what the flooding would like
5 under various flood severity. And we have sort of
6 used the high-tide flooding, which is more minor in
7 consequence, but due to increase in frequency it's
8 starting to take a toll in many communities. As a
9 starting point to really frame the discussion of how
10 has sea level rise affected flood frequencies along
11 the coast. Ah, so this is sort of, yeah, it's a
12 climate meet weather story here. It's local flood
13 defenses as they are, that, ah, when impacts occur
14 and events are anticipated you get warned so you can
15 take proactive measures to, you know, either protect
16 your car, your vehicle, or, or, you know, alert your
17 public. But due to climate change, sea level rise,
18 you know, these kind of events are increasing in
19 frequency and this is what I'll speak to, ah, and
20 frame much of the discussion today. Moving on to the
21 next slide. An old image of the tide gauge at the
22 Battery, um, just sort of shows sort of how we
23 collect these water levels. They've been in
24 existence in this area and many others for upwards of
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1 a century, um, are really used for, you know, ah,
2 safe shipping and navigation, but due to years of sea
3 level rise they're also informing us of how sea level
4 rise-related coastal flooding is changing in nature.
5 And what we've been doing is really just looking at
6 the observation shown in blue, the tide predications
7 are in the way, and making counts as to, ah, you
8 know, how many times a year are we crossing these
9 thresholds, which sort of register a sort of minor,
10 moderate, or major flooding, and we're simply summing
11 these up and, and discerning patterns and projecting
12 these into the future as a starting point to
13 recognize, ah, vulnerabilities and how under current
14 flood defenses, ah, impacts may change in the future.
15 Um, so, again, sort of that minor high-tide flooding
16 is, is about two feet above mean high tide. Um,
17 sometimes you refer to these in geodetics, ah,
18 national, ah, the NAVDAD8. There's various ways of
19 describing it and I'll show, ah, a couple different
20 ways that we, it can be referred to. But in essence
21 it's that kind of minor flooding that really probably
22 is playing out in many of these areas around the, the
23 airport and Jamaica Bay area I think is sort of your
24 front and center of your impacts, ah, which can be
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1 seen on the next slide. These are, ah, immigrants
2 that I have justice taken off of, ah, from some of
3 our weather service, ah, media sites showing examples
4 of that October 2016 event where there was, you know,
5 flooding was occurring, it was cold, but water, ah,
6 wasn't too high, but it was high enough, ah, sort of
7 that in between moderate, moderate flood stage to
8 cause, you know, very noticeable impacts. And again
9 what we're trying to do, and I think a lot of the
10 challenge currently is to really understand when
11 water gets to a certain height where and what are the
12 impacts. Ah, they become very clear at the Hurricane
13 Sandy level, it's clear as day, and it's, it's very
14 catastrophic and significant. But even at the lesser
15 extremes, you know, where is the flooding occurring,
16 what are the impacts, how do we catalogue this so you
17 can get a better sense of what rising sea levels,
18 where, what will the consequences be under today's,
19 ah, flood defenses? Next slide please. So a
20 schematic basically showing these colorful, ah, sort
21 of bell-shaped curves, um, that really characterize
22 [inaudible] each curve would represent 365 days per
23 year on average during a decade. Um, the X axis is
24 in, in meters, ah, so two feet is about 0.6, short of
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1 showing that high tide of flood threshold or major
2 flooding at four feet. Obviously, Hurricane Sandy
3 levels aren't even on this graph. And it just shows
4 due to the continuous creep of sea level, whether
5 it's ocean rise or land sinking that the risk of
6 flooding of all severities are increasing, whereas
7 the four-foot flood, the five-foot flood might still
8 be in these, ah, you know, very low probability,
9 maybe one in 10 or one 20 or one in 100 type events.
10 The less or extreme the high-tide flooding now are
11 starting to get under that part of the curve where
12 it's something that's happening several times a year,
13 and due to continuous sea level rise, ah, it's
14 becoming very nonlinear in response, and you can see
15 that on the next slide that has the yellow, ah,
16 column, far columns, of numbers of days per year with
17 a high-tide flood. And so the red dotted line is a
18 quadratic fit, just a mathematical fit to the data.
19 If it was linear it would be a straight line, but
20 it's not, it's quadratic, and it's showing that on an
21 annual basis, ah, these lesser extremes, ah, whose
22 images you saw earlier, it's just an example, are now
23 accelerating. They're not expected to slow down.
24 It's expected to increase and continue to increase
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1 into the future, ah, growing in depth, ah, and become
2 more widespread, ah, with consequences more severe.
3 And this is more or less what we are seeing up and
4 down the eastern seaboard right now in many
5 locations, ah, so it's not necessarily unique, but
6 it's concerning nonetheless. Next slide please. So
7 here we show in blue are the more likely ranges of
8 sea level rise, relative sea level rise, for the New
9 York City region. Ah, not too different than what
10 has been already established somewhat for the New
11 York City region in New York. Um, this is NOAA's
12 2017 intermediate low and intermediate, ah, range,
13 shaded in blue. And in black is the observations at
14 the Battery's tide gauge, ah, as it stacks up. So
15 you can see that it that sort of falls on this
16 trajectory that, um, looks to be like it's unfolding,
17 ah, somewhere at a year 2100 target of somewhere
18 between two and slightly more than four feet of rise
19 by the end of the century. It could be higher. It's
20 very likely not going to be less, as sea level rise
21 are modeled and predicted to continue to increase in
22 their rate as to which they are rising. Um, this
23 value, you know, again, consider lots of other
24 things. Land sinking is included in this, ah,

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2 gravitational changes of the land, ah, ice melt, and
3 where is ice melting, changes in circulation of the
4 Gulf Stream. It's really what's important for local
5 decision-making is what is the projections of likely
6 rise, ah, in the place of concern. In this area it's
7 New York City. Next slide. Ah, this shows some, ah,
8 engineering return interval curves, or damage risk
9 curves, ah, loosely. What you see in the dark blue
10 is what FEMA's definition of the 1% annual chance
11 shown as a return interval is 100 years. On both
12 axes on the Y you have a NAVDAD8, which oftentimes
13 maps are used with, but oftentimes engineers and
14 surveyors will use that reference frame. On the
15 right is mean high high water. Ah, that would be the
16 zero and the OSU [inaudible]. Ah, but they're
17 equated equal in this. So using the right-hand side
18 the annual 1% chance on FEMA's flood maps, which have
19 waves and have other phenomena, not just captured
20 in the tide gauge estimate shown in the light blue,
21 um, more storm-driven. You can see about a nine
22 flood above mean high high waters, about the 1%
23 annual chance, ah, with FEMA's definition. Um, and
24 as you move to things that are more recurrent they
25 became more tidally drive, and that's where these

1
2 tide gauge estimates sort of ring true. And we're
3 actually working with FEMA now to kind of converge on
4 the two so we can have better estimates of the more
5 frequent types of flooding. And shown on the bottom
6 there are the major, the moderate, and the high tide
7 flood threshold at about two, three, and four feet.
8 And you can, ah, on the X axis get an, an instance of
9 what's the return interval, the likelihood. Um, so
10 the way that you kind of frame sea level rise, um,
11 assuming that storms don't change, or at least you're
12 not impacted on a more frequent basis by major
13 storms. Ah, you would just adjust these curves up or
14 down. In this case with sea level rise, ah, the, the
15 values would all go down. So, for instance, right
16 now a four-foot major flood would have somewhere
17 about a 10-year return period, a one-in-10 chance in
18 a given year, as the FEMA and the tide gauge
19 estimates converge. Ah, with two feet of sea level
20 rise that four-foot, well, you would assess that risk
21 of a two-foot flood and you would come over and
22 follow that yellow line, and that's something that's
23 happening several times a year. So you can sort of
24 do the same sort of adjustments at least as a first-
25 order screening estimate of how sea level rise is

1 likely to impact, ah, your, your community and what,
2 you know, doing stress tests as to how you're
3 developing, ah, and how things may change on the
4 current flood defenses. Um, the last slide just
5 shows some current NOAA tools that we're developing.
6 Ah, the upper left hand corner is NOAA's sea level
7 rise viewer and flood mapper, and here we have this
8 high-tide flood, ah, elevations that are at or below
9 these elevations that I was referring to that are
10 accelerating. So you can get a sense of the land
11 that's exposed currently to this type of flooding.
12 Um, and you can go to the flood, ah, the sea level
13 rise viewer and show what two, three, four, five,
14 six, eight, all the way up to 10 feet of additional
15 sea level rise would look like at high tides and get
16 a sense of, you know, if a storm came, you know, what
17 might be impacted. Again, as you get to, ah, with
18 sea level rise, ah, as you get to the lesser extreme
19 events they become more tidally driven and less storm
20 surge driven, more bathtub-like, less storm, ah,
21 reflective of the storm characteristics themselves.
22 On the bottom right hand, ah, is a image that the
23 website that you can actually get next year's
24 outlooks, a continuation of that quadratic fit, ah,

1 giving you sort of some guidance as to what is likely
2 to occur next year in case you need any kind of
3 guidance as to budgeting for expected responses.

4 We're starting to get more questions as to what can

5 we expect next year, not only in the next several

6 decades. But we did that, too. In 2030 and 2050

7 what's the expected, ah, likely range on any given

8 year, ah, of these high-tide floods. Ah, so this is

9 at least a starting point to provide some actionable,
10 ah, guidance in terms of, ah, impacts associated with

11 these lesser extremes, not so much for the minor, ah,

12 the, the very rare major consequences, which are much

13 harder to predict and obviously more uncertain as we

14 move into the future. Um, so with that, that

15 concludes my testimony. I hope you find it useful,

16 and please visit these websites. If you have more

17 questions and/or contact NOAA for any, ah, more

18 specific details as to ah, ah, as you need

19 information to make your decisions. Thank you.

20

21 COMMITTEE COUNSEL: Thank you very much,

22 Dr. Sweet. Ah, I just want to note that the slides

23 referenced by Dr. Sweet during his testimony, once

24 they have been received and made accessible will

25 become part of the official testimony. I will now

1 turn it over to questions from Chair Brannan. Dr.
2 Sweet, please stay unmuted if possible during the
3 question and answer period. Thank you. Chair
4 Brannan, please begin.

5
6 CHAIRPERSON BRANNAN: Thanks, Jess. Ah,
7 I want to acknowledge that we've been joined by my
8 colleagues, ah, Councilman Costa Constantinides, and,
9 of course Councilman Ruben Diaz, Jr. and Councilwoman
10 Debbie Rose is, is still with us as well. Um, Dr.
11 Sweet, thank you so much for that. Um, can you
12 explain sort of just, just as simply as you can, how
13 does sea level rise affect the coastal flood risk?
14 What's the relation there? How does that work?

15 DR. SWEET: Sure. Um, you know, in
16 general you've got to, there's two parts to the
17 problem. One is the typical, um, variability in your
18 water levels from tides and storms. Um, we
19 characterize this typically, ah, at the tide gauge as
20 to what's happened over the period of record, ah, and
21 we quantify that through extreme water distributions.
22 So what's the likelihood of water hitting X, ah,
23 height based on just the local record would have a
24 certain probability. Ah, FEMA does similar, but
25 they'll also factor in, you know, waves and maybe

1 storms that haven't really been observed but could,
2 they may generate a more of, ah, of a synthetic set
3 of, of probabilities that say it hasn't happened yet
4 but it could under today's climate. What might that
5 risk be? So, you know, roll the dice a hundred
6 thousand times versus, you know, roll the dice a
7 hundred times as observations may show. Nonetheless,
8 you've characterized them, what's the likelihood
9 based on, ah, observations or plausible conditions
10 under today's environment. Um, so you have a set of
11 probabilities. Then with sea level as it rises then
12 you essential are saying without any extra
13 understanding of how, you know, storms may change or
14 tides may change with one, two, three feet of sea
15 level rise, then under the variability that rolling
16 the dice, um, it just will show that the probability
17 of all events become more likely. Um, to what extent
18 on an annual basis, five, 10 times a year or does
19 something go from a 100-year event to a 50-year event
20 plays out under these sort of, that bell-shaped
21 distribution curve I showed. So, in short, with sea
22 level rise the risk of flooding of any severity
23 increases, um, to under today's flood defenses. So
24 that, that's basically the short. And you can do the
25

1
2 quantification and do the math, ah, your engineers
3 and designers will do that. But that's the fact of
4 the matter is flood risk has already increased due to
5 sea level rise and due to future sea level rise it
6 will continue to increase.

7 CHAIRPERSON BRANNAN: So what, Doctor,
8 what should the city be doing to address for, to
9 address and prepare for these increasing, increasing
10 risks?

11 DR. SWEET: Well, as the risk becomes
12 more likely the lesser extremes start, ah, you know,
13 become something that might be now a 20-year event
14 eventually becomes an annual event. These, as they
15 become annual and more frequent it's more tidally
16 driven. It's more bathtub-like. Pay attention to
17 your elevations. Lower elevations are more at risk
18 than higher elevations. Um, and that's basically the
19 way that, ah, the sea level rise is playing out,
20 it's, ah, the things that are becoming, that were
21 once frequent, were more storm-driven, as they become
22 more likely to become tidally driven and the tide's
23 sort of gonna go where the tide wants to go. Um, you
24 know, it's going to go. Um, you know, it's gonna go
25 subsurface. It's eventually going to pump up ground

1 waters. It's gonna find its conduits in. So it
2 really becomes an elevation game. So I guess the
3 simple guidance that NOAA has been doing is saying,
4 you know, we don't know exactly what trajectory is
5 going to occur, but we do know that lower elevations
6 will be more at risk. When you have the opportunity
7 to, ah, replace or move critical infrastructure
8 definitely pay attention to elevations, um, and, and
9 that is probably the 101 in how to help protect, you
10 know, important infrastructure, is pay attention to
11 elevations.
12

13 CHAIRPERSON BRANNAN: Um, with sunny day
14 flooding and, and nuisance flooding, um, what do we,
15 what do we expect between, you know, say, the next 10
16 years, the next 30 years? How, how often will, will
17 that occur, do we predict?

18 DR. SWEET: Well, under our definition,
19 which is about two feet above mean high tide, which
20 is pretty much right in line with the weather
21 services, ah, you know, last year had about 10, 10
22 days, [inaudible] somewhere upwards of 10 to 15. By
23 2030 that's likely to rise to, ah, 20 to 40 days, and
24 by 2050 that number is likely to be somewhere between
25 50 and 135 days out of the year. Again, ah, it can

1 bounce around. You have variability in any given
2 year of sea levels as well as, ah, you know the
3 number of days per high-tide flooding. But that's
4 the range under that likely amount of sea level rise,
5 ah, that was shown, which is somewhere between two
6 and four feet by 2100. But even just at 2050 the
7 number of days is likely to increase somewhere
8 between 50 and 135 days per year at, affecting that
9 elevation.
10

11 CHAIRPERSON BRANNAN: What are your, what
12 are your recommendations for, for mitigate against
13 sunny day flooding?

14 DR. SWEET: Ah, again it's very much ah,
15 ah, elevation driven. You know, one thing's for
16 certain. Where impacts are already a problem, they
17 will continue to get worse. Other areas that
18 currently aren't impacted are likely to become
19 impacted, but, again, since we're only sort of
20 providing [inaudible] at a fixed elevation, we're
21 really just talking about frequency increases in
22 these areas. But we know that it's just not this
23 threshold, if a foot higher it's gonna be even less,
24 ah, you know, it's more rare today, but they're gonna
25 become more probable. So we can do the same sort of

1 map. But essentially if storm water drains are going
2 to become continuously infiltrated, ah, lower
3 elevations are gonna continuously going to flood and
4 saturate. Um, so, you know, it's, it's a hard idea.
5 I'm not exactly sure, you know, giving best guidance
6 of how to respond. But, again, ah, areas that are
7 being impacted now they're only going to experience
8 more, ah, impacts in the future. So if, if the
9 infrastructure is not meant to be inundated, if it's
10 not expect, ah, ah designed to be exposed to salt
11 water, then that very well will be a problem and
12 continue to be a problem moving forward.

14 CHAIRPERSON BRANNAN: What do you, what
15 do you make of this, this, this very, very busy, ah,
16 hurricane season we're seeing?

17 DR. SWEET: Yeah, it's something, you
18 know, as we move forward, um, climate models all
19 predict, you know, more intense storms, maybe not
20 necessarily more storms in general. Ah, there are
21 mixed signs right now as to exactly how, ah,
22 frequency will play out. But one thing is for
23 certain is that there are patterns, ah, big storms do
24 occur. Um, the likelihood of, of hitting one
25 particular area, you know, is not the same as the

1
2 likelihood of the, you know, storms increasing in
3 general. But I think it's important to recognize
4 that, you know, if there is a risk of major flooding
5 from major storms that that needs to be understood.
6 Um, the sediments deposits, there are a lot of ways
7 of overwash, of people analyzing, you know, past
8 storm frequency. These big storms aren't
9 necessarily, ah, overly, ah, rare. You know, I think
10 the Hurricane Sandy types of events have been
11 documented probably occurred several times in the
12 last, ah, several hundred years in, in the area of
13 New York City. Um, so there are ways of
14 understanding what the risks are, at least based on
15 historical record. Um, you know, that is something
16 that is, is very difficult to fully, ah, characterize
17 and develop probabilities of saying, you know, what's
18 the likelihood of an eight, nine, 10 foot flood. Ah,
19 they're just very rare. But I think what is more,
20 ah, with more certainty are these lesser extremes,
21 the things that happen, you know, once every 10 years
22 or so. They're gonna become much more probable. We
23 have observed them and we know what to expect with,
24 with sea level rise. So there's two ways to adapt.
25 The big storms have big problems and you can expect

1
2 them just, you know, very rarely and you can build
3 walls and try to prevent the surge from occurring.
4 But the lesser extremes being more tidally driven are
5 gonna find other ways, other conduits to access a
6 community. So I think it poses sort of a binary
7 challenge in, in how to live with threats that are,
8 you know, rare and severe and those that are lesser,
9 ah, extreme but become a more frequent, ah, under a
10 future sea level rise.

11 CHAIRPERSON BRANNAN: Thank you, Doctor.
12 I appreciate your time. I don't know if any of my
13 colleagues have question for, for the doctor? OK.
14 All right. Doctor, thank you so much. We really
15 appreciate this.

16 DR. SWEET: Thank you.

17 COMMITTEE COUNSEL: Thank you, Chair
18 Brannan, and thank you, Dr. Sweet. We will now call
19 on members of the administration to testify. First,
20 Jamie Bavishi, followed by Deputy Commissioner of
21 Response, John Grimm, of New York City Emergency
22 Management. For the question and answer period only
23 we will also be joined by Assistant Commissioner of
24 Response, Johanna Conroy. Before we begin I will
25 administer the oath. Director Bavishi, Deputy

1 Commissioner Grimm, and Assistant Commissioner
2 Conroy, I will call on each of you individually for a
3 response. Please raise your right hands. Do you
4 affirm to tell the truth, the whole truth, and
5 nothing but the truth before these committees and to
6 respond honestly to council member questions?
7
8 Director Bavishi.

9 DIRECTOR BAVISHI: Yes, I do.

10 COMMITTEE COUNSEL: Deputy Commissioner
11 Grimm.

12 DEPUTY COMMISSIONER GRIMM: I do.

13 COMMITTEE COUNSEL: Assistant
14 Commissioner Conroy.

15 ASSISTANT COMMISSIONER CONROY: I do.

16 COMMITTEE COUNSEL: Thank you. Director
17 Bavishi, you may begin when ready.

18 DIRECTOR BAVISHI: Good morning. I am
19 Jamie Bavishi, director of the Mayor's Office of
20 Resiliency. I would like to thank Chair Brannan and
21 Council Members Diaz, Constantinides, Ulrich, and
22 Rose for the opportunity to testify today. I would
23 also like to acknowledge my colleagues, Deputy
24 Commissioner Grimm and Assistant Commissioner Conroy
25 from New York City Emergency Management. Deputy

1 Commissioner Grimm will be providing testimony and he
2 and Assistant Commissioner Conroy will join me in
3 answering your questions. As you know, Hurricane
4 Sandy was the most catastrophic natural disaster in
5 New York City's history. The storm, strong winds,
6 and immense storm surge devastated entire
7 communities, causing 19 billion dollars in damage and
8 tragically taking the lives of 44 New Yorkers. Since
9 hurricane season we've made considerable progress
10 towards making New York City safer and more
11 resilient. The importance and urgency of this work
12 has only been further emphasized by how climate
13 change is playing out in our country and around the
14 world. This year has brought devastating and
15 persistent wildfires in the western states and so
16 many Atlantic hurricanes that we resorted to using
17 the Greek alphabet to name them. These disasters
18 make it clear that amidst the ongoing pandemic we
19 must also continue to prepare for future severe
20 extreme weather events fueled by climate change.
21 Since Hurricane Sandy our office has partnered with
22 different city, state, and federal agencies to
23 complete several key coastal resiliency projects. In
24 August of 2019 the city completed a wetlands
25

1 restoration project in Broad Channel, Queens, one of
2 the lowest-lying areas in all of New York City.
3 Several months later, in October of 2019, we
4 completed another wetlands restoration project on the
5 west shore of Staten Island. These projects took
6 environmentally degraded sites and breathed new life
7 into them. They also created new nature-based
8 buffers that will reduce wave impacts during storms
9 and provide rich wildlife habitats. These completed
10 projects build on our many other accomplishments,
11 including the reconstructed Rockaway Boardwalk, a
12 [inaudible] project in Sea Gate, Brooklyn, beach re-
13 nourishments in the Rockaways between Beach 92nd and
14 103rd Streets, street raisings in Broad Channel,
15 Queens, 26 completed Bluebelts projects across three
16 boroughs, and Emergency Management's interim flood
17 protection measures program, which now covers more
18 than 50 sites across the city. As you all know,
19 large capital coastal protection projects take years
20 of planning, contracting, and development. I'm
21 excited to report we're officially breaking ground on
22 the Rockaways Atlantic Shorefront Project later this
23 week, on the anniversary of Hurricane Sandy. This
24 project will span six miles, from Far Rockaway to
25

1
2 Jacob Riis Beach. Earlier this money the city also
3 broke ground on a 75 million dollar expansion of the
4 mid island Bluebelt on Staten Island, which uses a
5 series of streams, ponds, and wetlands to capture
6 rainfall and prevent flooding. And that is not all.
7 We also plan to break ground on the East Side Coastal
8 Resiliency Project next month. This project is one
9 of the most technically complex and ambitious climate
10 adaptation projects anywhere in the world. It's also
11 critically important for advance climate justice in
12 New York City, seeing as it will protect a highly
13 diverse community that includes more than 28,000
14 NYCHA residents. This community was devastated by
15 Hurricane Sandy and this project will deliver the
16 protection they need. We're also continuing to
17 advance many other resiliency projects all across the
18 city, from Red Hook to Jamaica Bay to Staten Island.
19 Our office also continues to focus on insuring that
20 New York City is prepared using a multi-hazard
21 strategy that addresses risks not only related to
22 coastal storms but also from intense precipitation,
23 extreme heat, and sunny day flooding caused by
24 chronic sea level rise. One notable example of our
25 multi-hazard approach in action is the Get Cool NYC

1 program, created by Mayor de Blasio just as COVID-19
2 cases were start to reach their peak in New York
3 City. Recognizing that extreme heat is a silent
4 killer, this program provided free air conditioners
5 to 74,000 elderly low-income New Yorkers. With fewer
6 cooling options available to New Yorkers due to the
7 rapidly spreading virus, this program allowed
8 vulnerable seniors to stay safe and cool in the
9 comfort of their own homes. As we enter a new era of
10 climate catastrophe we expect that more initiatives
11 like this one will be needed to counter the effects
12 of simultaneous and overlapping disasters. As we
13 advance large-scale generational infrastructure
14 projects on the coastline we must remain nimble and
15 adaptable to other emerging threats, including those
16 that impact inland areas. Additionally, we're glad
17 to announce that this year we published the fourth
18 update to the city's climate resiliency design
19 guidelines, a critical tool that can be used to
20 increase resiliency for public facilities and
21 infrastructure, supporting a stronger and safer New
22 York City, while also saving taxpayers money through
23 averted losses. All of our work is and must continue
24 to be informed by the best available science and
25

1 localized data. This year we proudly announced the
2 fourth New York City Panel on Climate Change, which
3 is the most diverse, credentialed, and
4 multidisciplinary panel yet. These 20 members will
5 produce actionable and authoritative scientific
6 information on climate change, resource that is
7 critical in grounding our office in a clear
8 understanding of what types of climate risk we face,
9 how they intersect, and what solutions are most
10 appropriate for mitigating these hazards. Looking
11 forward into the future, we are also focused on
12 seizing the opportunities that come with confronting
13 climate change. In particular we are excited about a
14 recently announced rezoning that will enable the
15 creation of a climate adaptation center on Governors
16 Island. This center will create an international hub
17 for climate resource, engineering, and design that is
18 focused on the solutions that communities and cities
19 need to navigate climate-related threats. This
20 effort is projected to create 8000 direct new jobs
21 and one billion dollars in economic impact for New
22 York City. We hope to work closely with the council
23 and the trust for Governors Island to maximize the
24 impact of this bold and ambitious project. While the
25

1 city has made great, has made great strides towards a
2 multi-hazard and multilayered approach to resiliency
3 there's still much work to be done, and much of it
4 can only be accomplished with the collaboration and
5 partnership with our federal and state partners. We
6 hope to see increased investment from the federal
7 government through a stimulus action in the future,
8 long-awaited reforms to the National Flood Insurance
9 Program, and improved affordability and flexibility
10 for urban environments, and a reinstated harbor and
11 tributary study by the Army Corps of Engineers.
12 Additionally, we are hopeful that the Mother Nature
13 Bond Act will move forward in the next legislative
14 session at the state level, providing critical
15 funding for important green infrastructure projects,
16 storm water management, coastal protections, and heat
17 mitigation strategies. In conclusion, I would like
18 to thank the Committee on Resiliency and Waterfronts
19 for allowing me to testify here today. I will now
20 yield to Deputy Commissioner Grimm from New York City
21 Emergency Management and look forward to your
22 questions following my colleague's testimony.

24 COMMITTEE COUNSEL: Thank you, Director
25 Bavishi. Next we'd like to invite Deputy

1
2 Commissioner Grimm from New York City Emergency
3 Management to testify. Deputy Commissioner Grimm,
4 when you're ready.

5 DEPUTY COMMISSIONER GRIMM: Thank you.

6 Good morning, Chair Brannan and members of the New
7 York City Council. I am John Grimm, deputy
8 commissioner for response and New York City Emergency
9 Management. I'm joined by my colleague, Johanna
10 Conroy, assistant commissioner for interagency
11 operations. We are pleased to be here to discuss
12 hurricane preparedness for the 2020 season, which has
13 been extremely active and required us to consider
14 cascading impacts from COVID-19. New York City faces
15 the biggest threat to hurricane season and coastal
16 storms from August through November. This hearing is
17 a poignant reminder that devastating hurricane season
18 such as Hurricane Sandy, can still wreak havoc late
19 in the season. In one of the most active hurricane
20 seasons in memory, we have tracked 28 tropical
21 cyclones in the Atlantic basin, 27 of which were
22 named storms and 11 that were categorized as
23 hurricane season. Preparation for coastal storms
24 requires coordination, coordinated planning to ensure
25 the city is ready to react at any given time. We

1
2 have a robust training and exercise program to build
3 the capacity to carry out the response and annually
4 host exercises involving City Hall executives, agency
5 commissioners, and interagency partners, with the
6 goal of rehearsing crisis decision-making during a
7 coastal storm. An important part of our mission is
8 to support preparedness for all New Yorkers. The
9 Know Your Zone campaign encourages New Yorkers to
10 identify if they live in a hurricane evacuation zone,
11 know the hazards they may face, and take the
12 necessary steps to be prepared. In conjunction with
13 our Ready New York and Ready Kids program we have
14 educated hundreds of thousands of New Yorkers and
15 will work diligently to increase these numbers every
16 day. We are aware that COVID-19 presents a different
17 set of challenges for coastal storm preparedness.
18 Many months ago we tasked members of our cascading
19 impacts planning team to adapt plans to meet this new
20 challenge. Together with our partners at the federal
21 and state level and within the private sector we are
22 finding solutions, for example, by encouraging New
23 Yorkers to add sanitizer and masks to their go bags,
24 by updating our stockpile for evacuation centers, and
25 by working with DOE to ensure that public schools

1 used as evacuation centers can have expanded foot
2 print to ensure adequate social distancing by using
3 classrooms and other spaces and floor markings for
4 proper flow. Already COVID-19 and this hurricane
5 season has provided us with opportunities to learn.
6 Additionally, [inaudible] leads the city's efforts to
7 provide temporary deployable flood protection for
8 critical facilities in neighborhoods in low-lying
9 coastal areas through the Interim Flood Protection
10 Program. For the first time outside of an exercise
11 Emergency Management activated one of 55 operational
12 sites in response to forecasted coastal storm impacts
13 within the South Street Seaport area, which showed
14 the highest potential for coastal flooding from
15 Tropical Storm Isaias. While ultimately impacts from
16 Isaias did not materialize in this area, the
17 deployment provided useful operational experience and
18 we are applying the lessons learned for future
19 deployments at sites across all five boroughs. This
20 is a great example of how we plan, implement, take
21 information gained during an activation, and use it
22 to make our city more resilient in the future.
23 [inaudible] will continue to develop, adapt, and
24 innovate our hurricane preparedness measures to
25

1 provide the best strategies and resources for the
2 City of New York. Across the boroughs we applaud the
3 efforts of the City Council in communicating with
4 your constituents on how to prepare for emergencies.
5 We ask, as always, that you continue to promote
6 Notify NYC, the city's free service that provides
7 timely, accurate information during emergencies,
8 including coastal storms. Thank you for your time
9 today, and I'm happy to answer any questions.

11 COMMITTEE COUNSEL: Thank you. I will
12 now turn it over to questions from Chair Brannan.
13 For these questions, we will additionally be joined
14 by Assistant Commissioner of Response, Johanna
15 Conroy, from New York City Emergency Management.
16 Panelists, please stay unmuted, if possible, during
17 this question and answer period. As a reminder, if
18 council members other than Chair Brannan, would like
19 to ask a question of the administration or a specific
20 panelist, please use the Zoom raise hand function and
21 I will call on you in order. We will be limiting
22 council member questions to five minutes, which
23 includes the time it takes to answer your questions.
24 Thank you. Chair Brannan, please begin.

1
2 CHAIRPERSON BRANNAN: Thank you, Counsel.
3 Ah, I just want to acknowledge that we had been
4 joined by Councilman Eric Ulrich as well. Um,
5 Director, during last year's oversight hearing on the
6 seventh anniversary of Superstorm Sandy, which really
7 feels like yesterday, it's kind of creepy, um, MOR
8 testified that the best strategy for future
9 resiliency planning, ah, was to continuing advocating
10 for the Army Corps, ah, to finish their New York-New
11 Jersey Harbor and Tributary Study, um, and the
12 federal government stopped funding that study, ah,
13 back in February 2020, unfortunately. Um, I guess
14 two things. What we will use as a blueprint for, ah,
15 coastal resiliency projects now, ah, and what actions
16 are you taking to ensure, ah, that coastal
17 protections will be in place throughout the five
18 boroughs and along the 520 miles of our shoreline?

19 DIRECTOR BAVISHI: Ah, thank you for the
20 question, Chair Brannan. So let me take that
21 question in two parts. Um, first of all, I just want
22 to, I just want to say that in terms of resiliency,
23 um, ah, action for the city, um, we're not only
24 preparing for the climate change impacts that will,
25 um, impact our coastline, but we are also preparing

1
2 for the impacts of intense precipitation and, um,
3 extreme heat, um, and so the, the work that we're
4 doing, and there's an enormous amount of work in all
5 five boroughs to prepare for all of the climate
6 change impacts we face, um, ranges from, ah,
7 infrastructure hardening to planting trees to
8 building thousands of rain gardens. Um, it's a
9 massive undertaking and, and we're much further ahead
10 than any other city in the United States. Um, so
11 just wanted to make sure that we're, in terms of
12 resiliency planning we're talking about that, um,
13 entire suite of actions, um, that, ah, we're, we're
14 advancing and the entire suite of hazards the we
15 face. Um, in terms of the harbor and tributary
16 study, um, you know, we were really disappointed in
17 the Trump administration's decision to defund the
18 study. It was a reckless decision and it will
19 literally cost lives, um, and we opposed that
20 decision from the moment that the president tweeted
21 about it. Um, we are very hopeful that after the
22 election in November the study will be reinstated.
23 Um, that could either be accomplished by a new
24 administration or it could be accomplished by
25 Congress. Um, but, you know, in the meantime we have

1
2 known for years that we can't wait for Washington and
3 that's why we've been moving ahead with our own
4 resiliency projects and our own plan. Um, our, our
5 plan is documented in the Special Initiative on
6 Resiliency and Rebuilding Report that was issued in
7 2013 and has been, um, updated and, um, and progress
8 has been reported on since then, um, due to OneNYC
9 reports, um, including the update last year in 2019,
10 um, and, and we are, um, focused heavily on the
11 coast, um, but we're, like I said, also looking to
12 address threats, um, ah, beyond the coast as well.
13 Um, so, ah, we, we are, ah, advancing massive
14 infrastructure projects on the coast, coastal
15 protection projects, including ones that, um, I
16 addressed in my testimony, um, coastal protection
17 projects like wetlands restorations projects in Broad
18 Channel and Staten Island, but also, um, very complex
19 infrastructure projects like the Rockaway
20 Reformulation, ah, Project, which will, ah, be
21 announcing groundbreaking on later this week, um, and
22 East Side Coastal Resiliency, which we'll be breaking
23 ground on next month. Um, and then also, ah, ah,
24 projects to, ah, address extreme heat in central
25 Brooklyn and in the South Bronx, um, and work to

1 address extreme rain, um, things like, ah, building
2 thousands of, of curbside rain gardens all over the
3 city, which capture rainfall and prevent flooding.

4
5 CHAIRPERSON BRANNAN: Have, ah, have you
6 identified, um, community priorities for adaptation
7 alongside, um, the planned, planned or constructed,
8 ah, federal, city, or state projects?

9 DIRECTOR BAVISHI: Community priorities
10 for adaptation, um, yes. We, we, ah, work with
11 communities across the city, um, ah, when we're
12 planning and, um, designing our adaptation projects,
13 and we also consult, um, community adaptation plans
14 or community resilience plans that are developed by,
15 ah, community board groups and, and nonprofit
16 partners. Community engagement has been absolutely
17 critical to all of our work. Um, ah, we, you know,
18 it, we, we take it incredibly seriously and we've
19 been, um, prioritizing it as we design, um, and
20 implement our projects.

21 CHAIRPERSON BRANNAN: So, um, we face
22 multiple challenges here as a city due to climate
23 change that, that intersect with other challenges
24 that are faced by, um, low-income communities and
25 communities of color. Um, affordable housing, urban

1 heat, sea level rise, just, just to name a few. Um,
2 how has the administration analyzed the cross-section
3 of these issues to, to really understand the risks
4 and, and, and what are we doing, ah, to take this
5 into account as planning continues?
6

7 DIRECTOR BAVISHI: We are, um, working
8 very closely with our agency partners. Um, for
9 example, you know, HPD, um, recently released the
10 Where We Live Report, um, which is a report that
11 focuses on, on advancing fair housing. Um, it also
12 accounts for climate change, and this is exactly the
13 kind of action we need to continue to see. We need
14 to continue, um, embed climate change considerations
15 into everything the city does, um, and the only way
16 we're gonna do that is by continuing to build
17 capacity, um, within agencies so that as they are
18 executing their missions and their operations they're
19 also accounting for climate change impacts. Um, only
20 then will we start seeing that, that cross-section,
21 um, that's the, really seeing an acting on the nexus
22 of the different kinds of issues that, um, that you
23 are asking about and, um, we're already seeing that
24 kind of action take place.
25

1
2 CHAIRPERSON BRANNAN: Is there, are we
3 doing anything sort of comprehensive and holistic as
4 it relates to, to this, as, as opposed to just sort
5 of spots here and there?

6 DIRECTOR BAVISHI: Um, we are, ah, I
7 mean, I think that, that it's reflected in the, um,
8 in various city planning processes, right, so, um,
9 ah, we're, we're, the comprehensive approach we're
10 taking is to build climate change considerations
11 into, um, into city levers and city policies, right,
12 city planning processes. We're building climate
13 change into our building code. We're, we're
14 accounting for climate change in our zoning code and,
15 in fact, ah, the Department of City Planning just
16 released, just made an announcement about progress
17 on, um, zoning for coastal resiliency, which will,
18 um, acknowledge that strong building codes are really
19 critical to resiliency and we need to make sure we
20 are making it easier for single, single-family
21 homeowners in particular to, um, to, ah, account for
22 flood resiliency, um, and, and protect their home.
23 So we're, we're basically working to create a culture
24 of resiliency within the city government. Um, that's
25 about as comprehensive as it gets. It's, it's gonna

1
2 take some time and we're, we're, um, ah, but, and,
3 and we're gonna to work on it, but, um, but that is
4 our goal.

5 CHAIRPERSON BRANNAN: Do you think the
6 city is giving enough, the same amount of attention
7 to the so-called outer boroughs as it does to lower
8 Manhattan?

9 DIRECTOR BAVISHI: Absolutely. Ah, um,
10 um, holistic approach starts with the highest-risk
11 areas, um, that's what we've been doing. We've been
12 focused on high-risk areas all across the city. Um,
13 like I said, we're, um, we're, ah, advancing the
14 Rockaway Reformulation Project in Queens. Um, we are
15 advancing, ah, the Staten Island Coastal Storm Risk
16 Management Project in Staten Island. We're
17 advancing, um, um, integrated flood protection system
18 in Red Hook, Brooklyn. Um, these are just the major
19 coastal protection projects, but there are, um, also,
20 ah, projects under way to address extreme heat and
21 intense precipitation all across the city.

22 CHAIRPERSON BRANNAN: So I saw a recent
23 article in the Times that was talking about how some
24 coastal communities are looking at managed retreat,
25 um, and neighborhood-based buy-out programs to help

1 steer development away from the shoreline, ah,
2 particularly in, um, flood-prone, um, neighborhoods.
3 Um, I know FEMA and HUD have announced programs to
4 pay for large-scale, ah, relocation. So has the city
5 studied, um, the need for expanding the availability
6 of, of neighborhood-based buy-out programs?
7

8 DIRECTOR BAVISHI: The city implemented a
9 number of buy-out programs right after Sandy, um, and
10 this was done when, um, federal funding, it was,
11 there were also some programs that were run by the
12 state, um, and by the federal, by federal agencies
13 themselves directly. Um, we are, ah, certainly
14 looking at those programs, um, and, ah, looking at
15 the lessons learned from those programs. Um, we've
16 also in parallel, ah, instituted special coastal risk
17 districts, which is a new, um, ah, fairly new zoning
18 designation that, um, limits density in the most
19 vulnerable areas, um, of the city. Um, which is an
20 important, important step. Um, we are, um, currently
21 the city does not have a financing, um, ah, stream
22 of, of a way to finance, um, buy-outs, um, outside of
23 that, those post-Sandy federal funding streams that
24 we had.

1
2 CHAIRPERSON BRANNAN: So, so earlier this
3 month, um, and this sort of ties into funding for,
4 for all these resiliency projects, which we're all
5 concerned about. Um, I know earlier this month
6 Moody's downgraded the city's credit ratings, um, you
7 know, and, and obviously the downgrade reflects, um,
8 you know, the substantial financial challenges that
9 we're facing right now. Um, and, you know, Moody's
10 is saying the city is on a longer recovery path than
11 most other cities. Um, how will this downgrade,
12 which impacts, ah, almost 40 billion dollars of the
13 city's general obligation bonds, how will that impact
14 the funding for resiliency projects this year, or the
15 next five to 10 years? What's, what's the immediate
16 plan there and, and how are we triaging or, or
17 prioritizing what we do have and what's expected?

18 DIRECTOR BAVISHI: Ah, funding for
19 resiliency projects, um, most of our resiliency
20 projects I should say, um, are, ah, funded by at
21 least some federal or state funding. That funding is
22 locked in. Um, the city has also invested a
23 considerable amount of funding to, ah, many
24 resiliency projects across the city. Um, in terms of
25 how the Moody's credit rating or bond rating, um,

1 affects, ah, ah, New York City's, ah, funding for
2 resiliency projects, um, that's probably a question
3 for OMB. I'm not a financial manager, I'm just a,
4 for the city, I'm just a, a, a resiliency policy
5 expert. So I can't really address that specifically.
6

7 CHAIRPERSON BRANNAN: I'm sorry, go
8 ahead.

9 DIRECTOR BAVISHI: But I will say that
10 we're continuing to be aggressive about, um, ah,
11 pursuing federal and state funding streams,
12 especially proactive funding streams, because, like I
13 said, those, ah, funding streams are absolutely an
14 important catalyst, um, for some of these, ah, more
15 expensive, um, large, complex coastal infrastructure
16 projects.

17 CHAIRPERSON BRANNAN: I guess the reason
18 why I'm asking I because I know, I know there's a
19 city match component to a lot of these projects. So
20 I don't know if there's been internal discussions as,
21 you know, I mean, are all these, so are you saying
22 that all these projects are all systems go, that
23 nothing is on pause, nothing is in jeopardy of being
24 halted or anything?
25

1
2 DIRECTOR BAVISHI: There have been no
3 funding cuts to resiliency projects. Um, even, ah,
4 in, in the context that we're operating in, and we're
5 facing, like you said, um, you know, an unprecedented
6 financial crisis, the, the worst since the Great
7 Depression. We're, um, navigating the, um, the needs
8 of the pandemic, um, while also working to address,
9 ah, the racial injustices, um, ah, that we see in our
10 society and, um, ah, be proactive about the climate
11 crisis. So we're navigating all these layers of
12 crisis at the same time. There have been no funding
13 cuts to resiliency projects and we're moving ahead.

14 CHAIRPERSON BRANNAN: Good. So even,
15 even with the federal government threatening to
16 withhold funding from the city we're not worried
17 about that?

18 DIRECTOR BAVISHI: What I can say is that
19 the funding that we are currently counting on, um,
20 to, ah, ah, support the resiliency projects that are
21 underway, that funding is locked in.

22 CHAIRPERSON BRANNAN: OK. Um, for, what
23 about for future projects? Are we, you know,
24 planning for, um, resiliency projects is the city
25 assuming that there will be adequate state and

1
2 funding, ah, federal funding levels, or if, you know,
3 are there different models for that? Is there a
4 contingency? Are we planning for it? I don't want
5 to just, you know.

6 DIRECTOR BAVISHI: I think there are a
7 lot of exciting opportunities on the horizon. The
8 one that I will specifically, ah, highlight and I
9 mentioned in my testimony is the Mother Nature Bond
10 Act that, um, made some progress in the State
11 Legislature, um, this past year. Um, you know, ah,
12 due to the pandemic it, it, um, it didn't end up
13 moving forward. But, um, you know, I think there was
14 broad support for it and, and we'd love to see that,
15 um, advance again next year and it would be an
16 important source of funding, especially for green
17 infrastructure projects, storm water management
18 projects, um, coastal resiliency and heat mitigation.
19 Um, and, you know, I consistently say and will say
20 here again that we need more support from the federal
21 government, especially, ah, proactive funding for
22 resiliency projects. Too often the funding from
23 federal, for, from the federal government only flows
24 after a disaster and we don't want be reactive, we
25 want to be proactive. And so, um, I, ah, you know,

1
2 would love to see, ah, more pre-disaster mitigation
3 funding, um, and, ah, would appreciate, you know,
4 any, um, partnership from the council on advocating
5 for that.

6 CHAIRPERSON BRANNAN: Sure. I mean, it
7 would certainly be helpful to have someone in the
8 White House who acknowledged climate, the climate
9 crisis as the existential threat that it is. Um, I
10 know that there was, I read somewhere that there was
11 a 3 billion dollar bond that was pulled this year?

12 DIRECTOR BAVISHI: Um, was that the
13 Mother Nature Bond Act?

14 CHAIRPERSON BRANNAN: I don't, I don't
15 know. I'd have to look it up. But I know that there
16 was a bond that had been pulled from the ballot. I
17 don't know.

18 DIRECTOR BAVISHI: Yeah, I think that's
19 the Mother Nature Bond Act. So it was, um, ah, a
20 bond act that was, um, that passed the State
21 Legislature and, um, would have been up for, as a
22 ballot measure. Um, the government decided not to
23 move forward with it given everything else that is
24 going on. Um, but again, like I said before, we, um,
25 you know, are excited about the, the possibility of

1
2 it. Um, and it, it received broad support and we
3 hope to see it move forward in the next legislative
4 session.

5 CHAIRPERSON BRANNAN: OK. Can you
6 provide, um, a list of the projects with, the
7 projected cost of each project, and then which agency
8 is funding it so we can an idea of where we're at
9 with everything?

10 DIRECTOR BAVISHI: Ah, can I follow up
11 with you on that?

12 CHAIRPERSON BRANNAN: Yeah, um, it's
13 important, but, you know, I, I'd like to know how
14 we're prioritizing funding for the different
15 projects, if, if some are being funded and some
16 aren't. Obviously that's super important.

17 DIRECTOR BAVISHI: Yeah. I believe we
18 sent information to your office about that, but I'm
19 happy to follow up and find out what, ah, what else
20 is needed.

21 CHAIRPERSON BRANNAN: OK. Um, the, this
22 is somewhere related. The Sandy Funding Tracker, ah,
23 that was created after the storm, um, for those that
24 don't know it was provided to provide the public with
25 information about projects and spending data, ah,

1 related to the, the recovery efforts. Does the
2 tracker include only projects that are funded by the
3 city?
4

5 DIRECTOR BAVISHI: The tracker includes,
6 ah, projects that are funded by federal sources.

7 CHAIRPERSON BRANNAN: OK, so it's, so
8 then it's everything?

9 DIRECTOR BAVISHI: Um, yeah, so the Sandy
10 Funding Tracker, um, so, let me just take a step back
11 and say that, um, that the, the city's resilience
12 funding is, is actually quite complex. Um, we have
13 funding, um, ah, that is invested by the city, by, by
14 federal sources. Um, some projects are, um,
15 reflected in the city's budget. Others come directly
16 from federal sources and don't come through the city.
17 Um, so it is, um, quite a, a complex, um, you know,
18 landscape of funding. , um, we are working to be as
19 transparent as possible and the Sandy Funding
20 Tracker, um, accounts for all projects that have
21 federal funding. But, you know, if the council has,
22 um, other ideas about how to be more transparent
23 about this funding we're certainly open to the
24 discussion.
25

1
2 CHAIRPERSON BRANNAN: Um, yeah, for the,
3 the coastal resiliency project update, I, I just
4 looked, ah, we did get some of it from you guys but
5 not everything. So if you could provide us with the
6 full most recent up to date, I know it changes by the
7 minute but, um, the info that you sent us was
8 incomplete. So if you could send this to us that'd
9 be great, just to know where we're at with
10 everything.

11 DIRECTOR BAVISHI: Ah, absolutely, and I
12 will, um, just reiterate, um, that there have been no
13 funding cuts to resiliency projects.

14 CHAIRPERSON BRANNAN: OK. I believe you,
15 I'm just scared [laughs]. Um, so, um, another,
16 another thing about the, the Sandy tracker. The,
17 the, most of the, many of the projects on there are,
18 ah, reconstruction projects. So if I wanted to see,
19 or, or the general public wanted to see where the
20 coastal resiliency projects are located or their
21 status and, and how much has been funded where would
22 I, where would I find that? Is that available?

23 DIRECTOR BAVISHI: Um, that information
24 is also on the Sandy Funding Tracker. Um, the Sandy
25 Funding Tracker. Um, the Sandy Funding Tracker, um,

1 accounts for all projects that, um, ah, were funded
2 by post-Sandy dollars that flowed to the city, um,
3 and that includes, um, that includes, ah, coastal
4 resiliency project. Um, again, these are projects
5 that, um, that, ah, are, are included in the city's
6 budget. Um, there are also projects that, um, don't,
7 don't come, that, where the funding doesn't come
8 through the city, for example the Army Corps
9 projects. Um, so, ah, those would not be included in
10 the, in the Sandy Funding Tracker and, again, if
11 there are ways to improve transparency we're
12 certainly happy to talk about it. I know that
13 Council has had the [inaudible] about how to improve
14 the Sandy Funding Tracker previously...

16 CHAIRPERSON BRANNAN: Yeah.

17 DIRECTOR BAVISHI: ...and we incorporated
18 that feedback. So, um, we appreciate Council's
19 partnership on this.

20 CHAIRPERSON BRANNAN: Yeah, I think, I
21 mean, I don't think it's, it's so much as the, the,
22 um, transparency as it is the, it's not all that
23 user-friendly. Um, you know, it might be publicly
24 accessible but I don't think it's as user-friendly as
25 it could be. I mean, I think, I try to always make

1
2 stuff so you can use it with your elbows, so to
3 speak. Um, so I think that there could be work
4 there. I don't know if that's something that MOR
5 could lead on, but I think that would be helpful, um,
6 especially, you know, if we've got nothing to hide
7 then let's just show it, you know, and let's make it
8 easy for folks to find it. Um, I'd love to work with
9 you on that. We've gotten concerns from folks who,
10 you know, are in the weeds on this stuff, you know,
11 um, who also think that it's not quite user-friendly,
12 so. Um, I guess let's talk, I don't know if any of
13 my colleagues are, I don't think I have anybody. Um,
14 Councilman Diaz is here. OK. Um, let's talk a
15 little bit about the 2020 hurricane season. Um,
16 we've got a little bit more than a money to go. Um,
17 we've had now 27 named storms with 10 of them
18 becoming hurricanes. Um, Isaias I feel, you know,
19 caught us off guard, um, and, um, I guess, I guess my
20 concern is that things are only gonna get worse,
21 right? And this, this hurricane season that everyone
22 is saying oh, we've never seen anything like this
23 before, they're gonna start saying that every single
24 year, um, and this hurricane season is not gonna be
25 an anomaly. Um, so what is the city doing sort of

1 broadly or, um, as we continue to see more frequent
2 and, and stronger hurricanes, what are we doing to
3 prepare, um, for the increasing intensity and, um,
4 and likelihood of these storms?
5

6 DIRECTOR BAVISHI: I'm gonna defer to my
7 colleague, Deputy Commissioner Grimm, to answer that
8 question.

9 CHAIRPERSON BRANNAN: All right.

10 DIRECTOR BAVISHI: And I think he needs
11 to be unmuted in order to be able to respond.

12 DEPUTY COMMISSIONER GRIMM: All right.
13 Can you hear me now?

14 CHAIRPERSON BRANNAN: Yes, sir, thank
15 you.

16 DEPUTY COMMISSIONER GRIMM: OK, great,
17 thank you very much. Um, thank you for that
18 question, and, and just to repeat the question again
19 you were asking for what we're looking to do forward
20 to prepare ourselves for, for future storms?

21 CHAIRPERSON BRANNAN: Right, I mean, you
22 know, we all know hurricane season comes the same
23 time every year, but now everywhere you look they're
24 telling us that it's worse than every, it's
25 unprecedented, we've had 27, we've gone through the

1 whole alphabet already. Um, what, if anything, are
2 we doing differently now that it seems that storms
3 are clearly getting more frequent and, and more
4 intense?
5

6 DEPUTY COMMISSIONER GRIMM: Well, we are
7 always in a cycle of continuing to work with our
8 partners. You know, our partners at the federal,
9 state level but also our city partners and our
10 partners in the private, ah, private sector also.
11 And that's something that, um, you know, our
12 preparedness cycle is, is, is continuous. Um, you
13 know, we are not in a spot where we would just, ah,
14 try to reach out and, ah, work through plans, ah,
15 quickly, but that we are always in those
16 conversations, always meeting with our partners and
17 trying to increase our readiness. Um, and we do
18 that, that increased readiness through our planning
19 efforts, but also through our training and exercise
20 programs, ah, where we have several, ah, exercises
21 throughout the year to ensure that we are
22 communicating well, making decisions well together,
23 ah, and also our outreach. Um, outreach is a huge
24 piece of this, um, because it's, ah, not just, again,
25 with our partners that we need to be prepared, but we

1
2 want to make sure that the public themselves take
3 measures themselves to be educated and be prepared
4 themselves. So we really try to do all those
5 efforts, um, on a continuous basis, ah, just to make
6 sure we as an agency, a city, ah, is prepared as well
7 as possible, but also, um, you know, all them
8 members, all the public, that they, ah, themselves,
9 again, are as ready as they can be, ah, and their
10 prepared for, for different events that may come.

11 CHAIRPERSON BRANNAN: So in being, and I
12 agree, obviously, ah, an ounce of prevention is worth
13 a pound of cure and ultimately makes your life easier
14 if there's less to react, you know, if we were being
15 more proactive than reactive. Um, unfortunately, ah,
16 it seems just overall on government we're great at
17 being reactive, we're not great, so great, not as
18 great as being proactive. Um, are there different
19 things that we're looking at or, I mean, you know,
20 if, if the storms are actually getting worse and more
21 intense is it just doing more of what we were already
22 doing or are there different things we're looking at
23 or different things we should be doing? And I want
24 to be a partner to, to help, I mean, you, look, I
25 gotta say, Emergency Management, you guys were

1
2 tremendous, um, after Isaias. I can't say enough
3 good things. Um, but, you know, immediately I
4 started thinking about well, if only we had done
5 more, ah, with tree maintenance, if only, you know,
6 the city paid more attention to the 311 calls about
7 tree maintenance, that kind of thing, that there
8 would have been less to clean up after. Um, so has
9 there been a significant change now that, you know,
10 all the experts keep telling us that 2020, the
11 hurricane season, is just unheralded?

12 DEPUTY COMMISSIONER GRIMM: Obviously,
13 um, you know, we've, we've talked before, after
14 about, ah, Tropical Storm Isaias, and we definitely
15 look at our lessons learned or after actions, what
16 did we take from one storm that we can fix and
17 improve and, and we have continuing conversations,
18 you know, with the Parks Department, with Con Edison,
19 ah, about how we can specifically do better and
20 improve and that's, that's something we always want
21 to do. We always want to take our lessons learned,
22 look at our after actions, and make improvements.
23 Ah, we also are, ah, looking at what, ah, the
24 National Hurricane Center is, is working on and
25 preparing. And they recently, um, updated some of

1
2 their, ah, the, the surge modeling and what that
3 would, ah, could potential [inaudible] event could
4 potential, potentially impact here in New York City.
5 So we're looking at one of those, what they have
6 created and how we need to adjust towards that. Um,
7 so that's something, ah, we'll be spending really
8 this winter looking at does that affect our, our
9 evacuation zones, does that affect centers that we've
10 identified as evacuation centers? This is a lot of,
11 you know, serious work that we need to be able to do
12 and we have to take that data and that information
13 from the National Hurricane Center and make sure that
14 we are applying it to, to our plans and to our
15 procedures. Ah, and that's really gonna take a, a
16 tremendous effort looking through all that data and
17 then overlaying it with, with what we already had,
18 we've already planned for. Ah, so that, that's gonna
19 be a very large, ah, effort, ah, throughout this
20 winter. Um, and, ah...

21 CHAIRPERSON BRANNAN: [inaudible]

22 DEPUTY COMMISSIONER GRIMM: [inaudible]

23 CHAIRPERSON BRANNAN: No, Deputy, were
24 you there during, ah, Sandy? I don't remember.

25

1
2 DEPUTY COMMISSIONER GRIMM: Yes, I was.
3 Yeah, I was in a different, I was in a different
4 position at the time, but I worked in the EOC, in the
5 Emergency Operations Center, during Sandy.

6 CHAIRPERSON BRANNAN: So what did you, I
7 mean, I guess, what are the differences that you saw
8 between Isaias and Sandy? I mean, I know they're,
9 it's apples and oranges. But Isaias certainly was
10 like two hours of destruction, ah, that we weren't
11 really, you know, we thought it was gonna be a water
12 event and it was really a wind event. Um, what, what
13 were the main differences that you saw?

14 DEPUTY COMMISSIONER GRIMM: Well, Sandy,
15 right, Sandy hit everything, right. It was, it was,
16 it was, it was flooding, right. It hit, um, you
17 know, the trees went down, it was a wind event, it
18 was a flooding event. It, it, there was a lot of
19 cascading, ah, ah, issues that, that we had to have
20 with Sandy. So Sandy was, was, you know, very, very
21 serious and had a lot of different impacts. Ah,
22 where Isaias was really mainly a wind event. Ah, we
23 were preparing for it to be potentially, ah, some
24 inundation, ah, that ultimately didn't happen, thank
25 goodness. Um, but it was, and when you look at the

1 numbers, really it was only second only to Hurricane
2 Sandy. And, you know, that wind event caused, ah, as
3 we know, a tremendous amount of trees to go down,
4 which then, ah, caused a lot of power outages in the
5 areas that have, um, you know, overhead power. And
6 beyond that it blocks streets, which is very, very
7 concerning to us because if you have a blocked street
8 now an ambulance, you know, can't get down that
9 street. So even in the areas that don't have
10 overhead power lines, there are hazards that we are,
11 you know, very much concerned with. And, and, again,
12 we are working very closely, we've worked closely
13 with Parks in the past. But, again, we are working
14 closely now with them to continue that conversation.
15 What is it that we did during Isaias that we can do
16 better and what strategies do we need to implement?
17 One of the things that we did during Isaias, we went
18 from a central coordination strategy to a
19 decentralized, ah, strategy, which I think really
20 helped us out, so that instead of trying to bring
21 everything to one point we worked at the borough
22 level and resolved the problem, ah, at a lower level
23 [inaudible] more efficient, ah, pace. We also, ah,
24 created what we termed as tiger teams, where Con
25

1
2 Edison and Parks and Forestry crews would be joined
3 together and be working in concert with each other,
4 and that made for a much more efficient, ah, ah, and
5 effective, ah, ah, methodology to, ah, to, ah, fix
6 some of the issues, where one crew, where a Con
7 Edison crew wouldn't have to wait for a Parks crew to
8 come, or vice versa a Parks crew wouldn't have down
9 time, or a Forestry crew wouldn't have down time
10 waiting on a Con Edison crew, that we would link them
11 and have them work in concert and just be a much more
12 effective team.

13 CHAIRPERSON BRANNAN: Did you, I mean,
14 some people are fans of, of the Fantastic Four, or
15 the X-Men. I'm personally in favor of the Downed
16 Tree Task Force. Those are my favorite, ah, super
17 heroes. Um, can you walk us through, well, two
18 things. Downed Tree Task Force, which I think is
19 great, was that something that did not exist during
20 Hurricane Sandy that we learned from and we created
21 since then?

22 DEPUTY COMMISSIONER GRIMM: No, Downed
23 Tree Task Force actually existed prior to Hurricane
24 Sandy.

25 CHAIRPERSON BRANNAN: OK.

1 DEPUTY COMMISSIONER GRIMM: I think it
2 was, um, it was when we had the tornados come
3 through, ah, I think it came through Bay Ridge
4 [inaudible] so that was really, ah, the time that,
5 after that the Downed Tree Task Force was created.
6

7 CHAIRPERSON BRANNAN: OK.

8 DEPUTY COMMISSIONER GRIMM: So it was
9 created during Sandy, but during Sandy, ah, I think
10 with the number of different events that happened and
11 the damage all over the city, ah, it, it maintained
12 the centralized system. And really since Sandy,
13 every time it's been activated, ah, that has kept
14 with the centralized system, but with the, the
15 numbers that we saw during Isaias, ah, working with
16 Parks, ah, we thought decentralizing it made for a
17 perfect turnaround on, on being able to make
18 decisions and react to problems.

19 CHAIRPERSON BRANNAN: So what, walk us
20 through as, as far as, as far as, um, um, Emergency
21 Management is concerned, um, the process of when a
22 power line gets knocked down, um, what agencies work
23 together, what's, what's the order of things that,
24 like one of the things we ran into during Isaias was
25 any tree that went down, um, you know, whether or

1 not, you know, to the naked eye it was, it was
2 entangled in power lines, usually no one could touch
3 it until Con Ed sort of signed off on it, especially,
4 you know, in the so-called outer boroughs, where we
5 still have overhead power lines, right? Um, is, what
6 is the standard protocol, if a power line comes down
7 or a tree comes down, Con Ed first, number one, has
8 to OK it before anyone can touch it, is that how it
9 goes?
10

11 DEPUTY COMMISSIONER GRIMM: Well, firstly
12 we absolutely want people to call 911, right, if
13 there's a downed power line call 911 because what we
14 want is to make sure that that, that area is safe and
15 then if we need to shut down the block or cordon the
16 area off if there's a live wire down that people
17 could, you know, be killed, could be injured, we
18 really want to make sure first we keep people safe.
19 Um, then also, you know, we do, ah, collect the
20 information in 311 about downed trees. But at this
21 point with it being a 911 call we still do want it
22 to, you know, ah, individuals from the public to
23 make, ah, the call into 311 so can enter in that
24 system. Um, but with a downed wire absolutely Con Ed
25 needs to, ah, needs to make it safe before crews,

1 Forestry crews can come in there and, and address it.
2 Um, so that's really the order of events. And I know
3 with, with, ah, Isaias, you know, there was, there
4 was a lot of coordination, ah, taking place to make
5 sure that we were getting to those, you know,
6 critical, um, ah, critical downed trees. And really
7 the order of priority is, ah, trees that are semi
8 knocked down, right, where a tree is not all the way
9 down to the ground but could continue to fall. That
10 is something we're very concerned with because if it
11 could continue to fall it could fall on somebody, um,
12 or it could fall on something and do more damage, or
13 potentially hurt or kill somebody. So those are the
14 ones we really want to be able to get to. Then we're
15 looking at, um, you know, the blocked streets, which,
16 again, we need to be able to open up the streets so
17 that, you know, ambulances, Fire, PD can make it if
18 there's some other emergency call. And then the
19 trees that are entangled, ah, with, with the wires.
20 Ah, often we see those, those priorities really
21 become, a lot of times they hit multiple priorities.
22 You know, a tree that's hanging is hanging in the
23 wires. That's what's keeping it, you know, from
24 completely falling to the ground. Ah, so we want to
25

1
2 be able to work very closely with Con Edison, get
3 those crews out there, make it safe, not just for the
4 public, but then for the follow-on Forestry crews to
5 be able to, ah, address it.

6 CHAIRPERSON BRANNAN: Um, that's helpful,
7 thank you. I'll have to remember that next time I'm
8 freaking out. Um, the CDC and FEMA, um, and Red
9 Cross as well, they all issued guidance for
10 evacuation if evacuation shelters are needed while
11 we're dealing with COVID. Um, and the guidance
12 emphasizes using, you know, smaller shelters rather
13 than large, ah, congregate areas, obviously because
14 of COVID. Um, is, if, or if not when will the
15 guidance on this be available publicly? Is it
16 available right now as far as what, what Emergency
17 Management, um, protocols are for this sort of thing?

18 DEPUTY COMMISSIONER GRIMM: Ah, I don't
19 know, um, what's available publicly. But I, I can
20 just answer real quick what we have done.

21 CHAIRPERSON BRANNAN: Right.

22 DEPUTY COMMISSIONER GRIMM: Um, working
23 very closely with, ah, the Department of Education,
24 ah, really we have kept the evacuation centers and
25 the, ah, shelters the, the same locations, ah, but

1 what we've done, and again, working very closely with
2 DOE, who has been a great partner to this, is
3 expanded the areas in which people would be able to
4 go, right. In the past we would have wanted to limit
5 that areas, um, and try to utilize the larger spaces,
6 the cafeterias, the gymnasiums, um, but now working
7 with DOE, ah, expanding into the classrooms and, ah,
8 and that's very important to do, as you just, ah,
9 said, to be able to have that social distancing. So
10 if someone had to evacuate, if, if a general
11 evacuation was called, um, people would be able to
12 arrive at an evacuation center. First they would get
13 screened, um, because we wouldn't want someone with,
14 you know, with COVID-19 to be, go into the general
15 area. So they would get screened. If someone has a
16 temperature or, ah, when we ask a series of questions
17 if we identify that yes, OK, this person may have
18 COVID, they will be isolated at that point and then
19 they could be transported, ah, to a different
20 facility, ah, that would be appropriate for them. So
21 the first step would be to do the screening. Then
22 after that within, ah, the building, ah, there's
23 floor markings, there's flow of traffic, so that we
24 would not have people criss-crossing each other, but
25

1 there would be one-way traffic to limit, ah,
2 interactions, and then to expand the spaces that we
3 use in the buildings themselves so that people really
4 would be able to social distance and would not have
5 to congregate.
6

7 CHAIRPERSON BRANNAN: What is, um, I
8 guess, last, last thing. What is the trigger for
9 when we decide to do an evacuation, a coastal
10 evacuation?

11 DEPUTY COMMISSIONER GRIMM: Well, that's
12 really going to be, ah, based on the forecast that
13 we're receiving from the National Hurricane Center.
14 So we are, we are in constant, ah, communication with
15 the National Weather Service, um, and then, ah, you
16 know, and then we would work closer with the National
17 Hurricane Center. Um, as you know, we, we are, ah,
18 in communication with the National Weather Service
19 usually multiple times a day, ah, just on, just on
20 day to day weather. But certainly in the lead-up to
21 a storm we would be, ah, working with them, ah, very,
22 very closely and looking at their surge data and
23 their surge models. Ah, that would really be what
24 would be driving the decision to, if an evacuation is
25 necessary, and if one is necessary what areas would

1
2 be necessary, would really want the science to drive
3 that, ah, drive that decision.

4 CHAIRPERSON BRANNAN: OK. Ah, Deputy,
5 thank you very much.

6 DEPUTY COMMISSIONER GRIMM: Thank you,
7 sir.

8 CHAIRPERSON BRANNAN: Thank you.
9 Counsel, I don't know if there are any of my
10 colleagues that want to ask some questions? I think
11 it's just, ah, Reverend Diaz on.

12 COMMITTEE COUNSEL: OK. Thank you, Chair
13 Brannan. Um, we will now turn to public testimony.
14 I'd like to remind everything that unlike our typical
15 council hearings we will be calling individuals one
16 by one to testify. Each panelist will be given three
17 minutes to speak. Please begin once the sergeant has
18 started the timer. Council members who have
19 questions for a particular panelist should use the
20 raise hand function in Zoom. And I will call on you
21 after the panelist has completed their testimony.
22 For panelists, once your name is called a member of
23 our staff will unmute you and the Sergeant at Arms
24 will give you the go-ahead to begin upon setting the
25 timer. Please wait for the sergeant to announce that

1 you may begin before delivering your testimony.

2 First we will be hearing from Kate Boicourt of the
3 Waterfront Alliance, followed by Carlos Castell Croke
4 from New York League of Conservation Voters. I would
5 like to welcome Kate Boicourt to testify.

6
7 SERGEANT AT ARMS: Starting time.

8 KATE BOICOURT: Thank you very much,
9 Council Member, and, ah, really appreciate your time
10 and focus on this issue. Just briefly, Waterfront
11 Alliance is a nonprofit civic organization and
12 coalition of more than 1100 community and
13 recreational groups, educational institutions,
14 businesses, and other stakeholders. Our mission is
15 to inspire and enable resilient and revitalized and
16 accessible coastlines for all communities. So this
17 hearing is very much in our wheelhouse. I think
18 we've heard a lot today and given the timeline of the
19 challenge I will keep it short to really where we are
20 focusing on in terms of action what we would like to
21 see from the council and the city moving forward.
22 Um, as we know, just last week the city identified a
23 report, they released a report identifying more than
24 100,000 residential units projected to be in the
25 flood plain by the 2050s. Um, so we need a strategy

1
2 for that. Progress has been made and, ah, we
3 appreciate the direction of the resilient zoning
4 recently released and there is an upcoming
5 comprehensive waterfront plan that we're looking
6 forward to seeing from the city, ah, and, and seeing
7 how that addresses these, these challenging issues.
8 Ah, at the same time we are, we're calling on the
9 council to, to partner with us, ah, and others. We
10 have a coalition of more than 90 organizations, of
11 which, ah, a couple are reflected here, ah, that are
12 fighting for federal, state, and local policy change
13 so that we can take a more comprehensive approach.
14 So we are just calling on a few, I'll, I'll name five
15 things that we're aiming for today. Ah, one, we,
16 we'd like to see a framework that informs all land
17 use and infrastructure planning, capital development,
18 and, ah, building regulations that measurably reduces
19 the risks that we have. Two, a suite of adaptation
20 options suitable to, to those risks in every single
21 neighborhood. Three, ah, programs to support a
22 climate transition from increasing the funding for
23 the Center for New York City Neighborhoods Flood Help
24 New York program, establishment of a voluntary buy-
25 out program, and supporting and continuing to

1
2 maintain the resources for emergency preparation and
3 response programs. We also, like we heard earlier
4 today, are really counting on our city to mobilize
5 federal dollars from hopefully stimulus funds. FEMA
6 is building resilient infrastructure and communities
7 program, future infrastructure bills crossing our
8 hands for the Water Resources Development Act, and
9 others that will allow us to really mobilize and, and
10 create green jobs that are addressing this solution.
11 And I heard something about financing strategies. I
12 think we need to start thinking, um, not only federal
13 and, and state level, but on different financing
14 strategies at all levels of government. Lastly, ah,
15 partnering and planning regionally with the US Army
16 Corps of Engineers and communities to build a better
17 plan for the region. Ah, and that's my time. Thank
18 you very much.

19 CHAIRPERSON BRANNAN: Thank you. That
20 was great. Thank you so much. You guys are amazing.
21 Thank you.

22 COMMITTEE COUNSEL: Thank you. Next to
23 testify will be Carlos Castell Croke of the New York
24 League of Conservation Voters, followed by Jessica
25

1
2 Roth of Riverkeeper. Carlos Castell Croke you may
3 begin when the sergeant announces.

4 SERGEANT AT ARMS: Starting time.

5 CARLOS CASTELL CROKE: Thanks. Ah, good
6 afternoon. My name is Carlos Castell Croke. I am
7 the associate for New York City Programs at the New
8 York League of Conservation Voters. NYLCV represents
9 over 30,000 members in New York City, and we are
10 committed to advancing a sustainability agenda that
11 will make our people, our neighborhoods, and our
12 economy healthier and more resilient. I'd like to
13 thank Chair Brannan for holding this important
14 hearing and for the opportunity to testify today.
15 Ah, when Superstorm Sandy hit our city in 2012 it was
16 dubbed a one in a hundred year storm, a misleading
17 label that undervalues the growing threat climate
18 change continues to impose on our world. We believe
19 that in order to better protect our city from this
20 threat we must establish a resiliency plan that
21 preemptively protects from another super storm like
22 Sandy. To date much of our resiliency work has been
23 reactive and fragmented, relying on federal disaster
24 response funds, mobilized by devastation to help
25 certain vulnerable neighborhoods recover and build

1 back stronger. But in a city of islands with 520
2 miles of coastline this approach is inadequate. We
3 need comprehensive and anticipative citywide approach
4 to resiliency. NYLCV supports the passage of
5 legislation such as Intro 1620 that would establish
6 and implement a resiliency plan to protect us before
7 another super storm hits. This plan should build off
8 and work in tandem with existing community-based
9 plans, such as the special niche of rebuilding and
10 resiliency and the local waterfront revitalization
11 plans to reduce redundancies in our resilience work.
12 The plan should also accurately evaluate and report
13 on the specific risks to waterfront properties,
14 neighborhoods, and developments, and be updated
15 regularly to reflect current storm and flood data so
16 that we may develop clear, accessible, and equitable
17 targets for risk reduction. This is critical for
18 low-income communities and communities of color who
19 often bear the brunt of the effects of climate
20 change. Lastly, since our waterfront is home to so
21 many critical infrastructure, so much critical
22 infrastructure, from public housing to airports to
23 power facilities to wastewater treatment plants, it
24 is also important that the plan brings those relevant
25

1
2 stakeholders into the planning process. A full list
3 of comprehensive priorities for this plan will be
4 found in my written testimony. As climate change
5 continues to intensify the magnitude and frequency of
6 natural disasters, it has become clear that New York
7 does not have the luxury of choosing whether or not
8 to improve its resiliency. It is a requirement.
9 Taking a proactive approach will get out in front of
10 the problem before more lives and infrastructure are
11 threatened. We will continue to work with the
12 council and our partners in the Rise to Resilience
13 Coalition for a more resilient future for our city.
14 I'd like to also add that NYLCV is also, um, very
15 supportive of, ah, State Environmental Bond Act and
16 we hope to see that, ah, back on the ballot next
17 year. Thank you for the opportunity to testify.

18 COMMITTEE COUNSEL: Thank you very much.

19 We will next be hearing from Jessica Roth of
20 Riverkeeper, followed by Summer Sandoval of Uproads.
21 Jessica Roth, you may begin when the sergeant calls
22 you.

23 SERGEANT AT ARMS: Starting time.

24 JESSICA ROTH: Good afternoon, Chair
25 Brannan and council members. Thanks for holding this

1 important hearing on the anniversary of Superstorm
2 Sandy. Um, my name is Jessica Roth. I'm the
3 director of advocacy and engagement for Riverkeeper,
4 which is a membership organization with nearly 55,000
5 members and constituents. We protect and restore the
6 Hudson River from source to sea and safeguard drink
7 water supplies through advocacy rooted in community
8 partnership, science, and law. We're extremely
9 concerned that the federal government did not find a
10 resiliency plan for this region important enough to
11 fund in the next fiscal year and that really
12 highlights the importance of the city's role to make
13 sure that something is done properly, even
14 recognizing that the core feasibility study was
15 deeply flawed and lacking in full incorporation of
16 sea level rise and ecosystem [inaudible] threats and
17 community engagement. We need to, um, we need to
18 move forward with a comprehensive regional plan. Ah,
19 the study relied heavily on in-water barriers, which
20 didn't actually account for flood risk and
21 [inaudible] ecological processes and water quality
22 and, ah, Dr. Philip Wharton and his colleagues' most
23 recent study on storm surge barrier protection showed
24 that. I'll be including that with my, um, testimony,
25

1 um, and it's showing that sea level rise will
2 continue to cause exponential increase in frequency
3 for closure of gates and the duration of time that
4 they would have to be closed and so clearly we are
5 and he concludes in his study that, um, that the
6 kinds of decisions about where to be building and how
7 to be building on shore measures should be done on a
8 neighborhood by neighborhood basis and that we should
9 be talking about manage or treat and non-structural
10 options as better options. Um, and we strongly
11 supportive those alternatives and as well as being a
12 member of the steering committee of Waterfront
13 Alliance's convened Rise to Resilience Coalition
14 support their recommendations as well. We recommend
15 following the guidelines of the models from Climate
16 Ready Boston, which is a multilevel, multi, um, level
17 approach to dealing with, ah, within an architecture
18 of a combination including things like living
19 shorelines, green infrastructure, um, and other
20 measures that will help support our waters and our
21 ecosystems and allow our sewage system to continue to
22 function without threatening to pollute New York City
23 communities with trap water. Um, it's also important
24 that when we're looking at a plan such as, ah, a five
25

1
2 borough resilience plan that we require greater
3 community engagement and foster important community
4 buy-ins such as that took place with the Climate
5 Ready Plan. Um, because of the fact that, um, that
6 this is so critical and has been lacking for so long
7 it's also really important that whatever steps we
8 taking moving forward include securing systems of
9 funding and actual incorporation of the participation
10 of communities in especially frontline communities,
11 shoreline communities, and black, indigenous, and
12 communities of color and to make sure that those
13 places are prioritized in anything moving forward.
14 We need to learn from the lessons, ah, from the Hat
15 Study and the failures in it and in order to fully
16 integrate, ah, sea level rise and mitigate against
17 the ecosystem services and environmental threats.
18 Ah, it's also critical that we look to communities
19 for their expertise on, on protective measures and
20 what's already, excuse me, what's already happening
21 with...

22 SERGEANT AT ARMS: Time expired.

23 JESSICA ROTH: ...[inaudible] so we thank
24 you for this opportunity and I'll be submitting more,
25 ah, detailed comments, including, um, Wharton's study

1
2 as well as our testimony from last year because
3 there's a lot of the similar issues that we addressed
4 in our testimony on 1620 last year. So thanks very
5 much for the time.

6 CHAIRPERSON BRANNAN: Thanks, Jess.

7 COMMITTEE COUNSEL: Thank you. We will
8 now hear testimony from Summer Sandoval of Uproads,
9 followed by Daniel Gutman of the Metropolitan Storm
10 Surge Working Group. Summer Sandoval, you may begin
11 when the sergeant calls times.

12 SERGEANT AT ARMS: Starting time.

13 SUMMER SANDOVAL: Thank you for the
14 opportunity to submit testimony today on the eighth
15 anniversary of Superstorm Sandy. My name is Summer
16 Sandoval and I am the energy democracy coordinator at
17 Uproads. I'm here today on behalf of Uproads to
18 share the importance of supporting community-led,
19 comprehensive waterfront planning in the era of
20 COVID-19 and climate change. Founded in 1966 and
21 located in Sunset Park, Brooklyn, Uproads is an
22 intergenerational [inaudible] community-based
23 organization working at the intersection of racial
24 justice and climate change. Today we are faced with
25 multiple crises all hitting communities and low-

1 income communities the hardest. As we acknowledge
2 and anticipate that we will be faced with more
3 unprecedented disasters, New York City must change
4 its culture practice when it comes to working with
5 communities and building for climate mitigation,
6 adaptation, and recovery. A just transition rooted
7 in equity requires us to rethink how we utilize and
8 plan for our waterfronts for the future. Economic
9 recovery means that we cannot afford for climate
10 adaptation and economic growth could be addressed in
11 silence. Decisions on land use, zoning, policies,
12 funding, and partnerships will determine how
13 infrastructure can either support our communities or
14 continue to perpetuate cross-sector inequities in
15 environmental justice communities. Sunset Park is
16 New York City's largest significant maritime and
17 industrial area and we need the political will,
18 investment, and support to use this waterfront to
19 host thousands of climate jobs from New York City's
20 climate leadership and community protection act as
21 well as the city's Climate Mobilization Act. In 2019
22 Uproads partnered with the Collective for Community
23 Culture Environment to develop a community-led
24 proposal for Sunset Park, called a green resilient
25

1 industrial district, or GRID. The GRID is a scalable
2 and replicable model to realize tens of thousands of
3 these climate jobs projected from these climate
4 legislations to address both coastal resiliency and
5 long-term local and regional needs for Sunset Park
6 and the region by training local residents in
7 renewable energy, energy efficiency, retrofit
8 construction, and sustainable manufacturing jobs. The
9 GRID is a model of a 21st century green re-
10 industrialization of an industrial waterfront that
11 can be utilized for regional economic resilience and
12 COVID-19 recovery. It is also an example of a
13 frontline community-led solution to meet both local
14 and regional needs. We are calling for the city to
15 support not only goal setting but creating real
16 processes and investments of how to achieve a just
17 transition. I would like to thank the council for
18 holding this hearing, for the opportunity to testify.
19 Thank you.

21 COMMITTEE COUNSEL: Thank you.

22 CHAIRPERSON BRANNAN: Thank you...

23 COMMITTEE COUNSEL: Sorry, Chair Brannan.

24 CHAIRPERSON BRANNAN: No. Thank you,
25 Summer, appreciate it.

1 COMMITTEE ON RESILIENCY AND WATERFRONTS 85
2 COMMITTEE COUNSEL: Next we will hear
3 testimony from Daniel Gutman of the Metropolitan
4 Storm Surge Working Group, followed by Tommy Lowe.
5 Daniel Gutman, you may begin when the sergeant calls
6 time.

7 SERGEANT AT ARMS: Starting time.

8 DANIEL GUTMAN: Ah, hello. My name is
9 Daniel Gutman. I'm here representing the
10 Metropolitan Storm Surge Working Group, which is
11 composed of scientists, engineers, architects, and
12 planners who have come together to advocate for a
13 regional solution to the storm surge and sea level
14 rise. New York City has not been pursuing a regional
15 approach. The current plan addresses storm surge
16 protection by ultimately relying on shoreline
17 barriers, which would provide only piecemeal
18 protection one neighborhood at a time. The authors
19 of the plan recognized that these shoreline barriers
20 would take decades to construct and are only a
21 partial solution. For example, Mayor Bloomberg wrote
22 that because of sea level rise a storm like Sandy
23 could cause five times as much damage in the 2050s as
24 it did in 2012. If all of the 2013 plans phase one
25 measures were constructed, he wrote, damage would be

1 reduced by only 25%. All he could say about
2 constructing all of the measures was doing so would
3 "result in an even larger reduction." So it seems
4 that a storm as large as Sandy hit New York City in
5 the 2050s flood damage could be higher than
6 destruction caused by Sandy, even if New York City
7 completed all of the, ah, shoreline protection
8 projects envisioned in the current plan. At the same
9 time, Bloomberg administration rejected after little
10 or no investigation a system of offshore regional
11 storm surge barriers. But the experience of many
12 cities around the world has shown that offshore storm
13 surge barriers with moveable gates are the most
14 effective solution, one that could reliably protect
15 the city for the next hundred years. But largely
16 because of the Corps of Engineers Hat Study we know
17 much more about offshore barriers today than we did,
18 than the mayor's office did in 2013. We also know
19 much more about the city's shoreline barrier effort.
20 The East Side Coastal Resiliency Project, for
21 example, we found that the costs more than tripled
22 since it was first proposed and, in addition, once
23 constructed the project would provide full protection
24 for only a short period of time, only about 30 years.

1
2 Because of the time and costs required, the plan
3 needs section protection for many neighborhoods,
4 especially those in the outer boroughs, will
5 inevitably not be constructed for decades. And, ah,
6 your bill 1620 is aimed at overcoming these
7 disparities among neighborhoods and for that reason
8 we suggest that, ah, the bill include a provision
9 that would require the mayor's office to reevaluate
10 the choice between onshore and offshore storm surge
11 protection. And I did want, one issue [inaudible]
12 about, ah, gate closure frequency, ah, Bill Wharton's
13 paper, the, the Corps of Engineers actually has...

14 SERGEANT AT ARMS: Time expired.

15 DANIEL GUTMAN: ...has, the plan of the
16 Corps of Engineers would have a fixed, ah, time
17 average between closures, for example once every two
18 years. Ah, and that would be fixed, an average, so
19 that the closure frequency would not in fact increase
20 as sea level rises. Sea level rise would have to be
21 dealt with in a different way with, with small, ah,
22 barriers onshore, not by this offshore system, which
23 is really only for major storms. And thank you for
24 allowing me to testify.

1 COMMITTEE ON RESILIENCY AND WATERFRONTS 88
2 COMMITTEE COUNSEL: Thank you. We will
3 next hear from Tommy Lowe, followed by Harriet
4 Hirschhorn. Tommy Lowe, you may begin when the
5 sergeant calls time.

6 SERGEANT AT ARMS: Starting time.

7 TOMMY LOWE: Thank you. Um, I am a 45-
8 year resident of the Lower East Side and I'm here
9 representing the thousands of residents who are
10 opposed to the current East Side Coastal Resiliency
11 Plan, including thousands of NYCHA tenants. As you
12 know, this plan was developed, um, after the
13 community spent years developing its own plan, which
14 came in at a cost of about 750 million dollars, only
15 to be superseded with no notice and no planning with
16 the community by a plan that cost 1.45 billion
17 dollars, including 1.1 billion of city tax levy
18 funds. As you know, the council was not made aware
19 of this plan and Commissioner Grillo publicly
20 apologized to both the council and the community at a
21 public, at public testimony. Um, the community plan
22 would have only involved, ah, involved destruction of
23 about 30% of the park and the city plan involves
24 destruction of the entire park, including 1000 trees,
25 and would involve raising the park six to eight feet,

1 destroying the entire park. This plan was reviewed
2 by an outside expert brought in by Borough President
3 Brewer, who only had one week to review it. First of
4 all, the city withheld critical planning documents,
5 including the value engineering report, which
6 allegedly gave the city the idea to change this plan
7 from a Sandy type plan to a combined conflated
8 coastal resiliency sea level rise plan. Um, the city
9 has never, ah, ah, divulged or released this so-
10 called value engineering report, and I would suggest,
11 Chairman Brannan, that you also suggest, because that
12 was withheld and hidden from the outside independent
13 expert. What we're asking for is a total review of
14 this plan, similar to the L train. As you know, when
15 the L train, ah, plan was reviewed, ah, substantial
16 changes were made and incredible improvements were
17 made, including the shortened time schedule. We have
18 been told by the city that interim flood protection
19 is not possible. This would be possible at a minor,
20 at a fraction of the current cost and you saw it
21 being adapted at South Street. I'd also like you to
22 ask the city over 100,000 NYCHA tenants would have to
23 be evacuated in a Sandy type event. There is no plan
24 to evacuate them. And you should also be reviewing
25

1
2 the 350 million dollar plan currently going on on the
3 Lower East Side in NYCHA developments and when the
4 city came before Community Board 3 they said they had
5 no idea what was going on with that plan. That plan
6 is redundant to the existing East Side Coastal
7 Resiliency Plan when completed. So this, this whole
8 plan needs a lot of investigation and I hope,
9 Chairman...

10 SERGEANT AT ARMS: Time expired.

11 TOMMY LOWE: ...Brannan you will have a
12 hearing just on the East Side Coastal Resiliency
13 Plan. Thank you.

14 CHAIRPERSON BRANNAN: Thank you, Tommy.

15 COMMITTEE COUNSEL: Thank you. We will
16 next hear from Harriet Hirschhorn. Harriet
17 Hirschhorn, you may begin when the sergeant calls
18 time.

19 SERGEANT AT ARMS: Starting time.

20 HARRIET HIRSCHHORN: Sorry. Um, I just
21 want to acknowledge that I'm grateful and privileged
22 and lucky to be alive. All of us have lost someone
23 to COVID, neighbors, in-laws, family members,
24 friends, many of our neighborhood businesses have
25 closed. We are traumatized and witnessing a change

1 to New York City that faces tremendous challenges.
2 COVID-19 is affecting all of us, but not equally, and
3 its aftermath will be felt for a long time. Before
4 the virus came to our city the ESCR did not seem like
5 a plan that valued people, that valued our diverse
6 community. We questioned whether there wasn't a more
7 humane, environmentally just, less wasteful, more
8 honestly resilient, and innovative approach. Our
9 neighborhoods have been designated as environmental
10 justice neighborhoods, which specifically mandates
11 that low-income, minority, and other vulnerable
12 groups are engaged and included. Yet for the most
13 part we have not been engaged and included. The
14 decision to demolish the park, changing the plan from
15 the Big U design in which some of us were engaged and
16 included, was made behind closed doors. A charade of
17 community engagement ensued through a ULURP process
18 in which our voices were ignored. Right now COVID
19 rates across the country are soaring. The pandemic
20 is far from over. And during the last seven months
21 the East River Park has been a lifesaver. People
22 flooded into the park, exercising as if their lives
23 depended on it. But also to celebrate birthdays, to
24 talk to neighbors, eat their free meals in the park,
25

1
2 to try to feel a little normal. We talked to each
3 other about COVID, about our city, and strangers
4 spontaneously joined conversations with ER workers
5 who were walking their dogs in the park before a
6 shift, sharing news of progress and treatment with
7 us. Neighbors told each other about applying for
8 unemployment and we shared resources. We checked in
9 with each other to find out who was OK and who needed
10 extra help. At the amphitheater Black Lives Matter
11 rallies were held. Teachers taught English to native
12 Chinese speakers. There were outdoor yoga exercise
13 and dance classes. There was music. Children played
14 and families had picnics, strung up hammocks between
15 the trees. People found sanctuary. The East River
16 Park during the COVID summer was even more NYCHA's
17 back yard than it had ever been. And it was a mecca
18 of social resilience, even more than it had been
19 before. Destroying the park has dramatic physical
20 and mental health consequences on the people who live
21 on the Lower East Side and East Village. Digging up
22 fill underneath, digging up fill underneath a large
23 municipal park that may contain contaminants that
24 could affect our lungs, cardiopulmonary, and nervous
25 systems, while we are all still in a public health

1 emergency, does not seem rationale. Cheaper, faster
2 interim flood protection our neighborhood would be
3 more ethical. When the City of New York will be
4 facing tremendous economic challenges, education and
5 social programs are being slashed, my neighbors are
6 experiencing food insecurity at higher than ever
7 rates...
8

9 SERGEANT AT ARMS: Time expired.

10 HARRIET HIRSCHHORN: ...there are more
11 humane ways to spend 1.1 billion dollars of city
12 funds than to demolish a beloved park. Thank you.

13 COMMITTEE COUNSEL: Thank you. If we
14 have inadvertently missed anyone that has registered
15 to testify today and has yet to have been called,
16 please use the Zoom hand function and you will be
17 called in the order that your hand has been raised.
18 Seeing none, I will now turn it over to Chair Brannan
19 for closing remarks. Chair Brannan.

20 CHAIRPERSON BRANNAN: Thank you, Counsel.
21 Um, this was, ah, a great hearing and in some ways it
22 was déjà vu all over again. Um, I think, ah, eight
23 years ago we woke up to, um, what we had been told
24 was a, you know, once in a hundred year storm, um,
25 and we know that that is no longer the case. Um, and

1
2 I, obviously my concerns remain just as they did a
3 year ago, um, that now with the added challenges and,
4 and fiscal, ah, limitations of COVID, um, and what
5 it's done to our budget, city, state, and federal,
6 um, there are significant concerns that we are not,
7 um, we are now not able to look at this in a holistic
8 way and we absolutely need to prioritize, um, that we
9 continue looking at this, ah, these resiliency
10 efforts, um, to fortify our, our 520 miles of
11 coastline, that we continue looking at this in a
12 holistic way, um, and not in a scattershot approach.
13 So obviously I look forward to the updates that MOR
14 can provide us to see where we're at with all the
15 different projects, um, and the different funding
16 levels and, and, and the different status updates and
17 progress reports. Um, look, I think we all agree we
18 need a citywide approach, um, to resilience, and, um,
19 I think we're all on the same page that that's what
20 needs to happen. Um, but unfortunately I don't know
21 that that's what's actually happening, and now with
22 the, the added concerns of the budget restraints I, I
23 worry that we're gonna have to double down and push
24 even harder, ah, to make sure that the administration
25 remembers that, ah, lower Manhattan is not the only

1 area of the city that needs to be fortified, um, and,
2 and, and that the, the oil, ah, that runs the
3 economic engine of the city which for the time being
4 may still exist in Manhattan, ah, resides in the
5 outer boroughs and it resides primarily, ah, on very
6 vulnerable coastlines that's made up of largely of,
7 of low-income communities and communities of color.
8 So, ah, we need to talk all of this into
9 consideration as we move forward, um, eight years
10 later. So, ah, I thank everyone who worked so hard
11 behind the scenes to put this, this hearing together,
12 um, and with that, ah, I will adjourn this hearing.
13 Thank you. [gavel]

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C E R T I F I C A T E

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date October 31, 2020