Testimony of

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before the

New York City Council
Committee on Environmental Protection, Resiliency, and Waterfronts

Stormwater Resiliency in a Changing Climate

October 22, 2025

Good afternoon, Chair Gennaro and members of the Committee on Environmental Protection, Resiliency, and Waterfronts. I am Beth DeFalco, Deputy Commissioner of Public Affairs and Communication at the Department of Environmental Protection (DEP). I'm joined by Acting Deputy Commissioner Mike Farnan, who leads our Bureau of Water and Sewer Operations (BWSO); Assistant Commissioner Wendy Sperduto, our chief engineer who oversees engineering and capital planning; and Assistant Commissioner Melissa Enoch, who oversees green infrastructure and sustainability. We appreciate the opportunity to speak about stormwater resiliency and the legislation before you today.

When the Commissioner testified on Flooding and Stormwater Infrastructure in 2024, he outlined five realities, which have shaped everything DEP has done since:

1. We are now living through the climate impacts scientists warned us about.
2. Some impacts will continue to surprise us — because climate change brings more extremes and less predictability.
3. Our infrastructure can't evolve as quickly as the climate is changing.
4. Everyone has a role to play — DEP can't solve flooding and resiliency challenges alone.
5. And finally, resilience comes with a cost — paid for through water rates — so we must invest wisely to make every dollar count.

Three years later, all five lessons have proven true. We've made progress — but the pace of climate change means we can't slow down.

Living in a Changed Climate

Every New Yorker has been feeling the effects of climate change. In 2020, the U.S. National Climate Assessment officially moved New York City from a "coastal temperate" to a "humid subtropical" climate zone — essentially, we've moved 500 miles south without leaving home. That means hotter summers, more intense storms, and heavier rainfall.

We've recently experienced some of the most extreme rainfall events in our city's history. The four storms with the highest hourly rainfall rates (at Central Park) in the last 50 years have all occurred since 2021:

1. September 1, 2021 (Hurricane Ida): 3.47 inches

2. July 14, 2025: 2.08 inches
3. September 29, 2023: 1.87 inches;
4. August 21, 2021 (Hurricane Henri): 1.84 inches

These intense rain events strain the capacity of our sewers, which were not designed to manage this sort of inundation. Until 2022, DEP's standard was to design infrastructure to the "5-year storm" but that storm was based on historical data. This meant that projects were designed to handle at first a 1.75" and more recently a 1.85"-per-hour storm. Prior to 1980, when DEP was formed, each borough established its own stormwater standard, and in some cases allowed developers to build without installing stormwater systems. Given that most of our infrastructure is more than 50 years old, large parts of Brooklyn and Queens have smaller sewers, contributing to more frequent flooding events. Some parts of the City – mostly on Staten Island and Southeast Queens – are just now beginning to get storm sewers.

In addition to being more intense, the storms we experience now have different patterns than the ones we're accustomed to. Traditionally, the most extreme storm we would routinely face was a nor'easter. Nor'easters are large, so they would be predictable, and they would cover the whole city more or less uniformly. Our new storms are more tropical in nature. They are hyper-local, hyper-intense, of very short duration, and, unfortunately, very hard to predict.

Infrastructure Can't Evolve As Quickly As The Climate Is Changing

Taking office soon after Hurricane Ida, this administration has made one of its top priorities addressing stormwater resilience. This initiative has required several significant changes in how DEP approaches planning work.

The first was to look ahead instead of back. Since we are building infrastructure for the next 50 years, not the last 50 years, we have to plan for the climate of the future, not that of the past. As a result, we now use the New York Panel on Climate Change's 5-year storm as expected in 2080 as our design standard. This standard is 2.15" per hour, which equates roughly to the historical 10-year storm for NYC.

The second was to create our own internal infrastructure to undertake smart stormwater planning. DEP built a digital model – essentially a digital twin – of the sewer system, to help pinpoint the most impactful interventions. Flooding may occur at one location, but the cause of that flooding may be upstream or downstream. The model now allows us to understand that.

Third, teams used the model to identify the locations that will experience the most impactful flooding in a 2.15" storm. Based on that information, we created a prioritized list of 86 locations across the City that have the highest need. This work is laid out in the 2024 Stormwater Analysis, which is available on the DEP website.

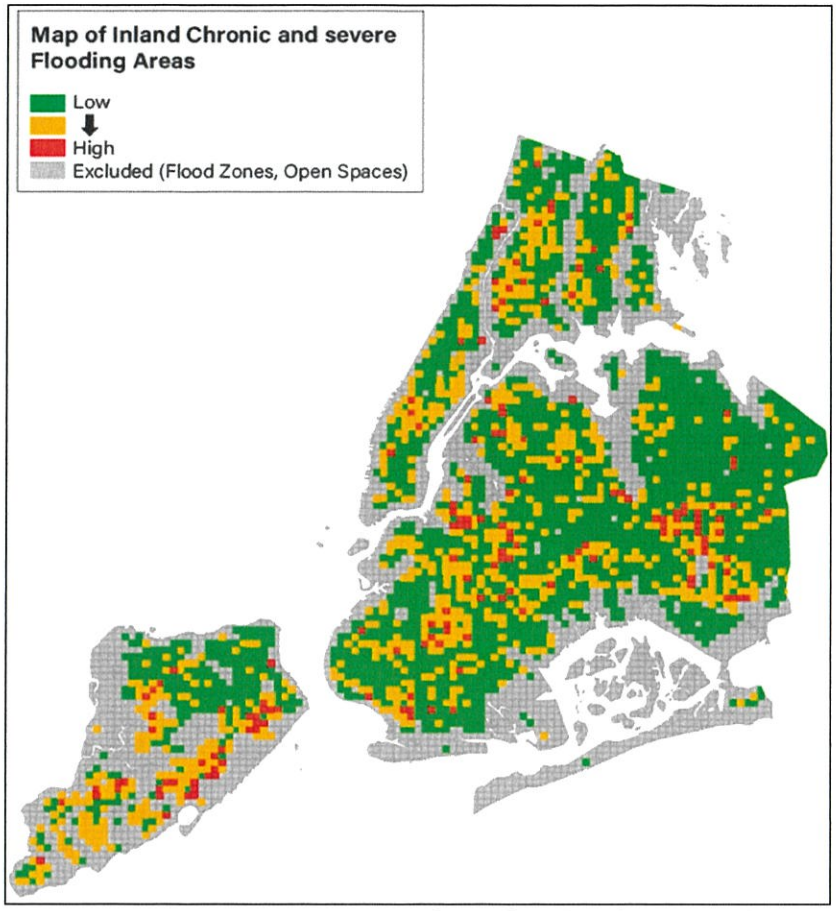

Image from 2024 Stormwater Analysis

Finally, DEP has integrated planning across green and gray infrastructure. At each of these locations, we are looking at all potential solutions on an equal footing. Not only does the terrain, soil, and existing infrastructure in each location shape what is possible, but different solutions may take more or less time to construct. DEP is developing a citywide stormwater resilience strategy, building on what's in *PlaNYC*. A big step forward has been breaking down silos between our green infrastructure and gray infrastructure teams. Historically, they worked separately — one focused on rain gardens and permeable surfaces, the other on sewers and drainage pipes. Now, they're working side by side to find the smartest mix of both.

Stormwater Management Toolkit	
Sewers	Often called "grey infrastructure," these are the pipes and pumps that drain stormwater from the streets. Sewers have traditionally been the first line of defense in a storm. New York City has approximately 7,500 miles of sewers. Sewers work in every rainstorm and protect fully against 98% of rain events. However, just like roads are not designed to handle Memorial Day Weekend traffic, sewers are not designed to handle hurricane-level rain. The sewer system can get overwhelmed when the amount of water produced by a storm is greater than the capacity of the pipes.
Green Infrastructure	Green infrastructure absorbs water into the ground in areas with good soil. Green infrastructure reduces street flooding by capturing and slowing stormwater before it enters the sewer system, freeing up drainage capacity and reducing sewer overflows into local waterways. It can also green neighborhoods, reducing urban heat island effect. Examples of green infrastructure include curbside rain gardens, greened medians with underground stormwater retention, or permeable pavement - a special roadway pavement designed to absorb and drain rainwater.
Bluebelts	Bluebelts divert rainfall away from sewers, provide retention and create rich ecological areas. This solution preserves or restores natural drainage corridors like streams, ponds and wetlands to store and filter stormwater. DEP manages 545 acres of bluebelts and natural areas in the Bronx, Staten Island and Queens.
Cloudburst Management System	A cloudburst is a sudden, heavy downpour that drops a lot of rain in a short amount of time. Cloudbursts can overburden the sewer system and cause flooding. Cloudburst management systems use a combination of grey and green infrastructure to capture and retain or detain stormwater until the sewers can handle the flow.

The 2024 Stormwater Analysis offered four neighborhood case studies of this new approach to planning: Dyker Heights, Knickerbocker, Kissena Park, and Jewel Streets. The engineering teams examined which unique set of tools would best serve each of those locations. Each location has unique challenges and solutions, but a few key lessons stand out:

- When large trunk sewers have unused capacity, upgrading smaller local pipes to connect into that capacity can make a big impact.
- Green and gray infrastructure are most powerful when they work together.
- Green infrastructure is often faster and cheaper to install — but it can't handle every storm or every location.
- In some neighborhoods, expanding traditional sewers is still the best option.

This analysis is just the beginning of a comprehensive Stormwater Master Plan that will guide future engineering, budgeting, and investment priorities. We will continue to keep the Council and the public informed as that Plan takes shape. We will issue reports regularly starting in 2027 and will launch the stormwater analysis dashboard this coming summer to publicly track the status of various planning initiatives.

Work Underway

So far, I've been discussing DEP's new approach to planning, but DEP has also been hard at work in the field undertaking construction as well. Since 2022, DEP has constructed:

- 170 stormwater management systems – underground tanks, porous pavement and rain gardens – on public properties including schools, parks and NYCHA developments;
- 2,890 rain gardens and infiltration basins we've installed in sidewalks;
- 36 green infrastructure practices such as storage systems, porous pavement, rain gardens or green roofs that we have incentivized on private (non-City) properties through grants.

In August, we completed construction on the City's first cloudburst project at NYCHA's South Jamaica Houses. This fall we are initiating construction on two additional cloudburst projects at Rufus King and Archie Spigner parks.

Since 2022, we have also installed over 200 (221) sewer sensors around the City placed in service so we can observe levels inside the sewers. These sensors tell us where and when capacity is reached, information we use to inform project planning.

DEP has been prioritizing projects within our capital plan based on which locations have the biggest challenges and most immediate needs. The 2024 Stormwater Analysis is a roadmap for these priorities. Already, significant work is underway for three of the four neighborhoods that were highlighted in the analysis:

- A $390 million investment (from DEP and DOT) in Bushwick in Brooklyn will address chronic flooding around Knickerbocker Ave. by expanding the sewer under Knickerbocker Ave. so that it has nine times its current capacity.
- Design is currently underway for work in Dyker Heights in Brooklyn that will upsize key pipes to improve drainage capacity in the area.
- A Bluebelt is being considered for Kissena Park in Queens. DEP is working closely with Parks on a potential bluebelt and holds regular community meetings to seek feedback and keep local electeds updated.

As we have repeatedly said, however, the climate is changing faster than our infrastructure can change. The unfortunate reality is that planning, designing, procuring, and constructing these projects takes usually 7 to 10 years. The Knickerbocker Avenue project, for example, will only enter service in 2037.

Everyone Has A Role To Play

The long timeline to re-engineer our sewer system for our new climate is one reason that stormwater has to be thought of as a shared responsibility. In 2022, DEP implemented the Unified Stormwater Rule, which requires property owners – including city agencies such as Parks, DOT, and DDC – to build onsite stormwater management into new construction and renovation projects. Stormwater Pollution Prevention Plans (SWPPPs) have been a concern for some developers as these requirements extend timelines and add costs, but we cannot be serious about addressing stormwater if we are not serious about requiring property owners to help.

Similarly, we need New Yorkers to recognize that protecting their lives and property is a shared responsibility. That's why we've been working with communities across the city through our "Flooding 101" sessions, helping residents prepare for and recover from storms. These sessions include demonstrations of basic equipment – such as flood alarms – that homeowners can install to protect themselves.

While a lot of stormwater planning requires construction, DEP's maintenance crews have also been doing tremendous work to ensure we get full capacity from the infrastructure we do have. Since 2023, BWSO has been using a data-driven, catch basin inspection schedule that prioritizes basins where maintenance is most often required. Because of this approach, and the new catch basin trucks added to the fleet this year, 98% of the more than 87,500 catch basins DEP inspected in FY25 were functional. BWSO has also cut down a backlog of 5,000 uncleared catch basins to less than 1,000 across the city's 154,000 total. That's a big win for stormwater management and it is a key reason that, despite the heavy rain that caused flooding at one subway station during the storm on July 14, we got very few reports of basement flooding or sewer backups that day.

Resilience Comes With A Cost

Most of DEP's work, including our capital work, is funded by water and sewer rates. There is a direct, almost one-to-one correlation between the revenue we collect and the work we are able to do. Planned capital work is one of the factors taken into consideration when the Water Board considers rate increases every year.

As the Commissioner has discussed before, we are constantly thinking about how we can use our resources most effectively. Our resources are finite. Making sure we get the most out of them is one way we keep rates down. We always consider trade-offs and opportunity costs when we decide to allocate resources to one thing over another. We ask that the Council thinks about these trade-offs as well when considering legislation that would mandate expenses. Each new requirement takes resources away from our other work (or requires rates to be increased – or both).

Legislation

Int. 403

The first bill on the agenda today is Int. 403. Int. 403 would require quarterly reporting on the inspection, cleanup, maintenance, and repair of catch basins and would require all catch basins in the city to be inspected once or twice every year.

There are 150,000 catch basins around the city. For a few years, we were required to inspect them all annually. We found that doing so was not necessary and was not an effective use of inspectors' time. BWSO used the results of the annual inspections to create the four-tiered inspection schedule that they are following now. As I mentioned, this schedule has proven to be very effective. More than 87,500 catch basins were inspected last year and 98% of them were functional.

A targeted, efficient, and effective catch basin inspection schedule allows staff to use its time where it is most needed, such as in repairing broken catch basins more quickly or doing other needed system maintenance.

It is difficult to compare year-to-year data about catch basins and SBUs because they are so driven by rainfall, but when comparing FY2025 with recent years with similar rainfall (FY2016 and FY2023), FY2025 saw fewer SBU complaints, fewer catch basin complaints, and faster resolution times.

BWSO Performance indicators	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Rain (inches)	35.22	48.45	42.34	63.53	41.99	47.60	53.53	39.90	61.30	37.44
SBU complaints received	10,469	12,133	11,303	11,965	10,767	11,752	16,652	11,705	11,421	7,345
SBU complaints: Unconfirmed	2,503	2,649	2,389	2,177	2,051	1,983	4,795	2,164	2,851	1,401
SBU complaints: Confirmed	7,960	9,489	8,904	9,796	8,705	9,772	11,858	9,543	8,567	5,946
SBU resolution time (hours)	3.7	3.8	3.7	3.6	3.1	2.7	15.7	3.4	3.2	2.5
Catch Basin complaints received	8,020	8,943	7,673	10,662	6,613	7,241	11,447	8,585	11,064	6,837
Catch Basin resolution time (days)	4.0	5	6.9	7.8	7.8	3.6	3.7	2.9	2.2	2.6

Annual inspections of all catch basins was mandated FY17-FY19.

These are all encouraging indicators about the catch basin inspection schedule and the overall prioritization of sewer maintenance resources. We're happy to work with the bill sponsor to codify a catch basin inspection and reporting schedule, but we don't think the schedule laid out in the bill is the way to go.

Int. 1352

Int. 1352 would prohibit downspouts from being connected to a sewer line during construction or renovations for certain properties in combined sewer areas. This is an issue that the Commissioner has discussed before. Increasingly, with the intense rainstorms we are seeing, homes are experiencing sewer backups not because the sewer is full but rather because the rush of water from the roof creates an internal backup. Further, any water we can keep out of the sewers both creates capacity that we sorely need and helps to reduce combined sewer overflows. So, we are grateful for this bill to shine a light on this concern.

That said, we have discussed this legislation with Chair Gennaro's staff and would like the opportunity to further assess the initiative. The challenge is that the water from a disconnected downspout has to go somewhere. On a single-family lot with a yard, this may not be a problem. In denser areas of the city, these disconnections must be planned carefully so that they do not create a flood. We would like to work with Chair Gennaro and his staff to consider this question, develop guidelines for property owners and consider what should be mandated. We have discussed including this initiative as a component of the Stormwater Master Plan. The Department of Buildings will also speak about this bill.

While downspout connections are legal in the combined sewer areas of the City, they are illegal in those parts of the City that are separately sewered. DEP is beginning to alert homeowners in the separately sewered areas of the City that such connections to the sanitary sewer are illegal and must be corrected. We are starting this outreach in Midland Beach in Staten Island, because this neighborhood is experiencing an increase in sewer back-ups due to these connections. DEP has developed a website with directions and guidance on how to disconnect and a portal for the homeowner to self-certify the fix when it has been made. Our goal is not to issue citations or fines, but rather to ensure that stormwater is kept out of the sanitary system. We invite the Council's partnership to reach out to homeowners about this.

Int. 1395

Int. 1395 would require DEP to construct five "green climate screens" across the city in a two-year pilot project. The technology proposed is a new technology; as far as we know, the only example of this on earth is one constructed in Denmark in 2019. Denmark has not done more than this first installation, because they have not found a second appropriate location. It seems likely that the technology has not proven very valuable, or they would have prioritized more installations. Further, it seems that only one company makes this equipment, so legislation mandating that DEP pilot it seems inappropriate. This may be an appropriate use for Council Member funds if a location were identified, but given that we have identified a $30 billion program for stormwater resilience that must be our top priority, this bill's mandate seems like an unwise distraction.

DEP is now in our third year of the Environmental Tech Lab, a partnership with the Partnership for New York City that helps DEP identify and pilot new technology in a systematic way driven by the agency's needs. We would be happy to connect the provider of this technology with that program so it can compete on its merits, but we must oppose this legislation that mandates a pilot of a specific technology.

Int. 1397

The Department of Buildings is here to testify about Int. 1397. After that, my colleagues and I will be happy to answer any questions that you have.

NYC Buildings

NEW YORK CITY DEPARTMENT OF BUILDINGS
TESTIMONY BEFORE THE NEW YORK CITY COUNCIL
COMMITTEE ON ENVIRONMENTAL PROTECTION,
RESILIENCY AND WATERFRONTS
OCTOBER 22, 2025

Good morning, Chair Gennaro and Members of the Committee on Environmental Protection, Resiliency and Waterfronts. I am Joseph Ackroyd, Assistant Commissioner for Technical Affairs and Code Development at the Department of Buildings ("the Department"). I am pleased to testify before the Committee regarding Intro 1352, which would add a new requirement for stormwater drainage from roofs, and Intro 1397, which would establish a base flood elevation and resilient construction standards for 10-year rainfall flood risk areas.

Intro 1352

Intro 1352 would establish a new requirement for stormwater coming from the roofs of certain buildings to drain towards the street and onto a permeable surface. While we understand the desire to address stormwater drainage, we have significant concerns with the legislation as drafted. The existing regulatory framework requires onsite containment of stormwater when not conveying stormwater to city infrastructure. The proposed bill would effectively allow drainage onto the ground which means onsite containment would no longer be required. The bill does not take into consideration that stormwater drainage, if not contained, does not follow a set path and will go beyond the property boundaries. Requiring stormwater to drain towards the street could result in drainage towards neighboring properties potentially causing flooding. This could create unsafe conditions for pedestrians and damage neighboring properties. Rather than limiting the use of onsite stormwater disposal methods, as proposed in the bill, the Department suggests expanding the applicability of such methods. Such methods include the use of a drywell, which is a chamber below the surface of the property specifically designed to contain stormwater runoff. The use of drywells would ensure that stormwater is contained within the property and is a more effective approach than what is currently proposed.

In addition to the concern regarding potential flooding of neighboring properties, there is some confusion regarding applicability. We read the legislation as applying to new construction and to alterations to applicable systems. However, it is unclear what residential buildings would be subject to the requirement. The proposed new Section 1101.2.5 includes a formula for determining applicability and relies upon terms defined in the Zoning Resolution. Those terms, when used in the context of the subject section, makes the provision unclear and would result in a calculation that could not be applied. As such, it is unclear which buildings would be required to comply. This would need to be clarified. The subject section also provides for exceptions to the new requirements, including one for buildings located in areas of high groundwater level. Groundwater elevation is not information that the Department captures on any plan or document unless a subsurface field investigation is required. As such, determining whether a building qualifies for an exemption using this data point could be problematic.

Intro 1397

Moving on to Intro 1397, which would amend Appendix G of the Building Code to require that new or substantially altered buildings located within 10-year rainfall flood risk areas be built to the standards that apply to certain federal special flood hazard areas. The Department appreciates Council's goal of addressing inland flooding risk. However, we do not believe that the application of Appendix G, which is based on the National Flood Insurance Program requirements, is the most appropriate solution to address such risk, particularly for existing buildings. New York City's built environment poses unique challenges. Retrofitting existing buildings to comply with the requirements of Appendix G can be expensive, and in some instances, retrofitting may not be feasible from a constructability standpoint. Furthermore, even with new buildings, the application of Appendix G would impose certain requirements that would be overly restrictive.

Additionally, expanding section G304.1.1 to apply post Rainfall Flood Risk Area Map (post-RFRAM) construction standards to residential buildings would have the effect of prohibiting dry floodproofing, which is the process of making a structure watertight. It could also prohibit ground floor uses for residential buildings. If these provisions are applied, as written, owners of the subject buildings would be prohibited from retaining or constructing subgrade spaces when substantially improved or newly constructed. Instead, residential building would be required to elevate the lowest floor 3 or 4 feet above grade which could be viewed as an excessive measure for inland

properties that would likely only be faced with 4 inches of standing water from rain. Dry floodproofing and similar methods would enable owners to maintain flexible options for their residential and nonresidential buildings while allowing them to continue using ground floor spaces.

The City of New York recently applied for a Climate Smart Communities grant administered by the New York State Department of Environmental Conservation to research stormwater flood risk and identify effective stormwater management solutions with the goal of promoting the development and sustainability of structures located within 10-year rainfall flood risk areas. This grant, if awarded, would enable the City to conduct critical research to identify effective stormwater management solutions to address the specific environmental challenges New York City's built environment faces. That research will, in turn, inform the recommendations for necessary regulatory changes to address safety risks and reduce damage from stormwater flooding at the building level. The department urges Council to allow this critical work to take place rather than enacting the proposed amendments to Appendix G of the New York City Building Code. The Department welcomes the opportunity to further engage with Council and the Department of Environmental Protection to develop viable stormwater management measures to address New York City's built environment.

Thank you for the opportunity to testify before you today. We welcome any questions you may have.

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BRAD LANDER

Testimony of New York City Comptroller Brad Lander
In support of Resolution 82-2024
New York City Council Committee on Environmental Protection, Resiliency and Waterfronts

October 23, 2025

Thank you for the opportunity to submit testimony in strong support Resolution 82-2024 to advance the mission and continued growth of the NYC Climate Museum. As New York City Comptroller, I'm responsible for taking the long-term view — ensuring that today's decisions build a more sustainable, equitable, and resilient city for generations to come. The NYC Climate Museum plays an essential role in that work. This is not just a museum — the NYC Climate Museum is a civic institution for culture and the sense of hope we need to meet the challenges posed by the climate crisis.

By translating complex ideas into accessible stories and experiences, the Museum builds the public understanding and collective will necessary for bold, lasting climate action. New York City faces urgent and intersecting challenges: rising seas, longstanding inequities in pollution and resilience, and the rapid workforce transition required for deep decarbonization. Effective policy on clean energy deployment, investment in frontline communities, and a just transition are essential — but they require public support that is informed, empathetic, and motivated.

The Climate Museum's exhibitions, programs, and community partnerships help create that foundation, connecting policy to people and action to purpose. As the City continues to lead on climate policy, the Museum's role in shaping civic culture and public commitment is more important than ever.

The permanent opening of the NYC Climate Museum is an investment in the cultural infrastructure that makes strong climate policy possible. I strongly support the City Council's leadership in advancing the Museum's mission and growth, and in partnering with it to strengthen New Yorkers' shared commitment to climate action.

Thank you, Chair Gennaro, and Council Members Hanif, Nurse, Restler, and Louis, for your leadership and for sponsoring this important resolution.

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Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Dr. Cynthia Rosenzweig, Vice Chair, The Climate Museum
Testifying on Behalf of The Climate Museum
October 22, 2025

My name is Dr. Cynthia Rosenzweig, and I am a climate scientist. From 2008 to 2019, I was Co-Chair of the New York City Panel on Climate Change (known as the NPCC), the body of experts that provides the knowledge base for the City of New York to take action on climate change. I was also the Founding Chair of the Climate Museum Board of Trustees beginning in 2018 and have been actively involved in the Board ever since. I am testifying today as a private citizen.

Through many years, the New York City Council's Committee on Environmental Protection, Resiliency, and Waterfronts has played a vital role in assuring that New York City is a world leader of climate change action. One of many examples is the passage of Local Law 42 in 2012 that codifies the NPCC, requiring it to present updated climate risk information and communication at least once during each mayoral administration.

Now the City Council is bringing forward Resolution 0082-2024 *Supporting the Mission and Growth of the Climate Museum*. As a climate scientist, I realized early on that action on climate change depends not just on people's heads (that is what we scientists focus on), but also on people's hearts. The Climate Museum, with its tripartite focus on art and community, as well as science, is essential for mobilizing hearts, not just heads.

The Climate Museum provides the key elements necessary not only for New Yorkers, but for visitors from the U.S. and the world, to solve climate change, the significant planetary challenge of our time and for generations to come.

I want to highlight three activities of the Climate Museum that are especially close to my heart:

1) **Ask a Scientist Day at the Climate Signals Exhibit – 2018**

Scientists were stationed at the climate warning road signs across all five boroughs, engaging with people attending the installation and providing climate science and solutions information.

2) **Climate Speaks Poetry Slam at the Apollo Theatre – 2019**
   High school students from across NYC presented their work on the stage and were awesomely inspiring, especially since they are the generation over whom climate change is most threatening.

3) **The End of Fossil Fuel Pop Up Show in Soho – 2024**
   I lived in Soho for many years and it was gratifying to find this serious yet engaging show amidst Soho's many boutiques and restaurants.

With the tireless momentum provided by the Climate Museum, we've moved way beyond scientists ringing the alarm bells about heatwaves, heavy downpours, and exacerbated coastal flooding. We are now in the solution phase for climate change.

At every show, the Climate Museum creates a huge wall and asks everyone to post a written note on how they will help to solve climate change. By the end of the show, the wall is plastered with individual commitments, which taken together, form the community of actions that solving climate change requires.

Thank you for your service. With the passage of the Climate Museum Resolution, you will continue to enable New York City to be the worldwide leader of climate change action that it is.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Miranda Massie, Director of The Climate Museum
Testifying on behalf of The Climate Museum
October 22, 2025

My name is Miranda Massie, and I am the founder and director of the Climate Museum. On behalf of the staff and board teams at the Museum, we're all so proud of what's happening today, and so thankful to you, Chair Gennaro, to all your cosponsors—my own Council Member Hanif, as well as Council Members Louis, Nurse, and Restler, and the whole committee.

This is a critical inflection point for the Museum as an organization, but it's also a critical inflection point for our country and world, with ongoing federal attacks on freedom of expression, the fabric of our communities, and progress toward a safe and just future for all, values at the heart of our work at the Museum.

We're proud of what this hearing means for the Museum today, but even prouder to live in a city with elected leaders who are standing up for those values.

The Climate Museum

The Climate Museum is the first climate-dedicated museum in the US. We use arts, cultural programming, and storytelling to help our visitors see their own civic agency on climate change and to become actively involved. Our programming started in late 2017 with a panel here and there, and now the Museum has an exhibition count of 17. Our work, which is free and open to all, has touched over 166,000+ visitors, and I'm happy to say, caused powerful ripples of climate engagement, as you will hear from various witnesses.

Civic engagement on climate is important for intrinsic reasons to do with individuals' emotional well-being and communities' civic well-being, but it's also important for policy progress. Movement forward has been slowed and sometimes stymied altogether by an artificial climate silence in our culture.

The origins of this silence are well-documented in an extensive social science literature. Attached to this testimony is one example of the peer-reviewed research in this area. In sum, those supporting clean energy and climate justice constitute a large supermajority. But critically, and even quite tragically, we ubiquitously misunderstand these dynamics and believe ourselves instead to be outnumbered. Because we don't hear our friends and neighbors talking about climate change, we assume it's off the table as a subject; they interpret our resulting silence the same way; and what researchers call a "spiral of silence" results. The Climate Museum's work changes that dynamic and substitutes a virtuous silence of dialogue and action that can support the work of leaders like you who want to move us toward bright futures.

The Climate Museum and New York City

Like many of today's witnesses, the Museum is proudly New York City born and bred. We look to represent our great home city as well as we can.

First, we have the aspiration to echo its ambition and excellence. New York City has demonstrated tremendous capacity for climate leadership. We hope to be a helpful partner as the city continues to take steps forward. NYC also holds uncontested leadership on the cultural front. We inhabit a global cultural capital, from street art and pop culture to the presence of a disproportionate number of the world's greatest museums and cultural institutions. As a creature of NYC, the Climate Museum strives to represent the intersection of these two prodigious strengths.

Second, we look to express our city's diversity, dynamism, and cosmopolitanism, and relatedly, its intellectual excellence.

But most of all, we are deeply committed to championing a spirit of community and care–the spirit you so often find just underneath some tough-as-nails NYC veneer.

The Testimony on this Resolution

We're honored and inspired by the statements offered in support of this Resolution, both in person and in writing, by the Museum's partners, advisors, and visitors. They showcase stories about individual transformation that has taken place at the Museum, as well as the Museum's impact, at an international scale, on museum and cultural institutional practices. They capture the voices of students who will change the world in the future and internationally respected leaders who've changed it already. Witnesses include artists, scientists, writers, teachers, designers, policy experts, foundation officers, communications scholars, in addition to civic, climate justice, and museum leaders. Witnesses' ages range from the 20s to the 70s, and you'll be hearing from Staten Island, the Bronx, and everywhere in between.

We're thankful to all of these witnesses and to all of you. We face challenges that in their scale and urgency are hard even to articulate, much less to address. But together, we can write a new story.

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Americans experience a false social reality by underestimating popular climate policy support by nearly half

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Pluralistic ignorance—a shared misperception of how others think or behave—poses a challenge to collective action on problems like climate change. Using a representative sample of Americans ($N = 6119$), we examine whether Americans accurately perceive national concern about climate change and support for mitigating policies. We find a form of pluralistic ignorance that we describe as a *false social reality*: a near universal perception of public opinion that is the opposite of true public sentiment. Specifically, 80–90% of Americans underestimate the prevalence of support for major climate change mitigation policies and climate concern. While 66–80% Americans support these policies, Americans estimate the prevalence to only be between 37–43% on average. Thus, supporters of climate policies outnumber opponents two to one, while Americans falsely perceive nearly the opposite to be true. Further, Americans in every state and every assessed demographic underestimate support across all polices tested. Preliminary evidence suggests three sources of these misperceptions: (i) consistent with a false consensus effect, respondents who support these policies less (conservatives) underestimate support by a greater degree; controlling for one's own personal politics, (ii) exposure to more conservative local norms and (iii) consuming conservative news correspond to greater misperceptions.

Addressing a collective action problem like climate change requires individuals to recognize the problem as a threat and to engage in coordinated actions that result in major structural and social change. Collective action problems pose a difficult challenge as individuals are less likely to act when there are others who standby and do nothing—and this outcome is only more common when the problem at hand is not clearly perceived to be a threat[1]. Further, research on threat perception suggests we rely heavily on others' reactions to recognize complex or non-immediate problems like climate change as a threat[2,3]. Similarly, perceptions of social norms, including perceiving others' concern and desire for action, may be key to coordinating collective solutions[4,5], including in environmental domains[6,7]. But such processes are hampered if people fail to accurately perceive that others are concerned and support taking action. Systematic misperception of public opinion (i.e., "pluralistic ignorance"[8]) like a widespread underestimation of public support for climate action could inhibit willingness to talk about the problem with others[8,9], and could lead people to falsely conclude that the vocal minority who dismiss climate change are representative of broader public opinion[10]. Further, given that most Americans report concern about climate change and support many policies to address the issue[11,12], why has the US not yet enacted major climate policy to address the issue? If most Americans were unaware of the popularity of their pro-climate action views, this could encourage inaction through pressures to conform to the (mis)perceived political attitudes of others, a phenomenon robust across the political spectrum[13]. These concerning possibilities raise the question:

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Do Americans accurately perceive public support for climate mitigation?

Generally, our perceptions about the world, including the social world, are shaped by society and can be thought of as part of a "social reality", wherein some social truths are widely held and can exert influence over us[14,15]. Notably, whether or not these perceptions are accurate, they can shape our actions and beliefs, including our expectations or judgment of others[16]. To better understand the impact social realities, the role of second order beliefs (our beliefs about others' beliefs) are increasingly highlighted as important contributors to and intervention point for contemporary social problems[17,18]. Indeed, there have been calls for a better understanding of the social determinants of collective behavior to be elevated to a major "crisis discipline" of our time[19]. Here, we investigate norm misperception in the climate policy context. Pluralistic ignorance refers to a systematic and shared misperception of a norm, where many people have the same misconception about what most people do or think[20]. For instance, college students have been found to collectively misperceive that drinking is more common and desirable among their fellow students than is actually the case[21]. In addition to perceptions of local community norms, pluralistic ignorance can also pertain to society-wide misperceptions[17]. For example, people may succumb to the "conservative bias", whereby perceptions of public opinion lag behind actual public opinion by some decades, failing to reflect changes and anchoring on historic levels[22]. The conservative bias is particularly likely when public opinion has recently changed on a topic but policy and structural change has not yet resulted from this shift, leaving little concrete indication of a shift in norms[22].

Previous work suggests there may be pluralistic ignorance on climate concern and some related policies amongst the US public. First, research on a related topic suggests that people systematically overestimate the percentage of others in their country who outright reject the existence of human-caused climate change, with representative samples from US, China, and Australia showing that although most in each country believe in man-made climate change, people underestimate the extent to which their fellow citizens do[23–25]. And, research using student samples has found that college students underestimate their peers concern about climate change, broadly[8]. More pertinent to climate policy, one study found that an online convenience sample underestimated Americans' support to regulate CO2 as a pollutant (broadly, not in a specific policy framework), and concern about climate change[26]. Similarly, research on a sample of U.S. congressional staffers found that many underestimated the popularity of carbon pollution restrictions among the public in their district[27]. Further, work in the northeastern U.S. coastal states using an online convenience sample of Americans found that most underestimate support for regional decarbonization approaches like expanding offshore wind[28]. While piecemeal and unrepresentative, these scattered indicators are a cause for concern—one that demands a conclusive investigation of climate policy pluralistic ignorance using a representative sample to investigate concrete, major national climate policies.

Given the possible role of pluralistic ignorance in stalling progress on this existential threat, it is prudent to investigate fundamental, unanswered questions about pluralistic ignorance on climate policy support: Is pluralistic ignorance around climate policy common in the U.S.? Is it contained to specific pockets of Americans, or does it span many populations over many geographies? Does it affect only specific policies, or does it hold for a variety of climate change mitigation policies (e.g., those utilizing market instruments, as opposed to mandates, or direct investment in infrastructure)? As prior research has found that Americans underestimate fellow Americans' belief in climate change[23], it's possible that they also underestimate public support across a range of climate change mitigation policies (i.e., they may expect lower policy support for any policy addressing a problem if they assume others don't believe that the problem exists). If pluralistic ignorance is present in this context, how large are the misperceptions? Do some misperceptions exist, but perceptions are accurate about majority and minority opinion? Or do they surpass this level and result in misperceiving what the majority of Americans support?

The main objective of the present study is to provide clear and granular answers to the above questions. Additionally, there may be questions about the possible sources of misperception. One contributor to misperceiving popular opinion could be false consensus, where people pay selective attention to others' beliefs that are similar to their own, and overestimate the number of people who agree with them[29]. Indeed, false consensus effects exist for belief in climate change and support for local renewable energy projects in the Northeast US[24,28]. As such, we might expect that U.S. conservatives underestimate support for climate mitigation policies to a greater extent as they have lower approval of said policies.

Second, when forming estimates of frequency or probability, people's guesses are generally shaped by information that is more easily available or retrievable, reflecting an availability heuristic[30]. Thus, people's estimates of national public opinion may show an outsized influence of local norms that are easier to witness firsthand or recall. Given this, people's estimates of the nation as a whole may be swayed by their state-level norms such that those in more conservative states and those in states with fewer climate protests may underestimate climate policy support to a greater degree.

A third possible contributor is media consumption, particularly if media misrepresent public opinion[31]. News media coverage of scientific experts in the U.S. has historically given disproportionately too much time to climate change deniers[32] and presentations of conservatives as oppositional to climate change policy, while the conservative electorate is actually fairly divided on these issues[12]. Given differences in media coverage, one might expect that public opinion misperceptions would be particularly pronounced amongst those who consume news outlets that have been shown to be more inaccuracy-prone[33].

In the present work, we investigate national misperceptions of support for transformative climate policies and broader concern about climate change and show that Americans experience pluralistic ignorance to such a magnitude and breadth that it can be considered a *false social reality*: Americans from all walks of life systematically underestimate public concern about climate change and policy support over a range of climate policies. The magnitude of the effect is such that those who want action are a supermajority (i.e., 66% or higher), while there is a ubiquitous perception across demographics that they are only a minority.

Results

Study overview

To create a detailed picture of the state of pluralistic ignorance for climate policy, we use a large stratified sample of US adults ($N = 6{,}119$) through the Ipsos eNation Omnibus nationally representative panel to compare public opinion on climate change to perceptions of popularity of those same opinions. We commissioned this panel to oversample less-populous states to assess the extent of pluralistic ignorance for each state with greater precision, and aiming for a 10% margin of error for all states. For the full sample, this sample size is more than 80% powered to detect small national levels of pluralistic ignorance (effects as small as $d = 0.04$), as well as being 80% powered to detect separate levels among Democrat, Republican, and Independent partisan groups (effects as small as $d = 0.07$), allowing for very granular comparisons. For all national-level analyses, we applied weights from the survey provider to ensure representativeness (e.g., down-weighting data from smaller states that we oversampled).

Actual levels of U.S. public support on climate policies were obtained from nationally representative public opinion data available

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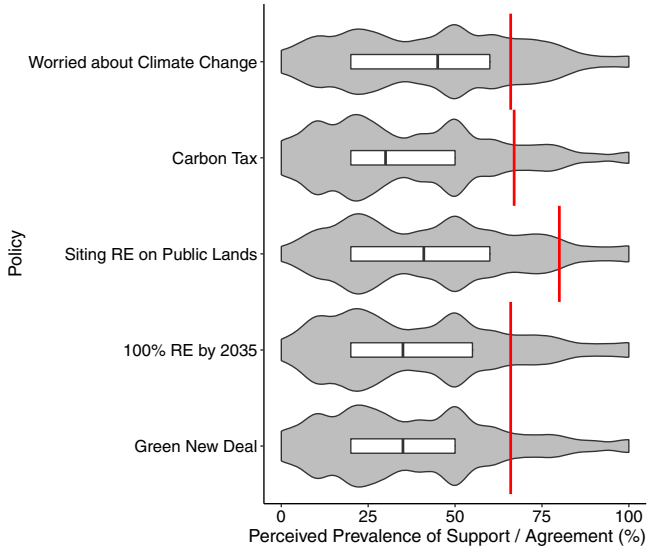

Fig. 1 | Perceived climate change worry and support for climate policies compared to actual levels. Boxes inside the violin plot represent the middle 50% of the sample, with a line at the median, while the minima and maxima illustrated represent the full range of responses (from 0–100%). The red line represents the true prevalence, as indicated by contemporaneous national polling[12,43]. RE refers to renewable energy. $N = 6119$ survey participants.

from Yale's Program on Climate Change Communication (YPCCC), who used the same survey provider who collected the data for the present study (which may help account for any surveyor-specific sampling or data practices)[11,12]. We also use YPCCC's state level estimates of public opinion (which are estimated from their national survey data via multilevel regression with post-stratification). These data were collected during the same year as the data in the present study (see Methods). Further, to avoid any differences in policy support estimates due to item wording in comparing actual levels to responses from our panel, we used precisely the same policy descriptions as used by YPCCC. Thus, if wording for any of the policy items is subtly leading to inflated (or deflated) support numbers, this wording should also lead to inflated (or deflated) estimates of opinion estimates; thus, specific item wording would be unlikely to create discrepancies between actual and perceived policy support.

We asked participants to estimate the percent of Americans who were at least somewhat concerned about climate change (see Methods for full survey text, and a discussion about using the phrase "climate change" vs "global warming" for this item). We then chose a set of specific climate policies especially relevant to the decarbonization of the US and the attainment of climate mitigation goals such as the 2015 Paris Agreement. We intentionally selected a set of climate change mitigation policies that varied in core features such as utilizing market instruments as opposed to mandates, or those that facilitate investment and the creation of infrastructure. For each policy, we asked participants to estimate the percent of Americans who would support it. Our list of policies included support for a carbon tax levied against fossil fuel companies and redistributed to Americans through tax breaks. The list also included a renewable energy standard that mandates 100% electricity generated by renewable energy in the near term —an essential step in decarbonizing our energy production[34]. And, as decarbonizing our energy infrastructure will require rapidly siting of wind and solar across the US, we also included support for siting renewables on public lands[34]. Given the need to consider infrastructure, jobs, and social equity in transitioning to renewable energy, we also asked participants to estimate the support for the Green New Deal (GND). Notably, large environmental policy packages like the GND and the American Jobs Plan may play a key role in passing environmental legislation, as research shows that bundling more redistributive, social equity, and job-creating measures into major environmental policies makes them more popular[35].

Finally, we asked participants about their news consumption, political affiliation, and demographic characteristics, which we used to conduct an exploratory cross-sectional analysis of possible sources of pluralistic ignorance in norm perceptions.

Table 1 | Differences in real vs perceived national policy support

Policy	Actual support (%)	Perceived support (%)	*T*	Cohen's *d*	95% CI of diff. (%)
Carbon Tax	67	36.6	96.26	1.27	29.7–31.0
Siting RE	80	43.4	113.10	1.48	35.9–37.2
100% RE	66	39.5	69.79	0.91	21.9–23.2
GND	66	37.9	89.81	1.17	27.5–28.7

Note. Real, perceived and 95% CI are all in percentages. One sample *t*-tests (two-tailed) were conducted against constant for real policy support values and each have 6118 degrees of freedom. RE refers to renewable energy. GND refers to the Green New Deal.

Prevalence and magnitude of pluralistic ignorance

Figure 1 shows that the vast majority of Americans greatly underestimate how many of their fellow Americans worry about climate change and support transformative climate policies to remedy the situation. While most Americans believe that less than half of the country is worried about climate change ($M_{est} = 43.3$), in actuality it is two-thirds ($M_{real} = 66$), $t(6118) = 70.9$, $d = 0.92$, $P < 0.001$, 95% CI_{diff} = [22.0, 23.3] (see Methods for additional notes on these analyses). Americans' estimates for major climate policy support is the same or even lower ($Ms = 37–43\%$), when in fact two-thirds of the country or more support each of these policies (Table 1). The distributions of these estimates in Fig. 1 show two noticeable concentrations, one at around 50% and another around 25%, salient proportions that seem to serve as focal points for answering these questions, even though a similarly salient proportion—75%—would have been a far more accurate answer. The misperceptions in estimates are so robust that, for every item assessed, the estimates of the lowest 25% and of the middle 50% of respondents falls well below the true values. More precisely, between 79% and 88% of our national sample underestimate public concern or each policy support.

We also asked participants for estimates of support in their home state, and found these perceptions (when averaged across states) to not vary substantially from the national-level estimates and to have very similar distributions (see Supplementary Fig. 1 in the Supplementary Information File). Overall, this pattern of results suggests that people misperceive support for climate action broadly, having non-specific and robust misestimates for support for a variety of climate policies. Indeed, in an exploratory factor analysis of the five responses shown in Fig. 1, a single factor emerged (all other factors had eigenvalues <1).

Pluralistic ignorance across partisans and policies

Breaking these perceptions of national public concern and policy support down by partisan politics, we found that Democrats, Independents, and Republicans all estimate levels for climate concern and climate policy support below 50%, while actual values are much higher. However, Fig. 2 shows that Republicans' estimates were reliably lower than Democrats' by 5–12%, with Independents falling somewhere in between.

For the national policy items, contemporaneous polling was available broken down by partisans, so we can compare partisans' estimates of nationwide support to actual partisan levels of support. Figure 2 shows that when Democrats, Independents, and Republicans

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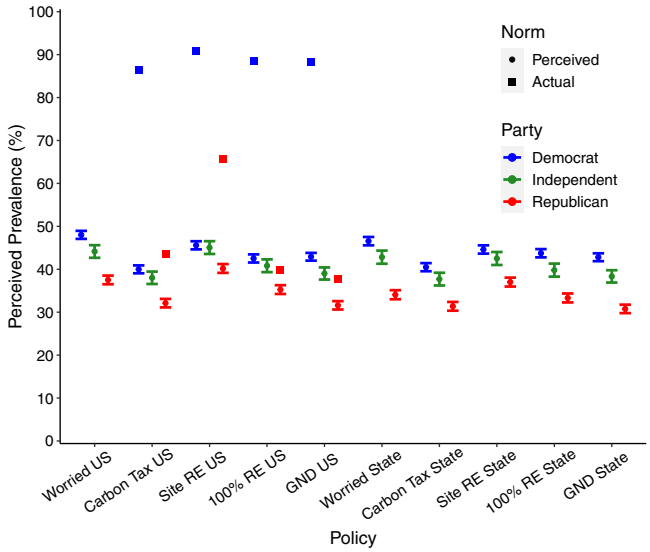

Fig. 2 | Partisan perceptions of popular climate worry and support for climate policy at national and state levels. All judgments were elicited for everyone in either the entire nation or one's state (not only for one's fellow partisans). Items on the left labeled with "US" indicate estimates of support for policies at the national level, while those on the right labeled with "State" indicate estimates of support for those in participants' own state. Actual partisan support levels available from contemporaneous polling (available for four US policies[12]) are indicated by squares. Error bars represent 95% confidence intervals for the norm perception means illustrated. RE refers to renewable energy. GND refers to the Green New Deal. $N = 6119$ survey participants, including 2777 Democrats, 1022 Independents, and 2320 Republicans.

estimate how the nation feels on these issues, their estimates of other Americans' support for these policies only really resemble actual Republican levels of policy support. In fact, even if individuals' estimates for the nation as a whole were, for some reason, based solely on Republican levels of support, all partisan groups would still be underestimating support for policies like a carbon tax and siting renewables on public lands. While differences between partisans are consistent with false consensus effects (e.g., Democrats—who are more likely to personally support climate policy—tend to provide relatively higher estimates of others' policy support than do Republicans), these effects are dwarfed by the absolute levels of misperception held by all Americans that strongly underestimates climate policy support.

For all policies and concern for climate change at the national level, as well as state level support for a carbon tax and concern for climate change, we were able to compare each participant's norm estimates to available contemporaneous data on actual support levels. Doing so, we create difference scores for each participant's estimate, which can be aggregated into pluralistic ignorance levels that we analyze below.

Reflecting the lower norm estimates by Republicans, Fig. 3 shows that Republicans' opinion misperceptions are stronger in magnitude than Democrats' and Independents' across all items. Further, we find that all partisan groups underestimate concern for climate change at both the national and state level by roughly 20–30%. In policy support, we find that the magnitude of misperception is highest for support to site renewables on public lands, with underestimates closer to 35–40%. Underestimation is smaller for support for 100-percent renewable energy mandates, which is still between 20–25% lower than actual levels. Support for a carbon tax and a Green New Deal fall in between these levels.

We can also directly compare state and national pluralistic ignorance levels for the two items for which we have data for both (a carbon tax and worry about climate change) to test if estimates are more accurate for state than national items. Using a mixed model to predict pluralistic ignorance levels across these four items using a dummy-coded fixed effect for item location (state = 0 vs nation = 1) and random intercepts for participant and item type (carbon tax vs worry), we find no difference between the two, $t(21762) = -0.94$, $P = 0.350$, suggesting that people are equally inaccurate at estimating opinions of fellow denizens of their own state, relative to the entire US public.

Regional variation

Aggregating levels of pluralistic ignorance by state, we can map the magnitude of false norm perceptions across the country. Figure 4 shows that residents of *all* states underestimate how much the nation is worried about climate change and support climate policy (for separate maps for each policy, see Supplemental Fig. 2 and Supplemental Fig. 3). For both perceived popular worry and climate policy support, we see that the southern gulf states (e.g., Mississippi) tend to show the highest pluralistic ignorance. But, underscoring the ubiquity of this misperception, even liberal states such as California and New York underestimate climate policy support as much as many conservative states. In fact, no state was less than 20% off in their estimates of climate policy support. These errors are robust for the more proximal state-level estimates as well, where participants of virtually every state underestimated how concerned their fellow state residents were about climate change, and how much they supported a carbon tax (see Supplemental Fig. 4).

Variation by demographics

We regressed pluralistic ignorance across items in a linear mixed model weighted to be nationally representative, with random intercept for participant and item, on the full battery of demographics assessed (see Methods). As shown in Supplementary Table 2, we find a number of statistically significant factors. Consistent with false consensus effects, we find participant's political orientation has a notable effect (with 22% underestimation for those who are very liberal to 33% for those who are very conservative). Race also has a notable impact, with 25% underestimation for white respondents to 35% underestimation for black respondents, and other races falling in between. Other demographic characteristics had smaller, but still statistically significant effects. For instance, those living in urban areas were about 29% off, while their suburban counterparts were 26% off (and rural respondents falling in between).

Notably, there was no demographic group for which the estimated range reached accurate levels—instead all groups assessed were at least 20% off. Further, some demographics which might have been anticipated to predict reduced misperceptions did have statistically significant effects, but were small shifts in absolute terms: Those who attended 12 years of schooling but never obtained a GED or diploma were 28% off, while those with a doctorate were still 27% off, just a single percentage point better.

Variation by local norms

In exploratory analyses, we assessed two state level predictors for their relationship to pluralistic ignorance levels across items with both known real and perceived levels: the voting margin for Biden in the 2020 election (used as a state-level proxy for prevalent political ideology), and the logged number of climate or environmental protests per capita (see Methods). The effects of these predictors were assessed in a multiple regression mixed model with random intercepts for participant and item, and controlling for the top five demographic variables shown to have an effect and likely vary by state (personal political orientation, race, employment status, age, and income). Consistent with an availability heuristic, we find that both indicators of local norms influence norm estimates: there is a significant effect for state political ideology $b = -0.02$, $t(39760) = 2.35$, $P = 0.019$, such that

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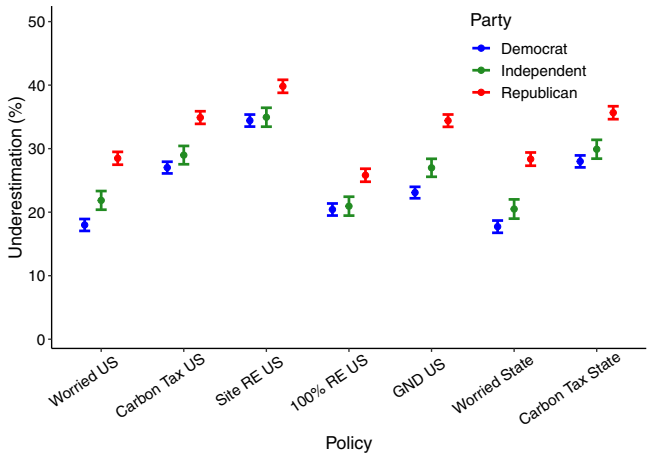

Fig. 3 | Partisan levels of pluralistic ignorance for climate worry and support for climate policy. Pluralistic ignorance is calculated as the difference between real and perceived norm levels, so greater values indicate real levels are higher than perceived norms (i.e. greater underestimation). All perceptions pertain to either the entire nation or one's state (not one's fellow partisans). Items on the left labeled with "US" indicate estimates of support for policies at the national level, while those on the right labeled with "State" indicate estimates of support for those in participants' own state. Error bars represent 95% confidence intervals of the mean differences illustrated. RE refers to renewable energy, and GND refers to the Green New Deal. $N = 6119$ survey participants, including 2777 Democrats, 1022 Independents, and 2320 Republicans.

states with the highest margin for Biden had pluralistic ignorance levels of 25.5%, while those with highest margin for Trump were 28.1% off. We also find a significant effect for state-level environmental protests $b = -0.47$, $t(39980) = 2.32$, $P = 0.020$, such that states with the highest level of protest were estimated to have pluralistic ignorance levels of 25.9%, while those with the fewest protests were 28.3% off.

Variation by media consumption

In exploratory analyses, we assessed the relationship between news media consumption and pluralistic ignorance levels across items. Using a dummy-coded variable to compare consumers of each news outlet (those who view it at least weekly) to those who do not, we assess the effect of media consumption for each outlet in a multiple regression mixed model with random intercepts for participant and item. And as media consumption may vary based on demographics, we control for the full battery of demographics assessed here, including personal political orientation, education, age, race, and income. We find that consumers of all news media outlets underestimate climate concern and policy support by around 25–30% (see Fig. 5, Panel A). Contrasting the differences between viewers and non-viewers of each outlet (see Fig. 5, Panel B), we see relatively lower levels for consumers of public broadcasting (National Public Radio), and mainstream news outlets including major national papers (e.g., New York Times), major cable news outlets (e.g., CNN), national broadcast news networks (e.g., ABC). We see relatively higher levels for those who consume news from major conservative outlets like Fox News and other conservative outlets (e.g., Breitbart), as well as for other liberal outlets (e.g., The Nation).

This pattern generally suggests that media exposure to outlets with less favorable coverage of climate change policy correspond with lower estimates of public support, with the increase in pluralistic ignorance for those consuming "other liberal outlets" as the exception. Notably, "other liberal outlets" was also the least consumed outlet, with only 15.5% regularly consuming it (95% CI = [14.6, 16.4]), while all other outlets were consumed by 20–63% of Americans. One possibility is that consumers of these liberal outlets recognize their news source both liberal and niche, and therefore presume others do not share their more liberal, pro-climate attitudes.

Discussion

We find that roughly 80–90% of Americans underestimate the true level of concern for climate change as well as support for transformative climate policies like a carbon tax, 100-percent renewable energy mandates, and a Green New Deal. Not only are these misperceptions nearly universal in the country, but the magnitude is large enough to fully invert the true reality of public opinion: although polls show that a supermajority support these climate policies (66–80%), the average American's estimate of public opinion suggests it is just a minority (37–3%, effect sizes of the difference ranging from $d = 0.91$–1.48). In other words, supporters of major climate policies outnumber opponents 2 to 1, but Americans falsely perceive nearly the opposite to be true. In fact, Americans' estimates for all national support for climate policies is roughly the same or even lower than even just Republican levels of support.

This misperception is highly robust, being present for all the climate policies assessed here, and true across the country: Americans in every state and of all major demographics are 20% or more off in their estimates of support for all climate policies. In all cases, Americans failed to understand that a strong majority of fellow Americans support climate policy, instead, estimating it to be a minority. Given both the ubiquity and magnitude of misperception, this represents a notable form of pluralistic ignorance, perhaps best described as a false social reality, defined here as a case where an inverted perception of the attitudes of others is nearly held by all in a society.

We also find preliminary evidence for possible sources of this misperception. Our results are partially consistent with previous theory and research on false consensus effects:[29] those who are less likely to support these policies (conservatives) are more likely to underestimate climate policy support by a greater degree. Our results are also consistent with previous theory and research on the conservative bias[22], where people may anchor on more conservative historic levels of political attitudes, failing to update estimates to match current public opinion. Further, consistent with availability heuristics[30], salient information from one's local norms, such as the political ideology of those in one's state, and the number of climate protests one might observe in their state, are also linked to these misperceptions, such that more liberal states and states with more climate protests have somewhat lower misperceptions. Finally, the news media that one consumes may also play a role: those who consume conservative outlets are more likely to have more erroneous views.

Beyond these contributing factors, there are additional psychological mechanisms that may help explain the effects found here. For example, it has been shown that many liberals experience "false uniqueness" whereby they falsely assume that their own opinions are less common than they really are[36], which could explain why even liberals underestimate levels of support for climate mitigation policies by a large degree. Broadly, there are many psychological factors that are plausible contributors to the misperceptions documented here and warrant future research. Additionally, media consumption may correspond with other demographic features not controlled for here and the data used in analyses here are correlational in nature. So while recent research finds that media consumption plays a causal role in shaping political beliefs[37], one should exercise caution in presuming media effect cause the pattern of results observed here until experimental data can confirm such effects.

These results have a number of concerning implications. The extent of pluralistic ignorance in this context presents at least two major hurdles for climate action. First, it undermines people's willingness to discuss the issue[8] and thus obstructs organizing around it. And second, erroneously enlarged perceptions of the opposition's numbers should increase conformity pressures to oppose climate

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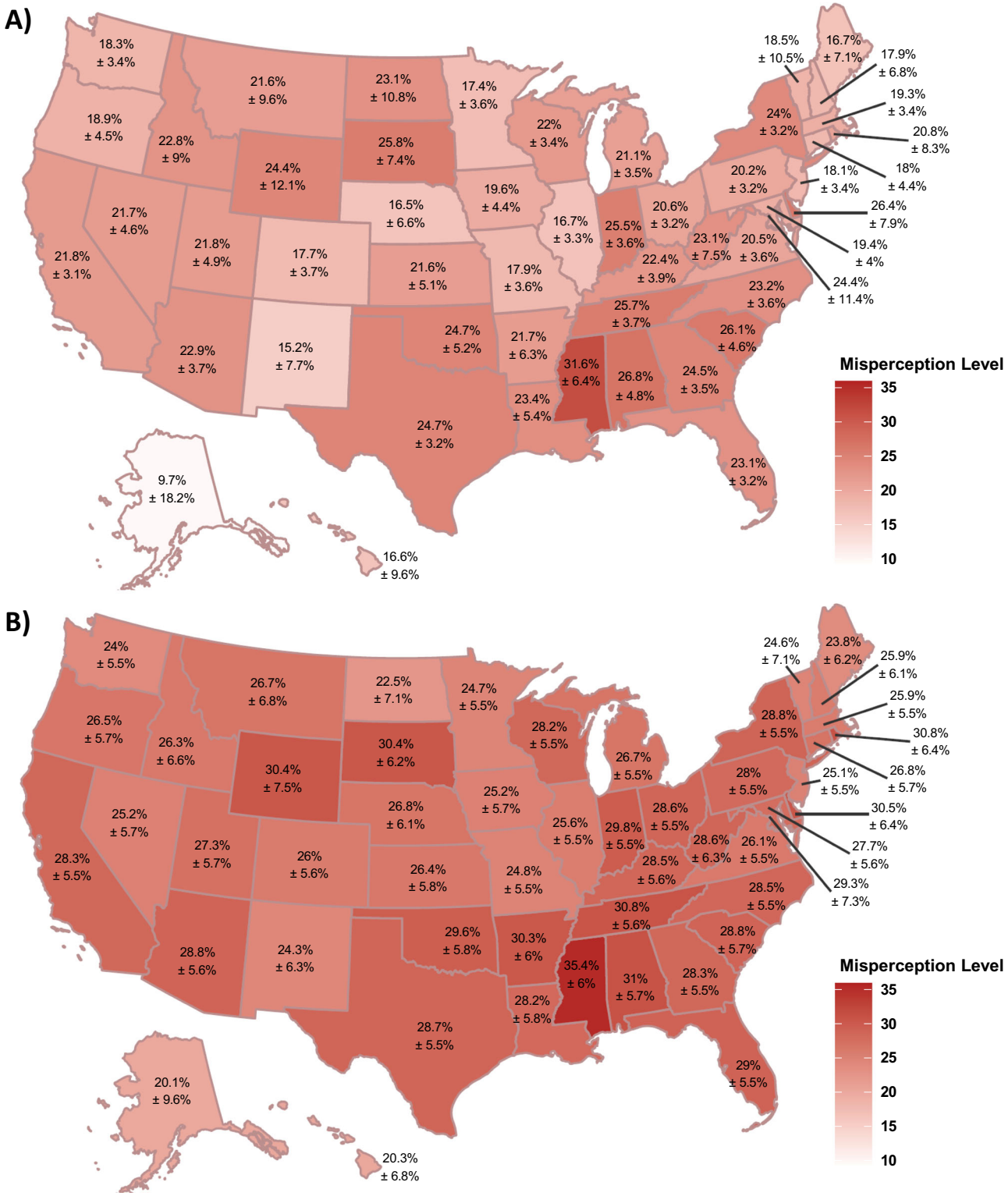

Fig. 4 | Pluralistic ignorance for climate worry and support for climate policy across the U.S. A shows pluralistic ignorance levels for worry about climate change by taking the difference from real and perceived national levels of climate change and averaging those levels across participants in each state. **B** shows levels of pluralistic ignorance for climate policy, calculated by averaging the difference between real and perceived support levels across the four national policies examined for each participant, and then averaging those levels of national policy support misperception for all participants in each state. $N = 6119$ survey participants. In both panels, greater values indicate real levels are higher than perceived norms (i.e. greater underestimation in perception). The ± values represent the margin of error (half of the 95% confidence interval for each state's mean).

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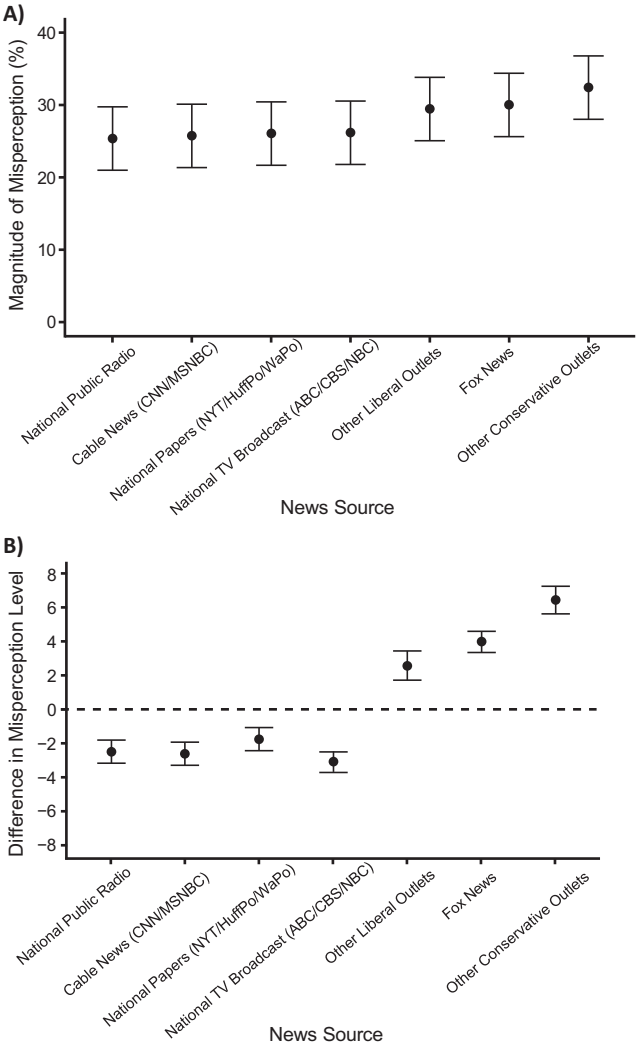

Fig. 5 | Pluralistic ignorance and news media consumption. A shows pluralistic ignorance levels for consumers of each news media source. **B** Shows effects on pluralistic ignorance levels comparing consumers to non-consumers of each news media source (zero = baseline levels of misestimates). Estimates in both panels are obtained from a mixed model contrasting viewers and non-viewers of each news source and controlling for participants' demographics. Pluralistic ignorance levels of $N = 6119$ participants are calculated by taking the difference from real and perceived levels of policy support and climate concern (greater values indicate real levels are higher than perceived norms, i.e. greater underestimation in perception), and controlling for the battery of demographics assessed (see Methods). Error bars are 95% confidence intervals of the means illustrated.

policy[13], diminishing motivation and political pressure to pursue these essential climate goals. Further, a perceived popular consensus around climate change may be key to reducing polarization around climate change as it can help bring conservatives closer to the majority of Americans on the issue[38]—while in the absence of this perceived consensus as seen here, polarization may thrive. If so, these misperceptions represent be a self-fulfilling prophecy: one where underappreciated levels of support for climate policy inhibit support for climate solutions needed, and undermine nascent efforts at substantive change.

The results of our study clearly establish pluralistic ignorance in the US climate policy context, and granularly maps it out, while offering an initial investigation into possible sources. Given the host of ways in which pluralistic ignorance may undermine climate policy support and action, these findings may help us understand the historic absence of major national climate policy despite solid majorities of the American public favoring strong action and setting goals such as net zero by 2050[39]. These results also underscore the need for future research to investigate and document the variety of possible contributing factors of pluralistic ignorance, including those explored here, particularly by utilizing experimental and causal evidence. Such work may help in developing and accessing practically relevant interventions. Norm misperceptions have been addressed by interventions in a variety of domains, such as those aimed at increasing perceptions of tax compliance[40], reducing perceptions of heavy drinking on college campuses[18], and reducing perceptions of that school bullying is approved of[41]. Our work suggests the importance of developing a similar intervention in the climate policy context to correct pluralistic ignorance and help empower efforts to pass transformative climate policies.

Methods

Participants

We used the Ipsos eNation Omnibus nationally representative panel to survey US adults ($N = 6,119$) between April and May in 2021. Ipsos calibrates respondent characteristics to be representative of the U.S. population where source of these population targets is U.S. Census 2019 American Community Survey data, including targets for region, gender, age, and household income. To recruit a greater number of participants from less populated states, Ipsos implemented a cap on the number of participants from larger states (ending recruitment from states after they reached $N = 250$). This method allowed Ipsos to continue using their representative panel, but kept recruitment open for participants in smaller states. While the aim was not to recruit equal numbers from every state, this approach did improve recruitment of participants from small states that otherwise would have very small numbers. Ipsos provided weighed values used in all calculations of national levels to ensure representativeness. These post-hoc weights were made to the population characteristics on gender, age, race/ethnicity, region, and education. Ipsos implemented the following data quality control checks: removal of participants who took less than half of the median time, those who streaked responses in survey responses, and those who did not complete the survey. This survey provider was chosen for its high-quality data collection and for being the same provider used in polling actual levels of concern and support for identical items by the YPCCC, which is one of the most comprehensive polling efforts done on US climate opinion[11].

Materials and procedure

For all norm estimates, participants responded using a free response question. Participants were asked to estimate the percent of Americans who were at least somewhat concerned about climate change, as well as the percent of Americans who supported each of the following climate policies: a carbon tax, a 100-percent renewable energy mandate for electricity, siting renewables on public lands, and a Green New Deal (GND). Each policy was shown given the same brief description as used in polling by the YPCCC (see Table 2). However, our phrasing did differ for the item about worry: while we asked about worry in "climate change", YPCCC asked about worry in "global warming". Another nationally representative sample of Americans[42] polled at the same time (early 2021) asked "How concerned are you about global climate change?", and found similar (slightly greater) levels of concern about (72% at least "somewhat concerned") compared to YPCCC's data on "global warming" (66% at least "somewhat worried"). Differences in concern about climate change and global warming may lead to different precise levels of pluralistic ignorance. Participants were then asked to estimate concern and support for the same policies among those in their state of residence.

In comparing perceived levels to real levels for the items in Table 1, we use a one sample t-test against a constant. Comparing against a constant value reflects the confidence held in the overall

Table 2 | Norm items: what percent of Americans hold the following opinions?

Item	Wording
Climate change Worry	Feel at least "somewhat" worried about climate change.
Carbon tax	Support requiring fossil fuel companies to pay a carbon tax and use the money to reduce other taxes (such as income tax) by an equal amount.
100-percent Renewable energy mandate	Requiring electric utilities to produce 100% of their electricity from renewable energy sources by the year 2035.
Siting renewable Energy on public lands	Support generating renewable energy (solar and wind) on public land in the USA
Green new deal	Support a "Green New Deal" to produce jobs and strengthen America's economy by accelerating the transition from fossil fuels to clean, renewable energy. The "Deal" would generate 100% of the nation's electricity from clean, renewable sources within the next 10 years, upgrade the nation's energy grid, buildings and transportation infrastructure, increase energy efficiency, invest in "green" technology research and development, and provide training for jobs in the new "green" economy.

Note. Wording used in the four policy items is the same as used in polling by YPCCC[11,12].

body of work YPCCC has collected, sampling tens of thousands of observations from nationally representative polls regularly for over a decade. However, one could choose to ignore the broader body of work and use a two-sample *t*-test comparing the perceived value to the specific poll selected for comparison. Doing so does not meaningfully change the results (Supplementary Table 1).

Next participants were asked for their media consumption of the following outlets: "Mainstream cable news (CNN, MSNBC)", "New York Times, Huffington Post, or the Washington Post", "News from ABC, CBS, NBC, or similar local or national TV broadcast news", "NPR (radio or online)", "Fox Cable News", "Other conservative news, shows or radio (Breitbart, Drudge Report, Newsmax, Rush Limbaugh, The Blaze, OAN, etc.)", and "Liberal news outlets (Democracy Now, The Intercept, The Nation, Salon, Mother Jones, Common Dreams, etc.)". These were shown in a matrix with the following frequency options: "Never", "Every few weeks", "Once a week", "Every few days", "Almost every day or more".

We used up-to-date polling data available from YPCCC, including the polling results published in 2021 on worry about climate change[43] and climate policy items[12].

For the state levels of environmental and climate protests, we utilized the protest event data collected by the Crowd Counting Consortium[44]. Of these records, we selected protests from the past 5 years published in May 2021, and pertaining to climate, the environment, and/or energy. This dataset includes protests events with as few as 1 people in attendance, and many of these smaller events lack clear confirmation. Therefore, we only included protests with at least 100 attendees. This yielded 1046 protests of interest spread across the US. We then calculated protests per capita using the 2019 US Census estimates for each states' population and logged the result to obtain a fairly normal distribution (skew = −0.28, kurtosis = 1.2; vs. skew = 6, kurtosis = 58.1 when not logged).

Demographic variables provided by IPSOS include political orientation, age, race, gender, education, income, employment, marriage and housing status, number of children, and whether participants live in an urban, rural or suburban area. This research was approved by an Internal Review Board at the home institution of the corresponding author and informed consent was obtained from all participants. Participants provided their informed consent prior to completing the survey. Data were analyzed in R (version 3.6.1)[45].

Reporting summary

Further information on research design is available in the Nature Research Reporting Summary linked to this article.

Data availability

All data analyzed are included in the supplementary data files (Supplementary Data File 1 for participant data; Supplementary Data File 2 for a participant data codebook; Supplementary Data File 3 for state-level data used; and Source Data for all figure source data). Source data are provided with this paper.

References

1. Fischer, P. et al. The bystander-effect: a meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychol. Bull.* **137**, 517–537 (2011).
2. Latane, B. & Darley, J. M. Group inhibition of bystander intervention in emergencies. *J. Personal. Soc. Psychol.* **10**, 215–221 (1968).
3. Frantz, C. M. & Mayer, F. S. The emergency of climate change: why are we failing to take action? *Anal. Soc. Issues Public Policy* **9**, 205–222 (2009).
4. Biel, A. & Thøgersen, J. Activation of social norms in social dilemmas: a review of the evidence and reflections on the implications for environmental behaviour. *J. Econ. Psychol.* **28**, 93–112 (2007).
5. Ostrom, E. Collective action and the evolution of social norms. *J. Econ. Perspect.* **14**, 137–158 (2000).
6. Bolsen, T., Leeper, T. J. & Shapiro, M. A. Doing what others do: norms, science, and collective action on global warming. *Am. Politics Res.* **42**, 65–89 (2014).
7. Howe, L. C., Carr, P. B. & Walton, G. M. Normative appeals motivate people to contribute to collective action problems more when they invite people to work together toward a common goal. *J. Personal. Soc. Psychol.* **121**, 215–238 (2021).
8. Geiger, N. & Swim, J. K. Climate of silence: pluralistic ignorance as a barrier to climate change discussion. *J. Environ. Psychol.* **47**, 79–90 (2016).
9. Taylor, D. G. Pluralistic ignorance and the spiral of silence: a formal analysis. *Public Opin. Q.* **46**, 311–335 (1982).
10. Maibach, E. et al. *Oxford Research Encyclopedia of Climate Science* (Oxford University Press, 2016)
11. Howe, P. D., Mildenberger, M., Marlon, J. R. & Leiserowitz, A. Geographic variation in opinions on climate change at state and local scales in the USA. *Nat. Clim. Change* **5**, 596–603 (2015).
12. Leiserowitz, A. et al. *Politics & Global Warming* (Climate Change Communication, 2021).
13. Yeager, D., Krosnick, J., Visser, P., Holbrook, A. Tahk, A. et al. Moderation of classic social psychological effects by demographics in the U.S. adult population: new opportunities for theoretical advancement *J. Pers. Soc. Psychol.* **117**, e84–e99 (2019).
14. Searle, J. R. *The Construction of Social Reality* (Free Press, 1995).
15. Durkheim, E. *Rules of Sociological Method* (Simon and Schuster, 1982).
16. Snyder, M. & Swann, W. B. Behavioral confirmation in social interaction: from social perception to social reality. *J. Exp. Soc. Psychol.* **14**, 148–162 (1978).
17. Sargent, R. H. & Newman, L. S. Pluralistic ignorance research in psychology: a scoping review of topic and method variation and directions for future research. *Rev. Gen. Psychol.* **25**, 163–184 (2021).

18. Miller, D. T. & Prentice, D. A. Changing norms to change behavior. *Ann. Rev. Psychol.* **67**, 339–361 (2016).
19. Bak-Coleman, J. B. et al. Stewardship of global collective behavior. *Proc. Natl Acad. Sci. USA* https://doi.org/10.1073/pnas.2025764118 (2021).
20. O'Gorman, H. J. The discovery of pluralistic ignorance: an ironic lesson. *J. Hist. Behav. Sci.* **22**, 333–347 (1986).
21. Prentice, D. A. & Miller, D. T. Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *J. Personal. Soc. Psychol.* **64**, 243–256 (1993).
22. Shamir, J. & Shamir, M. Pluralistic ignorance across issues and over time. *Public Opin. Q.* **61**, 227–260 (1997).
23. Ballew, M. T. et al., *"Americans Underestimate How Many Others in the U.S. Think Global Warming is Happening"* (Yale University and George Mason University, 2019).
24. Leviston, Z., Walker, I. & Morwinski, S. Your opinion on climate change might not be as common as you think. *Nat. Clim. Change* **3**, 334–337 (2013).
25. Mildenberger, M. & Tingley, D. Beliefs about climate beliefs: the importance of second-order opinions for climate politics. *Br. J. Political Sci.* **49**, 1279–1307 (2019).
26. Ballew, M. T. et al. Beliefs about others' global warming beliefs: the role of party affiliation and opinion deviance. *J. Environ. Psychol.* **70**, 101466 (2020).
27. Hertel-Fernandez, A., Mildenberger, M. & Stokes, L. C. Legislative staff and representation in congress. *Am. Political Sci. Rev.* **113**, 1–18 (2019).
28. Sokoloski, R., Markowitz, E. M. & Bidwell, D. Public estimates of support for offshore wind energy: False consensus, pluralistic ignorance, and partisan effects. *Energy Policy* **112**, 45–55 (2018).
29. Ross, L., Greene, D. & House, P. The "false consensus effect": an egocentric bias in social perception and attribution processes. *J. Exp. Soc. Psychol.* **13**, 279–301 (1977).
30. Tversky, A. & Kahneman, D. Availability: a heuristic for judging frequency and probability. *Cogn. Psychol.* **5**, 207–232 (1973).
31. Noelle-Neumann, E. *The Spiral of Silence: Public Opinion–Our Social Skin* (University of Chicago Press, 1993).
32. Boykoff, M. T. & Boykoff, J. M. Climate change and journalistic norms: a case-study of US mass-media coverage. *Geoforum* **38**, 1190–1204 (2007).
33. Licari, P. R. Sharp as a Fox: Are foxnews.com visitors less politically knowledgeable? *Am. Politics Res.* **48**, 792–806 (2020).
34. Larson, E. et al. *Net-Zero America by 2050: Potential Pathways, Deployments and Impacts* (Princeton University, 2021).
35. Bergquist, P., Mildenberger, M. & Stokes, L. C. Combining climate, economic, and social policy builds public support for climate action in the US. *Environ. Res. Lett.* **15**, 054019 (2020).
36. Stern, C., West, T. V. & Schmitt, P. G. The liberal illusion of uniqueness. *Psychol. Sci.* **25**, 137–144 (2014).
37. Broockman, D. & Kalla, J. *The Manifold Effects of Partisan Media on Viewers' Beliefs and Attitudes: A Field Experiment with Fox News Viewers*. https://doi.org/10.31219/osf.io/jrw26 (2022).
38. Sabherwal, A., Pearson, A. R. & Sparkman, G. Anger consensus messaging can enhance expectations for collective action and support for climate mitigation. *J. Environ. Psycholo.* **76**, 101640 (2021).
39. D. Degette, & Tafoya, E. T. *Making the Case for the Clean Energy Innovation and Deployment Act.* https://www.dataforprogress.org/blog/2020/7/29/clean-energy-innovation-and-deployment-act (2020).
40. Wenzel, M. Misperceptions of social norms about tax compliance: from theory to intervention. *J. Econ. Psychol.* **26**, 862–883 (2005).
41. Dillon, C. E. & Lochman, J. E. Correcting for norm misperception of anti-bullying attitudes. *Int. J. Behav. Dev.* https://doi.org/10.1177/0165025419860598 (2019).
42. Communications, U. *Florida Residents Continue to Worry About Climate Change and Various Effects, Saint Leo University Survey Shows. Polling Institute at Saint Leo University* https://polls.saintleo.edu/6373-2/ (2022).
43. A. Leiserowitz, et al. *Climate Change in the American Mind* (Climate Change Communication, 2021).
44. Crowd Counting Consortium. *Crowd Counting Consortium Data* (GitHub, 2021).
45. R Core Team. R. *R: A Language and Environment for Statistical Computing* (Springer Nature, 2022).

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Author contributions

G.S., N.G. and E.U.W. designed the research, G.S. and N.G. collected the data, G.S. and N.G. analyzed the data, and G.S., N.G., and E.U.W. wrote the paper.

Competing interests

The authors declare no competing interests.

Additional information

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Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Drew Knotts, former volunteer and social media intern with the Climate Museum
Testifying on behalf of The Climate Museum
October 22, 2025

Good afternoon, Chair Gennaro and members of the committee. Thank you for the opportunity to testify today and for your ongoing support. My name is Drew Knotts, and I am a former volunteer and social media intern with the Climate Museum.

The Climate Museum is the first of its kind in the United States, using art and cultural programming to engage people with the climate crisis and empower them toward public and collective action. I'm here today to urge you to pass the resolution supporting the Museum's mission and expansion.

I was born in 2002, and I've grown up witnessing enormous social, political and environmental change. My generation has seen the country unravel in many ways during the most formative years of our lives, even as we're told that this is the best it's ever been. Meanwhile, our planet is deteriorating, and the future we were promised feels increasingly uncertain. According to a survey published in The Lancet Planetary Health, 85% of Gen Z across the U.S. are worried about the climate crisis, and nearly two-thirds agree with the statement, "humanity is doomed."[1] These concerns aren't youthful hysteria, they're the real fears of a generation inheriting a world in crisis.

The Climate Museum does more than educate people about the climate emergency, it restores hope. During my time as a volunteer, I watched visitors wander in off the streets of SoHo, often not expecting to be changed by their visit. I watched families sit together at the drawing station, children and adults being taken over while drawing their favorite part of the planet. I listened to visitors describe the relief of discovering a space where they realized they weren't alone in caring. I even watched audiences laugh at a night of climate comedy, finding joy and community amid the mental chaos conversations about climate often bring.

For me, the Museum was transformative on a deeply personal level. I discovered it at a turning point in my life, as an undergrad student rethinking my plans for law school and a political career due to extreme burnout. What I expected to be another college volunteer role became one of the most meaningful experiences of my life. I learned that art, storytelling, and culture could be tools for justice, and that my own strengths could serve a purpose greater than myself. The Climate Museum taught me how to turn my anxiety about the future into action, creativity, and

[1] Lewandowski, R Eric et al., "Climate emotions, thoughts, and plans among US adolescents and young adults: a cross-sectional descriptive survey and analysis by political party identification and self-reported exposure to severe weather events," The Lancet Planetary Health, Volume 8, Issue 11, e879 - e893.

hope.

New York City has always been a hub for cultural and political revolution, a place that challenges what's possible. The Climate Museum continues that legacy. It embodies the spirit of this city: art meeting activism, education meeting empathy, and grit meeting hope. At a time when cultural institutions like the Climate Museum face unjust political attacks and our country feels increasingly unfamiliar, we must choose to invest in spaces that bring people together to act for the common good.

Today, I'm asking you to stand with us to support the Climate Museum and help it continue this vital work. I'm asking you, quite simply, to continue to have hope.

Thank you again for your partnership, for your time today, and for your service.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Eddie Bautista, Executive Director, NYC Environmental Justice Alliance
Testifying on behalf of The Climate Museum
October 22, 2025

The New York City Environmental Justice Alliance (NYC-EJA) is a non-profit, citywide membership network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice. Through our efforts, member organizations come together around common threats to low-income communities of color, including climate change. We have been deeply involved in City and State policy advocacy since 1991.

NYC-EJA is proud to support the Climate Museum and we urge you to vote in favor of the resolution before you today. The Climate Museum understands the power of making and sharing art as an invaluable, underutilized way to prompt difficult conversations, unify people toward a common goal, spark social change, and help communities thrive.

Since the Climate Museum's inaugural programming in 2018, the Museum team has partnered with NYC-EJA member organizations and NYC-EJA partners including NY Renews on projects including a citywide exhibition in parks in every borough, a citywide youth spoken word competition and performance at the Apollo Theater, dialogue events, and teach-ins. These collaborations have been positive experiences for our colleagues and constituents.

In addition, The Museum's exhibitions and other programs have played a helpful role in informing the general public about the connections between climate change and social (in)justice and the critical role of the environmental and climate justice movements in advancing climate progress.

NYC-EJA is excited by the prospect of the Climate Museum as a new cultural institution—one that will soon have a permanent home—with a focus that extends beyond the arts—one with an

interdisciplinary mission to continue to highlight social and environmental justice; one that will tie science and art, fact and feeling, together to inspire people and move them to positive action; one that will symbolize our societal values and set a global precedent, and one that will connect our modern lives to the greater natural world around us.

We must invest in climate education, in dialogue, in hope and change, in using art as the vehicle for change against one of the most pressing issues of our time. We must collaborate and work together towards creative solutions. I have no doubt that NYC-EJA will be working with the Climate Museum for a safe and just future for many years to come, and on a personal note, I am delighted to have been one of the Museum's very first advisory council members.

Sincerely,
Eddie Bautista
Executive Director

Written Testimony on Resolution 0082-2024
Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Nathanael Greene, Director of Renewable Energy Policy, Natural Resources Defense Council
Testifying on behalf of The Climate Museum

October 22, 2025

Good morning, and thank you for the opportunity to testify today. My name is Nathanael Greene, and I serve as the Director of Renewable Energy Policy at the Natural Resources Defense Council. I'm a lifelong New Yorker and the father of two daughters who have come of age in a city—and a world—shaped by climate change.

At NRDC, my work centers on building the clean-energy systems that will power our economy in a healthier and more affordable way. I've spent the better part of three decades working on policies to accelerate wind, solar, and emerging clean technologies such as battery storage. I also focus on how these technologies interact with the natural world—how we build responsibly, protect wildlife, and ensure that clean energy benefits the communities where projects are built.

That kind of policy work can be complicated. It lives in spreadsheets and regulatory filings, and it depends on political coalitions that are never easy to maintain. But it also depends—fundamentally—on culture.

Given my job, it will not surprise you that I believe in a robust policy response to the climate crisis. But if we are not also shaping the culture—if we are not giving people a future they can talk about, believe in, and see themselves in—we will lose this fight. That's why the Climate Museum is such an important part of the solution, and why I urge you to vote for resolution no. 82-2024 supporting the Museum's mission and growth.

The Climate Museum is where art, community, and science meet. It offers something that policy alone can't: a shared space for imagination. A place where people come not just to learn about parts per million or who is funding pollution, but to practice hope—to picture a city and world that's cleaner, fairer, and more resilient.

When I visit, I'm reminded that solving the climate crisis is not only a technical project; it's a human one. Policy can clear the way for wind turbines, solar fields, and transmission lines, but culture is what gives us the courage to build them.

And right now, we need that courage more than ever. Across the country, the current administration has taken deliberate steps to slow and even reverse progress on clean energy—particularly offshore wind, which is central to New York's climate goals and to the health and security of this city. Political attacks on

offshore wind are attacks on New York's future: they threaten local jobs, clean air, and the reliable renewable power that will keep our lights on as we move beyond fossil fuels.

As someone who has worked for years to expand renewable energy, I can tell you that misinformation and fear—often amplified by partisan rhetoric—are among our greatest obstacles. You cannot counter fear with data alone. You counter it with belonging, with a sense of purpose, with art, and with stories that make people proud to be part of the solution. That's exactly what the Climate Museum does.

The Museum's work reverberates far beyond New York City. Around the world, cities are competing to define what climate leadership looks like. New York has always been a global symbol—of culture, of resilience, of reinvention. The Climate Museum shows that leadership here means not just cutting emissions but cultivating imagination.

Globally, the climate movement is confronting fatigue, disinformation, and despair. Institutions like the Climate Museum push back by keeping the public conversation human and hopeful. They remind us that climate action isn't just about preventing catastrophe—it's about creating a better, fairer, and more vibrant world.

For my daughters and for every young person growing up in New York, that vision matters. The Climate Museum helps transform climate anxiety into civic engagement. It empowers people to connect the dots between policy and personal action—to see that their voices, their votes, and their creativity all have a role to play.

The Museum helps build the social license that allows projects like offshore wind, solar arrays, and clean-energy transmission lines to move forward. It helps people understand why these changes matter and how they can participate in shaping them. Without that social foundation, even the best-crafted policies struggle to take root.

So, I urge the Council to support the Climate Museum—not only as a cultural institution, but as a catalyst for climate leadership at every level: local, national, and global. In a time when the federal government is backpedaling on climate and renewable energy and undercutting the science and laws that support them, New York City has the chance to lead by example.

The Museum is where the policy meets the poetry. It's where imagination fuels action. And it's where we can all learn that building a livable future is not just possible—it's already underway.

Thank you for your leadership, for your commitment to a vibrant and sustainable New York, and for recognizing that culture is not a distraction from climate work—it is its beating heart.

October 22, 2025

Testimony of WE ACT for Environmental Justice

To the New York City Council Committee on Environmental Protection Regarding Res 0082-2024 - Supporting the mission and growth of the Climate Museum

Dear Committee Chair Gennaro and Committee on Environmental Protection, Resiliency, and Waterfronts:

WE ACT for Environmental Justice (WE ACT) is writing to testify in support of Resolution 0082-2024. Founded in 1988, WE ACT is a community-based organization in Harlem, New York City; our mission is to build healthy communities by ensuring that people of color and/or low income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices.

WE ACT has collaborated with the Climate Museum on multiple fronts over the years, from artwork installations in Harlem to global panel discussions at the United Nations Climate Change Conferences. From its conception, the Climate Museum has been a valued addition to the broader effort to raise awareness and understanding of the climate crisis and how to address it.

Every successful movement has used art as a tool to advance its cause, including the climate justice movement, and the museum has embraced that role in helping raise awareness of the disproportionate impacts of climate change and the need for equitable solutions. With its unique cultural perspective, the museum has helped educate the general public – both young and old – about the critical dynamics linking systemic inequities and climate change.

Creating a permanent space for such discourse would be beneficial to all New Yorkers, but especially people of color and low-income who are disproportionately impacted by the climate crisis. Passing Resolution 0082-2024 would provide the museum with the funds and support it needs to complete its mission. In doing so, it would also help advance climate justice, in New York City and beyond, as well as provide the City with another treasured cultural institution of learning and inspiration.

Lonnie J. Portis
Director of Policy and Legislative Affairs
WE ACT for Environmental Justice
lonnie@weact.org | [redacted]

REBNY Testimony| October 22nd, 2025

The Real Estate Board of New York to

The City Council Committee on Environmental Protection, Resiliency, and Waterfronts

The Real Estate Board of New York (REBNY) is the City's leading real estate trade association, representing commercial, residential, and institutional property owners, builders, managers, investors, brokers, salespeople, and other professionals active in New York City real estate. REBNY appreciates the opportunity to provide feedback regarding Intros 403, 1325, 1397, and Resolution 82.

Intro 403: Cleaning of catch basins and reports on catch basin cleanups and maintenance

Subject: A local law to amend the administrative code of the city of New York, in relation to the cleaning of catch basins and reports on catch basin cleanups and maintenance.

Sponsors: Public Advocate Jumaane Williams, Councilmembers Joann Ariola, James Gennaro, Lynn Schulman, Sandra Ung, Lincoln Restler, Gale Brewer, Shahana Hanif, Nantasha Williams, Alexa Aviles, Farah Lous

This bill would require the commissioner of environmental protection to submit reports on the citywide catch basin inspections, cleanups, maintenance and repair, by community district. The bill would also require that catch basins are inspected, at a minimum of, once every year and are repaired or unclogged at least five days after inspection or the receipt of a complaint about a clogged or malfunctioning catch basin.

REBNY appreciates and supports the efforts to document and submit reports on the citywide catch basin inspections, cleanups, maintenance, and repair of such. Clogged catch basins prevent proper stormwater drainage, leading to street and basement flooding, which can ultimately damage buildings. However, DEP needs discretion in prioritizing catch basin maintenance in order to focus on areas of greatest need, including those in more flood prone areas. This is discretion which the current bill language precludes. The bill also adds administrative burdens that may take resources away from other priorities. REBNY supports ensuring proper maintenance of catch basins and urges the City Council to ensure the bill does not create unintended consequences and additional burdens for the affected agencies.

Intro 1325: Drainage location of certain building roofs

Subject: A local law to amend the New York City plumbing code, in relation to the drainage location of certain building roofs.

Sponsors: Council Members James Gennaro, Farah Louis

This bill would require that roofs on covered buildings drain onto a permeable surface in accordance with DEP rulemaking. Covered buildings would be residential buildings that are served by the combined sewer system and located on lots where the front yard area is at least 20 percent of the lot coverage area. Buildings in the 10-year rainfall flood risk area and certain other buildings would be exempt.

This bill aims to mitigate sewage back up, flooding risk, and combined sewer overflows (CSOs) by requiring new residential buildings with adequate permeable surfaces on the lot to drain into a permeable surface rather than directly into the sewage system. With increased development from recent rezonings, addressing stormwater runoff can help reduce pressure on aging infrastructure, mitigate CSOs, and address neighborhood flooding concerns.

However, the proposal raises concerns as drafted. Requiring stormwater to drain toward the street could eliminate existing onsite containment measures, allowing uncontrolled runoff that may flood neighboring properties and create pedestrian safety issues. REBNY recommends considering ways to expand the use of onsite containment methods such as drywalls, which safely manage stormwater within the property and better align with the bill's goals of climate resilience and flood protection.

Intro 1395: Requiring the department of environmental protection to conduct a green climate screen pilot project.

Subject: A Local Law in relation to requiring the department of environmental protection to conduct a green climate screen pilot project

This bill would require the Department of Environmental Protection (DEP), in consultation with the Department of Design and Construction, to implement a two-year pilot project to install five green climate screens in areas of the city that are within both flood-prone neighborhoods and disadvantaged communities. The bill would also require DEP to collect data on the stormwater capture and noise mitigation of such green climate screens, and report on such data, including any plans to expand the pilot program.

A green climate screen is a multifunctional infrastructure concept that combines stormwater management with a vertical surface to manage stormwater. DEP's stormwater rules require new developments and substantial redevelopments to manage runoff on-site and reduce combined sewer overflows. Green vertical infrastructure also supports heat mitigation, urban heat island exposure as well as streetscape quality, and softens the interface between commercial and industrial buildings. With NYC facing more frequent high-intensity rain events, REBNY supports establishing methods to manage stormwater runoff that are innovative and important.

Intro 1397: Establishing a base flood elevation and resilient construction standards for 10-year rainfall flood risk areas.

Subject: A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to establishing a base flood elevation and resilient construction standards for 10-year rainfall flood risk areas.

Sponsors: Council Members James Gennaro, Farah Louis, Lincoln Restler, Justin Brannan

This bill would require the Department of Environmental Protection, in consultation with the Department of Buildings and the Office of Long-Term Planning and Sustainability, to indicate a base flood elevation level within the 10-year rainfall flood risk areas on the updated flood risk area map.

This bill would also amend Appendix G of the Building Code to require that new or substantially altered buildings in 10-year rainfall flood risk areas be built to the standards that apply to some federal special flood hazard areas.

This proposes that DEP in consultation with DOB and the Office of Long-Term Planning and Sustainability should indicate a "base flood elevation" within the "10-year rainfall flood risk area" on the updated flood risk map. This builds on Intro 815 of 2024, which followed City of Yes for Housing Opportunity, and ties and enforces flood risk mapping to building code requirements.

In current high-and moderate-risk flood zones, zoning permits a "reference plane" to be established as an alternate method to measure height. Zoning acknowledges that the FRCE/Base Flood Elevation set forth in Appendix G may be higher and allows the reference plane to be at the FRCE. This allows for extra building height and thus does not reduce the building's envelope.

The proposed legislation's 10-year rainfall flood risk areas may overlap with current flood zones. If a new base elevation is adopted in the 10-year rainfall flood risk areas that are higher, then developments within these areas would not be able to take advantage of the reference plane. As such, in flood-zone areas, buildings will need the extra bump in height in order to install mechanicals above the requisite base flood elevation and in non-flood zones, zoning will need to be modified to extend the reference plane methodology.

The bill should not go into effect until the adoption of the related text amendment, similar to the process followed for Intro 2430-A, which delayed the effective date of a fire code provision to one year from the date of adoption of a zoning amendment exempting from the calculation of the building floor area ratio storage spaces for pre-positioned department equipment.

The DCP waterfront division should evaluate the impact of these areas and propose recommendations on interim and permanent zoning modifications under ZR 64-00. This evaluation should be inclusive of what standards or relief are necessary in this new zone, on the understanding that different requirements may be appropriate than what is needed for a storm surge or sea level rise condition. If this legislation moves forward, it will be vitally important for the City to work closely with all stakeholders in the rulemaking process to ensure that any requirements are both

protective of public safety and reasonable in terms of not interfering with developing much-needed housing in the City.

Res. No. 82: Supporting the mission and growth of the Climate Museum

Subject: Resolution supporting the mission and growth of the Climate Museum.

REBNY supports the growth of the Climate Museum, which is dedicated to inspiring climate action through art, science, and dialogue. REBNY members are on the forefront of innovation in this space, and the Climate Museum's mission aligns with the real estate industry's goals of advancing sustainability and resilience in the built environment.

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SWIM Coalition

Stormwater Infrastructure Matters

October 22, 2025

Testimony of Michelle A. Luebke

On behalf of Stormwater Infrastructure Matters (SWIM) Coalition

Before the New York City Committee on Environmental Protection, Resiliency, and Waterfronts

on Int 0403-2024, Int 1352-2025, Int 1395-2025, Int 1397-2025, and Res 0082-2024

Thank you for the opportunity to deliver public testimony on Intros 1352, 1395, and 1397, and Resolution 82, and thank you to Chair Gennaro and the Committee for your work on Stormwater Resiliency in a Changing Climate.

Stormwater Infrastructure Matters (SWIM) Coalition is a group of 70 organizations dedicated to ensuring swimmable and fishable waters around New York City through sustainable stormwater management practices — both green and grey infrastructure. SWIM Coalition member organizations endorse a truly sustainable view of watershed management, one that restores ecological systems, creates local economic opportunities and equitably distributes the benefits of green infrastructure.

The SWIM Coalition has long advocated for more sustainable, resilient stormwater management as effects from climate change challenge and often overwhelm our current sewer systems. While we are generally supportive of all introduced legislation today, we have specific recommendations that we hope will enhance the goals of each bill.

As part of the Rise to Resilience Coalition, we have been championing a campaign in support of the *Rain Ready New York Act* (S4071/A7467A), which would correctly define stormwater as a pollutant and grant power to water utilities to address local flooding and protect water quality. Although it was co-sponsored by 54 State Senators and Assemblymembers, and passed in the State Senate, it has not passed in the State Assembly. The SWIM Coalition, as part of the Rise to Resilience Coalition, will continue to advocate for this bill to pass in the next state legislative session, and strongly urge this Committee to introduce a resolution to call on the New York State Legislature to pass the Rain Ready New York Act. This will strengthen the proposed legislation in this hearing.

The SWIM Coalition would like to provide support for the passage of Intro 1327, which we had supported with suggested changes in June, that we hope will streamline the SWPPP permitting process.

Int 0403-2024

The SWIM Coalition is in support of a tiered inspection program for catch basins, particularly those in flood-prone MS4 areas, since these drain directly to waterbodies, and uplift WE ACT's comments that the City Council allocate adequate resources to assess where insufficient care for catch basins is contributing to flood events, identify sufficient funding for maintenance, and include community-driven programs like Adopt-A-Catch Basin in the final plan.

Int 1352-2025

While we support the intent of this bill to reduce stormwater into the combined sewer system, we have major concerns about the language of this bill and would like to see it rewritten to consider downspout disconnection more thoughtfully. Additionally, the SWIM Coalition wants to highlight and uplift the testimony on Intro 1352 provided by Riverkeeper, both a member organization and part of our Steering Committee, including:

- Ensure Intro 1352 is consistent with parallel efforts to increase green infrastructure on private property and manage stormwater citywide through the the Rain Ready NY Act, the Unified Stormwater Rule, and the Stormwater Management Plan, which includes $4 million in additional funding to DEP to fully implement the Unified Stormwater Rule (USWR).
- Ensure the scope is sufficiently broad, wherever there may be sufficient yard to manage stormwater, be in front, back, or side yards.
- Inclusion of stormwater management on commercial and industrial properties, not just residential, ensuring that any contamination from the building and/or parking lots is remediated on site and not in any runoff.
- Ensure permeability is sufficient for increased stormwater inputs so as not to cause or exacerbate localized ground-level flooding or foundational damage to nearby buildings.

Like Riverkeeper, while we are generally supportive of the intent of this bill, we have serious concerns, particularly about directing downspouts toward the street and thus storm drains, potentially causing more CSOs or flooding.

Int 1395-2025

The SWIM Coalition would gladly work with Councilmember Brooks-Powers to find an alternative GI technology for high water-table areas that can work without infiltration.

Int 1397-2025

Like the DEP and DOB, we support DOB's proposed study, funding for the study, and a replacement bill that more appropriately fits the realities of NYC.

Along with the Rise to Resilience Coalition, the SWIM Coalition advocates for practical solutions and for dedicated, long-term funding and planning for climate resilience for New York City. We also strongly encourage the Council to allocate the necessary funding for stormwater resiliency in the City budget for FY27. Climate resilience funding, broadly, in FY26 is dangerously low. We look forward to working with the Council to expand the City's legislative, planning, and funding approach to stormwater resiliency.

Thank you for the opportunity to provide this testimony and for your leadership in addressing problems related to flooding, climate change, and water pollution. We thank the Council for introducing this legislation, and the SWIM Coalition, along with our partners at Riverkeeper, are happy to work with the Council on any of our concerns and recommendations to ensure these bills achieve their goals.

Kindy submitted,

Michelle A. Luebke | Program Manager
advocacy@swimmablenyc.org
On behalf of the SWIM Coalition Steering Committee:

Mike Dulong – Riverkeeper
Larry Levine – Natural Resources Defense Council
Leonel Lima Ponce – Pratt Institute
Christian Murphy – Bronx River Alliance
Holly Porter Morgan – Lehman College
Em Ruby – Riverkeeper
Shino Tanikawa – NYC Soil & Water Conservation District

Written Testimony on Resolution 0082-2024
Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Sean M. Decatur, President, American Museum of Natural History;
Fellow, American Association for the Advancement of Science;
Board of Directors, NYC Tourism + Conventions

Testifying on behalf of The Climate Museum
October 22, 2025

My greetings and thanks to Chair Gennaro and Members of the Committee. I appreciate the opportunity to provide this statement in favor of Resolution 0082-2024, supporting the Climate Museum's mission and growth.

My name is Sean Decatur. I'm honored to be President of the American Museum of Natural History (AMNH) here in New York City, one of the world's preeminent scientific and cultural institutions and an important civic and educational resource for our City and its many visitors. AMNH's mission is to discover, interpret, and disseminate knowledge about human cultures, the natural world, and the universe. Prior to joining AMNH, I had a career in academia, including as President of Kenyon College, and am trained as a biochemist.

What I appreciate so much about AMNH's work is the broad platform it offers and the ability to reach people at scale—to have a real impact on fostering science literacy, improving the teaching of science in our schools, training the next generation of scientists and science educators, and sparking curiosity, joy, and responsibility among a diverse public.

One of AMNH's current strategic priorities is to address climate change and biodiversity loss through our scientific research, exhibitions, and educational programs. We do this work as part of a world-renowned cultural sector. Institutions like AMNH, the Wildlife Conservation Society, the New York Botanical Garden, Brooklyn Botanic Garden, the Staten Island Zoo, and the new Climate Exchange on Governors Island are essential cultural and educational pillars. We work individually and together to educate about science and the world around us, and to prepare our community and young people to meet the challenges ahead. Of course, no challenge is more pressing right now than the climate crisis.

With its focus on the human side of the climate crisis through arts and cultural programming, the Climate Museum is an important and distinctive addition to our sector. It is well known that a major obstacle to broader climate awareness and individual action is the too-common emotional response to climate change: discomfort, hopelessness, fear, and even apathy. The Climate Museum brings an important voice to this challenge by meeting people where they are, fostering a sense of community, and inspiring hopeful action. As some have said about the climate crisis, this is an all-hands-on-deck situation.

I have visited the Climate Museum's pop-up exhibits, and I have witnessed their impact on visitors first-hand. The Climate Museum successfully weaves art, historical documents, and scientific data into a coherent and cohesive narrative that both informs and activates its audience. The team at the Climate Museum is well-informed on both the content behind climate change and effective pedagogical approaches to reach visitors from a diverse range of backgrounds. I have no doubt that the Climate Museum will continue to have an impact here in New York and globally.

AMNH looks forward to working with the Climate Museum as the newest resource for our community, nation, and world in supporting the public's understanding of the climate crisis and mobilizing our collective response.

Thanks to the Chair and co-sponsors for supporting the Climate Museum's work with the introduction of this Resolution; I urge the Council to vote in favor of it.

THE TRUST FOR
GOVERNORS ISLAND

Testimony of the Trust for Governors Island
Delivered by Chief of Staff Sarah Krautheim
Before
The New York City Council Committee on Environmental Protection, Resiliency, and Waterfronts

Sarah Krautheim, Chief of Staff
City Council Oversight Hearing RE: The Climate Museum
Meeting of Committee on Environmental Protection, Resiliency, and Waterfronts

Chair Gennaro and fellow council members, thank you for the opportunity to submit written testimony on behalf of The Trust for Governors Island. We enthusiastically support the Climate Museum, its mission, and its tremendous potential to serve all New Yorkers as a vital educational resource.

About The Trust for Governors Island

The Governors Island Corporation, doing business as The Trust for Governors Island, is the 501(c)(3) nonprofit organization created by the City of New York and charged with the planning, redevelopment, and ongoing operations of 150 acres of Governors Island. The Trust's mission is to realize the full potential of Governors Island for the inspiration and enjoyment of all New Yorkers, demonstrating a bold vision for public space.

Governors Island as a Climate Solutions Hub

Over the past five years, the Island has made tremendous progress as a resource for the City's green economy. In 2020, the Trust and the Mayor's Office announced a vision to create the Center for Climate Solutions on Governors Island—a community to accelerate climate solutions for cities.

In April 2023, following a two-year competitive process, The New York Climate Exchange was selected as the anchor research and educational institution for this initiative. Working alongside programs presented by the Trust and the Island's tenants and partners, this work supports the research, development, and demonstration of equitable climate solutions for New York City that can be scaled globally by:

- Expanding opportunities for research and development of solutions for resilient and healthy urban neighborhoods to prepare New York City, and cities around the world, for climate change
- Attracting and growing high-quality green jobs for New Yorkers with diverse backgrounds through educational and training opportunities
- Creating space for New Yorkers to learn from, engage with, and play a central role in climate advocacy and action

A Partnership Built on Shared Vision

The Climate Museum has been instrumental in bringing this vision to life. Long-time partners like the Climate Museum, the Urban Assembly New York Harbor School, Billion Oyster Project, Grow NYC, and Earth Matter NY inspired this vision and helped the Trust build support for these achievements.

I first met the Climate Museum and Miranda Massie in 2018, when they presented their inaugural exhibition on Governors Island. This exhibition felt fundamentally different from other climate-focused programs I had experienced. Rather than overwhelming visitors with dire predictions, it met people where they are—tapping into individual feelings and experiences around the climate crisis while providing hopeful pathways for action. Working with Miranda and her team left me inspired and motivated, not paralyzed by fear.

Growing Impact Through Collaboration
Following that first exhibition in the historic Admirals House in Nolan Park, our partnership expanded significantly:

Climate Signals (citywide public art): We partnered with the Climate Museum and the Mayor's Office of Climate Policy and Programs to bring this powerful installation to Governors Island—a series of solar-powered highway signs by artist Justin Brice flashing climate change alerts in multiple languages, making the abstract urgency of climate change immediately tangible to everyday New Yorkers.

Beyond Lies (citywide poster campaign): We collaborated on this campaign led by artist and Pulitzer Prize-winning journalist Mona Chalabi, which exposed the fossil fuel industry's decades-long history of spreading misinformation about climate change causes—building public awareness of how climate denial has been deliberately manufactured.

New York Climate Exchange (founding partner): The Climate Museum is now a founding community partner of this groundbreaking campus led by Stony Brook University, which will focus on breaking down silos, accelerating solutions, and training New Yorkers for the green jobs of the future. The New York Climate Exchange will break ground on Governors Island next year, a significant milestone in Governors Island's transformation, and an achievement for the Climate Museum as community partner.

Beyond Programming: Strategic Partnership
The Climate Museum's contribution extends far beyond exhibitions and events. Miranda and her team provided critical guidance on how Governors Island can serve as a public space that brings everyday New Yorkers into co-creating solutions to the climate crisis through programming and advocacy. They were early advisers on developing our vision for Governors Island's transformation into a climate solutions center, and we are proud to have them as part of our growing community of partners.

Looking Forward
We congratulate the Climate Museum on securing a permanent home in New York City and commend the New York City Council for supporting this resolution. Now more than

every level institutions like the Climate Museum to inspire hopeful solutions, bridge divides, and build understanding as we tackle one of the greatest challenges of our time.

The Climate Museum has proven its value through years of innovative programming, strategic partnerships, and its unique ability to make climate action feel accessible and urgent without inducing despair. We are proud to call the Climate Museum a friend of Governors Island and look forward to their bright future as a permanent New York City institution serving communities across all five boroughs.

We encourage the Council to continue supporting the Climate Museum's vital work, and applaud the support of this committee.

Thank you,

Sarah Krautheim
Chief of Staff
The Trust for Governors Island
skrautheim@govisland.org

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Jenny Newell, Curator and Manager,
Climate Solutions Centre,
Australian Museum

Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. Thank you for holding this hearing vital to the intersection of climate and culture.

My name is Jenny Newell and I am fortunate to be the Curator for Climate Change and the Manager of the Climate Solutions Centre at the Australian Museum in Sydney, Australia. The Australian Museum was founded in 1827 and, with over 22 million collection items, is the largest natural and cultural history museum in Australia and one of the more substantial museums worldwide. The Museum is internationally respected by our peers in biological and geo sciences, wildlife conservation, climate change, cultural collections and Indigenous-led museum practice.

The Museum's Climate Solutions Centre was established in 2022. Its vision is to bring together cutting edge research with insights from people on the ground to create ways of engaging broad audiences with climate solutions. We offer a range of exhibitions and programs toward this end, including *Future Now*, an exhibition of dioramas about sustainability that tours to civic venues in rural and regional Australia.

I first became aware of the then-fledgling Climate Museum almost ten years ago, while living in New York City and serving as a curator at the American Museum of Natural History (AMNH). At that time, I had already become actively engaged with the promotion of climate-focused and -inflected programming in cultural institutions, and had founded an international coalition to build community and momentum around such initiatives.

I developed this interest and commitment due specifically to my work at AMNH, which focused on the cultural and natural history of the Pacific Islands. On these islands, entire nations face a jeopardy that is both urgent and existential due to climate change—without having contributed to the problem in any material way. The acuity of the threats posed and their interpenetration with profound questions of social justice, combined with the enormous public trust and popularity held by museums, led me to a deep conviction that a greater focus on climate should be brought into cultural institutions. So I was delighted to learn that there would be a new museum, the first of its kind in the United States and one of the very first in the world, that would be dedicated to presenting programming around climate change aimed at increasing public engagement and committed to contributing to advances toward a safe and just future for all.

It has been inspiring to watch the Climate Museum's development since those early days. Miranda Massie's creative vision, intelligence, determination and deep care have been powerful drivers ensuring the museum's success. I have remained impressed throughout the development of each new public programme, art installation, interactive exhibition, student traineeship, internship and fellowship. Their international collaborations have been innovative, advancing new ways of galvanising people to consider their relationships to the climate crisis. Miranda Massie is in high demand as a speaker locally and internationally, and she is a captivating and influential speaker.

The innovation and efficacy of the Climate Museum's work, despite the extreme resource challenges and lack of a permanent space, has been remarkable. As a climate curator working with all the comforts and supports of an established institution, I can only marvel at the quality and strength of the Climate Museum's work. To take just one example: 'Taking Action', an exhibition installed at Governors Island in 2019, was remarkably effective for supporting climate action. With a clear, direct truth-telling approach and designed to ensure interaction and provoke thought, empathy for existing victims of climate change and a recognition of growing impacts on us all, 'Taking Action' was a model for how to spark audience commitment to step up to climate solutions. As I discovered when writing about the Climate Museum for a 2020 *Museum Management and Curatorship* paper, about the ways climate museums around the world are powering action, the exhibition at Governor's Island was a stand-out for its thoughtful design and positive audience response. Despite being in a location that was relatively difficult to reach, the exhibition attracted over 9,000 visitors in five months. In written comments, on-site and in follow-up surveys, many referred to the experience opening their eyes to the severity of the climate crisis and inspiring them to pledge to take action to tackle it.

The student docents and the Climate Museum's other youth ambassadors found being involved in the exhibition particularly transformative. As the parent of one docent reported: 'during the course of being a tour guide and climate ambassador to an intergenerational public, my son became a leader in the global youth climate movement', he was soon organising a major student rally and has become 'a seasoned, courageous public speaker and climate educator to his peers.' The Climate Museum has been empowering ever-growing numbers and, crucially,

diverse ranges of people to support climate and social justice. An intern wrote in 2020 that the Museum is dedicated to: '...educating in a way that is inclusive, considering the social and cultural impacts of each climate solution.' As a result, she said, 'it rouses support from historically marginalized communities, and creates a space for their voices in a movement that often forgets about their existence.'

The importance of a permanent home for the Climate Museum cannot be over-stated, to free up the team to focus on expanding their programming excellence in all the directions needed, rather than being constantly occupied with seeking out and negotiating for spaces and securing audiences. A permanent home also conveys gravitas and sends an important message: that city leaders recognise the critical need for understanding and engagement in the climate crisis. Permanency also opens up opportunities for building a collection of artworks and other objects to support the telling of captivating stories. It also enables more sustainable exhibitions by providing space for storing and re-using exhibition materials and public programme equipment. I believe that this Resolution, if passed, will build on the Museum's remarkable steps forward and serve as a point of inflection at which the Museum's momentum increases even more rapidly.

It is important to note that through this growth, and indeed through its very existence, the Climate Museum has contributed substantially to international momentum toward the practices I have outlined here. Ten years ago, it was hard to get visibility in museums for the 'difficult' topic of climate change. Now, integrating climate content with culture is increasingly normative. More museums - large and small - are stepping up and exploring ways of engaging the public with the climate crisis. The Climate Museum has played an important leadership role in this urgently-needed change. As one insightful visitor said in 2020, The Climate Museum is clearly a leader in the movement that might just save us from ourselves.'

Having collaborated very closely with the Climate Museum team during 2021 on a global program—unfortunately deferred due to a want of capacity and funding—I can attest to the creativity and intellectual rigor housed in the organization, as well as the generosity and good humor team members bring to the collaborative process. I believe that it is these very strengths—of the left brain, the right brain, and above all, the heart—that can move humanity forward. Culture will play an important role, and within it, the Climate Museum, and its home city, are very well positioned to provide that motive power.

I sincerely hope the team at the Climate Museum will receive the support they need to expand their crucial work.

Thank you again.

Dr Jenny Newell
Climate Solutions Centre, Australian Museum Research Institute

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THE
CARMACK
COLLECTIVE

Written Testimony on the Resolution in support of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Ricardo Benavidez, Director, Carmack Collective
Testifying on behalf of The Climate Museum
October 22, 2025

Warm greetings to Chair Gennaro and to the members of the committee. Thank you so much for your time, your past support of the Climate Museum (CM), and for the opportunity to testify on behalf of the Museum. This is a pivotal movement for climate arts in New York City and I am honored to support an organization activating people into climate engagement.

My name is Ricky Benavidez, and I serve as the Director of the Carmack Collective, which I describe further below. I have been a part of Carmack since inception nearly five years ago. I manage our grantmaking portfolio, overseeing daily operations, and develop and implement the fund's strategic initiatives. Outside of The Carmack Collective, I co-direct Ktisis Capital and I am a Global Fellow of WK Kellogg Foundation. My experiences have afforded me a well-informed perspective on philanthropy and the mobilization of resources to advance progress on climate and on racial and environmental justice.

At The Carmack Collective, we catalyze transformative change in the pursuit of climate justice by strategically confronting the deeply entrenched and powerful fossil fuel industry. We recognize that the barriers to a sustainable future are not due to a lack of solutions, but rather the influence of a desperate industry. Through our highly-selective decision-making process, we identify and fund the best and the brightest frontline agents of change whose work is most likely to lead to a more sustainable, just, and equitable future for all.

I am here today to ask you to pass the resolution in support of the Climate Museum's mission and growth.

The Carmack Collective first began funding The Climate Museum in 2023, through an exploratory grant. Through their temporary exhibitions, such as *Someday, All This* and *The End of Fossil Fuel* – which explored the myth of American climate indifference and the histories of the fossil fuel industry and the environmental and climate justice movement, respectively – visitors' understandings and attitudes on climate change improved. These exhibitions confirmed that people have a deep appetite for complex and challenging information about climate and justice when it is presented within a framework of arts and

visual culture, and that people are more willing to take civic action on climate when engaged in this manner.

What matters most to The Carmack Collective is democratic participation in and movement building around climate. We were very impressed by the outcomes of the exhibitions and were eager to continue to support the CM's endeavors.

The Carmack Collective recently awarded the Museum a three-year $60,000 grant, starting in 2025 and ending in 2028. This multi-year commitment, of substantial scale relative to our portfolio, reflects our belief in the Climate Museum as a long-term investment.

This commitment is increasingly important. Even for organizations that have not relied on federal funding, the current federal administration's actions and stated policies actively threaten the resilience and sustainability of climate organizations and other nonprofits. We are in a moment of perverse attacks on clean energy and climate justice. It is paramount for both private and public funders to step up and support the excellent work being done.

This resolution is a critical step toward elevating climate and environment justice in New York City and reflects our shared commitment of honoring frontline expertise, advancing equity, shifting power, and embodying transparency. I ask the committee once more to pass the resolution in support of the Climate Museum's mission and growth and the positive change it will bring.

Thank you again for your time today and for your service.

Ricardo Benavidez
Director
The Carmack Collective

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

City Council Hearing on Resolution 82: Supporting the Mission and Growth of The Climate Museum

Testimony by Daniel A. Zarrilli, Chief Climate & Sustainability Officer
October 22nd, 2025

Good afternoon. My name is Dan Zarrilli and I'm the Chief Climate and Sustainability Officer at Columbia University. At Columbia University, we have led the way in understanding the climate crisis for decades, most recently by creating a world-leading Columbia Climate School, the first new school at the university in a generation, dedicated to advancing climate science and research, delivering impact through partnerships and climate solutions, and educating and empowering the next generation of climate leaders. Prior to joining Columbia, I served in variety of senior climate and resilience roles under Mayors Bloomberg and de Blasio – including as Chief Resilience Officer and Chief Climate Policy Advisor. It's a pleasure to join my fellow panelists today and it's nice to be back in front of the City Council.

I'd like to thank Members Gennaro, Hanif, and Nurse for putting forth this resolution today and thanks to all the members of the Council for the opportunity to testify today and for their consideration of this important resolution. I'll be brief.

Much has already been said today about the climate crisis that has already arrived on our doorstep. Storms, heat, and sea level rise are only going to continue to get worse and challenge our infrastructure and our communities. And we know that burning fossil fuels is the single largest contributor to the global warming that is causing climate change.

I'm proud to say that the work being done here in New York since Hurricane Sandy is at the cutting edge of climate policy among global cities. Billions of dollars have been invested in protecting New Yorkers

from extreme weather. Local Law 97 is already showing success as building owners work to limit the pollution from the city's largest source of emissions. Environmental justice legislation has provided the structure to begin overcoming decades of environmental inequities across the five boroughs. And new clean energy transmission will be coming online next year to reduce our reliance on dirty in-city power generation. However positive all of this action is, the reality is that we have so much more to do. And the answers to this challenge are not just technical in nature. It requires a cultural change on how we relate to our only planet and its natural, social, and built systems.

The Climate Museum has been a key player introducing culture alongside the policy, technology, and finance themes that dominate climate discourse. If we hope to make more progress here in New York City, we will need an even stronger focus on culture to activate the public, which of course supports clean energy and climate justice by very wide margins, but which has remained dramatically under-mobilized.

When I served as the City's Chief Climate Policy Advisor, I was proud to work alongside Miranda Massie and The Climate Museum and see first-hand the success of ground-breaking public art exhibitions like Climate Signals, which introduced easily-digestible climate messages to New Yorkers in familiar public spaces. These types of exhibits and actions serve to open up dialogue and connect the real danger of climate change into our everyday lives. This has profound benefits to how the public understands the challenge, but also how we as New Yorkers relate to each other in this moment.

Similarly at Columbia, we have been proud to work alongside The Climate Museum as part of our education mission, with The Climate Museum collaborating with us to teach classes, oversee student capstone projects, and help new students understand these cultural challenges.

These are just a few examples of the reach and importance of The Climate Museum. We are at a critical moment in which the City can actively expand its support for an organization doing so much to create

the conditions for positive change. This work is absolutely necessary if we hope to mobilize the public to more fully support the good work that the City is doing and must do to confront our climate crisis.

I wholeheartedly endorse this resolution and congratulate the Council for taking up this important issue and I encourage the Council to pass this resolution in order to amplify the good work that The Climate Museum will continue to do for New York City.

Thanks for the opportunity to testify and I look forward to any questions.

Daniel A. Zarrilli
Chief Climate & Sustainability Officer
Columbia University in the City of New York

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Guy Geier, Managing Partner, FXCollaborative

Testifying on behalf of The Climate Museum
October 22, 2025

Good afternoon, Speaker Adams, and members of the Council. My name is **Guy Geier**, **Senior Partner at FXCollaborative** — a New York City–founded and based architecture firm that's been shaping this city's built environment for more than forty years.

I would like to thank the sponsors of **Resolution 82** — Council Members **James Gennaro, Shahana Hanif, Sandy Nurse, Lincoln Restler, and Farah Louis** — for their leadership and for bringing this important resolution forward.

I've worked in New York most of my life. And like so many of us, I care deeply about what makes this city so special — its diversity, its creativity, and its spirit of community.

At FXCollaborative, we've had the privilege to design many civic and cultural projects across the city — from the **Javits Convention Center renovation and expansion** to **the Statue of Liberty Museum** — always with the goal of making New York more vibrant, equitable, and sustainable. We are thrilled to be designing The Climate Museum's permanent space.

I'm here today to **urge you to support Resolution 82** and to express strong support for **The Climate Museum**. We believe that the museum will be a genuine community benefit — a place where people can come together to learn, to create, and to connect – and as a result, to learn how climate change is affecting us and what we can do about it.

The museum will be perfectly located — adjacent to the 7 line subway station and **Bella Abzug Park**, and near the terminus of the **High Line** — helping extend the cultural energy that runs from the Whitney to the west side galleries, the Shed, and the Javits Center.

This project is about creating public spaces that reflect who we are as New Yorkers — open, inclusive, and forward-looking.

Thank you Speaker Adams, and thank you to all the Council Members and sponsors for your time, your leadership, and your dedication to keeping New York City dynamic and welcoming for everyone.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Edward Maibach, Distinguished University Professor Emeritus and Founding Director
George Mason University Center for Climate Change Communication;
Fellow, American Association for the Advancement of Science;
Member, National Academy of Medicine

Testifying on behalf of The Climate Museum
October 22, 2025

I extend my regards to Chair Gennaro and to the Members of this Committee.

My name is Ed Maibach. I'm a public health professional and communication scientist with more than 40 years of professional experience using communication to address the nation's and the world's most pressing public health problems. For the past 18 years, after coming to understand climate change and the continued burning of fossil fuels to be the world's most pressing public health threat, I have focused exclusively on these threats to human and planetary health. Indeed, as a public health professional I'm convinced that fossil fuel use and the changes in our climate it is causing are the leading preventable causes of mortality (death) and morbidity (ill health) in the world today—and they are rapidly getting worse,

The gist of my team's work at the George Mason University Center for Climate Change Communication is three-fold: to study public understanding of climate change; to identify means by which to enhance public understanding and public engagement; and to develop, test, and when feasible scale-up public education and communication programming that enhances builds public and political will to enact community-, state-, and national-, and international-level climate solutions.

As a member of their Advisory Committee since its inception, I am intimately familiar with—and supportive of—the work of The Climate Museum (TCM). The TCM team is steeped in knowledge of evidence-based approaches to public engagement, and their sophisticated public programming is a wonderful reflection of that knowledge. Through its programming, TCM is offering state-of-the-science and state-of-the-art climate education to NYC residents and visitors—which is an important service that reflects well on America's leading city. Indeed, a recently published peer-reviewed study led by a post-doctoral scholar at my center found strong evidence that TCM programming is both well-received by visitors and effective in advancing its educational goals.

TCM is poised to become an even more important and effective institution as it moves beyond its current approach to pop-up programming to occupy a secure physical space in a premier NYC location, Hudson Yard. I urge you to support the Resolution, as doing so will help TCM make this transition successfully which will also benefit the city, the state of New York, the country, and even possibly the world–given the number of international tourists it will likely attract.

Thank you for considering this important Resolution.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Dr. Ryan Mann-Hamilton Associate Professor of Anthropology

CUNY, LaGuardia Campus

Testifying on behalf of The Climate Museum

October 22, 2025

Greetings, Chair Gennaro and members of the committee. Thank you for the opportunity to provide written testimony in support of The Climate Museum.

My name is Ryan Mann-Hamilton, and I am an Associate Professor of Anthropology at CUNY LaGuardia and Director of Casa de las Americas Center for the last 3 years. I am here today to ask you to pass the resolution in support of the Climate Museum's mission and growth.

I am writing to respectfully request support for The Climate Museum, a pioneering institution in New York City dedicated to inspiring civic engagement and advancing solutions to the climate crisis through the power of art, science, and dialogue. Since its founding, The Climate Museum has served as a vital cultural and educational resource—empowering communities, especially youth and underrepresented groups, to confront the realities of climate change and to envision a just, sustainable future.

I had the pleasure of visiting the Museum in 2024 during a guided session organized for faculty at different colleges across NYC. Through that first visit, we began a conversation about showcasing some of their materials to our LaGuardia community. For the next few months I

worked with Climate Museum staff to organize a distilled version of their beautiful exhibition that was installed at LaGuardia Community College in the Spring of 2025.

The interdisciplinary exhibit at LaGuardia acknowledged people's worries and lived experiences, connected people to tangible actions they can take, and helped to build an empathetic, civically engaged and empowered community in the process. Over a thousand of our community members were able to experience the exhibit and it created future collaborations with organizations like El Puente, who joined us during the opening event.

The exhibit was aimed at educating our students and adjacent community about the climate crisis and to get them more involved in civic and collective action. Classroom visits were organized and many of our professors incorporated the exhibit's information into their curriculum. As part of the exhibit, there was a wall of reflection which allowed for visitors to post questions, solutions and actions regarding the climate catastrophe that they could be involved in. The ample participation of our college community showcased the need for more interdisciplinary spaces of thinking through the climate crisis and the unequal effects on marginalized communities. Our student and community visitors left more aware and inspired by just how much others are concerned about climate change.

The continued investment in the Climate Museum is an investment in New York's resilience, innovation, and leadership in the global movement for climate justice. I hope that with your support, the Climate Museum can continue to educate, empower, and unite our communities around one of the most urgent challenges of our time.

Thank you.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Armando Bengochea, Senior Program Officer and Director, The Andrew W. Mellon Foundation

Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. My name is Armando Bengochea, and I write today as a proud funder of the Climate Museum to thank you for introducing this Resolution supporting the mission and growth of the Climate Museum and to urge its passage.

I serve as Senior Program Officer and Director in the Higher Education Program at the Mellon Foundation. The Foundation makes grants to actively unlock the power in the arts and humanities that helps connect us all. It was established in 1969 to strengthen, promote, and defend these endeavors as essential to democratic societies. We believe that the arts and humanities are where we express our complex humanity, and we believe that everyone deserves the beauty and empowerment that can be found there. Through our grants, we seek to build just communities enriched by meaning and guided by critical thinking, where ideas and imagination can thrive.

Since 2019, we have made three grants to the Climate Museum, a critical new organization whose work, in a resounding way, expresses our commitment to this understanding and vision. The Museum harnesses the power of arts, storytelling, academic research and cultural programming to build an inclusive culture of civic agency on climate change. At the same time, it is important to know that the Museum‘s work lies at the edge of the grantmaking our Higher Education Program ordinarily does with institutions that are more established and that fall more clearly within the category of formal higher education—such as Howard or Harvard University.

We initiated our support because we believe that the vibrant interdisciplinary programs the Museum offers the public—explicitly uniting the arts and humanities with civic engagement on matters vital to us all–illuminate innovative pathways forward toward a safe, just, and vibrant future. Community connection, intellectual excellence, and the joy of aesthetic experience come together in the Museum's work in a way that we hope and believe will create ongoing ripples of inspiration.

We have enthusiastically supported the Museum despite the unusual challenge of its being a first-of-its-kind institution with the attendant problem of being under-resourced. But, in our view, it persists in providing exhibitions and other programming of great value. And we have been greatly impressed that the Museum's post-doctoral fellows in Climate Humanities and Social Justice, who have anchored our grants, have carried out such meaningful and important work both during their tenure at the Museum and moving forward from it.

We are proud of this commitment and are glad to say that we understand that the Mellon Foundation was the first large private institutional funder of The Climate Museum. We have been thrilled that others have since joined us in providing support.

Both as a matter of scale, and given the nature of the Museum as a public good that seeks to be publicly accessible and accountable, we hope that when the time comes, the City Council will consider investing in this extraordinary institution as well.

In this particular moment, the Foundation views the Museum's commitment to the fundamental values outlined earlier as even more important than ever. We are very glad to understand that the Museum—and the City Council—have taken the same view, championing matters at the heart of what it takes to build a multiracial democracy.

It was a delight to see that New York State has selected The Climate Museum to be the cultural anchor of a new development on Manhattan's far west side. I look forward to meeting some of you, as well as many other community members, in keeping with the democratic and inclusive ethos of the museum, at the red ribbon ceremony.

Thank you for your leadership.

Testimony of Alia Soomro, Deputy Director for New York City Policy
New York League of Conservation Voters
City Council Committee on Environmental Protection, Resiliency, and Waterfronts
Oversight Hearing on Stormwater Resiliency in a Changing Climate
October 22, 2025

My name is Alia Soomro and I am the Deputy Director for New York City Policy at the New York League of Conservation Voters (NYLCV). NYLCV is a statewide environmental advocacy organization representing over 30,000 members in New York City. Thank you, Chair Gennaro, and members of the Committee on Environmental Protection for the opportunity to comment.

While Hurricanes Sandy and Ida were major wake-up calls for the New York City region, unnamed extreme rainfall and flash flood events have increasingly posed a regular threat to New Yorkers. For instance, residents are all too familiar with street flooding when the city's aging sewer infrastructure cannot keep up when the amount of water produced by a storm is greater than the capacity of the sewer pipes. Additionally, billions of gallons of raw sewage and stormwater runoff can enter the city's waterways due to combined sewer overflows (CSOs), which is when the volume of sewage and runoff go beyond the capacity of the city's wastewater treatment plants.

As a member of the Rise to Resilience Coalition, a coalition of over 100 organizations across New York and New Jersey calling for climate resilience to be a more urgent policy priority, we stand with advocates calling for more investment in our city's sewer and stormwater infrastructure. NYLCV urges the City to continue prioritizing environmental justice and equity in all of its climate and environmental planning, implementation, and policies. We support DEP's prioritization of areas that have been historically overburdened and underinvested in. Ultimately, we hope to see the Administration and City Council fund green and grey infrastructure projects such as cloudburst management systems, in addition to nature-based solutions such as wetland restoration and bluebelts. We also hope the City continues to work with the MTA to prepare our public transportation system for the impacts of climate change.

On the bright side, we are encouraged that the 2025 Mayor's Management Report had good news about green infrastructure: In Calendar 2024, the number of green infrastructure assets implemented increased by over 18% from Calendar 2023, rising from 13,723 to 16,321. The number of green infrastructure greened acres managed also increased over 20% in Calendar 2024 to 2,853. We are also pleased to see the Mayor's Office of Climate and Environmental Justice launch the start of the "Resilient Acquisitions" program, which would be a voluntary home acquisition program for New Yorkers interested in selling their high-flood-risk homes.

While a long-term funding source has not been identified as of now, we hope this program will get dedicated funding in the near term.

Intro 403

NYLCV supports the concept of Intro 403 of 2024, sponsored by Public Advocate Williams, which would require the Commissioner of DEP to submit reports on the citywide catch basin inspections, cleanups, maintenance and repair, by community district and also ensure that catch basins are inspected, at a minimum of, once every year and are repaired or unclogged at least five days after inspection or the receipt of a complaint about a clogged or malfunctioning catch basin. NYLCV urges that the Council work with DEP to ensure this bill is able to be practically implemented. Overall, we think this bill can improve transparency and accountability around catch basin maintenance and operations, especially as this infrastructure gets more usage with the increase in rainfall and stormwater runoff due to climate change. In addition to this bill, we recommend that more funding be allocated for catch basin maintenance and operations.

Intro 1352

NYLCV also supports the concept of Intro 1352 of 2025, sponsored by Council Member Gennaro, which would require that roofs on covered buildings drain onto a permeable surface in accordance with DEP rulemaking. Covered buildings would be residential buildings that are served by the combined sewer system and located on lots where the front yard area is at least 20 percent of the lot coverage area. Buildings in the 10-year rainfall flood risk area and certain other buildings would be exempt. NYLCV is aligned with Riverkeeper's testimony and recommendations on this bill, and we urge the Council to ensure Intro 1352 is consistent with parallel efforts to increase green infrastructure on private property and manage stormwater citywide through the the Rain Ready NY Act, the Unified Stormwater Rule, and the Stormwater Masterplan, in addition to conducting preliminary mapping to better understand what residential lots this legislation would apply to as well as research on where drained water from the roof might go.

Resolution 0082

NYLCV also supports Resolution 0082 of 2024, sponsored by Council Member Gennaro, supporting the mission and growth of the Climate Museum. Given the urgency of the climate crisis, it is essential that citizens are educated on the impacts of climate change, and the Climate Museum does just that by offering programs, exhibitions, and dialogue.

NYS Rain Ready Act

Lastly, it is worth noting that the Rise to Resilience Coalition partners have been advocating for comprehensive, long-term planning and implementation of projects focused on improving stormwater management across the city and the state. Specifically, we have been leading a successful advocacy campaign in support of the Rain Ready New York Act (S4071 / A7467A), resulting in the co-sponsorship of 54 State Senators and Assemblymembers. The bill was also passed in the State Senate, and we will continue to raise support for it in the next state legislative session.

The Rain Ready New York Act would clarify the definition of stormwater in the New York State Local Water Authority and Sewer Act and Public Authorities Law. "*Stormwater*" shall mean a flow of water occurring on the ground or other surface when rain or meltwater can no longer be absorbed by the soil or other surface. This important legislation clarifies the powers of sewer authorities throughout the state to manage stormwater and prepare for the increasing frequency and intensity of rainfall due to climate change. This legislation would remove any confusion about the ability of water utility authorities to address local flooding and protect water quality. The Rise to Resilience Coalition strongly urges this Committee to introduce a resolution to call on the New York State Legislature to pass the Rain Ready New York Act.

Thank you for the opportunity to comment.

NYLPI
JUSTICE THROUGH COMMUNITY POWER

Testimony of Caroline Chen on behalf of New York Lawyers for the Public Interest, For Public Hearing: NYC Committee on Environmental Protection, Resiliency, and Waterfronts, October 22, 2025

Good afternoon. My name is Caroline Chen, and I am the Director of Environmental Justice at the New York Lawyers for the Public Interest (NYLPI). Our environmental justice program works on a range of community-driven priorities, but I am here today to speak about the urgent and persistent flooding and sewage issues in Southeast Queens.

I first want to thank this committee for bringing forward and discussing with DEP the introduced bills today that show your deep commitment to the New Yorkers who must face the harmful and costly consequences every time intense storms hit the area. With federal rejection of climate change and state inaction, your local leadership in this area is more needed than ever.

Today marks the 13th-year anniversary of Hurricane Sandy. Just 4 years ago, in the height of summer, Hurricane Ida flooded and killed 11 New Yorkers in their basement apartments, and now even average rainstorms trigger states of emergency across New York City and State. As extreme weather events become more frequent and intense due to climate change, Queens—home to some of the city's most flood-prone neighborhoods[1]—is bearing the brunt of the impacts. For example, residents in Queens made over 4,000 backup complaints involving private sewer systems to DEP in 2022 alone—nearly six times as many as in Manhattan.[2] Yet, many of these neighborhoods—including those of our clients—still lack adequate infrastructure, maintenance, and any meaningful DEP engagement.

NYLPI has worked with and represented Southeast Queens residents for many years, and I'm here today to re-elevate their concerns. Our clients and partners—like Linda Dada, Andrea Scarborough, and many others of their neighbors—continue to bear the brunt of sewer infrastructure disinvestment during flash storms like Ida. They and their neighbors have had to spend tens of thousands of dollars to fix crumbling shared sewer infrastructure that the City won't help with, and many have even stepped into their streets' manholes to unclog lines because DEP neglected to do so. This is despite DEP saying that they will not send staff into these manholes without protective eye, facial, and body gear.

Our clients in South Jamaica—on 106 Road and 107 Avenue—desperately need the City to provide what most New York residents already have—a safe, functioning public sewage line. Without this

[1] Ambika Nair & Claire Kramer Mills, Federal Reserve Bank of New York, Flood Risk and Basement Housing in New York City: The Impact of Extreme Weather on Vulnerable Housing Stock at 5 (May 2024). Flood-Risk-and-Basement-Housing-Brief

[2] NYC Department of Environmental Protection, *State of the Sewers 2022*, https://www.nyc.gov/assets/dep/downloads/pdf/water/wastewater/state-of-the-sewers-2022.pdf.

public sewage line, residents in South Jamaica will continue to face horrid sewer backups, leaving them with an unsafe, unhealthy, and inhumane living environment.[3]

In 2023, DEP promised our clients in South Jamaica that it would build a new sewer line in three to four years. That project was to start next year. But last week, Borough President Richards's office informed us that DEP is delaying that plan by two years, for unknown reasons. Neither we nor residents were aware of this, as our repeated attempts to obtain information from DEP about this promised sewer line since 2023 have been entirely unsuccessful.

Additionally, due to the relentless advocacy of Councilmember Gennaro and many others, Local Laws 70 and 87 were passed into law this year. In the months since, we have been unable to hear or learn from DEP on their plans to carry out these laws' mandates. These laws were enacted to ensure DEP provides information to residents in flood-prone communities precisely because of lack of transparency, data, and information from DEP about projects in New York neighborhoods. We urge this committee to continue meaningful oversight of DEP in their implementation of these laws.

Finally, in partnership with Southeast Queens residents, Councilmember Nantasha Williams and Borough President Richards, NYLPI issued a report and resource guide this summer that outlines our community clients' experiences and concerns, relevant City and State legislation, programs available to assist these homeowners, and steps DEP must take to address community concerns and to implement the relevant laws, including Local Law 70 and 87. We invite this committee to continue to engage and discuss with us how we can together move forward in protecting your constituents and our clients against the harms from inland flooding.

Respectfully,

Caroline Chen
Director of Environmental Justice Program
New York Lawyers for the Public Interest
cchen@nylpi.org

Founded 45 years ago by leaders of the bar, New York Lawyers for the Public Interest (NYLPI) is a community-driven civil rights organization that pursues justice for all New Yorkers. NYLPI works toward a New York where all people can thrive in their communities, with quality healthcare and housing, safe jobs, good schools, and healthy neighborhoods. Our Environmental Justice program fights environmental racism, works to eliminate the unfair burden of environmental hazards borne by low-income communities and communities of color, and seeks to create a more equitable and sustainable city.

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[3] *See* Dennis Pillion, *Alabama Black Belt Becomes Environmental Justice Test Case: Is Sanitation a Civil Right?*, Inside Climate News (July 10, 2023), https://insideclimatenews.org/news/10072023/alabama-sanitation-civil-rights-biden/?utm_source=InsideClimate+News&utm_campaign=e91b9fb4e0-EMAIL_CAMPAIGN_2023_07_15_01_00&utm_medium=email&utm_term=0_29c928ffb5-e91b9fb4e0-330506442.

NYU | ARTS & SCIENCE
Department of Environmental Studies

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Dr. Sonali Shukla McDermid, Chair and Associate Professor, Dept. of Environmental Studies
Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. Thank you for your time today and your past support of the Climate Museum.

My name is Sonali Shukla McDermid, and I am a climate scientist, Associate Professor, and Chair of the NYU Environmental Studies Dept here in NYC. I work to understand the drivers of climate change, its impacts, particularly on agriculture and food systems, and options for mitigation and adaptation. As a professor, one of my core goals is to educate and train the next generation to think critically and take action on complex issues.

I am here today to ask you to pass the resolution in support of the Climate Museum's mission and growth. My first experience with the Climate Museum was in 2019, in which I was asked to participate in a discussion on how climate change will impact our local communities and what we can do about it at the local-to-national levels. My first impression of the Climate Museum was that this place would become extremely important: this was a place that got the science right; and that wanted to not just represent it well but to represent it in a way that resonated with the public. In a way that motivated the public, even in ways that science could not. I see the Climate Museum as a transformative institution that could close a critical gap between the climate knowledge produced and the action needed to address it.

After this experience, I have personally sought out collaboration with the Climate Museum in several ways. I currently serve on the Museum's scientific advisory panel, and have had deep conversations with their staff on their approach to designing and

showcasing exhibitions. I have worked with their tireless staff to conduct workshops for grade-school students that incorporate rigorous climate science into creative expressions of climate action and justice. These workshops (like everything the Climate Museum does) are critical: they give local children - our local children right here across NYC - the knowledge, tools, and experience to be well-informed citizens. More generally, the Climate Museum, through all their programming, empowers people both here in NYC and visitors from elsewhere to see their agency, and maybe even their responsibility, in tackling the climate crisis. Most recently, I have asked the Climate Museum for their help to conceptualize a new exhibit and project that raises awareness of how recent immigrants in NYC may experience and be impacted by climate change in distinct ways from other groups. I offer this to highlight that not only do I find fulfillment in providing advice to the Climate Museum, but my work benefits by their offering insight to me. The Climate Museum is not just a place to learn about climate change, it's a place to gather our community - to galvanize our community - to address the climate crisis and create the city and the world we want to live in.

The Climate Museum has a critical role to play in empowering New Yorkers and the public on climate change action, and they complement other institutions' research and action on the problem. Therefore, I urge you to pass the resolution in support of the Climate Museum.

Thank you again for your partnership, for your time today, and for your service.

To: NYC Council Committee on Environmental Protection

From: April McIver, Executive Director, The Plumbing Foundation

Date: October 22, 2025

Re: Int. 1352-2025

INTRODUCTION

My name is April McIver, and I am the Executive Director of the Plumbing Foundation City of New York, Inc. The Plumbing Foundation was founded in 1986 and is a non-profit organization of small and large, union and non-union plumbing contractors, engineering associations, supply houses, and manufacturers whose mission is to protect the public health and safety of New York City through the enactment and enforcement of safe plumbing codes.

I am writing to you regarding Int. 1352-2025 which is on today's hearing agenda for the Council's Committee on Environmental Protection. Our members have some concerns and questions regarding the language in the proposed bill, as explained below.

COMMENTS

Int. 1352-2025 proposes to "require that roofs on covered buildings drain onto a permeable surface in accordance with DEP rulemaking. Covered buildings would be residential buildings that are served by the combined sewer system and located on lots where the front yard area is at least 20 percent of the lot coverage area." Our members have been actively engaged with the NYC Department of Environmental Protection (DEP) regarding its stormwater rules for the past several years. Given this background, we have comments and questions regarding the proposed language in Int. 1352, as detailed below.

While we were able to meet with Council staff regarding this bill to understand some of the background, we seek more information concerning the history and need for the bill, whether the Department is in favor of the language, and the timeline of moving the bill. We were told that this bill is designed after cities like Boston and Portland, although it is unclear where some of the specific language came from as it does not appear to be the policy or code in either city.

Specifically, the "20%" formula language used in the bill regarding lot coverage area seems to be specific to the New York City proposal, and initial research shows it is not the same as the cities

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after which the NYC bill is claimed to be modeled. Clarification on the background and justification for this formula would be greatly appreciated by the industry in understanding this bill.

Second, there is discrepancy regarding the text in the summary of the bill and the body of the bill. The summary of the bill says "20 percent of the lot coverage area" and the text says "is at least 20 percent of lot coverage ***multiplied by the lot area***." It appears that the latter part within the body text could be a mistake as it creates confusion. We request this is clarified in the body text.

Further, the bill uses the term "residential building" but does not define or reference a specific definition. Is the bill covering all residential buildings or just R3 single family homes? Staff indicated in our meeting their understanding is that Int. 1352 would apply to ***any*** building, including single family, but would only apply to new construction and significant renovations. The text of this bill, however, is vague and does not specify that intention. Council must amend this bill to define the buildings which fall under the proposed requirement.

Finally, regarding the exceptions under DEP's (and the NYC Department of Buildings [DOB]) discretion(s), specifically:

> *A residential building for which the Department of Environmental Protection or the Department of Buildings determines that compliance with this section would pose a threat to health, safety, or property, including but not limited to a building located in an area with a high groundwater level.*

This provides for extremely vague and almost unlimited authority since there are no specific parameters, nor is there a clear process on how DEP or DOB should implement such a waiver policy, or a time period that makes logical sense (e.g., how many months prior to implementation of the law should a waiver be applied for). We strongly suggest this bill is revised to be more clear and provide direction on why exceptions should be allowed.

CONCLUSION

We thank the Committee for their consideration of our comments and look forward to continuing to work with Council and staff on Int. 1352. We strongly suggest this bill is revised to address vagueness and misdirection. Please do not hesitate to contact us for any reason.

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GREEN-WOOD

Good afternoon, Chair Gennaro and members of the committee.

My name is **Joe Charap and I am Vice President of Horticulture at The Green-Wood Cemetery**, a National Historic Landmark and 478-acre greenspace in Brooklyn.
Storms since Hurricane Ida have shown how quickly New York City's sewer system is overwhelmed. When that happens, untreated wastewater and polluted runoff enter our waterways and streets, and the most vulnerable communities are hit the hardest.

At Green-Wood, we are working to be part of the solution. With support from the State's Green Innovation Grant Program and NYC DEP's Resilient NYC Partners program, we built a system that now manages **51 million gallons of stormwater every year**—with detention basins, bioswales, permeable pavers, and smart controls that also cut our potable water use by 8 million gallons annually.

This summer, we were awarded **$1.81 million** through the New York State Environmental Facilities Corporation to **expand our permeable pavement installations**. Thanks to this investment—and in partnership with our **great colleagues at the DEP**—we'll further reduce runoff into the Owl's Head sewer shed and improve water quality in Upper New York Bay.

The climate crisis is happening now. Private institutions like Green-Wood must join city and state governments in making bold changes. What happens on our 478 acres affects not just us, but the tens of thousands of Brooklynites around us.
I invite members of this committee to visit Green-Wood and see these forward-looking stormwater projects firsthand.

Thank you.

THE NEW SCHOOL

Office of the President
66 West 12th Street
New York, NY 10011
newschool.edu

Joel Towers
President and University Professor

October 22, 2025

Re: Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

To: New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Joel Towers, President and University Professor, The New School
Testifying on behalf of The Climate Museum
October 22, 2025

Dear Chair Gennaro and Members of the Committee,

Thank you for the opportunity to testify today, and for your past support of the Climate Museum. My name is Joel Towers, and I am President of The New School and a founding trustee of the Climate Museum. I am here today to urge you to pass this resolution in support of the work and mission of the Climate Museum.

I have had the pleasure of working with the Climate Museum since its inception in 2015. The Museum sought to be the first in the US dedicated to climate change and to use the arts, exhibitions, and public programs to not only move people emotionally, but to empower them—to make the issue feel less overwhelming, more actionable, and more communal. I could see from the beginning the significance of their work and its potential to fulfil a public need that was going unaddressed. Over the past decade, it has been a privilege to witness firsthand the profound shift that students, teachers, artists, New Yorkers, and other visitors of all types have experienced while at the Climate Museum.

In 2017, when I was the Dean of the Parsons School of Design at The New School, we offered the Climate Museum exhibition space in one of Parsons' flagship galleries, the Sheila C. Johnson Design Center, for their very first exhibition. The show, entitled *In Human Time*, presented the work of two artists whose depictions of polar ice explored themes of climate science, awe and vulnerability, and the deep human connection to nature. During the run of the show, the Museum hosted events including scientist-led tours and youth arts

workshops. Hand-written responses left by visitors said things like, “I feel the overwhelming necessity to do something about the climate NOW…” and, “Never has this made more sense than now. - A Hurricane Irma survivor.” It was an honor to help launch the Climate Museum’s public programs. Today, the Museum has presented 17 exhibitions, 355+ events, and reached 166,000+ people across the globe.

As the Museum has continued to grow, they have collaborated many times with the New School. During each exhibition, the Museum offers visits, tours, and programs for our students, along with those of other schools and universities. For example, for the Museum’s last show, *The End of Fossil Fuel,* the Museum commissioned a climate-justice themed mural from the award-winning children’s book author and illustrator R. Gregory Christie. As part of that collaboration, students from the Illustration Department at Parsons were invited to attend a workshop with the artist. The students gained insight on how Christie crafts emotional and meaningful visual narratives that his audiences can connect with. They saw the power of illustration to create an impact beyond the page, along with practical professional development skills to better understand how to establish themselves as working artists.

Our most recent collaboration with the Museum was the creation of a Spring 2025 class at the New School entitled “Climate Humanities & Social Justice” and taught by the Museum’s Mellon Foundation Postdoctoral Fellow. The multidisciplinary course explored the climate crisis as a cultural crisis and offered opportunities to investigate and envision sustainable futures through novels, articles, films, and visual art. We knew it would be enriching for the school and for the students to have the Climate Museum’s Fellow teaching about climate justice, history, and the arts while also sharing the organization’s interdisciplinary and intersectional philosophy of collective action. We are in preliminary discussions to continue the course for the Spring 2026 semester.

Finally, it was also my pleasure to spend over six years as Secretary of the Board for the Climate Museum, only stepping down when I had the honor of being appointed the 10th President of the New School. I have the utmost respect for the trustees on the board and for the leadership of the organization.

It has been a joy watching the Climate Museum flourish over the years—from that first exhibition years ago, to now securing and building their permanent home. The work of the Museum has reached the hearts and minds of so many. Not just my students, but thousands of all ages and backgrounds. Not just teaching about climate change, but changing the course of students' lives and fostering the next generation of civic leaders. We need organizations like the Climate Museum now more than ever. New York City is a leading voice in climate, and by uplifting the connection between climate, culture, and community—by uplifting the Climate Museum—we can continue building a

safer, healthier, more just, and more empowered city. Thus, I once again urge the committee to pass this resolution in support of the Climate Museum.

Thank you for your time and leadership.

best,

Joel Towers
President and University Professor / The New School
Professor of Architecture and Sustainable Design / Parsons School of Design
Joeltowers.president@newschool.edu

DAVID BERGMAN ECO
Sustainability Consultant . Architect . Author . Educator . Speaker

October 22, 2025

RE: Climate Museum Resolution hearing

Dear Committee on Environmental Protection, Resiliency & Waterfront Members,

Thank you for the opportunity to express my support for the resolution supporting the Climate Museum's mission and growth. I am a life-long NYC resident who has been involved for most of that time in advancing sustainability in the city and beyond as an architect, professor, author – and resident.

For climate issues to get the attention and buy-in needed, it's essential to reach as many people as possible in as many ways as possible. The Climate Museum presents a unique resource in that respect. Art – and especially interactive works – are a way to educate and involve people who might not be otherwise exposed to – or open to - the issues. Art is a visceral means of communication, unlike books and articles and talks, and has the ability to reach a different audience.

I teach sustainable design at two colleges. In the time that the museum has existed, I've been able to take numerous groups of students to see what artists, both local and distant, are doing as well as help them see what they, as students and residents, can be doing. Their experience is inevitably positive and, more importantly, positive in a way that not only educates but involves, and shows what the future can be.

The museum's work and exhibits are directed not to an audience of art goers, but to the public, including especially younger residents of the city, showing art and issues they can relate to. I don't know of another resource like it.

I urge you to support the work of the Climate Museum by passing this resolution. Thank you in advance.

David Bergman, LEED AP, LFA, CPHD, Assoc AIA

241 Eldridge Street 3R, New York, NY 10002

Written Testimony on New York City Council Resolution 0082-24
E. Christa Farmer, Professor, Hofstra University Geology, Environment, and Sustainability Department

10 October 2025

Dear Chair Gennaro and other Committee Members,

Thank you for your time and your past support of the Climate Museum. I am writing to express my support for the Climate Museum and to encourage you to pass Resolution 0082-24.

I visited the pop-up exhibition space of the Climate Museum on February 10, 2024, with seven students from my GEOL140 Paleoclimatology course at Hofstra University. Please see Figure 1 below for a photo of the students at the museum. We were all impressed with the welcoming space and the engaging exhibit. I was especially touched by the connections made between community, equity, and the climate system. I believe making these connections is essential for creating solutions to the climate crisis.

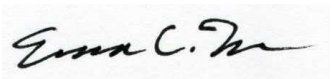
Figure 1: GEOL140 visits the Climate Museum, 10 February 2024.

One of the students who attended the trip wrote: “I thought visiting the museum was really cool and informative. I loved the mural about climate change, it's great to incorporate art. They made it easy to get involved and contact a representative or other official to urge them to act on reducing fossil fuel use or whatever you may want them to address. I think that they could do so

much more with more support to continue educating students and the public and inspiring people to get involved with such an important issue."

I hope you will consider supporting the efforts of the Climate Museum to create a permanent exhibition space- we need this union of science and art and social justice now more than ever.

Sincerely,



E. Christa Farmer
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The City College of New York MFA PROGRAM in CREATIVE WRITING

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum

New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Emily Raboteau, Author, Essayist and Art Critic;
Professor, the City College of New York;
Visiting Scholar, NYU Institute for Public Knowledge

Testifying on behalf of The Climate Museum
October 22, 2025

Greetings and thanks to Chair Gennaro and to the Members of this Committee.

- My name is Emily Raboteau. I have lived in New York City since graduating from college in 1998, over a quarter century ago. I got my MFA in Creative Writing from New York University. I got married in Upper Manhattan and now live in the Bronx where I am raising two children who attend public schools through the DOE—MS141 in District 10 and Beacon High School in District 3. For over twenty years I have been a professor of creative writing at the City College of New York, the Harlem campus of CUNY, one of the great public institutions of Higher Education in the US, where almost all my undergraduate and graduate students are New Yorkers.

- As a professor, practicing writer, art critic, and public intellectual in the humanities working across a range of disciplines including Black Studies, English, and Environmental Studies, and publishing longform essays on issues related to environmental and social justice and public art in wide-reaching publications including the *New Yorker,* the *Atlantic*, the *New York Times*, the *New York Review of Books*, *New York*, and the *Nation*, I do the work I do to engage and inspire critical thinking and action in the public sphere. This is also the aim of the Climate Museum.

- In 2018 I was inspired by a Climate Museum exhibit called “Climate Signals,” a public artwork by Justin Guariglia that I encountered in St. Nicholas Park while walking from the subway to the City College campus. It turned out this was but one of ten signs flashing warnings about the impact of the climate crisis, staged in areas of New York City most threatened by those impacts. The intention of the exhibit was to make New Yorkers confront the climate crisis as it is unspooling in our city now, not in the future. Over the course of the fall of 2018, I traveled across all five boroughs to visit each of the ten signs and wrote an essay about my journey for the *New York Review of Books*, which went viral and was later anthologized in *Best American Travel Writing*. Just as Guariglia’s artwork struck a nerve with me, my essay about it struck a nerve with readers. I later sat on a panel with Guariglia and Climate Museum director, Miranda Massie downtown at The Writers Room to discuss the project in front of a standing room only audience. (The essay also became the lynchpin of my 2024 book, *Lessons for Survival: Mothering Against the Apocalypse,* which was a finalist for the Brooklyn Public Library Book Prize.) I was moved on

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that panel to hear Miranda Massie talk about the amount of public trust people have in museums, across political divides, and convinced of the importance of this particular museum to inspire continued dialogue and climate action.

- The Climate Museum's Climate Signals show reoriented my trajectory as a writer to focus more explicitly on the climate crisis in my work as a matter of moral urgency and an area of collaboration. It also changed my focus as a researcher and a teacher. After writing about the show and my experience of awakening through it, I began leading workshops in climate writing and even won a college-wide provost's award for outstanding pedagogy. The reverberations of that exhibit are long-lasting and extensive, because now my students are writing and publishing work about climate change. My general impression of the Climate Museum is that it's an innovative and maverick space for urgent climate communications that inspire collective action as well as a safe pathway into the dark and overwhelming reality of the climate crisis. Speaking for myself, it helped give me the tools to confront that reality instead of avoiding it.

- I appreciate the Council's move in recognizing the importance of initiatives like the Climate Museum for New Yorkers and our coastal city. I look forward to many more exhibits and shows at the Climate Museum to come and am even investigating placing interns from City College there for a meaningful professional experience.

- Thank you for the opportunity to express my views on the Climate Museum and what it represents for the life of our great city.

Professor Emily Raboteau

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Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Gabriela Salazar, Professional Artist and Educator, Grace Church School - High School Division
Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. Thank you for your time today and your past support of the Climate Museum.

My name is Gabriela Salazar. I am an artist working primarily in sculpture and drawing, and a high school art teacher at the Grace Church School in downtown Manhattan. I'm a native New Yorker, grew up on the Upper West Side, and I live there again currently, with my young daughter. I am writing to you today to ask you to pass the resolution in support of the Climate Museum's mission and growth.

In 2019, the Climate Museum commissioned me to create work to concur with the 50th anniversary of Earth Day, in March of 2020. The work, "Low Relief for High Water," was postponed because of the COVID-19 pandemic, and was finally presented on October 10, 2021, in Washington Square Park. When Miranda Massie, Climate Museum's founder, approached me about working together, I was still in the first years of motherhood, trying to understand how to make art in changed circumstances. She had seen my work in Storm King Art Center's 2018 exhibition, "Indicators: Artists on Climate Change," and based on that work, offered me the opportunity to create a work for the Museum with a great budget and complete trust in me.

Certain considerations became apparent early on: We landed on Washington Square Park as a location that could inherently capture a broad population, but that meant that the work would only be shown for one day. I came up with a performance-sculpture that would create an exchange, literal and figurative, with audience members. Repeatedly casting the windows of my childhood home (the Upper West Side apartment where I am now raising my own daughter) in a water-soluble paper, I assembled a sculpture that symbolized "home," the hope and expectation of safety and shelter we seek in that place, and—via the vulnerability of the material to water—connected the threat of rising sea levels to the increasing threat to our shared homes—New York City and the Earth—from climate change.

On the day of the performance, I systematically cut apart and gave away the entire sculpture. With each gift of a piece of the art—a piece of my home—a moment of connection and responsibility was established with the viewer; whether they cared for or discarded the piece of the sculpture, in accepting it, they were acknowledging their role in fighting for the Earth and their place in a community of the like-minded.

On site, we also had various resources and activation sites where participants could speak with a psychologist who specialized in climate grief, write a postcard to then-President Biden or Senator Schumer in support of the infrastructure bill, and share what is important to them about “home” on a polaroid picture of them with their piece of the work. The Climate Museum also commissioned a short film about the work, directed by Micah Fink, that has been shown on PBS, most recently re-aired during Climate Week 2025.

Throughout this process, Miranda and the whole small-but-mighty Climate Museum team worked with me to secure permits, more funding (from the City Corps Artist Grant), and even lent me their (COVID-emptied) offices to store the work when everything shut down and finish assembly ahead of the final presentation.

I cannot share enough how meaningful and transformative the entire experience of making “Low Relief for High Water” with the Climate Museum was for me as an artist. The financial and logistical support were deeply appreciated and reaffirmed that I could find a way to keep making art through a complicated personal time, but even more, “Low Relief for High Water” has had reverberations throughout my art practice and fortified my commitment to educating and connecting people to fight climate change. I continue to work with the water-soluble paper I first used in “Low Relief,” now in a series of works called “Leaves.” These works—some of which have also become part of performances—speak to the vulnerabilities, ephemeralities, and poignancy of contending with my complicated inter-generational experiences of grief and beauty as the climate rapidly changes. The conversations I began with Miranda and Anais Reyes follow into the present, connecting me with other practitioners and audiences who believe in the potential of art to bring us together and transform this experience from one of despair to possibility.

I also teach art in the high school of the Grace Church School, and in the midst of creating “Low Relief for High Water,” I developed an elective class called “Creativity and the Climate Crisis” for juniors and seniors, where we delve into the possibilities and pitfalls of using creativity and the arts as a tool for climate action. (I also taught this class as a one-semester course at Sarah Lawrence College in 2021.)

Above and beyond any other institution, the Climate Museum has helped me to understand that through my devotion to art and its community, there is a way to make a difference. It is a unique catalyst in this landscape, bringing the climate conversation to people where they are, showing them they too have a part to play, crossing boundaries between art and the environment, and reminding the cultural sector as a whole of their role and responsibility in furthering this essential work.

We need the power of the arts and culture as much as any other tool to help us come together to combat climate change. I again request and respectfully urge the Committee to pass this resolution in support of the Climate Museum and their essential mission.

Thank you again for your partnership, for your time today, and for your service to our community.

Warm regards,

Gabriela Salazar
Artist and Educator

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Idea Reid, Freelance Dancer and Assistant Teacher, The Toddler Center, Barnard College
Testifying on behalf of The Climate Museum
October 22, 2025

Greetings, Chair Gennaro and members of the committee. Thank you for the opportunity to testify today, and for your past support. My name is Idea Reid, I was born and raised on the north shore of Staten Island (district 61) and I am a former intern for the Climate Museum. Currently, I am a freelance dancer and an assistant teacher at The Toddler Center at Barnard College.

When I was asked if I wanted to testify, I felt excited. I interned and worked for other organizations during my time in college, great ones, ones also doing important work, but there is none other that I would rather do this for, nor any that had a bigger impact on me as a young person. My relationship with the Museum began in high school, when I was 16.

Here's where I was coming from: I was a dance major at a public performing arts school in Hell's Kitchen, the pandemic had just hit and that meant I wasn't able to do much of what I loved day to day. The catalyst for applying for the Climate Museum internship was after the Black Lives Matter Movement of 2020, where I first learned what the term "environmental racism" meant, and that that term hit closer to home than I thought in my Staten Island neighborhood. I applied, liking what I saw on the website about the arts and activism coming together. That was my way in.

At that time, I had no idea the impact the Museum would have on me. As a high school intern with the Museum I had the opportunity to learn about climate advocacy and climate arts. That was over Zoom. Over time, learning turned to practice. I wrote a research paper on environmental racism on the north shore of Staten Island, I spoke at panels and climate policy rallies, I made a dance film about climate change. As a college intern with the youth programming team, I got to work more directly and behind the scenes with the Museum. I helped program events that passed along the joy and purpose that the Museum gave me, to other young people.

Those years of 2020-2023 were formative for me and action-filled. In fact, it's hard not to compare myself to when I was 17, working for the Climate Museum. The world was seemingly at its most hopeless, yet I don't think I've ever felt as unafraid and bold as I did then. The Museum gave me the tools to turn my passion and artistry into action, and every single person involved with the organization led by example of how to show up in this world as a thoughtful, caring human being. So yes, when *anyone* asks me about the Climate Museum, it's safe to say I go on a tangent comparable to the length of this testimony.

This is why the Climate Museum is, I can't stress this enough, *so* important. The Museum urges us to *feel*. By putting on the kind of arts and educational programming that it has for *years*, and doing so with whatever resources they have access to even when it's hard, it is an antidote to the disconnected times we live in. It connects us. Not only to the climate crisis, to each other, to the natural world (which takes some reminding when you live in NYC), and perhaps most importantly, to ourselves. To our humanness. Which all great art does. It is my belief that once we are connected back to our full humanness, everything else falls into place. In fact we need *more* organizations like the Climate Museum, that are that medium to which connect us back to ourselves and how we belong in, and with, the world around us. But first we just need the Climate Museum, so I urge you, members of the committee, to pass this resolution in support of the work the Museum does. We so desperately need it, more than I think we know. And then visit the work of the Museum to see what I'm talking about. Thank you.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Jasmine Wynn, Harvard College, Class of 2027
Testifying on behalf of The Climate Museum
October 22, 2025

To Whom it May Concern,

My name is Jasmine Wynn, and I am 21 years old. I was born and raised right here in New York City (Central Harlem, specifically). I am currently a student at Harvard College studying History with a minor in Environmental Science and Public Policy.

Since 2020, I have been involved with climate education and advocacy in various capacities — facilitating high school teach-ins, writing about climate solutions for Congressional audiences, and leading lobbying efforts in both Albany and New York City.

However, none of this would have come to fruition without the help of the Climate Museum, which provided me with a pathway into climate leadership and understanding environmental justice.

Serving first as a high school intern and now as a student ambassador, the Climate Museum has enabled me to better communicate the threat of climate change to audiences who are less familiar with the subject — for example, my extended relatives.

My father and all of his five siblings grew up in public housing located in Cypress Hills, Brooklyn. Today, they all have or had diagnosed asthma — my dad's brother, James, tragically passed away on his daughter's birthday from an asthma attack decades ago. My father's family always suspected the root cause of their asthma to be environmental causes, such as the high levels of exhaust from the traffic corridor of Linden Boulevard. It didn't help that they also resided in a New York City Housing Authority complex, which likely posed an additional environmental hazard. But the more I learned about the connection between fossil fuel combustion, highway construction, and frontline communities — such as Black and brown working class communities outside of Manhattan — the more words we had to describe the larger impacts that led to the health outcomes in my dad's family. It was the direct result of fossil fuel combustion — the same culprit causing intensifying, destructive storms like Hurricane Irene, Sandy, and Ida that flooded our subways and increasingly insufferable summers worldwide.

The Climate Museum was a big help in helping us see the larger systemic picture, and I confidently believe it can do the same for other New Yorkers. The Museum provides groundwork

for continued action too — for example, I just helped execute a climate rally at the Massachusetts State House a few hours before sitting down to write this.

The Climate Museum is an invaluable resource to the City of New York and youth education on climate. It must be treated as such.

Thank You.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Manav Bansal, MPhil Candidate, University of Cambridge
Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. Thank you for your time today and your past support of the Climate Museum.

My name is Manav Bansal and I am currently a Master's of Philosophy student at the University of Cambridge studying Energy Technologies.

I am here today to ask you to pass the resolution in support of the Climate Museum's mission and growth. As I sit at my desk in Cambridge, England, trying to find the words that can most appropriately capture the impact that the Climate Museum has had on me, I realize that the place where I am today is because of the Climate Museum.

With my parents in the medical field, I was surrounded by white lab coats and stethoscopes throughout my youth. It was only natural to imagine my story would follow a similar narrative.

Entering the 10th grade, I pictured a straightforward medical path to becoming an orthopedic surgeon, like my father. I envisioned developing innovative solutions to vexing problems, perhaps creating neurally controlled prosthetic limbs.

It wasn't until I encountered the Climate Museum, the first in the country dedicated to climate change, that my outlook on life, as well as the impact I thought I could make, was altered. It started with a short newsletter that, by chance, caught my attention in my otherwise cluttered inbox.

As I scanned the email, my eyes landed on *Climate Speaks*, a poetry competition that, beyond teaching participants how to effectively disseminate knowledge about the climate crisis through poetry, also highlighted the social inequity and injustice that permeate the climate crisis. I had been interested in environmental issues, writing pieces ranging from the impact of pesticides on human health and the environment to the diminishing bee population, but my perspective was predominantly a scientific one. A spark unexpectedly ignited within me, fueling a desire to think differently and to explore how I might have *a broader impact.*

Although I didn't advance in the competition that year, my desire to engage with the Climate Museum wasn't dampened. Instead, I applied to work at the museum in their summer internship program; one of their youth programs. By educating others, I deepened my knowledge and

expanded my understanding of strategies to mitigate the effects of the climate crisis and where significant knowledge gaps exist. Actively engaging with museum visitors propelled my much broader ambitions in climate activism; a pursuit that has allowed me to engage with other youth leaders regionally, nationally and globally.

Perhaps surprisingly, it was just an email that opened up a path of self-reflection and discovery. Before learning about the climate crisis, and more importantly, how it has disproportionately affected people of color, I took my station for granted. In our material society, we rarely focus on what others don't have, but rather focus myopically on our desires, which hinders us from seeing the social inequality that remains pervasive in modern society. Once I seized upon the debilitating intersection of the climate crisis and social justice, I realized I must use my privilege to propagate impact. As I sit passively by, my brothers and sisters across the globe are running. Ironically, running from both the rising seas and raging fires. These climate refugees, primarily of marginalized communities, are suffering the brunt of this crisis, while most of them don't know what the term "global warming" means, or its repercussions.

They are the ones inspiring me to serve as a catalyst for change. Change will take leaders who can apply science and think and act comprehensively. The Climate Museum and its programs are building those leaders. Ones who act, ones who rise, ones who use their voice to engage.

That email, and the ensuing awakening, brought about a period of self-reflection which caused me to reconsider my path. Like caring for a patient, healing the Earth will require a multifaceted approach. I always knew I would become a doctor, I just didn't know who the patient would be.

Thus, I urge the committee to pass Resolution 0082-2024 in support of the Climate Museum. We are living in a time where voices are being suppressed in the face of a climate and ecological crisis. We need voices who will amplify our need for mitigation techniques and sustainable solutions. The Climate Museum is creating those voices, and because of them, I have become one.

Thank you again for your partnership, for your time today, and for your service.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Nicholas Badullovich, Ph.D, Affiliate research faculty, George Mason University & Research Fellow at the University of Western Australia

Testifying on behalf of The Climate Museum
October 22, 2025

Greetings to Chair Gennaro and to the Members of the Committee. Thank you for your time today and your past support of the Climate Museum.

My name is Dr. Nicholas Badullovich and I am currently an Affiliate Research Faculty Member at George Mason University and a Research Fellow at the University of Western Australia.

I am writing this testimony to respectfully urge you to pass the resolution in support of the Climate Museum's mission and continued growth.

I first became familiar with the Climate Museum around August of 2023, through my Center's Director, when I was a Postdoctoral Research fellow at the Center for Climate Change Communication (4C) at George Mason University. As a scholar focused on climate change communication, I was deeply interested in the Museum's pioneering approach – using the power of the arts to engage the public on climate. Recognising the importance of grounding such work in evidence, I partnered with the Climate Museum to design an objective, empirical study examining the impact of its programming.

As the World Health Organisation has stated, climate change is a "fundamental threat to human health." Rising greenhouse gas emissions are driving more frequent and extreme weather, dangerous heat events, and displacement on a massive scale. These consequences fall hardest on those least responsible – people in developing nations and marginalised communities. Meeting this global challenge requires not only policy coordination, but also broad public understanding and engagement – the kind of grassroots mandate that institutions like the Climate Museum help to build.

Together with the Climate Museum team – including Director Miranda Massie and former Senior Exhibitions Associate Amanda Nesci – we co-developed a rigorous research project focused on three questions:

A. Who are the people that visit the Climate Museum?
B. To what extent does visiting the Museum affect perceptions of climate change and intentions to take action?
C. Can the Climate Museum act as an effective space for climate communication?

There is a dearth of research on the effects of climate change communication in informal learning settings, and hence, framing a study around the Climate Museum was on the cutting edge of climate change communication knowledge. Coming from a research institution, my job is to design rigorous research protocols, collect quality data, and perform objective analysis to report transparent findings. This means confronting the possibility that results may be unfavorable, inconclusive, or simply null, which is a common outcome in academic research.

The Climate Museum was instrumental in facilitating survey distribution and conducting interviews, while deliberately stepping back during data analysis to ensure full academic independence. This decision reflects their commitment to transparent and evidence-based practice – a quality that sets the Museum apart and underscores its scientific integrity.

In short, we found several important behaviours and mindsets that were positively affected by visiting the Museum: visitors had greater hope that climate change can be addressed, greater intentions to engage in climate change conversations, and we observed a marked shift in social norm perceptions. Social norms are subtle rules or beliefs that we all follow during our daily lives. One prevalent and incorrect social norm is that it's not acceptable to talk about climate change because it's controversial and few people care about it. Research from George Mason University and the Yale Program on Climate Change Communication unequivocally shows that in fact, 63% of Americans across the board are worried about global warming – two in three people. Our results suggested that visiting the Museum had a measurable effect on shifting this social norm, helping visitors have a more correct perception when it comes to how many people in America are concerned about climate change. This is not only a noteworthy result academically, but has huge potential for communication efforts to build social support for climate solutions. These results were written up in the form of an academic article and published in the peer-reviewed journal PLOS Climate in 2025.

The Climate Museum occupies a vital space in U.S. national discourse – building public understanding and encouraging civic engagement. Supporting this institution is an investment in informed democracy, resilience, and the capacity of people to confront the defining challenge of our time. It uses empirical evidence to build its programming and to communicate the realities of climate change. And it does not sugarcoat hard truths – but our research study shows that not only do people feel more hopeful when they leave the Museum, but they feel more compelled to do something about it. That is remarkable.

I strongly urge the committee to pass the resolution in support of the Climate Museum. Its impact reaches far beyond New York – it serves as a model for the world. Our empirical research paper also demonstrates this, as people visiting the museum came from five continents across the world, comprising 40 different countries. It is truly a space that is not only open, but accessible to the world, and plays a fundamental role in facilitating action on climate change.

Thank you for your leadership, your time today, and your commitment to the public good.

SARI GOODFRIEND PHOTOGRAPHY

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Sari Goodfriend, Photographer, Contractor to the Climate Museum
Testifying on behalf of The Climate Museum
October 22, 2025

Greetings Chair Gennaro and the Members of the Committee. Thank you for your time today and your past support of the Climate Museum. My name is Sari Goodfriend. I'm a lifelong New Yorker - born and raised on the Upper West Side, where I still reside. I am here today to ask you to pass the resolution in support of the Climate Museum's mission and growth.

As the Climate Museum's primary photographer, I have had the joy and the privilege over the last eight years of covering around seventy of the hundreds of events and workshops they have hosted since their inception. My role is not only to document installations and artwork, but also to capture the emotional responses of visitors — their curiosity, awe, and connection with the exhibitions and presentations and their connection with each other.

Every New Yorker remembers the day the sky turned orange — June 7, 2023. I was photographing in a Midtown law firm that day, vaguely aware of distant Canadian forest fires. From the 32nd floor of the Grace building, I stood beside prominent attorneys, looking out at the skyline anchored by the Empire State Building. Our noses pressed against the glass, we watched in shock as a grayish overcast sky transformed to an apocalyptic peach-toned glow. I shared a sense of helplessness with these accomplished individuals. The irony was not lost - these folks wield serious power, but we shared a palpable anxiety that day.

Paradoxically, that same feeling — collective vulnerability — is something I often experience at the Climate Museum. Thankfully though, the museum provides an opportunity for discussion and action, which elicits hope. As visitors move through its beautifully constructed exhibitions, learning about the vast challenges we face as a planet, they don't stay silent. Strangers speak to each other, point things out, and bond over shared outrage. They discuss climate injustice in marginalized communities, intentional pollution and cover up from the fossil fuel industry, and blatant corporate greenwashing. But amid the horror of human impact, there's also this sense of hope I mentioned. Every exhibition includes not only a library of resources with cozy areas to sit and read, but an action station.

In these action stations, people spend long amounts of time writing heartfelt postcards to leaders, feeling the power of participation. The sticker wall is my favorite. Climate Museum staff created twelve different colorful round stickers which have text on them such as “I’m going to start gardening”, “I’m going to join a climate group”, or “I’m voting Climate”. Museum goers select one and then add it to the growing installation. Some people jump with their sticker in hand to slam it as high as they can onto the wall - literally making their mark against climate change. The energy in these spaces is contagious — people leave not defeated, but activated.

Oddly enough, it’s in these rooms filled with climate realities that some of my own tension about the world eases. Information, presented clearly and aesthetically, is grounding. The museum helps us confront a very existential question: where do we fit in, and what can we do to ensure a safe future for our planet and humanity as a whole?

With so much buzz about climate change - some sources explaining it, but some sources sadly trying to explain it *away* (with a full on ban of the term), we need as much accurate information as possible. At a time when trust in the media is low and misinformation is high, the Climate Museum translates urgent research into experiences everyone can understand.

That accessibility and leadership makes it unlike any museum I’ve ever visited (and I’ve been to a LOT of museums). Staff are always present to discuss the exhibits with visitors, and people of all ages engage deeply. I’ve witnessed children pointing things out to their parents and teenagers debating their future. I’ve seen the same people return again and again because it’s such a welcoming space that helps lift spirits. I’ve seen tourists express relief that New Yorkers are not only aware of climate change, but taking action. To that point, I once met a couple from the mountains of Colorado who came to NYC specifically to visit the museum; their enthusiasm at what they saw reminded me how vital it is for the Climate Museum to have a permanent home here - in our city.

As we all know, New York is a global leader - it informs and inspires people from all over the world. I believe we have a responsibility and an opportunity to expand that leadership through the Climate Museum. Even if just two, five, ten, people from Florida, Shanghai, Mexico City, you name it — come here, and then go back to their communities engaged and activated to make a difference, the Climate Museum has succeeded.

To conclude – when we realize we are not alone in facing something overwhelming, connection can become courage. The Climate Museum builds that bond and that community. Through panel discussions, marches, “speed-friending” events, conversations with climate psychologists, and yes, even climate comedy shows, the Climate Museum brings people of all ages and backgrounds together to learn, act, and find hope. In doing so, it provides an invaluable service to our city — proving that while every individual action matters, collective action changes everything.

I urge you to *join us* in taking collective action in your committee of the New York City Council by supporting the work of the Climate Museum and passing this resolution.

Thank you again for your partnership, for your time today, and for your service.

Written Testimony on Resolution 0082-2024 Supporting the Mission and Growth of the Climate Museum
New York City Council, Committee on Environmental Protection, Resiliency & Waterfronts

Thérèse Dorn Bernbach, Visitor
Testifying on behalf of The Climate Museum
October 22, 2025

I want to thank City Council Speaker Adrienne Adams and members of the City Council for taking the time to consider and support this resolution for the Climate Museum. And in particular, I want to thank Chairman Gennaro and my excellent councilman, Lincoln Restler, who is a co-sponsor of this resolution. I urge all members of the Council to join Mr. Gennaro and Mr. Restler to vote in favor of this resolution.

Though I was born in Savannah, Georgia where my father was stationed as a naval officer during WWII, in 1948 we moved back to Brooklyn, my father's home town. My father, Francis E. Dorn, had been elected to the NY Assembly and resigned to join the Navy. In 1952, he was elected to Congress and served his Brooklyn District 11 until 1960. He worked hard to respond to the needs of the people in his district and he taught his five children to become active members of our community. I have tried to follow his good example and support many community groups in Brooklyn Heights where I have lived since 1970 and where I raised my children.

In 2019 my friend, Pete Putzel, introduced me to Miranda Massie. She so impressed me with her knowledge of all aspects of climate change that I asked her to speak at a meeting of our community organization. She spoke about the impact that climate change has had on our area in Brooklyn, specifically the damage done by Hurricane Sandy which affected all of New York City. She spoke about the disappearing coastlines of countries around the world, the damage done to reefs and the changing habitats of animals and fish due to the warming waters. Through the years since that talk, I have gone to the many installations, exhibitions and pop-up locations which Ms. Massie has organized to showcase information about climate change.

These installations have included very creative educational and inter-active exhibits to inform the public and many school groups about the impact of climate change. Even though we cannot stop climate change, these exhibits showed steps we can take to slow it down. This is so important for my own grandchildren and for the future of the world.

Miranda Massie has long hoped for a permanent location where all this information will be available. Finally, a permanent site has been found at the Hudson Yards, funded with private

donations as well as support from Gov. Hochul. I urge all members of the New York City Counsel to support this Resolution and the Climate Museum.

FIELD FORM

Testimony of Field Form Inc. before the

New York City Council

Committee on Environmental Protection, Resiliency and Waterfronts

Oversight Hearing on Stormwater Resiliency in a Changing Climate

October 22, 2025

My name is **Samuel Robinson**, and I am a **Principal at Field Form**, a New York–based landscape design and build firm. Thank you, Chairperson Gennaro and Members of the Committee for your leadership on climate resiliency and for the opportunity to testify today.

Field Form strongly supports the City's commitment to expanding flood-mitigation solutions. While we support the intent of **Intro. 1352**—to reduce stormwater entering the combined sewer system—we have concerns about how it can effectively be implemented.

Many residential sites simply lack the soil capacity or hydrologic conditions to infiltrate roof runoff effectively. Also, without flexibility for **complementary strategies** such as rain gardens, subsurface storage, or other engineered systems, compliance could be difficult and might even worsen localized flooding.

Understanding local geology along with accurate flood mapping is critical to reducing flood risk and protecting public health.
In this regard, **Field Form supports Intro 1397**, which would require base flood elevation data within 10-year rainfall flood risk areas. This is an essential step toward ensuring that legislation like Intro. 1352 is grounded in real data and feasible design standards. However, more benchmarks and interagency coordination will still be needed for success.

Our analysis of **Council District 24** found that, of roughly **18,000 total lots, more than 11,000** have potential for downspout disconnection and on-site infiltration—diverting over **120 million gallons** of stormwater annually. Yet roughly **7,000 lots** do not have suitable conditions, and even those that do will require **site-specific adaptation** such as soil amendments, grading, and micro-mitigation upgrades.

Currently, **there is no clear Citywide framework** to help property owners retrofit existing sites for downspout diversion, even where infiltration potential is high. Therefore, we urge the Council and DEP to establish a **citywide retrofit pathway**—with clear design standards, permitting guidance, and funding—to make this work feasible and equitable across all neighborhoods.

We also recommend refining Intro 1352 to include **data-driven design flexibility**, aligned with **DEP's investments such as the identification of areas that have already received green infrastructure installations, which may be better suited to deal with downspout diversions.** Importantly, eligibility should extend to **all properties citywide** that meet infiltration criteria—not just those with front yards. Many properties with rear or side yard areas could also make a significant impact if included.

Field Form stands ready to collaborate with **DEP** and the **Council** to ensure that **Intro 1352** and **Intro 1397** not only strengthen new design standards but also deliver a **clear, actionable retrofit plan** for existing buildings—an essential step toward a resilient, climate-ready New York City.

Thank you for the opportunity to testify.

Samuel Robinson
Principal
Field Form Inc

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Melissa Grech

Address: Assistant Commissioner Environmental Planning & Analysis

I represent: NYC DEP

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Wendy Sperduto

Address: Assistant Commissioner

I represent: NYC DEP

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/22/2020

(PLEASE PRINT)

Name: Michael S. Farnan

Address: Acting Deputy Commissioner, BWSO DEP

I represent: _____

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10.22.25

(PLEASE PRINT)

Name: Beth DeFalco

Address: _____

I represent: DEP

Address: 59-17 Junction Blvd. 11373

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Joseph Ackroyd NYC DOB

Address: _____

I represent: NYC DOB

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Paul Lozito

Address: 253 Broadway

I represent: Mayors office

Address: _____

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THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Joseph Charap

Address: _____

I represent: Green Wood Cemetery

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. 6082-2024

☑ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Victoria Cerulle

Address: 10 South Street, Slip 7 NY, NY 10004

I represent: The New York Climate Exchange

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. 82

☑ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: GERARD GEITER

Address: [redacted] BROOKLYN 11201

I represent: FX COLLABORATIVE

Address: 1 WILLOUGHBY SQ, BROOKLYN NY 11201

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: David Bergman

Address: _____

I represent: Parsons

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Idea Reid

Address: _____

I represent: Student

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Sara Goodfriend

Address: _____

I represent: Climate Museum

Address: _____

panel 3

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Drew Knotts

Address: _____

I represent: Climate Museum | Hitzik Strategies

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Sonali McDermid

Address: _____

I represent: New York University

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Vicki Cerullo

Address: _____

I represent: New York Climate Exchange

Address: _____

Panel 2

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THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Dan Zarrilli

Address: _____

I represent: Columbia University

Address: _____

Panel 2

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Guy Geier

Address: _____

I represent: FX Collaborative

Address: _____

Panel 1

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Mark Chambers

Address: _____

I represent: Terreform ONE

Address: _____

Panel 1

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Miranda Massie

Address: _____

I represent: Climate Museum

Address: _____ panel 1

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Cynthia Rosenzweig

Address: _____

I represent: NASA Goddard Institute for Space Studies

Address: _____

panel 1.

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Caroline Chen

Address: 151 W 30th St 11th fl NY NY 10001

I represent: NY Lawyers for the Public Interest

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1352 Res. No. _____

☑ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: SAMUEL ROBINSON

Address: 301 Dupont Street, Brooklyn, NY 11217

I represent: Field Fund Inc.

Address: "

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. 1352 Res. No. _____

☒ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Em Ruby

Address: [redacted] Brooklyn, NY 11215

I represent: Riverkeeper

Address: 20 Secor Rd. Ossining NY

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Michelle Fleurantin

Address: 151 W 30th Street, New York, NY

I represent: New York Lawyers for the Public Interest

Address: _____

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☐ in favor ☐ in opposition

Date: 10/22

(PLEASE PRINT)

Name: Idea Reid

Address: [redacted] Staten Island, NY, 10301

I represent: Climate Museum

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Drew Knotts

Address: [redacted] Brooklyn NY 11221

I represent: The Climate Museum

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 10/22/25

(PLEASE PRINT)

Name: Sari Godfriend

Address: _____

I represent: Climate Museum

Address: _____

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