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1	COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS 2
2	APPEARANCES (CONTINUED)
3	Angela Licata
4	Deputy Commissioner, DEP
5	Beth DeFalco Deputy Commissioner, DEP
6	Melissa Enoch Assistant Commissioner New York City Departmen of Environmental Protection
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8	Matt Drury
9	Chief of Citywide Legislative Affairs
10	Marit Larson Parks Asst. Commissioner of Natural Resources
11	Em Ruby
12	Riverkeeper
13	Paul Gallay Project Director, Resilient Coastal Communities
14	Project at the Center for Sustainable Urban Development, Columbia University
15	Alia Soomro - NY League of Conservation Voters
16	Michelle Luebke, SWIM Coalition
17	John Leyva
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COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS

SERGEANT AT ARMS: This is a microphone check for the Committee on Environmental Protection and Waterfronts recorded in the Chambers by Shaquilla Walker(SP?) on May 7, 2025.

SERGEANT AT ARMS: Good afternoon and welcome to today's New York City Council hearing Committee on Environmental Protection. If you would like to testify today, please see one of the Sergeant at Arms in the back to fill out a testimony slip. No one may approach the dais at any time during today's hearing. Please silence all electronic devices. Chair, you may begin.

CHAIRPERSON GENNARO: Thank you. [GAVEL] Good afternoon. I'm Council Member Jim Gennaro, father of the bride and Chair of the Committee on Environmental Protection, Resiliency and Waterfronts. Today, we will hold an oversight hearing on nature based solutions for climate resiliency and disaster preparedness. Additionally, we'll be hearing two Intro.'s sponsored by me and two Resolutions sponsored by my colleague Julie Menin. Julie can't be here today but we look forward to hearing her Resolutions.

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Intro. 1253, which would require DEP to notify

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Council Members whenever the city installs a new bioswale, rain garden or other bioretention system in the public right of way within their district.

That's that bill.

Intro. 1254, which would create a greened acre metric to measure stormwater captured by green infrastructure installed by the city and set a greened acre goal for MS4 areas. Many in the audience, of course DP knows but people who may be watching, you know the city has two kinds of sewage drainage areas. One is where the sanitary sewer is and the storm sewers are combined. We call those combined sewer whatever and the other area I guess it's about one-third of the city or whatever but I'm sure DEP will tell us. We call those areas that have separate dedicated sanitary sewers that go through the sewage treatment plant and the storm flow runs to a local water body. We call those MS4 areas. I mean it just doesn't run right out. You take out floatables and stuff like that but uhm, so that is what MS4 means.

And then Reso 131 calling on the New York State legislature to pass and the governor to sign a bill

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A6872A and S5921A. The New York State Deforestation-Free Procurement area. You know hyphen between Deforestation and free. Deforestation-free like that's what we're going for.

Next Reso, Proposed Reso, Number 143A to recognize the contributions of the Federal Endangered Species Act to the natural environment of New York City.

While there was no universally agreed upon definition for nature based solutions, we're getting back to the oversight topic now. The term is often understood to encompass a range of ecosystem related strategies including ecosystem based adaptation, ecosystem based management, green infrastructure, blue/green infrastructure. I don't know what that is but I'll find out. Natural infrastructure and ecosystem based disaster risk reduction.

Research indicates that nature based solutions can be just as if not more effective at addressing environmental hazards then traditional grey infrastructure. Nature based climate adaptations can be more resilient, have lower maintenance needs, be deployed with greater flexibility, and feature cobenefits like improving air and water quality,

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increasing habitat for wildlife and providing social and recreational benefits for people as well. By contrast, grey infrastructure - hey, nothing wrong with grey infrastructure. Grey infrastructure projects can often be very expensive to install and maintain, can come with serious project permitting and funding delays and in some instances have severe negative impacts on the environment for some times insufficient levels of additional protection.

In New York City, we've used this nature based — we, meaning you know DEP, us, whatever. We've used a nature based program. We've used this nature based paradigm to successfully address local flooding conditions in Staten Island, Queens in the Bronx and increased our resiliency to heat by expanding local tree cover, which has been particularly important in high heat vulnerability neighborhoods.

We've used green infrastructure assets like rain gardens and bioswales to manage nearly two billion gallons of stormwater annually, reducing combined sewer overflows, combined sewage overflow events by - wait for it, nearly 800 million gallons a year and we've used green infrastructure assets to increase resiliency to storm surge through efforts like having

2	living breakwaters projects. To have the Living
3	Breakwaters Project and Coastal Wetlands Restoration
4	work, to name a few, but every year, climate change
5	exacerbates disordered weather patterns, reminding u
6	that there is much more work yet to be done. At thi
7	hearing, I'm hoping to shine a spotlight on some of
8	the great nature based climate and resiliency work
9	that the city is already undertaking. We've been
10	doing this a long time, and so, I'm sure that DEP is
11	going to have a very good story to tell. This
12	hearing hoping to shine a spotlight on some of the
13	great nature based climate resiliency work that the
14	city is already undertaking so that we can see what
15	opportunities we have to expand this work in the
16	future. And you know this all ties into what we're
17	doing with our last bill with the comprehensive
18	stormwater management plan. It's all one big you
19	know, one big effort.

I'd like to thank the Committee Staff, Legislative Counsels Natasha Bynum to my right and Sierra Townsend, Policy Analyst Ricky Chawla and Andrew Bourne, Financial Analyst Tanveer Singh as well as my own Legislative Director Josh Gachette. You know the staff is sitting to my left, for all

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their hard work. And I want to recognize that we're joined by Council Members Holden and Marmorato. They have joined us. It's always a pleasure to be with them and now I'll turn it over to Committee Counsel to give the affirmation to the witnesses.

COMMITTEE COUNSEL: Good morning. Please raise your right hand. Do you affirm to tell the truth, the whole truth and nothing but the truth before this Committee and to respond honestly to Council Member questions?

Thank you, you may begin when you're ready.

CHAIRPERSON GENNARO: I just want to say that notwithstanding that fact that the Committee Counsel said it was good morning instead of afternoon. The affirmation still takes, okay. It's not like a time thing. There's no loopholes here, so.

ANGELA LICATA: I do it all day.

CHAIRPERSON GENNARO: Yeah, so like you know, you're affirmed like that's it. Let me just get your testimony and let me get my pen so I can make some notes and uhm, yeah please state your name for the record and proceed with your good testimony.

ANGELA LICATA: Good afternoon Chair Gennaro and members of the Committee on Environmental Protection,

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Resiliency and Waterfronts. I am Angela Licata,

Deputy Commissioner of Sustainability at the

Department of Environmental Protection and I am

joined today by Deputy Commissioner of Public Affairs

and Communication Beth DeFalco and several other

colleagues from DEP and the Department of Parks and

Recreation to talk about nature based solutions for

climate resilience and disaster preparedness.

DEP has a longstanding history of using nature based solutions to improve harbor water quality.

Newer systems focus on managing stormwater in areas that are prone to flooding. Nature based solutions can be advantageous when they are brought online more quickly and with less construction disruption than long-term sewer construction. They also have meaningful local improvements.

Before we talk more about these tools, we should talk about our changing climate.

Climate change is bringing more severe and frequent rainstorms to New York City. In 2020, the National Oceanic and Atmosphere Administration reclassified New York City from a coastal temperate zone to a humid subtropical climate zone. A recognition that we now live in a different world

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than we were in a few decades ago. The more severe rainstorms have brought new challenges to our stormwater management system. Traditionally, sewers, often referred to as gray infrastructure, are the main line of defense in a storm. New York City has approximately 7,500 miles of sewers, which were designed to effectively manage stormwater for a temperate climate. Our sewers continue to protect fully against 98 percent of rain events, but the system is not designed to handle the most extreme storms we now face. The sewer system can get overwhelmed when the amount of water produced by the storm is greater than the capacity of the pipes. This generally means that for most sewers can handle between 1.2 and 1.75 inches of rain per hour. used to be rare for most of the city but is now a regular occurrence.

We have to expand our stormwater management system if we want to meet the needs of today, let alone tomorrow. Upsizing sewers alone is not financially and logistically feasible.

Building above ground is almost always cheaper and faster than building below. Our best strategy is

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2 to use a combination of both gray and green

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infrastructure in the right place and measure.

Green infrastructure absorbs water into the ground in areas with good soil. It can also green neighborhoods, improve air quality, create cooling, improve aesthetics and provide habitat for pollinators.

A few years ago, we started to identify opportunities where we could site and design green infrastructure to go above and beyond the CSO Reduction, that's Combined Sewer Overflow Reduction, which is what the program principally was charged with doing in its origin. You'll find these strategies in large, underutilized medians and you will also see the cloudburst management program that we'll discuss below coming soon. With over 16,000 green infrastructure assets constructed -

CHAIRPERSON GENNARO: I kind of lost my place. I think I have a different version of the -

ANGELA LICATA: I'm starting with the paragraph with over 16,000 green infrastructure assets.

CHAIRPERSON GENNARO: Okay, hang on, hang on. Got it, got it, thank you.

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ANGELA LICATA: And over \$1.4 billion committed, the New York City Green Infrastructure program is now the largest of its kind in the nation and continues to grow. In 2024 alone, we added 2,500 green infrastructure assets in our city through a combination of rain gardens and infiltration basins in our sidewalks, as well as new green infrastructure on public and private lots.

In keeping with the topic of the hearing today, I would like to tell you a little bit about how DEP uses nature based solutions and tools and discuss the implementation challenges.

DEP's Bluebelt program dates back to the early 1990's. Bluebelts are ecologically rich stormwater management practices that work in tandem with our sewer infrastructure. They incorporate natural or engineered water features, such as streams, ponds and wetlands to convey, store, filter and slow the flow of stormwater to manage and alleviate and prevent flooding.

As an added benefit, Bluebelts include open spaces with native vegetation that reduce runoff and pollution and provide wildlife habitat. Bluebelts are connected to storm sewer pipes, so they are part

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of the sewer system network. They work with nature preserving and restoring natural drainage corridors, like the streams, the ponds and the wetlands, using these natural systems to store and filter the stormwater.

In addition to these stormwater benefits, Bluebelt networks help improve the city's ecological health and in some cases provide community amenities. As Bluebelts use wetlands and ponds to manage stormwater, they are primarily sited at locations with existing water bodies and separate storm sewer networks. Most of them are in Staten Island because Staten Island has the most intact water courses and water bodies than the other boroughs. Over the last ten years, DEP has built Bluebelts for approximately one third of Staten Island's land area. In Staten Island, we are continuing to build out Bluebelts in New Creek, Lemon Creek, Arden Heights, and Butler Manor watersheds. The US Army Corp of Engineers is commencing construction of Bluebelts in South Beach Watershed of Staten Island as part of an interior drainage of the South Shore of Staten Island Seawall.

DEP has completed 96 Bluebelt assets across three boroughs. In addition to Staten Island, DEP has

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2 created some Bluebelts in Queens and the Bronx and is 3 looking to expand the program into other boroughs.

DEP looks for opportunities to implement Bluebelts and watersheds near to flood vulnerable areas. Many times, these flood vulnerable areas are nearby or within existing historic waterways. They are often located on New York City Parks property, so DEP is partnering with the Parks Department to identify opportunities where park land could provide the space necessary to detain stormwater. there is no obvious parks partnership, DEP looks for other city owned or vacant land opportunities.

In addition to the stormwater and flooding benefit, the Bluebelt program is also a community amenity. The majority of Bluebelt sites are open to the public and offer open space experience. public can access the sites via gravel walking paths that afford access to green space, rich with wildlife, wild flowers and wetlands.

The program also leads multiple educational tours each year and hosts an annual citizen science project where local students learn hands on about fish migration, water quality and scientific methods. popular adopted Bluebelt project gives the community

an opportunity to get involved by adopting sites and keeping them free of litter and weeds. The Bluebelt program also supports local community groups each year by sponsoring cleanup events on city properties.

Transitioning to rain garden, green medians and porous pavement, we can recognize that green infrastructure comes in a variety of shapes and sizes including curbside rain gardens, greened medians with underground stormwater retention, porous pavements and infiltration basins.

Each of these installations or assets allows

water to flow in and then seep through layers of engineered soil and stone into the ground underneath. We have now installed more than 16,000 green infrastructure assets in the public right of way around the city, and the majority of these about 7,000 are rain gardens. We are building more than just the rain gardens you see on the sidewalk and porous pavements in the streets. We have also retrofitted over 250 public parks, playgrounds and NYCHA properties with green infrastructure and we have over 100 additional properties in planning and design. This includes projects funded through our public private partnership with the trust for public

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land, which has delivered 54 greened community school yards. Information about various types of green infrastructure and a map of the right of way assets around the city are included at the end of this testimony.

As we have spoken before about maintaining green infrastructure, we know that it is critical and it can also be a challenge. We strive to keep our rain gardens healthy and performing by visiting them every four to six weeks.

Rain gardens are a design so that water flows into them. If there is litter on the street, that water can bring litter into the garden. As you might imagine high pedestrian traffic areas tend to accumulate litter in the rain gardens as well. We use a data driven approach to maintenance crew deployment and routing. Where our inspection data show high need areas, we send crews more frequently and where the data shows less need, we deploy crews less frequently.

We also supplement liter control with a borough based contractor support contract. More time spent on litter control means less crew time available for other work like soil enhancement, tree pruning,

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plantings and horticultural services that are important for maintenance staff, recruitment job satisfaction, training advancement and of course the health of the rain garden. We cannot meet the city's stormwater management needs with infrastructure alone in public space. There must be stormwater management systems on private property as well. So, DEP provides financial incentives for installing green infrastructure on private property. Through our capitally funded GI grant program, we funded \$13 million across 32 different sites primarily building green roofs.

To compliment this program and fund even more green infrastructure on private lands in 2021, we launched resilient New York City Partners. This program offers an innovative pay for performance contract to fund even larger projects on private lands with large amounts of site level impervious area.

To date, we funded over \$9.5 million in private green infrastructure that manages 11 million gallons of stormwater a year on private properties. Private owners who have participated in our program include Greenwood Cemetery, H+H Health and Hospitals, Jacobi

Medical Center and Pratt Institute. DEP is currently working on a project at the Brooklyn Navy Yard and is coordinating with several new potential partners.

The city alone cannot manage stormwater because most property in the city is privately owned. It's roughly about 50 to 60 percent. That makes the unified stormwater rule one of our most powerful tools for onsite stormwater management.

Starting in early 2022, it requires every site that disturbs 20,000 square feet or more of soil or adds 5,000 square feet or more of new impervious surfaces to manage a certain amount of stormwater on their site.

They must submit a stormwater pollution

prevention plan or a SWPPP, which controls - which

requires controls to be in place during construction

to protect our sewers and waterbodies from soil

erosion. As the sites redevelop they're performing

better during wet weather than they were before

development. Since this rule was implemented, over

1,400 sites are meeting the new online stormwater

management requirements and an additional 200 sites

constructed or will soon be constructing green

infrastructure to further reduce their stormwater

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runoff. Examples of these projects can be found all over the city. One example includes 585 Union Street in Gowanus. This nine story 230,000 square foot building will occupy the entire lot. Before the stormwater rule was in effect, a development like this likely would have just managed stormwater in an underground attention tank. With our rule, they are building a 6,000 square foot green roof and a robust detention system. We even noticed them touting their green roof under building amenities on their website.

We also have our largest green infrastructure project to date nearing design completion. The Tibbetts Brook daylighting project in the Bronx. The Tibbetts Brook originates in Yonkers and flows through Van Cortlandt Park before discharging into Hester and Piero's Mill Pond. In the early 1900s the brook was diverted into an 8 foot diameter tunnel that connects to a combined sewer flowing to Wards Island Wastewater Resource Recovery Facility.

Burying streams and creeks and merging them with sewers underground was a common strategy as our city developed but a century later, we are experiencing unforeseen consequences. Flowing a waterway into a combined sewer reaches that sewer's capacity quickly.

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The Tibbetts Brook connection has led to significant issues over the years. Instead of building more infrastructure like storage tanks to try to hold a brook, we are going to daylight the brook, disconnecting it from the sewer system and allowing it to flow more naturally.

Once completed, not only will this project reduce combined sewer overflows to Harlem River by 220 million gallons a year, but it will allow for the creation of a new public greenway between Van Cortlandt Park and West 230th Street enhancing connectivity and access as part of the Empire State Trail. And it bears repeating and mentioning that this a project and partnership with the Department of Parks and Recreation.

A cloudburst is a sudden, heavy downpour in a short amount of time. Cloudbursts can overburden the sewer system and cause flooding. Cloudburst management systems capture stormwater until the sewers can handle the flow. Cloudburst management projects often feature special community amenities and open spaces that can be used by the public on dry days. For example, the cloudburst project designed for NYCHA's South Jamaica Houses is a sunken

basketball court that will absorb and divert

for you in the testimony.

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stormwater during future storms. Most days, the basketball court will provide recreation for residents. During cloudburst events, the stormwater will intentionally be diverted to the court, which will hold the water safely until the rain even is over, taking that rain water off the street and out of the sewers. And we provided some picture of that

Cloudburst hubs a large scale cloudburst

projects, generally designed for a multi-block area

where directing, collecting, storing, and

transferring stormwater can have a meaningful benefit

on localized flood attenuation and the added benefit

of CSO reduction. We use existing land and retrofit

public spaces to allow for more enhanced stormwater

management. These can be implemented more quickly

than larger nature based solutions that may rely on

identification of vacant lands or property

acquisition. These projects require close

coordination with our colleagues at Parks Department,

at Transportation, at Department of Education, School

Construction Authority and of course NYCHA.

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Analysis; DEP's green and gray infrastructure teams are coordinating to develop a stormwater master plan for the city that will lead to a more resilient system overall. This comprehensive stormwater master plan that will assess necessary upgrades, engineer amended drainage plans and set funding priorities.

This planning process will take years but the results will be targeted approaches to capital investments including nature based solutions where it could help manage surface flooding and longer term gray infrastructure upgrades.

In 2024, DEP released the 2024 Stormwater

Analysis, which is the first building block for the master plan. This stormwater management update highlighted the city's challenges with managing stormwater in a changing climate and examine stormwater challenges and solutions in four case study locations.

Of course stormwater management cannot be done by DEP and a silo. Work will need to be coordinated among the city agencies mentioned. Fundamental policy decisions will need to be made, in particular the acceptable levels of service and the level of

acceptable flooding in our environment and DEP will work to inform these decisions.

Most of DEP's work is paid for by water and sewer rates. We constantly think about how to balance our needs, the demands of New Yorkers for providing better service and especially floodwater protection and the needs to manage our rates to be affordable.

DEP aggressively pursues outside funding for our work and we have had strong successes receiving funding, including federal funding. In particular, our cloudburst projects have been receiving building resilient infrastructure and community BRIC grants from FEMA. The federal government recently announced that FEMA or the Federal Emergency Management Agency, is ending the BRIC program and canceling all BRIC applications from federal fiscal years 2020 through 2023.

We are still figuring out what impact this may have. We remain in close conversation with our city and state partners as it pertains to our federal funding streams and will work with these partners to try to mitigate and minimize impact as much as possible.

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Before I conclude, I will speak briefly about the two pieces of legislation being heard today. We have been discussing the bills with your staff and look forward to continued conversations. The first bill on today's agenda is Intro. 1253, which would require DEP to notify the local Council Member 30 days before installing a bioretention system in a right of way. We generally support this bill but want to make some edits. The Department of Design and Construction manages most of DEP's GI projects. DEP and DDC both recognize the importance of speaking with the community and elected officials and we have robust outreach plans that are already in place.

We have spoken to DDC about this bill and they are happy to supplement these outreach plans to fill any gaps. We would like to continue discussions with DDC and the Council to determine the best way to do that and to make some changes to the bill before it is passed.

The second bill is Intro. 1254, which would require DEP to install 2,400 green acres in the MS4 or the Municipal Separated Storm Sewer areas by 2035. As we discussed with your staff last week, we are fully committed to expanding GI across the city but

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we believe that the greened acre metric is not the best indicator of progress. As a quick background, for those listening, MS4- oh, I said that already.

In this system, separate pipes carry wastewater and stormwater as opposed to the combined sewer area, where the wastewater and stormwater are in one pipe.

So, as the Chair said earlier, 60 percent of the city has combined sewers and about 40 percent are MS4 areas or direct drainage. Our first concern for greened acres is that we no longer rely on that as an indicator for our GI program with New York State DEC. At one point in the program, when it began in 2012, there was a greened acre target but we have since realized that it is not a good metric because of the concept of greened acres does not fully capture what the green infrastructure does.

We continue to report greened acres however, in our New York City Greened Infrastructure annual report and we brought a few extra copies of the greened infrastructure annual report, it was just released on April 30th. Another concern is that we don't know if GI is the best tool to address stormwater management and water quality needs in all of the MS4 areas.

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As I have described today, DEP has developed a suite of tools because different tools are best suited for different goals and for different areas of the city. Mandating a fixed amount of greened acres could be counterproductive because it could require

us to install GI where it is not going to be

effective.

Finally, the bill's mandate may not be achievable. For the past 13 years, we have been installing GI across combined sewer areas, with our 16,000 assets, we have just reached 2,800 greened The bill requires nearly the same amount of acres. greened acres to be installed in the MS4 areas over the next ten years. There may simply not be enough time or enough space in the MS4 areas to accomplish that.

A minority of the city is MS4 as we stated and GI is not appropriate for much of that area. example, we know that many areas with separated sewers in the city like South East Queens have high ground water tables, which makes them ineligible for green infrastructure. We share the Council's goals of expanding stormwater management infrastructure through the MS4 areas and we appreciate the Council's

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continued support of our efforts. We have already started installing GI in strategic MS4 areas such as school yards and street medians with partners like DOT, DOE, and the Trust for Public Land.

As Council is aware, it is important to remember that while green infrastructure provides many community benefits, the goal of the program is simply to green the city. These are engineered systems that are built to enhance the way the city manages stormwater by reducing CSOs, improving water quality, and reducing flooding where possible.

Thank you again to the Council, especially to the Committee and Chair Gennaro for your continued support of nature-based solutions for stormwater management and other challenges. My colleagues and I are now happy to answer any questions that you may have.

CHAIRPERSON GENNARO: Thank you Deputy

Commissioner Licata. We appreciate your

comprehensive testimony as always and all the good

work you've done that you know DEP has done green

infrastructure. And before I commence my questioning

- uhm, I have to step out for a just a minute, so I

think I'm going to recognize Council Member Holden

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for questions. I'll be very brief. What's the matter? You okay? I'm just saying you know -

COUNCIL MEMBER HOLDEN: Alright.

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CHAIRPERSON GENNARO: Yeah so I -

COUNCIL MEMBER HOLDEN: Thank you, alright.

CHAIRPERSON GENNARO: I recognize Council Member Holden to start and then I'll do my thing.

COUNCIL MEMBER HOLDEN: Alright, thank you.

Thank you Chair and thank you Deputy Commissioner.

Just a couple of questions and uh I don't think I

have to be brief now so I can go on.

The average cost of installing a bioswale or a rain garden, what is that? Because I asked another question and I didn't get an answer at another hearing. Do you have that? The average cost?

ANGELA LICATA: Yeah, it's somewhere between

COUNCIL MEMBER HOLDEN: Alright.

\$15,000 and \$20,000.

ANGELA LICATA: And one other important point is that our green infrastructure program is generally our most cost effective CSO strategy at this point and time. There were times in the past decades when we invested a lot in gray infrastructure, including combined sewer overflow holding tanks but those costs

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have escalated and the economy of scale that we achieved is no longer available, so the green infrastructure that we're installing now is among the most cost effective solution.

COUNCIL MEMBER HOLDEN: Do you know how many bioswales were installed in Queens for instance? Or you know a ballpark?

ANGELA LICATA: I don't have that breakdown. We can certainly -

We have to measure outcomes. So, for instance if you know in my district we have a lot of storm runoffs, some water runoff going into the New Town Creek, which is further polluting the creek. You know that it's a vicious cycle. As we get bigger storms, there's more runoff, more sewer backups. We've invested a lot into sewer systems that still can't like you mentioned, in a cloudburst or the sewers weren't made to handle the amount of water. And then I'm always battling residents in my district that pave over their yards and then have a constant problem with the Department of Buildings going over and not finding anything wrong with that. And then I have to send it back and I said, yes, there's a law.

	RESILIENCI AND WAIERFRONIS 50
2	Did you know this and no, sometimes buildings doesn't
3	trickle down. But here's the biggest problem, I
4	mentioned this to the Commissioner. I have a lot of
5	national grid work being done in my district. I have
6	a lot of Con Ed work. They're installing new
7	electric lines both above and below ground and in Con
8	Ed - I mean in National Grid; they're installing gas
9	lines. A lot of tearing up the roadbeds, a lot of
10	tearing up the sidewalks. Yet and I discovered on
11	all these projects, they're paving over the green
12	strip at the curb, which is so counterproductive.
13	We're putting in bioswales all over the place, yet
14	the bigger picture, we're not - we're paving over
15	green space and just based on no particular plan,
16	there's no particular coordination. I mentioned this
17	to the Commissioner a number of times, yet I just had
18	a project near my office, they're doing the same
19	exact thing. They're actually paved - we have more
20	concrete then before the project. Why is that?
21	ANGELA LICATA: Yeah, that's disturbing and my
22	understanding is that there's supposed to put back
23	what was originally there. So, I would love to -
24	COUNCIL MEMBER HOLDEN: But even if like it was

paved over before, why would you pave it over again?

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ANGELA LICATA: They don't have the same mandate that we have. We can encourage that -

COUNCIL MEMBER HOLDEN: Who's they?

ANGELA LICATA: National Grid. Wait, they're doing it in the public realm. They're working on our streets. They're working for the public. They're working for the city, right?

ANGELA LICATA: Right.

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COUNCIL MEMBER HOLDEN: What do you mean their mandates?

ANGELA LICATA: Yeah, no and I could not agree more and I think that what we could do is meet with them and see if we could encourage them and DOT to see what the cost differential might be.

been bringing this up for several years. You know that? And this Commissioner heard this from me a number of times. You're probably hearing it for the first time but nothing changes and because you know, it's frustrating. When I'm trying to - I'm trying to you know put my finger in you know the dike and you know hold back something and then you know battling the green spaces on peoples homes and getting them fined because they don't know the law. But then you

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have National Grid doing it on a massive scale, entire blocks and I could show you and I sent pictures to DEP.

ANGELA LICATA: I would appreciate seeing those pictures.

know here's a strip of four feet wide and the whole block as far as you can see has been paved over because you know what, the homeowner says yeah, I want that paved over. I don't want to have grass there and I get it but that's not good for us and I try to tell people, don't pave over your - and have some green strips and then you get people putting astroturf, which you know I don't want. I think that's illegal too. You know I don't know how porous it is but can we actually get a program -

CHAIRPERSON GENNARO: Bob, I just want to tell you this. I'm just going to give you more latitude. You've got a good thing going here, so keep it up.

ANGELA LICATA: Yeah, I just want to respond by saying that we would like to work with you to see how we might be able to address this problem because I cannot agree more that it's a missed opportunity.

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our sewers.

2	CHAIRPERSON GENNARO: Well, you know, should I
3	have you know Chair, should we come up with a local
4	law that would require - is that what is needed here?
5	If we have a local law that would require the City of
6	New York anytime there is construction that that has
7	to be a green strip at the curb. That's not the
8	homeowners property. They don't understand that
9	sometimes and I have a big argument with them. Like
10	they're trying to oppose a tree being planted or
11	they're trying to oppose - they wanted that area you
12	know concrete and I said, no, no, it's got to be
13	green. We need more green. We need more you know
14	where the runoff can go into the ground rather than

So, if that takes a local law, let me know and I'll introduce it.

CHAIRPERSON GENNARO: And what I'll do, I'm just - I've got my Legislative Director, Josh if you could you know write that up and just have a few moments with Council Member Holden at his convenience after the hearing or when he leaves the hearing, make sure we get that on paper.

COUNCIL MEMBER HOLDEN: Thank you Chair. you.

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CHAIRPERSON GENNARO: Sure, my pleasure. This is why we have hearings. This is why we do this. It's not just me to wear my three piece suit and look nice.

You should have seen me on Sunday, my tuxedo.

Forget about it. Yeah, forget about it. Angela's seen some of the pictures already.

ANGELA LICATA: Council Member, I was just going to add that we also do regular meetings with the utilities, so I think that that's something that we'll put at the top of our agenda for the next meeting that we have with them and can report back to you after that.

COUNCIL MEMBER HOLDEN: Thank you.

CHAIRPERSON GENNARO: Thank you and Council

Member Marmorato. If I'm going to do for Holden, I

have to do for Marmorato. It's only fair and plus I

really like the Bronx. And so, I recognize Council

Member Marmorato for questions.

COUNCIL MEMBER MARMORATO: Thank you Chair. So, last year I did a walk through with DEP team and I kind of felt like the only thing I walked away with was to tell my constituents to constantly report flooding through 311, and we have been just

constantly devasted by flooding with every single rainstorm to the point where people kind of feel like this is the natural way of life and they have to like combat it on their own and they don't think to put the 311 calls because this is just normal to them.

Is there any way that we can do another walk through in my district because now you're saying that you're coming up with all these different kinds of solutions to help combat the flooding? If we can identify areas in different portions of the neighborhood just to see what we can do or at least get the conversation started to have the ball rolling where eventually we can offset some of the flooding. And especially with the City of Yes, I have focus point is my biggest - one of my bigger flooding zones and we have somebody coming in that's going to build six three family houses right next to wetlands and it's just like, this is already a street that floods constantly when it rains.

So, I just want to know if we can at least start a conversation. Just get an understanding and at least inform me so I can inform my constituents and see how we can like fix things or make things better.

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2 Because I know you're not going to redo my sewers.

3 There's no money in the budget for all of this.

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ANGELA LICATA: No, we can absolutely set that up and one of the things as Deputy Commissioner mentioned earlier about the unified stormwater rule. The stormwater rule is as those new buildings come up and come on line, they're going to start managing stormwater that otherwise was not managed before in the same way. So, hopefully that will be some of the benefit. We can certainly take a look if there are any green infrastructure opportunities or if there's a more simple solution to what the flooding maybe. Whether that's a street regrading or other issues. Figure out first of all what's causing the flooding.

COUNCIL MEMBER MARMORATO: Okay, great thank you.

I'd like to get in contact with you guys sooner or

later because now is kind of more of the rainy season

I feel. Okay, thank you so much. Thank you Chair

and congratulations.

CHAIRPERSON GENNARO: Thank you Council Member, appreciate that. As is my sort of pattern, I'll go through your written testimony and then I have prepared questions from staff and oh, I will mention to Bob though, do you know the DEP Borough

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2 Commissioner Mr. Lopez, Alfonzo Lopez? Do you know 3 who he is BOB?

COUNCIL MEMBER HOLDEN: Yes.

CHAIRPERSON GENNARO: Yeah, he's like a really good guy and you go to him, he's my constituent. He lives right near my DO and he used to work for the Mayor's Office. He does a great job as the Borough Commissioner and he sometimes is a great first stop. Some times the last stop as well because he's a closer and so, you should tell Alfonzo that I mentioned him okay.

Oh and we're joined by Council Member Restler.

Very happy to have him here. If I had his hair I'd

be Governor but that's another story. Usually I make

a lot of notes here.

Yeah, on uh, now my page doesn't qualify - my

page - the page in my testimony doesn't connect with

your page because DEP was nice enough to give me like

a large print version of your testimony but this has

to do with the citywide Bluebelt locations and you

indicated in your statement where there's no obvious

parks you know partnership, DEP looks for other city

owned and vacant land opportunities and I was just

wondering how sort of structured that was. Is this

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like an ongoing initiative or is there some sort of metric that they use or some sort of specified, you know periodic outreach to do this. I just wondered about like the mechanics of how those interactions with you know other city owned or vacant land opportunities, how does that work?

ANGELA LICATA: Council Member, are you talking about the green infrastructure or Bluebelts?

CHAIRPERSON GENNARO: Yeah, Bluebelts. Yeah, DEP looks for opportunities to implement Bluebelts and watersheds or whatever, and then and so it goes, it talks about uhm, you know the ongoing interaction with the Parks Department and you know - whether there's no obvious Parks Department, DEP looks for other city owned or vacant land opportunities and I was just wondering how that has been you know - how that's been set out and how that works.

ANGELA LICATA: Yeah, that's an excellent question and it really varies according to the area that we're studying. So, historically when we develop the Bluebelt program in Staten Island, the idea was that the traditional way of sewering would be much more expensive and would also require and mean that wetlands would be drained and most likely

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eliminated, which would not be not be easy to permit through New York City DEC, who at that time had developed strict regulations to protect wetlands that were greater than 12.4 -

CHAIRPERSON GENNARO: Right, 12.4 yeah.

ANGELA LICATA: Yeah, so what we did is we were able to sewer the various streets and developed networks with homes that had no storm sewers and we were then able to locate where those might then be intersected in a way that is configured as like a ribbon is the way I've always tried to think about it.

And then that stormwater could be developed into a park amenity, such as some type of a pond. Maybe already wetland that was situated within a park that needed to be rehabilitated, restored, and upgraded. And so, we were able to comingle all of those benefits together with the Parks Department and we created many beautiful amenities for the community as well as obviously incredible stormwater management.

At certain locations where there was not already a park or a wetland feature, we were looking at private property acquisition and we acquired quite a

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2 lot of land in Staten Island to do then the very same thing.

CHAIRPERSON GENNARO: How many acres did the DEP purchase in its - because I remember that they were doing like a land act thing in Staten Island. Is that still growing or was that sort of planned and is now complete?

ANGELA LICATA: Yeah, I don't have the number off the top but we could certainly get that to you because that was not only an acquisition for the benefit of stormwater management but as you know preservation of land and created quite a lot of land that is now in the public realm in Staten Island.

And we're trying to replicate -

CHAIRPERSON GENNARO: And now is that land once purchased, uhm does it have parks land designation?

ANGELA LICATA: Some of those lands were transferred to parks if they had a park land need and use and could maintain it. A lot of the property is managed by DEP itself.

CHAIRPERSON GENNARO: Okay because once it has parklands, park land designation, it would have to be alienated in order to be used for something else and so.

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ANGELA LICATA: Yeah, unless it was considered an
enhancement or an amenity to the parks. So, there
were a lot of parks in Staten Island, gratefully they
had acquired those properties and they had protected
them but they were in desperate need of
rehabilitation and an opportunity to regrade them in
certain instances or enhance their natural features
was available to us and the results were stunning.
And those neighborhoods, some in the adjoining
neighborhoods have indicated that their property
values actually increased as a result of that
Bluebelt program.

CHAIRPERSON GENNARO: Great, so the answer is that you know once the need is perceived, uhm DEP goes out and tries to figure out a way to make it happen. I'm just wondering if there was like a big board someplace about you know because notwithstanding having a first in the nation green infrastructure, look at our flooding problems, look at the bill we just passed last week, but the comprehensive stormwater management plan, which is really just putting like the cherry on top of what you all are doing with regard to stormwater management and so, notwithstanding all we've done,

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it's just like nature has caught up and is like overtaking us and we're going to be I guess doing a lot of gray infrastructure you know going forward but that's not the subject of this hearing. And so, let me see what else I have in your statement.

This is going to be question, this is - I'm going to give myself a little bit of latitude here. part of the statement is information about various types of green infrastructure and a map of you know right of way assets around the city are included at the end of this testimony. Okay and so, whoever wants to step forward from the Parks Department, I have a question about the city's right of way and trees.

We're going to call Marit Larson. ANGELA LICATA:

CHAIRPERSON GENNARO: Sure.

ANGELA LICATA: Commissioner.

CHAIRPERSON GENNARO: I think the Counsel is going to want to do the affirmation thing.

COMMITTEE COUNSEL: Good afternoon. Please raise your right hand. Do you affirm to tell the truth, the whole truth and nothing but the truth before this Committee and to respond honestly to Council Member questions?

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CHAIRPERSON GENNARO: Pardon?

COMMITTEE COUNSEL: Yes.

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CHAIRPERSON GENNARO: Okay.

MARIT LARSON: I do.

CHAIRPERSON GENNARO: Okay.

COMMITTEE COUNSEL: Thanks, you may begin when you're ready and please just state your name and title for the record.

CHAIRPERSON GENNARO: Yeah, I'm going to ask a question and when they answer, they'll state their name.

This is a little, I'm giving myself a little latitude here. Uhm, I've got a bill that I'm contemplating, which is very much in line with you know DEP thinking about how to increase or maintain the city's tree canopy and it's just a stone fact that uhm, that you know we all know about the right of way that the city you know reserves for itself. I happen to live on the street where the city has a 60 foot wide right of way, that it maintains but the street is only 28 feet wide. A pretty average size street but the city's right of way is 60 feet. So, from the center of the street to the curb, it would be what did I say, 20 feet? So, it's 14 feet to the

2	curb, then it would go another 16 feet and there is
3	this notion that trees that are planted on the little
4	strip of grass between the curb and the sidewalk,
5	those are like city trees. Anything that's on like
6	the property side of the sidewalk is like fair game
7	for tree contractors, for you know residents to hire
8	tree contractors to take down trees and uhm, and it
9	happens all the time. And trees within the right of
10	way, whatever the right of way is, those trees are
11	not allowed to be cut down and so, I have a bill in
12	the offing, uhm that would - well we're still kind of
13	playing with it but it would mandate, you know it
14	would mandate more education on the part of parks to
15	both I don't think too many residents are taking that
16	in their own trees but both the residents and for
17	contractors that do tree removal and tree servicing
18	in order to I mean, I live in an area that has many,
19	many old growth trees and properties get redeveloped.
20	Trees that are deep into the property, 100 years old,
21	what are you going to do? You're not going to tell a
22	person what they can do like with their trees.

But with regard to trees that are in the city right of way, you know that is a real loss of tree canopy and you know adds to the urban heat island

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effect and so, I guess you're probably wondering if there's a question in your future but let me see if I can get there.

Uhm, you know what is the Parks Departments current disposition regarding the phenomenon of trees that are on the property side of the sidewalk but within the city right of way? Because I've called the Parks Department when I've seen this happen, when they're just about to kind of like put like the chainsaw and I take out my Council identification and say, I have to make a phone call and then somebody comes down from forestry and they take a measurement and they say, I'm sorry, you can't take this tree down but at my current age and weight, I cannot be everywhere and so, uhm, so I was wondering what exists now in the Parks Department in terms of some effort to try to educate people to not do this and to the extent that this happens would those that perpetrate this be subject to the same kind of penalties that one who cuts a tree that's between like the curb and the sidewalk, which everybody knows is a city tree. Anybody who does that like knows they're guilty but so how does the Parks Department handle this because like old growth trees are being

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2 lost every day to this phenomenon and the Parks

3 Department can't be every place either but you know

4 to the extent that there was some you know concerted

5 effort to try to control this phenomenon. I'm

6 wondering what the Parks Department does regarding

7 that.

and family.

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MATT DRURY: Sure. Matt Drury, I'm the Chief of Citywide Legislative Affairs for New York City Parks.

Thanks for having us and mazel tov to your daughter

12 CHAIRPERSON GENNARO: Oh, you missed it. You
13 missed it pal. I'm telling you.

MATT DRURY: Yeah, it sounds like quite the to do.

Uhm, so firstly, thank you for your support and your vigilance apparently in terms of monitoring this.

CHAIRPERSON GENNARO: Not apparently. I'm stating this as fact.

MATT DRURY: Yes, very much so and that's appreciated and in those instances, as you noted, we do you know if it is a tree within the right of way as it's defined -

CHAIRPERSON GENNARO: Right but I'm wondering how the parks is going into the Ivory Tower and you know identifying this as a problem and coming up like with a solution.

MATT DRURY: Yeah, so firstly -

CHAIRPERSON GENNARO: Oh, by the way, just a second. I got a question. Josh, did we put this bill in?

JOSH GACHETTE: Yes.

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CHAIRPERSON GENNARO: Oh okay, so yeah, I'll say that Josh said yes because he is not - okay, so the bill is in?

MATT DRURY: Yup and we would be happy to kind of engage with you further on it. We think there are definitely opportunities, always opportunities to improve communication and education. It is admittedly - it can be a little you know confusing or uhm, challenging to kind of envision the right of way

CHAIRPERSON GENNARO: My question is really like, what's going on now in the Parks Department?

MATT DRURY: Right, I think I can thankfully report and we can circle back to our teams to get more metrics here.

2 CHAIRPERSON GENNARO: Hmm, you're kind of looking 3 for it now.

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MATT DRURY: I am to be clear, it's an important, it's something we take very seriously and if we're you know if we become aware of a situation where a tree may be removed that is indeed in the right of way. For example, if we get like a tree uh, you know if we get the notion that someone is doing tree related work or whether our permit process or what have you. If that comes to our attention. That's something where we work very closely with that property owner to make sure they're well aware.

CHAIRPERSON GENNARO: Yeah, that's not happening.

MATT DRURY: That the penalties remain the same.

CHAIRPERSON GENNARO: That's not happening.

MATT DRURY: Can we be doing more? You know I'm sure we could and we'd be happy to work with you and your team on that.

CHAIRPERSON GENNARO: Let me make the thing real simple and so, so you're the intergovernmental person, okay and you're good at your job you know and so, you gave the perfect answer for an intergovernmental person to give and I - but the other witness is perhaps is more involved in like -

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MATT DRURY: Not in our street tree canopy. So, our forestry director who oversees our park and street trees and Commissioner Larson is incredible. You can hear from her about a variety of different things, largely focused on our natural areas, and sort of which is more closer to the sort of directly Jermain topic of this hearing. So, our Assistant

CHAIRPERSON GENNARO: Yeah but I couldn't resist when we mentioned like the right of way, of course it's going to ring a bell with me, so I'm going to - because I know there's a big right of way problem in terms of tree removal.

Commissioner for forestry is not here at the moment.

MATT DRURY: Yeah, we'd be happy -

CHAIRPERSON GENNARO: Which DEP hates when that happens.

MATT DRURY: Of course, happy to engage with our forestry team, which again focused more squarely on street trees. Not here at the moment but happy to take this back. We are aware of the bill. We want to work with you and your team on that.

CHAIRPERSON GENNARO: Okay, yeah because this is a big you know, a big loss and you know homeowners don't even know of the existence of a right of way.

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I suspect that tree contractors do but they're just happy to take the money and take the job and that's what happens. So thank you for that. We're joined by Council Member Avilès. Oh, okay, okay and so thank you for that.

Did you know about the bill before this or you're just hearing about it now?

MATT DRURY: No, no, I believe we were aware.

CHAIRPERSON GENNARO: Oh, okay, yeah because this is something we have to figure out some way we do education and enforcement and penalties on this because planting trees all over the place, but you have a tree that's 75 or 85 years old, I mean you know that's the kind of tree canopy that you know you can't snap your fingers and make that happen. And so, so now you know that is coming.

Okay, back to DEP and it's talking about managing the green infrastructure. We strive to keep — I'm reading. We strive to keep our rain gardens healthy and performing by visiting rain gardens every four to six weeks and then there's this whole data driven thing where you try to like figure all that out. And when the team, which I assume is a DEP team goes to the rain garden, uhm, now litter is removed from it

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when you go and visit the rain garden or do they just make an assessment of it? Like, what happens when the team goes to the rain garden?

ANGELA LICATA: When they're deployed, they are managing and bike cleaning and then they're also assessing for vegetation, what plants may need to be replaced.

CHAIRPERSON GENNARO: Yeah, because you're getting ahead of me because like the rain gardens sometimes become like six foot tall weeds and shame on the homeowner for not - I mean come on. This thing is in front of your house, you got six feet tall weeds, and so, that's uh, some people just like to be neglectful and they're comfortable with that. And so, your folks go the site, pull out a garbage which is unsightly and with regard to managing the height of the flora that's there, do they cut it and make a note that maybe there should be other flora in here instead of the weeds that have taken over from the flora that was planted when it was first created as a rain garden? How does all that work?

ANGELA LICATA: Those are very, very timely questions. I'm so happy to be able to answer them now because we are in part of the program where we've

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been building assets for over ten years and we are assessing in a very analytical way, what is the rain garden potentially in need of? Are we experiencing a tremendous amount of trash and why is that? Is it potentially located next to a bus stop? What else may be going on? What could we do with Sanitation to be able to maybe address the street more routinely because as you know, the rain garden would not be the only place where the litter would be observed generally speaking.

It's in an area where there's also a lot of litter on the adjacent roadway. So, we've been in discussions with them. In regards to vegetation, that's exactly what we do. We look at what trimming is needed and what planting, where we generally have the opportunity to do that in the spring and the fall because that's when plants like to be pruned and that's when plants generally like to be replanted or planted for the first time, seeding can also happen. In some locations, we determine whether or not that planting pallets appropriate. Maybe it needs to be modified. So, we're also taking note of that and triaging that and then in the most extreme cases, does that rain garden sit well within that particular

community. We have some business districts where a rain garden may be under attack, which is the way I look at it because there's a lot of commercial activity there. There's just - it's a rough go for a particular rain garden.

CHAIRPERSON GENNARO: Right.

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ANGELA LICATA: So, the idea would be maybe that needs to be more of an infiltration basin. The thing about what we observed from the street level -

CHAIRPERSON GENNARO: So, if you're taking it from a rain garden to a penetration basin -

ANGELA LICATA: Yeah, those are the ones where - CHAIRPERSON GENNARO: Yeah, what does that look like?

ANGELA LICATA: In some locations, instead of a rain garden where it's a vegetated top, we have either a concrete top or a planted strip on top.

Generally speaking because the homeowner would like to maintain the look and feel of what was there before and what is on continuous look and feel to their block. The important thing as far as DEP is concerned as we look at those rain gardens or infiltration basins, whatever the typology may be, is how is it performing for stormwater and I'm pleased

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to be able to say, in most cases, that's where they're performing extremely well. Those assets are still taking stormwater into the inlets and then that is infiltrated in the ground. And so, that's what's really important. Many people don't realize, they think only what appears on the surface is what's been developed or built but the engineering that goes into the asset is actually occurring for the entire five feet below the surface.

CHAIRPERSON GENNARO: Right, yes this is a much different kind of absorption then the grass strip that's just like down the street because there's a lot of you know subterranean engineering that makes that happen.

Many years ago, I passed a bill about like some of the plantings on center medians. This is like before the days of rain gardens. Like, drought resistant plantings or whatever. I don't know if that's a thing. I forgot about that bill like 20 years ago. Is that part of the mix in terms of like where the rain gardens are? Because uhm, I know they're meant to absorb water but sometimes we don't want the vegetation dying and so, sometimes like the drought resistant planting could potentially in this

2 case, although that bill was written for just median

3 plantings that had nothing to do with rain gardens.

I don't know if drought resistant plantings are part

of the menu for what gets planted there. Is that a

6 thing?

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ANGELA LICATA: I think that's right. I mean within the rain garden itself, we want it to not be so much drought tolerant but to also be a plant that can accept a lot of water and be able to survive in a more moist environment.

CHAIRPERSON GENNARO: Oh okay, alright. Okay, fair enough, fair enough, good point there. And right below that, you talk about in your statement more time spent on litter control means less crew time available for other work like swale enhancement, tree pruning plantings and horticultural services.

They're important for maintenance staff, recruitment - so these are DEP people that are involved in soil enhancement, tree planting, horticultural, so does the Parks Department get jealous or how does that work?

ANGELA LICATA: We actually use some of the Parks titles because that's the type of work that is actually happening.

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CHAIRPERSON GENNARO: Oh, I see, so you have some parks titles that are actually -

ANGELA LICATA: But they are DEP yeah and I want to give a shout out to OMB. Our task force Steven Lomberg and Salina Young, and Jeona Parisse have been really, really supportive and have been really great partners, thought partners on looking at the budgeting that is necessary to maintain these assets as we grow the program. They've been very cooperative with us. We just got an additional 25 seasonals that were approved by OMP that we're trying to onboard. Currently we have about 61 staff. Also, we've been working very closely with OMB on the types of vehicles that we need for maintenance purposes and they've been working very hard to help us understand those types of budgetary needs frankly. But we do have a very robust staff. We also have a program that was just funded that is a workforce development program whereby we will be privatizing some of the green infrastructure assets about a thousand of them to the DOE fund and they will help us not only to train but also to recruit staff that could then move into the city's pipeline because a lot of the jobs that we have under the Green Infrastructure program

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are in fact entry level jobs and they do build life skills for those employees and when there are seasonal employees, if they're good workers, we tend to offer them a permanent job as well.

CHAIRPERSON GENNARO: Great and I remember OMB fondly. I started my - I worked at OMB from 1983 to 1985 and so I think a lot of my colleagues are retired but if you need, oh you worked for OMB as well?

ANGELA LICATA: I started my career at OMB as well.

CHAIRPERSON GENNARO: Oh yeah so uhm, I was going to say if you need anything from them, mention my name but you should mention your own name because they don't know who I am anymore.

So, what I'm going to do is I'm going to finish going through my statement and before I get to my prepared questions, I'm going to call on Council Member Avilés to ask her questions. This is a very busy time of year for Council Members where they got primary coming up. I'm not supposed to talk about politics but you know it's a reality that people are running around doing things and so, thank you for your attention to the SWPPP. I know this is — its

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got developers going out of their minds. I've spoken with the Commissioner about it. There are things coming down the you know - things coming down the line regarding how we maintain like a good balance between getting the benefits from the SWPPP and getting projects to move. And so, right now we have one and not the other and so, we're going to get both. So, any developers watching on wherever this is broadcast should know. So, I've had protective conversations with the Commissioner on that.

Yeah, you talked about BRIC grants from FEMA and the new administration ending the BRIC program and you talked about you know you're trying to figure out what impact this may have. Where do we think this is going? You know kind of difficult to imagine that the state is going to help us out because even when we get federal funds, that we get federal funds through the state, we don't get them and so, by the formula that has been made for all kinds of you know like whether it's the Bond Act, federal funds, whatever and so uhm, we're just like a small town on the Hudson and we get cheated all the time.

So, in the absence of BRIC funding, what do you think the prognosis is and what is going to be the

sort of like the result of that kind of not so good prognosis? We could always do bad news here. We do bad news at hearings so.

ANGELA LICATA: It's very upsetting and disturbing after all of the successes that we had in securing over \$240 million in BRIC funding. I don't know where this is going to end necessarily. We're in - as we said in the testimony conversations with the oversights. The one thing I know is that we are funded in the city for cloudburst that we plan on doing. We are about 60 percent design, so we have a budget estimate for those. We believe that we can accomplish those four with the current city funding. What would be - and we have an additional two, one that was funded under another federal program and another project that also currently has funding. So, that would bring us to about five or six.

The impact would be if the BRIC funding is eliminated that we could not reach further down our list. So, when we developed our cloudburst projects, we had about 31 cloudburst hubs that look very good to us in terms of cost benefit and the amount of flooding that would be alleviated. We were hoping with that federal funding to be able to leverage that

and get further down the list, so that's the impact in short.

CHAIRPERSON GENNARO: Okay, yeah, thank you.

ANGELA LICATA: You're welcome.

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CHAIRPERSON GENNARO: Uh and getting to the bills. I think your testimony on Intro. 1253 is fine. That's about the notification thing. I want to loop in DDC. You know there's a smart and a less smart way to do anything. We want to do that the smart way and that's sounds very reasonable.

terms of what you've been able to you know do in the combined sewer areas. What we're trying to get at with 1254 is that a lot of the green infrastructure has gone into the 60 percent with the city with combined sewers because of the CSO problem and the CSO consent order and it was really an attempt to kind of like you know level the playing field like a little bit because the MS4 areas, you know we're not getting that kind of you know greenery but as you you know mention there are impediments there and areas that would be completely – you know that we couldn't consider at all by virtue of the you know high water table.

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I still want to do something though and so, uhm, you know I took all of your you know analysis you know to heart here but I think we're still of the mind that we want to try to you know work in a concerted way with DEP to get like something done.

Do you have a follow up? Do you have a response to that? What are your thoughts on what I just said?

ANGELA LICATA: Yeah, first our appreciation for your attention to this issue because it is very important to - although it is only about 30 percent of the city, it is very important to address flooding concerns in the MS4 area. And so, we do have - I mean the good news is approximately \$28 million in upcoming projects within the MS4 area and we've completed quite a lot of projects to date. We are struggling with a metric for how to measure the amount that we could complete in the MS4 area but we certainly do track the water quality volume because in the MS4 area, the goal is not CSO reduction. the goal rather is to treat the stormwater and to eliminate the pollutants that don't ever get to a wastewater resource recovery facility before its discharge. You mentioned earlier in your opening remarks that we do treat for inflatables.

that through the catch basin hoods but you're right,

there are other pollutants in the stormwater that we

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want to address.

So, certainly needs to be part of the strategy.

It needs to be part of our attention and not to mention of course the flooding controls that are necessary there. You're also very correct in your mentioning of the state consent order change. So, in 2023, the modification to the order that we renegotiated with the New York State DEC -

CHAIRPERSON GENNARO: Yeah, talk about that. Talk about that.

ANGELA LICATA: Yeah, sure.

CHAIRPERSON GENNARO: Help me out there. I'm not very facile with that.

ANGELA LICATA: Yeah, no, but I could tell you're recalling that some of that occurred and yes, what we have there is a volumetrical for CSO reduction. We want to reduce CSOs by 1.6 billion gallons a year through green infrastructure measures. As well as we now have a monetary obligation to spend but the state did recognize that we need to build resilience in the City of New York and so, we pushed very hard for them to accept that under that consent order, there could

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be spending that would improve water quality in the MS4 and then also be co-benefits with resiliency.

So, we do have that opportunity at this point.

CHAIRPERSON GENNARO: Thank you and with regard to areas in South East Queens and other areas of the city that have no storm sewer infrastructure. I guess they would not be MS4 areas right because they don't have storm sewers. So, like what are they called? So, to me, in order to be an MS4 area, you've got a dedicated sanitary sewer and you've got the stormflow that goes out to a local water way with sort of minimal treatment lets say. But if you don't have any storm sewer infrastructure, is that an MS4 area or what is it?

ANGELA LICATA: No, it's not and especially in areas in South East Queens like we said the high water table is an issue, so that might not be the right fit.

CHAIRPERSON GENNARO: Well, I'm just saying but they have a high water table. They have flooding problems and they have no storm sewer infrastructure whatsoever. I think they would benefit from that right? I mean-

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Not necessarily. Depending if

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what you're looking for

ANGELA LICATA:

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what you're looking for is to reduce flooding, a

green infrastructure in a high water table -

CHAIRPERSON GENNARO: No, but I'm just saying, you know putting aside the green infrastructure, I'm just talking about you know South East Queens I think is a great candidate for gray infrastructure because you know at least they will have drains that will take the water away. You know to have - because right now South East Queens is with no storm sewer, those parts that don't have storm sewers, it's already one big green infrastructure thing. You know you don't have anything to catch the stormwater and you know to try and process it and you know assimilate it but the natural you know areas, then like the non-paved areas. Like that's all there is and so, this is sort of a commercial for like gray infrastructure in those areas. Yeah, I think the green infrastructure, not the ticket but so, those areas are not designated as MS4? They're just -

ANGELA LICATA: They're not but they're also receiving probably more money then most parts of the city for gray infrastructure upgrades.

CHAIRPERSON GENNARO:

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city -

This is one of the - I know

3 that there's a lot of projects going on down there 4 but what we don't have and may not have for a long time is you know even one piece of paper left for This is like the build out date for you know 6 access. 7 South East Queens and other areas of the city that don't have any storm sewer infrastructure. You know 8 this is the date certain by which we're going to build out this infrastructure and as we contemplate 10 11 things, like going from 1.75 inches per hour to 2.1 12 or whatever the number is going to be depending upon

you know how the comprehensive stormwater management

plan works out in terms of increased you know storm

sewer capacity, you know we still have areas of the

So, we got areas of the city that have 1.75 going up to some number bigger than that. You still have areas that are like at zero and so, this is my point you know that I think - and one of the reasons why I want to do that - that bill that we just did because there are areas of the city that just don't have any storm sewer infrastructure, combined with the high water table, I mean, you know they're really getting it both ways since we ramped down use of the you know

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3 whatever it is today. Some low number.

Well, but some waters pump to waste, right?

Otherwise storm sewers - but like wouldn't subway tunnels flood because as we shut down the wells and you know like the water table like resumed to pre
Jamaica water service you know levels. Oh, so right now, so when you say nothing is being pumped, it means like it's not being pumped for portable use?

Uhm, so there's zero going into the distribution system but I think there's still some water being pumped to waste and I guess how much water is that and where does it go?

ANGELA LICATA: I don't know what the quantity of that is but it's from various parts of the aquafers you know and we've had these discussions in the past before, so I don't think that the pumping that's happening in the epiglacial is getting down to where the Jamaica supply was in the Magothy.

CHAIRPERSON GENNARO: Right, right but I'm just saying the water that gets pumped to waste to the extent that that happens, like where does it go?

ANGELA LICATA: Into the sewer system and generally speaking that requires a DEP permit.

CHAIRPERSON GENNARO: Oh, okay so - oh it would go into - it would go into a sewer which would - and that's not a combined sewer area, so it would go to a local waterbody, okay.

ANGELA LICATA: Or the sanitary sewer where there's no storm sewer.

CHAIRPERSON GENNARO: Oh yeah, then we're talking capacity problems potentially you know. Wow, I don't think I'm going to work with DEP any time soon. It seems very complicated you know I don't know if I got it up here to figure all that stuff out.

And with that, oh okay, yeah. I have to excuse myself again. I'm going to put one of my colleagues on. Did you have an MRI where you get the contrast? You know and then they say this contrast is pretty funky stuff you know, so they said like, drink like there's no tomorrow for like the next like two days. I'm like what did you just like put in me, you know. This is on the record. Yeah, this is classic Gennaro colliculi that's going on the record that people could read 100 years from now you know. People will say like what was contrast and so, uhm, yeah so that's the story as if people needed to hear that or whatever but. And I've had contrast before where

they didn't give me the speech you know but yesterday like I got the speech you know saying like you know this is pretty funky stuff, you should like get this out of your system as soon as possible.

Now with everyone so enlightened now about the toxins coursing through my body right, this is the perfect time to go from you know go from toxic to wonderful with my colleague Council Member Avilés who I now recognize for questions.

COUNCIL MEMBER AVILÉS: Thank you. Thank you

Chair Gennaro. Hi everyone. So, I'm going to ask
you probably a couple of disconnected questions. So,
forgive me and I didn't get to hear your testimony,
so it may be covering some things that were in fact
in your testimony. And as I understand it, it's DEP
and Parks Department? Okay, thank you.

So, I guess let's start with the 2023 Consent

Decree, Consent Order Modification that requires DEP

to track the constructed green infrastructure assets

in a data set that the state refers to as the New

York City Green Hub. Additionally, DEP maintains a

green infrastructure data set, New York City open

data. Are the two data sets the same? Do they

communicate?

2	ANGELA LICATA: So, they are not the same and I
3	will explain the difference. The green hub as a
4	tracking system is looking - it's what DEP uses to
5	keep track of the areas that we have visited and
6	assess for appropriateness for green infrastructure.
7	So, it's assets that have also been rejected and
8	assets that we're carrying forward into the process
9	and we're looking at that during the various stages
10	of planning, investigation as I mentioned. You might
11	have boring information with tech work, design and
12	construction. And then the open data set is really
13	available for communities to better understand the
14	assets that most certainly will be implemented.
15	Those are the ones that are in design heading to

COUNCIL MEMBER AVILÉS: Got it. So, if I understand correctly it means the green hub is more the preplanning development data set that you utilize internally and New York City open data captures ones that are in process, like in construction?

construction or have been constructed.

ANGELA LICATA: Exactly, that are designed and most certainly expected to lead to a constructed asset.

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COUNCIL MEMBER AVILÉS: Great. We don't hear
that DEP must calculate the volume of the combined
sewer overflow reduction attributable to green
infrastructure assets. Is that also, I understand
that that's part of the consent order? Is that
metric also available on New York City open data?

ANGELA LICATA: I don't know if it's on open data. No, okay but we do track it and this is our annual report which was just issued April 30th. We have a yearly report and we look at the number of assets. It gives you the type of asset that was constructed. Obviously where the asset was built and the volume managed that we roll up. So, we have an estimated about 600 million gallons a year that is now being addressed with our Green Infrastructure program.

COUNCIL MEMBER AVILÉS: So, when you say the volume managed, it also - that also includes the reduction?

ANGELA LICATA: That's our CSO abated.

COUNCIL MEMBER AVILÉS: Great and so the beautiful report I assume is findable online, on DEPs website?

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COUNCIL MEMBER AVILÉS: Okay great. In terms of

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- I wonder in terms of natural nature based solutions. I wondered if DEP has ever considered using street creeks and how it engages with using you know kind of the natural geography where water is kind of moving underneath? Because we see the natural geography certainly directs water regardless of what we do in the built infrastructure, so I was curious around how DEP is using you know our natural geography to manage some element of water management?

ANGELA LICATA: Yeah, we spoke a little bit about

that earlier. The history of the Bluebelt program and how that took into account and respected the existing streams that were present and low depressional points that might have existed within parks. Some of those were wetlands and they were greater than 12.4 acres that were protected by DEC, you would at least have to get a permit. There were some areas that were outside in adjacent areas of those wetlands and they were vulnerable to redevelopment. DEP worked with the Parks Department to utilize a lot of the natural areas that they protected by creating these park lands. And then we also purchased property that had naturally wet

features or topography that allowed for storage by creating ponds and extended detention areas.

So, that is something that we've done. There's a team here behind me that is still looking at how best to continue to promote those practices citywide. A lot of those assets that I described as part of the Bluebelt program occurred in Staten Island, which was the most intact borough of course, but there are opportunities elsewhere and we do have some examples that are more limited in physical extent but do exist in the outer boroughs and they are going through all of that material now to see where the opportunities currently exist and where they can be created.

recent example of some students that were studying some resiliency elements within Red Hook and noted that uhm where they thought they would finding salt water, they were finding fresh water and noted in looking at some old maps that the fresh water was finding its way in certain parts of the neighborhood because it reflected the natural topography. It's still part of the question whether it was flooding or at least they thought it was flooding. They thought it was salt water because we have rain that in fact,

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it was something slightly different. So, of course we were thinking what are the kind of nature based solutions that you could potentially do but also even Greenwood Cemetery, which is a really significant piece of land that really helps flood mitigation for Sunset Park and that whole entire area in the other part of my district. So, just curious about how DEP certainly is looking at all these opportunities and where it's kind of matching what makes sense.

I know the built environment is really challenging in certain regards and there a probably other variables, so just curious about this new thing that I heard about, which is probably old news to you all about street creeks and uhm what other kind of nature based solutions we could continue to employ there. So, uhm just really quickly, in terms of I think huge support or certainly of nature based solutions, so thank you for all the work that you all have managed to deploy throughout the city.

Obviously, it's really critical for the future of our city regarding climate change, but in terms of the bioretention systems that were installed, like how many were installed over the last year?

2 ANGELA LICATA: It was in my testimony; we set up 3 2,400 assets this past year.

COUNCIL MEMBER AVILÉS: And that's across the city, right?

ANGELA LICATA: Yeah.

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COUNCIL MEMBER AVILÉS: Okay.

ANGELA LICATA: And that's a total of about 16,000 now.

COUNCIL MEMBER AVILÉS: Got it and I think you probably covered this as well. In terms of you know I guess managing those assets in terms of cleaning and doing all of that, is that a DEP function or is that shared with another agency?

ANGELA LICATA: It is a DEP function and we've been working very hard to develop crews as the assets come online that can do the maintenance that is required. And we were discussing earlier that we have about 60 staff or so that are online now. have another 25 seasonals that were approved by OMB. We have eight of those in the pipeline. We need to get them onboarded as quickly as possible. we feel that we're well resourced. Of course we need specialty equipment as well now because we have increased our typology. The goal is to develop a

toolbox that is as robust as possible so that we can customize the fit when we're in the landscape in New York City. As we know, our neighborhoods are very different. The areas in what you can fit in comfortably within a community, what a community will accept really varies across the city.

COUNCIL MEMBER AVILÉS: And in terms of like on a middle level, like in Sunset Park, we have had medians that are being raised and primarily because the train line runs underneath. So, there may be a more technical reason why we did this but of course we see vegetation. We're very excited about it.

But I'm curious around what is the collaboration for these kinds of projects? Like is there a resiliency lens that is being used when these kinds of projects are coming online? I guess I'm curious about what vegetation that is put in there and there's a consistent problem with trash but apparently since it's under construction, I understand the contractor is currently responsible for that but when that moves away, does that become part of DEP? Is it Parks? Is it DOT?

ANGELA LICATA: It's not DEP.

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COUNCIL MEMBER AVILÉS: It's not DEP, okay. 3 might be Parks. It might not be either.

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MATT DRURY: Well yeah, I mean it depends on the stretch is the short answer. Like whether it's designated. There are certain stretches that are designated to screen streets like per an MOU with DOT and that's the case but broadly speaking, you know I think that's a DOT/Department of Sanitation.

COUNCIL MEMBER AVILÉS: Is there - I guess uh, we'll get there, especially with the project but in terms of the lens, I'm curious like is there a resiliency nature based lens put onto these projects before they are built out or is that only done when requested?

ANGELA LICATA: I will say - I can answer from my own perspective so and I really appreciate and I like your observation because one of the things that we know in order to achieve our goals, we're going to be working in the right of way and we're definitely going to need the public realm, so any of the land that is in the city's possession to be part of the solution. So, we do try when we initiate a project, to look at it through that resiliency lens, to work with the owner of the property that maybe DOT in some

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3 transportation goals and we need to manage and meet

4 those but how can we and where can we have

5 partnerships that work with them?

So, when DEP initiates a project, that's how we look at it and we are transforming some very large medians in the city. I do not - I'm not familiar enough with yours that you mentioned, so I would need to see those on a map and work with the project management team.

COUNCIL MEMBER AVILÉS: Yeah, I can follow up.

Last question and thank you for the generosity of

time. Similarly the BQE structure, right? Everybody

knows the BQE and its glory. Uhm, I was curious

about have there been any studies around how we

manage water? Because now, like I'm thinking Third

Avenue if you're familiar with Brooklyn right? We

have the BQE running. It's constantly flooded right?

It's managing the water that's coming from the

structure, the super structure above, including the

water that's below because the neighborhood runs

downward, right? Has DEP looked at any kind of

nature based potential solution around how to manage

that kind of waterflow? And I guess what I'm

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thinking of is like, uh where is that? In Spain, they have the Averda where they were using these green - I don't know what they're called. A structure that holds a highway, doing kind of plant based in those structures both for air quality but also for some water.

So, I was curious like has DEP struggled at all with - are there any interventions around this infrastructure that could help either with water or air or noise? I mean those are the three challenges among others that come from the structure itself.

ANGELA LICATA: Yeah, I'd really like to take a look at that. Where is that in Spain? I'm sure we can Google and make some -

ANGELA LICATA: If it's vertical or horizontal and to answer your question pointedly with respect to the BQE, we did look very early on. We had a lot of environmental stakeholders that rightly pointed out that this looks like a missed opportunity because we have all this space here and all this water running off of the elevated highway. What can we do in that area below the elevated portions of the roadway? It was very difficult to identify ecological choices

that would survive in that very dank you know, very
light deprived environment. So, we shied away from
that. Maybe it's time to go and revisit that because
I was getting a vision of something maybe more
vertical that might make sense in a location like
that. Through the MS4 permit, we have and we are
continuing to evaluate all what we call arterial
highways. Forgive me for the jargon but that is the
roadways in the city where we have these major
arterials. They may be state owned. They may be
city owned and where is that water running and what
are the opportunities that we might have to address
that water, either in terms of volume or in terms of
water quality. So that is a study that is still in
progress and it is being cross shared between DOT and
DEP.

COUNCIL MEMBER AVILÉS: And when is the timeframe for the study?

ANGELA LICATA: It's the last year of - three years, it's probably more like a five year study but we have been discovering new information about ownership on arterial highways as well. As where the water is going. The benefit of that project, the biggest benefit of that project is not just the

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intelligence around the water routing but is also because to do the TB inspection, to understand the direction of the water, we've had to do a lot of cleaning. So, we're getting a lot of benefit from the contractor to do a lot of maintenance and cleaning along the way.

COUNCIL MEMBER AVILÉS: Got it. Thank you so much. Thank you Chair.

CHAIRPERSON GENNARO: Thank you Council Member Avilés, always a pleasure and now it's also my pleasure to recognize Council Member Restler for questions.

and I want to thank the DEP team for your thoughtful work on these issues and your partnership in District 33. Just specifically want to recognize Deputy Commissioner Licata for her initiative in revamping the New Town Creek Long Term Control Plan and I want to thank Melissa for her partnership, particularly in McCarren Park where we have two sites that I think are going to be tremendous green infrastructure projects for our community that we're really grateful for your all's responsiveness and partnership in our community.

2 You know I had the privilege for stepping in for 3 our Chair at the Budget Hearing and forgive me if the stuff in my brain didn't stick exactly the right way 4 but the thing that I was kind of kicking myself after the hearing that I felt like I should have pushed the 6 7 Commissioner on more, was that I think he said basically that you all have identified 86 locations 8 where we have severe flooding risks and it's going to cost about \$30 billion to upgrade our infrastructure 10 11 to better protect communities in those areas. got about \$10 billion funded and it's at 30 year 12

right? Okay, so I was listening.

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Uhm, and I know there aren't magic wands and I know that doing \$30 billion of work can't happen in a year or two and at the same time, it's really freaking hard to look a community in the eye and say, yes we recognize you have a severe flooding crisis in your community. You're a high vulnerable area and we are going to get to it in 30 years. Like, how do we - how do we - I don't know square that circle? Like help me you know think through this because to me that just feels like, I appreciate the reasonable constraints that you face and at the same time, the

timeline. Is that broadly - did I get those things

answer is totally acceptable, right and so what can - and I know you're spending more on capital money.

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30 years.

and I know you're spending more on capital money.

You know the DEP Capital Budget has increased

significantly including more funding going to issues

like the things that we all care about - the focus of

this hearing today. I realize there's improvements

happening under Commissioner Aggarwala's leadership

and this team. So, I'm not missing that but help me

square the circle. You know how do we look that

community in the eye and say we will get to this in

BETH DEFALCO: There's a recent taskforce report that might be worth and we can get you a copy of it.

Looking into in terms of funding structure and the way that we think about funding these projects because yeah, \$30 billion; DEP can't pay for that the way that we pay for infrastructure upgrades is through water bills, which you don't want to raise for everybody in the city.

So, yes, it's a problem and some green infrastructure can be incredibly beneficial because often you can build anything above ground faster and less costly than you can build below ground and it's less disruptive but does it convey or move as water

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biggest challenge.

as you want as gray infrastructure? Not always. The
way that you - I think funding is going to be the
largest challenge in the way that we think about
funding now and in the long term and what kind of
funding can you put in place that is consistent,
steady and can't be touched. I think is probably the

COUNCIL MEMBER RESTLER: Just to be clear, if there were more resources available, DEP would have the capacity to speed up the timelines?

BETH DEFALCO: Uhm, well it depends on what you want to do. If you're talking about speeding up the timeline to do a double barrel sewer in Queens, construction timeline is a construction timeline.

So, I don't think - it's a very simple question with a very complicated answer.

COUNCIL MEMBER RESTLER: I mean yes and no. I'm not - I mean look I'm not - this is not about like how do we green a median. That's not what I'm talking about. I'm talking about the 86 areas that you identified that are the most critical flooding risks in the city that require our immediate and aggressive attention and we're telling those communities we're going to fix it in 30 years.

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That's what I'm talking about. So, if you're telling that the critical path challenge that we need to resolve is funding, then let's have that conversation about funding. If you're telling me that it's something else, then let's have the conversation about something else but I think I'm being clear.

ANGELA LICATA: I think you're being clear. going to give you a slightly different answer which is that you need to get started and the good news is right here in this room we have some of the engineers who are working on pulling out there priorities from the 86 that were identified. And really understanding where they can make significant impacts and that's reducing street flooding. In the short run, we have medium term and then long term that was part of that you know 30 year strategy. Many projects are already starting design and they are already advancing to the Department of Design and Construction, already DEP is amending drainage plans to be able to share with the Department of Design and Construction. So, again, I just wanted to get back to it's a long timeframe to get it all done but you need to get started and I just wanted to suggest to you that we have hit the ground running.

credit this Committee for its leadership on Intro.

1150, which is going to have us report out on the master planning. Every two years I think the first planning report is going to be due in 2027. So, we really look forward to being transparent and to obviously the hard work that's ahead but again, you have to get started and I believe that this team has really made every effort to do so.

COUNCIL MEMBER RESTLER: Yeah.

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ANGELA LICATA: And you'll see a lot of spending coming up on that.

COUNCIL MEMBER RESTLER: Yeah, look I hear you that the best way to move forward is to move forward right and to start work and anywhere and everywhere we can. I think that you know it's really important to me that we figure out from a citywide vantage point new funding strategies and specific ways that we can turn a 30 year plan into a 10 or 12 year plan, right? And what are the things that we can do together to actually make that achievable because we don't have 30 years to wait right and we can only imagine how many horrific storms there are going to be in that time period and it's just not viable for us to look at things that way.

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So, I appreciate the response. I think - I know there aren't easy answers. If there were you would have provided them right. You're all good at your jobs. I'm not claiming otherwise. I just you know I think that we're not yet organized in the way that we need to be and it's hard when we don't have cooperation from the federal government, which you

know we've obviously entered into that realm as well.

One other thing I just want to ask and I think I in so many words try to ask this question at every hearing. Greedily as the Council Member for the 33rd Council District, you know my job is to be focused on my 170,000 people. Uhm and have as much of DEPs attention as possible in our Council District. We've had some good, really good experience. I mentioned the two projects a McCarren where the Farmers Market is and the kind of McCarren Asphalt lot. Again, where Melissa and John and the team have been terrific. We have other projects that we would really like to pursue. That would be great. In Northern Greenpoint, that we think would be great. mean terrific opportunities. When we talk to Kevin Moran and the leadership at the DOE, you know on the kind of Chief Operating Officer at the DOE, they

2 really want to be partnering more and we have schools
3 where we would love to be partnering together.

Like how do we - what advise do you have for me
to get more important projects in flood zones onto
your list? Like how do we - how do I do a better job
of advocating for my community so that I have even
more exciting projects to celebrate?

ANGELA LICATA: On schools, have you been in contact with the Trust for Public Land?

COUNCIL MEMBER RESTLER: Yes.

ANGELA LICATA: Okay. Do you have any sites that are eligible?

COUNCIL MEMBER RESTLER: We have one more that we're doing starting this year. Well, we have completed two TPO projects since I've been the Council Member. We have one more that we're going to announce imminently in South Williamsburg that I'm really excited about. So, we're - that for sure but yes, so we worked with TPL. I think is there any - okay, and we can continue to do that. Are there other mechanisms to partner with the DOE on DOE sites other than through TPL or is that the best way to do it?

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ANGELA LICATA: We have a program with schools Melissa do you want to come up and talk about that? Yeah, let's bring Melissa.

COUNCIL MEMBER RESTLER: Have you sworn Melissa in yet?

ANGELA LICATA: Assistant Commissioner.

COMMITTEE COUNSEL: Not yet. Hi, before you testify, I'm just going to swear you in quickly.

Please raise your hand. You're doing that. Do you affirm to tell the truth, the whole truth and nothing but the truth before this Committee and to respond honestly to Council Member questions?

MELISSA ENOCH: Yes.

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COMMITTEE COUNSEL: Fantastic, go ahead.

MELISSA ENOCH: Great, so to answer the question about our partnership with schools. So, we have prioritized a lot of different CSO sheds across the city for implementation of green infrastructure retrofits at schools. We've identified those. We have \$30 million worth of projects in construction on those properties right now. That's in addition to the projects that Angela mentioned with Trust for Public Land where we've funded them for 54 projects already.

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funding that way as well.

They have a really great formula. Theirs is such that they look around at you know if there's adequate green space in communities and how they might be able to get more play spaces in for community members.

So, we like to partner with them because it results in a much bigger project. So, that is an ongoing partnership. It's citywide. That's combine sewer and MS4. We fund them as much as they have capacity for and then on this other side of the program, we work with the School Construction Authority. They give us their upcoming capital projects. We like to integrate green infrastructure that way. As they redevelop some of their playgrounds, we also provide

COUNCIL MEMBER RESTLER: We will try and do a better job of integrating into SCA projects. I think we have a couple potential opportunities there and then just with Parks, is there anything more we can do? I mean playground, Green Fund Playground are examples of like sites that we're putting some funding into those sites. Would really love to maximize DEP investments as well. Any advice on how we could get that to happen?

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MELISSA ENOCH: We've been working with the Pa	rks
Capital Team on both of those sites and I think pa	ırt
of it is what's your vision and you've done a great	ıt
job of coming to us with what the vision is, and s	0
that - our two capital teams can get together and	say
what works for stormwater management. What works	for
parks for programming and I think that is really t	he
best way. I know it feels a little slow and	
cumbersome because you're bringing one and you're	
asking us to evaluate. That is because we've	
evaluated a lot of the sites in Greenpoint and in	
your district previously and hadn't been able to o	ome
up with a cost effective project without these oth	ıer
partners.	

COUNCIL MEMBER RESTLER: Okay.

MELISSA ENOCH: So, I think it's a good strategy.

ANGELA LICATA: I just wanted to - oh I was just going to mention one other site if I may, which is

the Gateway to Greenpoint.

COUNCIL MEMBER RESTLER: Yeah, which is great.

ANGELA LICATA: And that will begin construction this summer. So, those opportunities that you bring to us, where you know that there is maybe land that

25 | is not utilized to its highest efficiency or highest

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level of productivity. We appreciate I think those are one offs but to the extent that you find those sites, I think identifying them for us is really helpful. Sorry Marit.

MARIT LARSON: Not at all, I'm Marit Larson,
Assistant Commissioner of Natural Resources and
Planning at the Parks and I just wanted to speak to
Parks role in green infrastructure site planning and
design for design for a second. Not so much in
necessarily your district Council Member but citywide
but we have a long history of looking for
opportunities both when we are doing our own capital
redesigns and are partnering you know very closely
with DEP as you know to especially to bring in
funding to add those stormwater capture
opportunities. We've also sought grant opportunities
on our own and have gone in parallel over the last
ten years, well going on 15 years with DEP looking at
those opportunities in your district and others.

So, it's part of our process all together and to probably add but maybe it goes without saying, we are fundamentally because of our ability to provide just the natural based of stormwater capture via our vegetated surfaces, our tree canopy, our soils. It's

2 a function that's critical throughout the Park
3 system.

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COUNCIL MEMBER RESTLER: No, I just have to fund So, you know I mean we put \$15 million aside for McCarren Park. I mean it's not an insignificant amount of money and we put \$5 million into Greenpoint Playground. We're trying our best to direct the resources that we have access to to the areas that are - where there's a resiliency opportunity and where we can mitigate flooding. It's less to me about - I mean like that is the thing that we have to prioritize and these areas are flood zones, and there is like a major health and safety risk that I feel a deep obligation to prioritize in the resources we have going to these places and I'm grateful for the partnership from DEP. I wish that the city I mean and you all come up with the resources to handle your portions. I wish the city - I wish that parks had resources to work with us, that you would prioritize these areas as well. It's really just up to me to come up with the money and then you'll cooperate, which I'm grateful for the cooperation but like, I don't know Matt, you're looking at me like I'm wrong but it's true. You guys are nice enough and that's

fine but it's like totally my job to come up with every single penny where the project doesn't even get taken off the shelf.

MATT DRURY: I mean I guess I'd say we have like a \$1.2 billion capital plan and like 80 percent of it is you know funded by the sort of mayoral/admin. So, I don't know if I quite agree with that, like the onus of every like capital improvement in the Park system.

COUNCIL MEMBER RESTLER: No, I'm saying in the areas where we have major flood risks, where I'm looking for leadership from the Parks Department to invest resources to help us, I'm getting cooperation and everyone is nice and you've joined all the calls and you helped work with DEP on the projects but I'm not seeing any money. It's just whatever money I can bring to the table and if I come up with enough money for the project to work, it can work and if I don't, it doesn't. That's what I'm - I'm not saying that everything that the Parks Department does is - so.

MATT DRURY: Got it, understood.

COUNCIL MEMBER RESTLER: Chair, thank you for your generosity and time.

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CHAIRPERSON GENNARO: No, I want to thank you

Council Member Restler for Chairing the hearing of
this Committee and doing a great job by all reports
and you know just to -

COUNCIL MEMBER RESTLER: You didn't hear from DEP.

CHAIRPERSON GENNARO: What's that?

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9 COUNCIL MEMBER RESTLER: You didn't hear from 10 DEP.

CHAIRPERSON GENNARO: No, you know.

COUNCIL MEMBER RESTLER: I got a number of reports from the Deputy Commissioner that my failure to provide pizza was a major failing.

CHAIRPERSON GENNARO: Well, I understand that you know to quote Robert DeNiro, I hear things and uhm but regarding the 30 year time horizon, you know I've had conversations with the Commissioner and it all depends upon you know the speed at which we can — it's all about money. About like, so the more money like the quicker it can happen and you know the more robust capacity that we can build, which gets me to my point about the rental payment and I know that everyone and DEP hates the rental payment and they cannot say that but what this Administration has

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RESILIENCY AND WATERFRONTS

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unfortunately done, I don't think it's the Mayor, I think it's the budget director. This is a problem and uhm, so I'm working with State Legislatures to get a bill done that will just shut off the rental payment. There is a state bill that says that we the Council should be coconspirators with the Administration at setting what the rental payment level should be. We don't want to be part of that. You know so, you know, so like the Administration wants to stick the knife in four inches and we pull it out two inches, and it's just like and that's a win. It isn't. And so, you know the next mayor, whether it's this mayor again or somebody else, just won't have the rental payment as an option if I had my way.

COUNCIL MEMBER RESTLER: I'm with you 100 percent.

CHAIRPERSON GENNARO: So, that's going to be key thing because now do they not only put the rental payment for one year, which is what it always used to be when we're paying off the old pre-1985 debt. put the rental payment and then they baseline it. And so, then the next years rental payment, then like that gets baselined and so, it just becomes, it's

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going to become the thing that just like eats up like you know DEP's capital budget because a lot of our money is going to things other than water and sewer and you can pretend to disagree with what I'm saying. I know that you all support the Administration but I mean you know the rental payment, the time has got to go. So, thank you very much Council Member, appreciate that.

So, now we're going to the lightening round okay. Short questions, short answers, some questions actually; we have some great prepared questions from staff. Some you know in the course of the hearing, a bunch of them got asked but some that we should put on the record. Play NYC committed the city to constructing 300,000 feet, probably square feet of porous parking lanes. Oh alright, not square feet, we're talking like lanes of constructing 300,000 feet of porous - is it parking lanes? Would it be like parking lots or are we talking about like lane miles? What's that? Oh, lane miles or whatever to capture stormwater in the Bronx and Brooklyn. Can you provide an update on the city's progress towards the construction of porous you know porous pavement lanes? I messed that one up but I think you got most of it. You got the gist of it. How are we doing on the porous payment? Play NYC?

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ANGELA LICATA: So happy you asked. We do have plans for 330,000 linear feet of porous and the status is varying. Last year we began construction on a first large scale, porous pavement contract in Brooklyn and 20,000 linear feet have been constructed out of 38,000 linear feet. We have another project which will be - actually two additional projects which will result in 142,000 linear feet that we'll bid this year and then we have about another 100,000 linear feet in design and about 50,000 linear feet planned for design in the Bronx. So, that is our strategy for taking the porous pavement in the areas of the Bronx where we have had some high bedrock but not too high, where we can actually be able to dig a little more shallowly than our rain gardens, which we talked about earlier being five feet. These are only going down to about two feet.

CHAIRPERSON GENNARO: Right. Thank you. Thank you.

ANGELA LICATA: You're welcome.

CHAIRPERSON GENNARO: Thank you for that. Uhm, uh, in your testimony you mentioned that green

infrastructure can only be used where soil conditions allow infiltration but would you agree that other types of green infrastructure, such as the tension systems can be successfully implemented in areas with Bedrock or a high ground water table? Kind of a good follow up to what you just said.

ANGELA LICATA: Yes and that is true. Detention systems and tanks work really well because they have a closed bottom. So, we're not relying on infiltrating. We're not exacerbating the ground water condition. You're absolutely right. Then we're really relying on the orifice size or the slower release into the sewer system.

CHAIRPERSON GENNARO: Right.

ANGELA LICATA: Exactly right.

CHAIRPERSON GENNARO: Okay. Uh, okay this is a Parks question. Well Parks and DEP. What are Parks and DEP's respective roles in siting, designing, installing, and maintaining green infrastructure in parks?

MARIT LARSON: I can start from the Parks Perspective.

CHAIRPERSON GENNARO: Sure, just state your name.

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MARIT LARSON: Marit Larson, Assistant

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Commissioner of Natural Resources and Planning.

There are a number of ways that we work together with DEP to ensure that we are designing and implementing stormwater green infrastructure wherever possible in parks. Both to manage our own stormwater runoff and when appropriate manage runoff from the right of way.

One is that Parks designs and constructs GI retrofits on parkland with DEP funding and occasionally passed with grants funding, grant funding to take runoff from outside the parks.

We also partner with parks with DEP in programs such as our community parks initiative, where we're building new parks and then adding DEP funding to be able to add green infrastructure components into those systems. That program has been going on for ten plus years and finally, we collaborate with DEP on opportunities to retrofit green infrastructure into parks to capture neighborhood runoff where DEP takes the lead. We still work very, very closely with them of course because wherever that's possible, we need to make sure that we're still protecting our resources and providing park functions and some of the bigger programs of course we've talked about

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today, the Cloudburst and Bluebelt programs and we're continuing - we've worked with them for decades as you've heard. Staten Island and continue to work with them as they expand their programs to other boroughs.

CHAIRPERSON GENNARO: Thank you. Appreciate that. What is the status of the Tottenville Shoreline Restoration project? Sub question, can you explain what elements of this project incorporate nature based solutions. So, the overall status and what elements of the project incorporate nature based solutions, Tottenville Shoreline Restoration project.

MERIT LARSON: Sure that's a project that has been in development since Sandy, as opposed Sandy Coastal Resiliency Project that incorporates Nature based design elements throughout. It includes hybrid reenforce stoons, revetments, earth and berms, bioswales, along the top course of the earth and reinforced berms where there is new coastal - where there will be coastal access and waterfront access for the first time. The project is in - it was about to enter a procurement. It's in its final design stage and while we were very thrilled to get FEMA BRIC funding to complete the project and mass the

appropriate, you know the budget we needed, we're now paused with the FEMA on pause.

So, at this point, we're reassessing what it is that we might be able to do at the site. We're very disappointed of course because it's a long time coming and we'll be looking to see whether there's any approach that's feasible at this point. We have state and city funding in addition.

CHAIRPERSON GENNARO: Thank you. Thank you, appreciate that. We were talking about the MS4 areas and like the tricky things about getting green infrastructure in there. Here's the question. What are the most common types of green infrastructure that DEP and other partnering agencies have been able to install in MS4 areas? We kind of touched on this a little bit but just to kind of clarify it.

ANGELA LICATA: Yeah we have. It's very varied.

As we've been discussing, we've been looking to be very strategic in the MS4 area by identifying locations where we can get multiple benefits. We can improve the water quality by removing the pollutant loads and we can also address and reduce flooding.

So, we have a number of public onsite projects that we're doing with the Trust for Public Land and the

Basin.

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CHAIRPERSON GENNARO: Thank you. Thank you.

Okay, continuing our lightening round. Does DEP

consider co-benefits when selecting green

infrastructure for stormwater management such as

6 urban heat reduction?

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ANGELA LICATA: Right, so that is most related to when we're doing the green infrastructure, such as a rain garden where we would have a tree or vegetation and some of the school yard projects where we've been able to develop some of the green roofs associated with the development of underground storage tanks.

So, we need to have that green element mainly to achieve the cooling effect that we desire. And that's why even those are the hardest to maintain, we still try to promote that where it's possible for that type of vegetation to thrive and to be supported by our maintenance.

CHAIRPERSON GENNARO: Thank you. The Counsel was trying to explain the question to me. You know but I'm a little obtuse you know so I'll have the Counsel ask the question.

COMMITTEE COUNSEL: Sure, I will ask it. The question I know that you mentioned in your testimony the green infrastructure is not - or the green acre

metric rather is not totally conducive both to

measure CSO reduction or to measure other sort of

benefits of green infrastructure like street

flooding. Does DEP believe or know of any other

metric that would better capture green

infrastructures impact on street flooding reduction

or on any of the other co-benefits?

ANGELA LICATA: Yeah, and I'm struggling - we're struggling with this but we want to work with you on how to address that question best to explain a green acre is one inch of water over an acre of land.

That's just essentially meant to be a volume metric target. So, it's never a greening an acre. It's to be an efficient way of having water managed for the CSO program. It's infiltrating it. It's taking it out when the storm event occurs. Putting in the vans, putting it in storage so that the rain event can pass so that the CSO does not occur.

In the MS4 area, it's really about pollutant removal and this is going to get even wonkier, which is the same definition as water quality volume. It took me the longest time to understand what does that mean. The Chairman may know that better than I do with your educational background but the water

quality volume is about having enough of the pollutants removed. So, you're treating the water. It's really a treatment metric. So, two different metrics but we'd like to work with you to figure out a way to better relate that and to track that in a way that's meaningful.

We're certainly tracking it. I heard earlier from Council Member Holden that we have to build a measure of success. We do measure it. We are measuring it today. What is the water quality volume, how many stormwater you know management do we have? We're constantly looking at those metrics. We know how much we're achieving through our unified stormwater rule. We know how much we're achieving through the projects that we're developing. OMB holds us to account on that and we hold ourselves to a high standard. How to relate that in a way that meaningful to the public is something that we're struggling with.

CHAIRPERSON GENNARO: They have it and so, the Counsel to the Committee had the last word, actually you had the last word. I'm really grateful. It's you know - to have you come here and talk about how we have the best green infrastructure program in the

1 RESILIENCY AND WATERFRONTS 106 2 country and a lot of this stuff came out of the 3 comprehensive stormwater management plan that the 4 Council and I did, I think in 2008. That was really done for CSOs. That was like the big thing. Now, 5 like the new one is more about flooding but you know 6 7 as time goes on, we have to have new and different 8 and, better you know stormwater management plans in place as mother nature and climate change and take us down this road. And so, this concludes the 10 11 questioning. We're grateful to DEP and Parks for 12 being here. Always great to engage with you do great 13 things for you know the city's environment and the 14 city's parks on behalf of the people that we serve. 15 That almost sounded like a speech. Okay, so it 16 wasn't. It was just all you know, it just came out. 17 I don't know, it happens and so. Thank you all very 18 much and so, I thank the panel. If the Sergeants who 19 ever could queue up. I just have to take a break for 20 a second. I'm going to say goodbye to Angela and 21 company and I'll be back in a moment and if we could 2.2 have - oh, oh no we have live witnesses right? 2.3 have witnesses. We have in person witnesses and we have virtual right? So, we're going to do the people 24

first right? They showed up. They should get on

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first, okay and so if you could call the first witness, I'm going to say goodbye to the panel and then I'll be right back.

[02:21:05]-[02:27:55] Okay, we're starting the public participation part and in order to do that by the numbers, I have to read the following into the record. I now open the hearing for public testimony. I remind members of the public that this is a formal government proceeding and that decorum shall be observed at all times. As such, members of the public shall remain silent at all times.

The witness table is reserved for people who wish to testify. No video recording or photography is allowed from the witness table. Further, members of the public may not present audio or video recordings as testimony but may submit transcripts of such recordings to these Sergeant at Arms for inclusion in the hearing record.

If you wish to speak at today's hearing, please fill out an appearance card with the Sergeant at Arms and wait to be recognized. When recognized, you will have two minutes to speak on today's hearing topic of Nature based solutions for climate resiliency and disaster preparedness and proposed Intro.'s 1253 and

2 | 1254 as well as proposed Resolutions 131 and 143A.

If you have a written statement or additional written

4 testimony you wish to submit for the record, please

5 | provide a copy of that testimony to the Sergeant at

6 Arms. You may also email written testimony to

7 | testimony@council.nyc.gov. Let me say that again,

8 testimony@council.nyc.gov within 72 hours of this

9 hearing. Audio and video recordings will not be

10 accepted. And with that, I have the pleasure of

11 | calling the first witness - that would be Em Ruby of

12 Riverkeeper.

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13 EM RUBY: Good afternoon Council Member. I'm Em

14 Ruby, the Advocacy and Policy Coordinator at

15 Riverkeeper. Thank you, Chairperson Gennaro and

16 Members of the Committee, for your leadership to

17 promote nature-based solutions for climate

18 resiliency, and I appreciate the opportunity to

19 testify today.

20 Nature based solutions for climate resiliency are

21 | absolutely critical for New York City's adaptation to

22 | climate change. Riverkeeper strongly supports

23 \parallel efforts by the Council and DEP to expand the use of

24 | nature based solutions to address climate threats

25 citywide. However, we do have some concerns

2 regarding the two bills being introduced today and 3 how they propose to do so.

We oppose Intro. 1254. Riverkeeper appreciates the Council's intent to ensure development of green infrastructure in the MS4 area, and that is a goal which we have supported through the inclusion of GI in the MS4 area and the CSO Consent Order Modification of 2023. We supported that modification.

However, we oppose this bill as the greened acre target goal, we believe would undermine DEP's efforts to reduce CSOs in the most polluted waters in the city. While failing to drive meaningful flood mitigation and other key benefits to communities within the MS4 areas.

A greened acre is a unit that was created to measure the volume reduction of CSO and is a key target to ensure DEP is meeting its CSO reduction requirements to help remediate the impairments of most New York City waters.

A greened acre of green infrastructure is specific to CSO control for water quality improvement and cannot be used for flood risk reduction, which I

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believe this bill is attempting to do so and I know
that Deputy Commissioner Licata also spoke to this.

Setting a greened acre target in the MS4 area would result in widely disbursed and poorly planned infrastructure assets, having little benefit either in reducing pollution to water ways or to reducing street flooding.

By setting a mandatory target of 2,400 greened acres over ten years in the MS4 area, this legislation will also place a significant burden on DEP. Currently DEP does not have the resources to meet this target and would have to take funding from the CSO program to do so.

As a result, there is a one to one tradeoff in which every dollar spent in the MS4 areas decreases the funding for green infrastructure in the CSO areas. At which could risk DEP falling out of compliance with the CSO consent order.

In order to achieve effective flood reduction and pollution control, green infrastructure in MS4 areas must be thoughtfully deployed in conjunction with gray infrastructure and other assets. For New York City neighborhoods to use green infrastructure well to significantly reduce street flooding, strategies

2 like the Cloudburst program and the Bluebelt program,
3 which were spoken about today are needed. That

4 coordinate resilience on a neighborhood scale.

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Installing green infrastructure rain gardens and bioswales will not have the kind of intended flood reduction effect.

While we appreciate the intent of this bill as written, we believe that it would have a significant negative effect including by diverting resources from the city's very successful green infrastructure program in CSO areas while not significantly reducing stormwater pollution or street flooding in the MS4 areas and we would like to work further with the Committee and the Chair to find a more effective solution.

CHAIRPERSON GENNARO: And certainly you have my commitment. I always work with Riverkeeper and we would be happy to continue the dialogue. I appreciate the dialogue you've had you know you and your colleagues at Riverkeeper. There's been good engagement. I think we keep it going and so I look forward to that collaboration and I appreciate you being here and giving us the benefit of your views on the record and your patience and you know waiting so

EM RUBY: Thank you.

long to give your testimony. And please give my best
to everyone at Riverkeeper. I can go all the way back
to when Riverkeeper was founded, so it's just like EM RUBY: Well, you're not wearing your hat today
Chair.

CHAIRPERSON GENNARO: No, I'm not wearing my hat
I know and I like the hat because it keeps my balding
head from getting too much sun. So, I do appreciate
that and yes, that is my go to hat when I'm on Zooms
and I always appreciate Riverkeeper and what they
bring to the table in terms of making a better
environment and also their fashion statement with
their T-shirts and hats.

EM RUBY: Well, thank you very much and we look forward to working with you guys on this effort. As I just, I just want to reemphasize, we really appreciate the effort to expand nature based resilience and nature based solutions for climate resilience across the city, including in the MS4 areas and so we want to make sure that that happens and so we look forward to working with you guys.

CHAIRPERSON GENNARO: Me too. Thank you so much and all the best ${\mbox{Em.}}$

COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS

CHAIRPERSON GENNARO: Okay there are two more slips that were filled out. I don't think that people are still here but just to be thorough, Christopher Leon Johnson and Peter, I can't read

that, Peter Mallonousky (SP?). And so if oh, with the

Seeing no one, we'll move onto the online. So I

have to okay, Section two of the public testimony

would be the folks that are going to be participating

11 at Zoom.

Billion Oaster Project.

At the beginning of Zoom testimony - oh, oh, that's just the note for me to read it. Okay, we will now turn to remote testimony. Once your name is called, a member of our staff will unmute you and the Sergeant at Arms will give you the go ahead to begin. Please wait for the Sergeant at Arms to announce that you may begin before delivering your testimony, otherwise there will be like a spot where we can't hear you. So, here we go. My God we got yeah, we've got - he's a really important guy, yeah.

Well, it is my great pleasure and honor to call my long time friend and colleague Paul Gallay formerly of DEC, formerly of Riverkeeper. He was at

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COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS

Riverkeeper now with Columbia Climate School. So,
Paul Gallay, please Zoom in.

SERGEANT AT ARMS: You may begin.

PAUL GALLAY: Thank you. I'm here and hopefully you all can hear me.

CHAIRPERSON GENNARO: Yes.

PAUL GALLAY: Mr. Chairman and the other members of the Council, thank you for this opportunity to testify. I am current Director of the Resilient Coastal Communities Project. A partnership between the Columbia Climate School and the New York City Environmental Justice Alliance, which seeks to foster new collaborations between environmental justice communities, practitioners, and researchers, to help develop actionable, fundable, and equitable solutions to flood risks that also deliver complementary benefits, like habitat restoration, job creation, and greater community cohesion and put into practice the Climate School's commitment to fairness, social justice, and anti-racism.

I also represented DEC in negotiations with the
City of New York on the original 1192 CSO Consent
Order and while with Riverkeeper engaged closely with

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COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS

the state and the city on the 2012 modified order.

3 So, this goes way back for me.

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We are advocating for eight specific initiatives.

We have submitted written testimony earlier today and I'm not going to read that testimony obviously but I will summarize the eight recommendations for scaling up green infrastructure, which are detailed in the written testimony and attached to the written testimony is the resilient coastal Communities

Projects 2024 green infrastructure handbook, which studies the work in New York City and Hoboken and Portland Oregon, Los Angeles, New Orleans,

Philadelphia, and [INAUDIBLE 02:39:22] in the Yucatan State in Mexico.

And we feel that these other cities offer some great examples that can be borrowed into the work that's being done by DEP and other agencies here in New York City.

SERGEANT AT ARMS: Your time is expired.

CHAIRPERSON GENNARO: Paul, I'm going to give you a little latitude to continue so please continue and you know try to summarize but I'm going to give you a little latitude here.

PAUL GALLAY: Good. We urge the City Council to

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support the following eight ideas relating to natural and nature based measures and hopefully this can be within the time that you're giving me. Scale up the green infrastructure solutions, such as the New York City Cloudburst program and to the extent money is being taken away from the BRIC program, use the city's legal power if this process has been deficient

the way this money is being taken away, you should

sue and get that money back. Simply stated.

Number two, center equity by prioritizing historically underserved in high risk communities but risk is not evenly distributed, the city must direct GI funding and technical support towards front line neighborhoods that have historically been underserved and underrepresented.

Three, expand use of real time data tools to drive targeted GI deployment initiative like Flood net have already demonstrated how low cost, real time centers can radically improve stormwater management. More about that in my written testimony.

Four, commit to long term sustained funding for GI implementation and maintenance, a theme that has

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already been examined today and so I won't continue 3 to do so.

Five, invest in education and workforce development to build long term capacity. New York must invest in the people who will build, maintain and innovate this infrastructure. We urge the creation of training programs, curriculum, and integration and certification pathways to grow the local green workforce.

Six, center community codesign and all green infrastructure and resilience planning. Community trust, buy in and local expertise are essential to long term success of these investments.

Seven, foster cross section collaboration and continuous innovation harness the strengths of its academic institutions, community organizations and designed professionals to advance green infrastructure research. Hopefully our green infrastructure handbook will be helpful with that.

And finally, treat green infrastructure as essential climate infrastructure. This is the sum up. Green infrastructure and nature based solutions are core to how we must now think about flood resilience, public health, proven equity and long

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term sustainability. Green infrastructure must be embedded across all levels of planning, policy, and capital investment to ensure New York is not only reacting to disaster but actively and proactively shaping a greener, safer future. So, thank you for the extra time.

CHAIRPERSON GENNARO: Paul, thank you you know for your - I mean we've been colleagues for many decades and you know staff here should know that we're being addressed by a bonified environmental hero who is like still hitting it and still you know putting a ball in the bleachers and uhm, we really appreciate you Paul and thanks for all your great advocacy. I wanted to make sure you got your points on the record. We're certainly going to you know delve into the written testimony and really appreciate all the work that you continue to do on behalf of New Yorks environment.

PAUL GALLAY: I couldn't be more grateful to you. Thank you Chairman.

CHAIRPERSON GENNARO: Thank you Paul, appreciate it.

He really is a hero this guy, just so you know, I wasn't just saying that. Uhm, okay from the New York

League of Conservation Voters, Alia Soomro. Alia,
right? I said that right I think.

ALIA SOOMRO: Yeah, you said that right.

SERGEANT AT ARMS: You may begin.

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CHAIRPERSON GENNARO: Yeah, finally I said it right finally, yeah.

ALIA SOOMRO: Thank you. Good afternoon. My name is Alia Soomro and I am the Deputy Director for New York City Policy at the New York League of Conservation Voters. Thank you Chair Gennaro and members of the Committee on Environmental Protection for the opportunity to testify today.

New York City is vulnerable to multiple types of climate risks, including but not limited to extreme rainfall, sea level rise, coastal and inland flooding, extreme heat, high ground water tables, or a mix of all of the above. Climate change can also amplify the impact of environmental injustices.

Preexisting social and economic challenges combined with the uneven distribution of climate change impacts can make low income and communities of color more vulnerable than others. With the climate denying presidential administration actively cutting environmental regulations and funding, NYLCV urges

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2 New York City to work with the state to prioritize

3 and invest in multi-hazard climate resilience and

4 mitigation measures, including a mix of green and

5 gray infrastructure and natural and nature based

6 solutions along the city's coast. Centering

7 environmental justice and equity must be a key part

in all climate and environmental planning and

9 policies.

NYLCV recommends the city continue investing in smaller, stormwater management solutions, such as raingardens, bioswales, permeable pavement, and wetland restoration. Green infrastructure should continue to be prioritized and funded by DEP and be expanded and implemented equitably so that all neighborhoods can receive the environmental benefits that come with them.

While the green infrastructure program has made progress over the last few years, funding for maintenance and operation is key. When it comes to the related legislation, NYLCV has some concerns about Intro. 1253, a bill that would require DEP to notify the local Council Member when DEP installs a new bioswale, rain garden, or other bioretention system in the public right of way.

2 Given the urgency of the climate crisis -

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SERGEANT AT ARMS: Your time has expired.

CHAIRPERSON GENNARO: Alia, we work together.

I'm going to give you a little latitude as well, so please continue.

ALIA SOOMRO: Okay, thank you. Just given the urgency of the climate crisis, we think that a bill requiring notice for small scale green infrastructure projects could slow down the city's existing work.

Moreover, the public is already notified of the installation of new GI assets in the right of way through DDC, which is responsible for the construction of these installations. That it includes a 14 day public notice, which is sent out to local elected officials as well as the signed up to receive notifications through DDC's anywhere portal.

So, we're happy to continue working with you

Council Member Gennaro and other advocates to get the

bill where it needs to be but we just want to

emphasize that we think that green infrastructure

projects need more funding, maintenance and

operations.

And then wrapping up, we encourage the city to continue prioritizing cloudburst infrastructure and

2 the Bluebelt program, and lastly, we hope the city

3 makes progress in the coming years to develop an

4 equitable, voluntary bioprogram. We look forward to

working with you Council Member and the rest of the 5

Council and other advocates. Thank you for the 6

7 opportunity to testify.

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CHAIRPERSON GENNARO: Thank you Alia and I have a question for you. You ready? Little League Conservation Voters I quess, well not trivia because it's a big deal. Who is Paul Elston?

ALIA SOOMRO: I'm not sure actually.

CHAIRPERSON GENNARO: Paul Elston founded the League of Conservation Voters.

ALIA SOOMRO: Okay, that's good to know.

CHAIRPERSON GENNARO: And so I go back. Yeah, so here we are, you know we got this great institution. There's so much work and you know and particularly the people at LCV should know who Paul Elston is and so, uhm yeah he was the - he was the - he wasn't the day to day person but he was like the founder and like got it together and like raised the money and did all that and he's a great philanthropist and a good guy and so, I just wanted to get his name on the record because he is a very, you know he's got a

Coalition. Thank you for the opportunity to deliver

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public testimony and thank you to Chairman Gennaro and members of the Committee for your leadership on promoting nature based solutions for climate resiliency and protecting water resources in New York City.

SWIM Coalition is a group of more than 70 organizations dedicated to ensuring fishable, swimmable waters around New York City through sustainable stormwater management practices and has long advocated for nature based solutions to address flooding, stormwater, and climate resiliency.

Not only because green infrastructure has the capability to manage water in highly urbanized areas but also because of the myriad co-benefits associated with greening our cities. While the SWIM Coalition typically supports promoting green infrastructure throughout the city and has actively worked with the Council and the DEP to expand the use of nature based solutions to address climate threats citywide, we have major concerns that the two bills being introduced today will not be effective solutions and may have unintended adverse impacts particularly in environmental justice communities.

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2	In opposition to Intro. 1253, there are already
3	notifications as has been mentioned to Council
4	Members when new GI assets are being installed and we
5	fear additional requirements could slow down or
6	prevent new GI from being installed. We strongly
7	oppose Intro. 1254 because the greened acre target
8	goal does not accomplish what we understand the bill
9	is intended to do which is address flooding and may
10	in fact result water quality through the city. Two
11	solutions we do support are earmarking the \$303
12	million rental payment from the New York City
13	Waterboard to replace the \$300 million in funds lost
14	to Cloudburst, Coastal Resiliency and other climate
15	projects being funded through the FEMA BRIC grant
16	program. That will help address a lot of the MS4
17	flooding issues and also including an additional \$4
18	million to fund implementation of the unified
19	stormwater rule, including 15 additional staff at DE
20	which will increase effectiveness of this program.

SERGEANT AT ARMS: Your time has expired.

CHAIRPERSON GENNARO: Please continue.

MICHELLE LUEBKE: Thank you. Thank you for hearing our reasoning for opposing these bills. We will be submitting our written testimony with our

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concerns addressed in greater detail. We echo our partners at Riverkeeper in extending the offer to gladly work further with Council and DEP to find effective solutions for our common goals. Thank you.

CHAIRPERSON GENNARO: I certainly appreciate your testimony. I could not agree with you more on the rental payment, which is why I'm going to do everything I can to make the rental payment go away within a year and that would really be a great thing and so, always appreciate collaborating with the SWIM Coalition. We appreciate your very intense advocacy and your enlightened perspective on everything that we try to do here. We depend upon you and we thank you for coming through.

MICHELLE LUEBKE: Well, we thank you for your leadership.

CHAIRPERSON GENNARO: Thank you. Okay and then the last witness we have is John Leyva. If I pronounced that right.

SERGEANT AT ARMS: You may begin.

JOHN LEYVA: Hi, unfortunately I'm not in a good environment to really comment but I'll just say I agree with both bills as written and I think they should both be passed and like again, I'm not in a

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3 son from school. Sorry, I apologize.

CHAIRPERSON GENNARO: No, you know we certainly appreciate people going out of their way to make sure that they're part of our process, which is exactly what you are doing. You're doing something very important, picking up your son but you want to make sure that you get your voice on the record and that you get your views heard and you are exactly the kind of witness that we love to have. Someone who is not in a game but has profound views that they want to put on the record and so, that is who you are John and we appreciate your presence here today. Thank you so much and good luck with your son.

JOHN LEYVA: Thank you sir.

CHAIRPERSON GENNARO: Okay, you bet.

If we have inadvertently missed anyone that has registered to testify today and has yet to be called, please use the Zoom raise hand function. If you are testifying remotely and you will be called in the order that your hand has been raised. If you are testifying in person, please come to the dais.

Anyone? Seeing none, I will now close the hearing.

Thank you to the members of the Administration and

COMMITTEE ON ENVIRONMENTAL PROTECTION, RESILIENCY AND WATERFRONTS members of the public who have joined us today. This hearing is adjourned. Let me do the gavel and make it official [GAVEL]. Thank you all very much. God Bless. Thank you to the Sergeants. Let's hear for the Sergeants. [APPLAUSE]

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



Date June 30, 2025