

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ENVIRONMENTAL PROTECTION

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B E F O R E: COSTA G. CONSTANTINIDES
Chairperson

COUNCIL MEMBERS: Rafael L. Espinal, Jr.
Stephen T. Levin
Carlos Menchaca
Donovan J. Richards
Eric A. Ulrich
Kalman Yeger

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

Vincent Sapienza, Commissioner
Department of Environmental Protection, DEP

Joseph Murin, Chief Financial Officer
Department of Environmental Protection, DEP

Michael DeLoach, Deputy Commissioner of Public
Affairs, Department of Environmental Protection,
DEP

Tasos Rudelles, (sp?) Deputy Commissioner for
Water and Sewer Operations, Department of
Environmental Protection, DEP

Angela Licata, Deputy Commissioner for
Sustainability, Department of Environmental
Protection, DEP

Phil Voss, Program Director, Energy Vision

[sound check]

CHAIRPERSON CONSTANTINIDES: Alright, good morning. I am Costa Constantinides, Chair of the Committee on Environmental Protection. Climate change is real, and it impacts both our local community here in New York City and communities afar. As outlined in the report dated October 18, 2018 by the IPCC, experts believe global warming is likely to reach between 1.5 degrees Celsius—reach 1.5 degrees Celsius between 2030 to 2052. If it continues in its current increase, warming from emissions will continue to cause further long-term changes in climate change as sea levels rise and drastic weather events continue. We have to act now. I'm always a little frustrated with that this Committee on Environmental Protection who has purview over this area does not have the opportunity to question the Mayor's Office of Sustainability during these budget hearing in relation to sustainability since such arrangement is not made based on just the structure of this. The Committee and the Council are going to work to ensure that the Mayor's Office of Sustainability is designated as a city agency in the near future and a full department through the passage

of intro 1399. We look forward to hearing that bill soon, and hopefully to have a larger discussion, but today we will just focus on DEP, and their budget.

So, today's committee will address the Mayor's Fiscal

2020 Preliminary Budget for the Department of

Environmental Protection. The department's proposed

Fiscal 2020 Expense Budget totals \$1.32 billion,

which is \$71.2 million less than the adopted Fiscal

2019 Budget. DEP's Proposed Capital Commitment Plan

for Fiscal 2019 through 2023 includes \$13.3 billion,

which is about \$232 million less than the Fiscal 2019

adopted budget. The Committee look forward to

hearing more today about the agency's Four-

Year Capital Plan, and its then 10-Year Capital Plan

Strategy, operational needs versus absence of agency

new needs in the Fiscal 2020 Preliminary Plan.

Efforts to bolster-sustain sustainability across

operations and projects and agency performance in the

Preliminary Mayor's Management Report. Commissioner

Sapienza, the Department of Environmental Protection

is here to provide testimony. We thank him and your

whole staff for the work that you guys do, and your

partnership, and before we hear from the

Commissioner, I want to thank our staff, you know,

Samara Swanston; our Committee Counsel Jonathan Seltzer; our Financial Analyst Nadia Johnson; and Ricky Cholla (sp?) who are Policy Analysts—Policy Analysts, and my—my Legislative Counsel Nick Wazowski for helping to put this together today and, of course, our great sergeants-at-arms who keep everything moving swiftly. So, also recognizing Council Member Kalman Yeger from Brooklyn, a member of the committee who is here joining us. So, with that, Commission Sapienza always great to see you, and we'll have Samara Swanston our Counsel swear you in.

LEGAL COUNSEL: Would you please raise your right hand. Do you swear or affirm to tell the truth the whole truth and nothing but the truth today?

CHAIRPERSON CONSTANTINIDES: Okay.

COMMISSIONER SAPIENZA: So, good morning Chair Constantinides and members of the Committee on Environmental Protection, and thank you for the opportunity to testify here today. I'm Vincent Sapienza, the Commissioner of DEP. Joining me at the table is our Chief Financial Officer Joseph Murin, Deputy Commissioner Michael DeLoach, and in the first

row to this—to the right of me are members of our senior team who can help answer specific questions. I'm here today to speak about the FY2020 Preliminary Budget, and FY 19 Preliminary Mayor's Management Report. First, I'd like to speak to DEP's purpose, mission and strategic plan. At DEP we have the critical mission to enrich the environment and protect public health for all New Yorkers by providing high quality drinking water, managing wastewater and stormwater, and reducing air, noise and hazardous materials pollution. Our vision is to be a world class water and wastewater utility while building a sustainable future for all New Yorkers. New York City water system is world renowned. Since it was established more than 177 years ago, the system has continued to grow, and now provides more than a billion gallons of clean drinking water every day to more than 8.6 million residents, and to tens of millions of tourists and commuters who visit the city throughout the year. The water supply system also provides more than 100 million gallons a day to approximately one million people in neighboring counties. In all, New York City's water supply system provides drinking water to about half of the

population of New York State. New York City gets its drinking water from 19 reservoirs, and three controlled lakes spread across a nearly 2,000 square mile watershed located in portions of the Hudson Valley and the Catskill Mountains. New York City's drinking water is widely considered among the best in the world meeting or surpassing every national and state standard for quality. During 2018, DEP scientists performed 654,000 analyses of the water throughout the reservoir system, and for nearly 1,000 streetside sampling stations across every neighborhood in the city. Robotic monitoring stations on our reservoirs provided another 1.3 million tests to ensure that DEP is sending the best quality water to New York City at all times. Approximately 7,000 miles of water mains, tunnels and aqueducts bring this water to homes and businesses throughout the five boroughs, and 7,500 miles of sewer lines and 96 pump stations take wastewater to 14 in-city treatment plants. DEP recently changed the name of our treatment plants to Wastewater Resource Recovery Facilities. This change is not superficial. It reflects our continuing transformation from basic handling and treatment of wastewater to being

stewards of a sustainable environment, minimizing waste, enabling a circular economy, and embracing innovation. As many of you know, DEP owns and operates one of the largest wastewater collection and treatment systems in the world, and these facilities treat over 1.3 billion gallons of wastewater each day. Thanks to critical long-term planning, strategic investments, our hard-working staff, and partnerships with stakeholders across the city, today our water ways are cleaner than they have been in more than 140 years. No one alive has seen our waterways as clean as they are today. I mean I see whales, oysters and wetlands returning to our shores. Beyond these core responsibilities, DEP's scope included improving air quality, reducing noise pollution, and protecting New Yorkers from hazardous substances like asbestos and chemicals found at dry cleaners, auto body repair shops, hospitals and factories. In addition to our emergency response functions, we also regulate the management of hazardous materials and continue to work with stakeholders to improve safe—safety and health for our workers, first responders and the general public. I'm now going to talk about our Preliminary Budget

and--Budget and how it ties in with our Strategic Plan, and left copies of the plan with you all. The nature DEP's work means that we must plan in decades not years. We are always looking to a hundred years ahead to ensure that water and sewer infrastructure will be reliable for the generations to come. Last summer, DEP released our 2018 Strategic Plan called *Enriching Our Legacy*. Which reflects our priorities for shaping the future and focuses on seven overarching goals, and in the testimony I'll touch on each of those goals. The projected expense budget for the current Fiscal Year FY19 is \$1.329 billion. For FY20, the Preliminary Expense Budget is projected at \$1.317 billion. More that 40% of the Expense Budget is dedicated to personnel services. Our workforce includes nearly 6,000 employees, including almost a 1,000 members of staff working upstate in the watershed. All of our operational and capital water related expenses are paid for with water and sewer payments. DEP's 10-Year Capital Plan has a budget of \$19.7 billion, and I have a graph behind me. The majority of the budget is dedicated to state of good repair work or--or upgrades to keep our facilities functioning effectively and efficiently.

About one-quarter of the Capital Budget is dedicated to meeting the requirements of various mandates. The construction of sewers and water mains make up the next two largest investments. All of these efforts ensure that our water and sewer systems will continue to serve the city's needs into the future. Because our work is guided by a strategic plan, DEP's budget priorities reflect seven goals set forth in the plan. Our first strategic goal is to provide world class sustainable water and wastewater services because DEP's first and foremost is the city's water and sewer utility. To meet our drinking water goals, our Capital Plan includes funding for several critical projects. In addition to funding for water main construction projects, the Capital Plan includes more than \$1.2 billion to meet mandates related to the Kensico E. Street Connection Tunnel. More than \$500 million for dependability projects relating to the expansion of City Water Tunnel No. 3, the Brooklyn-Queens leg, and more than \$980 million to reinforce the structural integrity of the Shokan Reservoir and the Catskill Aqueduct Pressure Tunnels. This work will fully rehabilitate the dams, dikes, fowl (sic) chambers, bridges and other infrastructure that has

allowed that reservoir to serve the city since 1915.

Our Delaware Aqueduct Bypass Tunnel is the largest

repair project in the history of America's largest

water supply. This \$1 billion project to repair the

world's longest tunnel is ahead of schedule and on

budget. Excavation of the tunnels is about 65%

complete. The tunnel boring machine will complete

its work around the end of the year. Nearly 13% of

our Expense Budget, \$167 million is dedicated to

paying taxes on Upstate watershed lands. As you

know, the ownership of watershed lands represents a

critical in maintaining high—the high quality of the

city's drinking water by protecting it at the source,

and ensuring that it does not require more expensive

treatment such as filtration. I am pleased to report

that we continue to work closely with Upstate

jurisdictions to make our tax obligations fair,

stable and predictable. Our wastewater system

priorities are also apparent in the Capital Plan.

There is funding for sewer reconstruction, which

includes expansion for neighborhood rezonings and

land acquisition for our Blue Belt Program, our award

winning investments to manage stormwater run-off

using ponds, wetlands and other ecological projects.

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The Capital Plan includes more than \$120 million to meet the mandate to reduce residual chlorine that is released from our plants at almost \$1 billion for facility upgrades at the Hunts Point, North River and Owls Head Treatment Plants. To further protect our wastewater services, DEP recently launched our Trash It Don't Flush It Campaign around the city and we—we left a brochure up at that table. The campaign reminds people that only bodily waste and toilet paper should be flushed down a toilet. All other items including wipes, feminine hygiene products and cat litter must be thrown away. Cooking oil must also be thrown away and poured down a sink. DEP spends nearly \$19 million each year to clean clogged sewers, respond to sewer back-ups, dispose of wipes and repair damaged machinery. It can cost the property owner more than \$10,000 to repair household plumbing damaged by grease and wipes. Our Trash It Don't Flush It campaign aims to protect infrastructure, help New Yorkers avoid those expenses, and keep the city fat burden free. (sic) We look forward to working with the Council in future legislation to help further restrict this growing concern. Our second strategic goal is to control

local sources of pollution. As previously stated, New York's waterways are currently cleaner than they've been since the Civil War. DEP is proud of our contribution to this improvement and we continue to work to make our waterways even cleaner. One of the most important issues we are focusing on is the reduction in combined sewer overflows or CSOs. Over 60% of the city was designed with a combined sewer system, which conveys both wastewater and stormwater for treatment in the same pipe. During particularly heavy rain events this mixture may overwhelm the system and untreated flow can be released into local waterways. While we have reduced CSOs by more than 80% since the 1980s, our Capital Budget dedicates more than \$1.6 billion to meeting several CSOs mandates including construction of CSO retention facilities at the Gowanus Canal, constructing CSOs projects for the Hudson River and Bronx River and developing a citywide long-term control plan for the East River and open waters. One of the key components of our CSO reduction strategy is the New York City Green Infrastructure Program. We have installed over 4,000 rain gardens around the city, which take pressure off of our treatment plants, and

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reduce combined sewer overflows, all of which reduces our energy use. We also have a robust partnership. Both the Departments of Parks and Recreation, Education, and the New York City Housing Authority to retrofit city-owned properties with rain gardens, green roofs and permeable pavements. To incentivize green infrastructure on private property we offer a Green Infrastructure Grant Program that funds up to 100% of the design and construction costs for green infrastructure projects. The Grant Program is open to not-for-profit organizations, private property owners, and businesses. This program is funded with capital money. We are constantly looking for ways to improve this program to facilitate even more participation, and we are currently developing a new private incentive program to support this work. Our expense budget includes funding for the chemicals that are necessary for our drinking water supply and wastewater treatment. These are estimated at \$64 million for FY20, which is about 5% of Expense Budget. Our facilities manage 1,200 to 1,300 tons per day of biosolids. This is projected to cost about \$57 million in FY20, or about 4% of the Expense Budget. It should be noted that as DEP continues to

improve treatment, more and more biosolids get produced. Finding beneficial uses for this mater is a key goal. As the City Council is aware, One New York, The Plan for a Strong and Just city includes the pledge to reduce greenhouse gas emissions by 80% by 2050. DEP's third goal to reduce our carbon impact and mitigate the effects of climate change helps to meet this pledge. DEP reduced our greenhouse gas emissions by 23% between 2006 and 2018. We are proud to say that DEP is on track to meet the One NYC goal of 40% reduction by 2030. DEP's most valuable opportunities for carbon and energy neutrality and power resiliency are in the biogas and biosolids produced at our wastewater treatment plants. As discussed at the hearing a few weeks ago, DEP is transitioning our wastewater treatment plants into wastewater recovery--wastewater resource recovery facilities or WRRFs, and our WRRFs represent an incredible opportunity to produce energy. Biogas can be used to produce heat and electricity. Bioslids can be used for carbon sequestration. Maximizing the productive use of these resources puts us on a path towards achieving energy neutrality. We have achieved 30% beneficial

use of our digester gas already, and this will increase to 56% by the end of the calendar year with the completion of Newtown Creek's Gas Handling System and North River's Cogeneration System. DEP is the third largest municipal consumer of electricity in New York City and for the Department of Education and New York City Health and Hospitals, and our consumption will grow as we bring online new treatment processes for wastewater. DEP's energy costs including heat, light and power account for \$109 million or 8% of the FY20 Expense Budget. To control energy costs and meet Mayor de Blasio's major commitment to reduce greenhouse gas emissions, DEP is investing in projects to reduce energy needs. We invest in energy efficient equipment, and systems including cogeneration at the North Rivers Treatment Plant, and by training our staff to operate our facilities' efficiency—efficiently to reduce energy needs. We have identified more than 500 opportunities for Energy Conservation Measures or ECMs, which are integrating into our State of Good Repair Plan. We are expanding our use of solar photovoltaic, hydroelectric, wind, geothermal and other zero emission systems. For example, the Port

Richmond Plant of Staten Island has the largest solar panel array. It's a 1.3 megawatt system on city-owned property. We plan to install more solar array systems at our other plants around the city, and we continue to deploy small scale wind turbines. We continue to investigate the feasibility of installing an even larger scale wind power. Our fourth goal is twofold: Increasing public awareness of our operations and improving our service to our customers and to businesses. One the most important pending improvements in customer service is the new billing system that we are creating. Our new customer information system will help DEP better meet customer expectations by empowering them with more data and analytics. Customers will receive modern, easy to understand bills, will be able to access more services online through a new web portal. The contract to build the build the system is currently with the Comptroller's Office. We hope to start work with the vendor as soon as next month. Increasing public awareness also includes expanding educational opportunities. Through our work at the Visitor's Center at Newtown Creek, the Queens Museum and with schools around the city, we teach our community about

the water supply, wastewater treatment, air quality, water conservation and other important issues such as climate change. We are working to expand our outreach to raise awareness, help people understand our work, and ensure compliance with environment rules and regulations. We are working to improve service in a few ways. We are incorporating more technology to improve communications with our customers. We also streamline the process to obtain, water, sewer and stormwater permits and make these efforts less confusing and more efficient.

Cultivating a diverse and qualified workforce is another important goal. We are proud of the fact that our workforce is representative of the areas that we serve. More than 40% our Expense Budget, \$555 million goes to personnel services. We have more than 6,000 funded positions including 1,000 positions in the watershed Upstate. As part of our staffing efforts we intentionally look to create career opportunities for historically underrepresented Communities. We have made conscious efforts to work with local non-profits, and job placement programs. Our recruitment outreach has increased in recent years, and we continue to expand

our efforts. Our Green Job Staffing Program is projected to have 163 people on staff in FY20, which is about twice the number we had in FY17. This program includes about 50 positions for seasonal workers annually. These seasonal positions may lead to full-time opportunities for people who are successful in their roles. To approve our operations and save money, our next goal is to maximize operational efficiencies around the agency. One critical way to do this is to leverage data effectively. DEP monitors hundreds of thousands of data points each year. These data can do more than tell us the status of our water and air quality, and with Predictive Analytics, these data can be used to identify potential issues before they become problems. Predictive Analytics can also support our other goals such as optimizing performance and improving customer service. Similarly, data visualization systems can help our staff quickly identify trends and improvement opportunities department wide. Several years ago we began systematically replacing the oldest water meters in the system, which also tend to be the most inaccurate. The Capital Plan includes \$73 million to

continue this replacement project. The meter upgrades help DEP recover lost revenues and make collections more equitable, particularly with respect to non-residential versus residential customers. The replacement program incorporates accuracy testing on all new meters. Our final goal is to leverage innovation, innovative approaches to improve performance DEP is a world class water and wastewater system and we expect to stay at the forefront of our field. We are engaging in new research and incorporating new technologies. For example, as discussed earlier, we want to maximize resource recovery of our treatment plants. We collaborate with other industries, and learning organizations to adopt best practices and influence national policy making. Innovative approaches often connect to other goals such as increased efficiencies. For example, we are able to use technology to improve performance and allow staff to use their time more efficiently. Over the past decade DEP has introduced Tablets and similar devices to several field units improving—improving their productivity and responsiveness and increasing accuracy and safety. We continue—continue to identify areas where innovative technology can

improve operations in all areas from water and wastewater treatment to response tracking, and I'll just briefly on the PMMR. They FY19 PMR-PMMR, highlights some of DEP's recent successes. We continue to have exemplary water quality and sewer service. Nearly all of our critical indicators met or exceeded the targets during the reporting period. We have improve our response time to air quality and noise complaints, and we continue to respond to 100% of asbestos complaints within three hours. Our time to close noise complaints has improved by almost 20% in part due to our improved use of technology in the field. We are very proud of our customer service quality overall even as we consistently strive to improve our services. The PMMR also indicates some areas that we need to focus additional attention on: Sewer backup and catch basin complaints both increased during the first four months of FY19. Both of these issues are attributed largely to record rainfall experienced over the summer, but we are still taking steps to ensure better performance in the future. It is worth noting that despite the increasing complaints, sewer back-up resolution times only increased by 48 minutes and catch basin response

times actually decreased. Likewise, the time to close noise complaint cases have—has decreased by 20% this year. This success is due to our innovative use of technology, which allows our field staff to make reports in real time as well as recent local laws that have required DEP to inspect and clean catch basins more frequently. As you can see our 2018 Strategic Plan and our Capital Investments serve as a blueprint—blueprint that reflects DEP's priorities for shaping the future. We commit to evolve the plan over the years to reflect emerging and changing trends while continuing to hold true to the visionary goals that are vital to creating a sustainable future for all New Yorkers. Thank you again for the opportunity to testify today, and my colleagues and I are happy to answer any questions you have.

CHAIRPERSON CONSTANTINIDES: Thank you, Commissioner. I want to make sure I recognize my colleague Council Member Carlos Menchaca from Brooklyn who is here as well. So let's—lets dive right in. I mean let's—let's begin where you just ended on some of those sewer backup issues. You know, according to, you know, the Mayor's MMR. We see a small—we've seen about an increase of over a 1,000

in this first quarter of FY19, and if you look at our—our trajectory here, we had a good year in 20—FY16, not such a great year—we had a 2,000 increase in '17. It went down to about 11,000 last year, but now it looks like we're possibly back up. So, in that vain, what are we doing to address—you talked about it a little bit, but if you could expand on your answer, and do we have enough workers? Do we have enough staff? Because I also saw in this year's budget there are not any new needs. So, if we can talk about that as well, like are there enough folks at DEP doing this work to get this work done in a timely way because we—we can't say that we're—our trajectory is going downward unless we—you know, we are in a place where we're going to consistently need less because we're—there's less issues. We're—we're kind of like hills and valleys. So, I—I can't see like there's needs for cuts. So, what's happening there, and—how do we—how do we sort of make sure that we're going to stay in the right direction for long term without any new needs?

COMMISSIONER SAPIENZA: So, Mr. Chair, as you know there are 148,000 catch basins around the city and under Local Law a few years ago, DEP became

required to inspect all 148,000 annually and clean where necessary, and we've been doing that over the last few years. We've—we've increased staffing and we do a lot of analytics to see, you know, where are—are spots that are more troublesome than others. One—one of the—the facts is that when it rains a lot, a lot of street debris gets pushed into our catch basins, and we did have a lot of rain this past July and August and, you know, as we try through public communications and to tell people not to throw garbage not only in their toilets, but on the street, but we do whenever we get a lot of rain, we see increases in the amount of material that we need to pull out. We are pulling out, in fact, record amounts of—of material out of those basins.

CHAIRPERSON CONSTANTINIDES:

[interposing] And just—just to interject here, Commissioner. I mean if you, you know, I was reading the new Wells book *Uninhabitable Earth* last night, and it was talking about how this is the new normal. Right, like climate change is everywhere. It's—it's—it's built into everything that's happening in our world. So, we are—we're expecting more precipitation. How are we equipped then to deal with

the fact that it's not just going to be heavy rain this past year, but more than likely we're going to see heavier rain events for the duration of our lifetimes.

COMMISSIONER SAPIENZA: That's right.

No, that's absolutely true and the information that we're seeing, too, for—for the Northeast U.S. there's more rainfall and not only more rainfall, but—but more intense rainfall what we call cloud bursts, and that's something we look at not only for—for the local sewer system here in New York City but our reservoir system as well, and we get more intense rainfall on—on watershed lands. So, it's something that—that our—our—our teams in our Bureau of Water and Sewer Operations certainly look at all the time and we know some areas of the city are more troublesome than others on—on climate change as well and sea level rise. We know that there's some areas of the city that are seeing sunny day flooding because of—of high sea levels. So, we have an analytics group that's continually looking at that.

CHAIRPERSON CONSTANTINIDES: I guess that kind of comes back to my question. If—if all this is happening, how do—how do we not have any new needs in

the budget when we are--this is an agency that's tasked with dealing and yourselves and the Mayor's Office of Sustainability you're on the front line of climate change. You're the ones that are dealing with the most immediate effects, things like sea level rise and how do we keep flooding out of homes and backups in our sewer systems? How do we not have any new needs in the budget when there's so much going on in these areas of need? [laughs]

COMMISSIONER SAPIENZA: So--so in--in the past few years we--we did have new needs, and in our Preliminary Budget, and that's because we needed to fund some of those current year expense needs, and--and that's why they were identified. In this current year FY 19, we've had no current Fiscal Year needs that we needed to address. We are talking to OMB about some FY 20 new needs, and again related to service deliveries that--that you spoke about and--and during Exec we will have some identified.

CHAIRPERSON CONSTANTINIDES: Okay great because I'm--I'm just concerned that we're--we're--I'm glad that we're being more efficient. I'm not--I'm not--I'm not criticizing DEP for doing more with less, but I will say that in doing more with less there's--

there's a lot more to do. So there isn't less to do. There's actually much more to do here and when it relates to DEP that we cannot--there's not a lot of fat here to trim actually. There's--there's--it's all muscle that we're cutting into here, and we need to be able to meet these demands that aren't going away. It's going to rain more. We're going to see more issues around CSOs going into waterways. We're going to see more of these things happening. So, we have to make sure we're making those investments. Talk about the catch basins. How are doing with those cleanings every year? I know that you've hired up more staff. Out of the mind (sic) we should continue--I know it's supposed to sunset this year. I don't think that this is a bill that should sunset. What are your thoughts?

COMMISSIONER SAPIENZA: So--so the--the Local Law required us to--for--for a three-year period to inspect each catch basin, and--and clean them as necessary. I think the program is going very well so far. What we're finding is some catch basins do need cleaning every year or even more in some cases where in other parts of the city we're seeing that the same catch basins are clean over--over multiple inspection

cycles. So, we want to continue to work with the Council to-to, you know, develop a program going forward, but to date again, we've been pulling our record numbers of material out of the catch basins and they're-they're functioning better for it.

CHAIRPERSON CONSTANTINIDES: And-and, you know, with that, with, you know, the additional rain events and additional things happening in communities when it comes to climate change and-and the additional, you know, additional precipitation, I can't see how we are pulling a record number of material out of these catch basins, how we can sum (sic) this up as well. It just doesn't make sense to me.

COMMISSIONER SAPIENZA: It can-we'll be happy to continue working with you. I look forward to that Commissioner. So, talk a little bit about, you know, we talked about sewer back-ups. Which boroughs are seeing a higher influx of sewer complaints and-and-and issues?

COMMISSIONER SAPIENZA: We-we see sewer complaints in--in a bunch of different areas, and I guess I'm going to ask Tasos Rudelles (sp?) who's our Deputy Commissioner Water and Sewer Operations and

Distribution system to—to step up and—and provide some information that you have.

CHAIRPERSON CONSTANTINIDES: It's always good to see you. Another Greek. I just have to have Samara swear you in, my friend. [laughs]

LEGAL COUNSEL: Do you swear or affirm to tell the truth, the whole truth, and nothing but the truth today?

TASOS RUDELLES: I do. So, if I heard the question correctly it's where we're experiencing more sewer backup?

CHAIRPERSON CONSTANTINIDES: Uh-hm.

TASOS RUDELLES: So, we are seeing in the PMMR, we saw an increase in sewer backups. So, that was due to an increase in rainfall over the last four months. We went from the previous year where we had 13 inches of rain. So this four-month period we had 23 inches of rain. The increase of the back-ups—we pretty much saw an increase citywide. So it wasn't like a specific areas that was hit worse than the other. We're always monitoring and looking at all the areas to try to be as proactive and responsive as we can.

CHAIRPERSON CONSTANTINIDES: No, I mean—I—I appreciate that. You know, I'll—I don't want to ask the same question again, but I'm—I'm pretty sure we're to see as much as it pains me to say this, I know spring is coming and baseball season is coming, and I want to see as many games get in this year as we can, but we're going to see a lot more rain events, a lot more rain, you know, rainy days. I mean we're seeing that. It's going to be more consistent. So, are we able to meet that—that—that need if we're going to—that 20—if there's additional 23 inches it will probably become the norm or the—the low end of the spectrum not—not where we—not where we were before. Before it looks like it's gone.

TASOS RUDELLES: And—and we should mention also, Mr. Chair, the—the Green Infrastructure program that's—that's well underway now, we have more than 4,200 of those curbside rain gardens we've installed and—and budget for many thousands more and that's helping to just use natural systems to—to relieve stormwater from getting into the sewer system.

CHAIRPERSON CONSTANTINIDES: Now, I saw that you have this program that you talked about where you provide the capital outlay for green infrastructure and pollution control, right? That's—that's a-how—who-what outreach do we do? Who are we working with? You know, how are we making sure that they're—they're—who's taking advantage of it? Who should be taking advantage of it, but isn't and, you know, sort of what's our thought process there.

TASOS RUDELLES: So, I'll—I'll key it up but I'll ask Angela Licata our Deputy Commissioner for Sustainability to come up. So, so—we have a grant program for non-profits and—and private facilities to—to install green infrastructure that we can as a city pay up to 100% of. We—our 4,200 rain gardens that I mentioned are built on city property and the city right-of-way, but a lot of the paved areas of the city are—are privately owned, and—and so that's why we instituted this grant program, and Angela I'll ask you to come up to speak a little bit more about it. [pause]

CHAIRPERSON CONSTANTINIDES: Hi, Angela. It's good to see you. I've got to swear you in, though. [laughs]

LEGAL COUNSEL: Do you swear or affirm to tell the truth, the whole truth and nothing but the truth today?

ANGELA LICATA: [off mic]

CHAIRPERSON CONSTANTINIDES: Alrighty. Make sure that your mic is on.

ANGELA LICATA: It's on now.

CHAIRPERSON CONSTANTINIDES: Good to see you, Angela.

ANGELA LICATA: Yeah, same here. So, as the Commissioner stated we are looking for green infrastructure really in three baskets is the way I always explain. We must really take advantage of the right-of-ways, which make up almost 30% of our impervious areas in the city, and that's why we have such an aggressive rain garden program. As the Commissioner mentioned, we have over 4,000 assets in stalled, which are primarily in the right-of-way, and we will continue to build many thousand more. In fact, we also are looking at the second basket very aggressively now with respect to public lands. So, we have quite a lot of projects that are teed up in design and have already been constructed for the

NYCHA properties for our parklands, and for our school sites. Those--those are--

CHAIRPERSON CONSTANTINIDES: See, I was going to ask you about that. So that--that's--it's great that you--you bring up NYCHA and schools because I know in--in my area, the one area that was most impacted by Hurricane Sandy was the Halletts Cove Peninsula by the Astoria Houses. I would love to know if there is opportunities there for green infrastructure. Around you have Queensbridge, Ravens Wood and then Astoria Houses on the Halletts Cover Peninsula, you know, a stone's throw from each other. What is--but I don't represent those first two that I mentioned, but I do represent the Astoria Houses. What are our greenhouse infrastructure opportunities there? If you can get back to me about that because I don't know if you have that information in front of you, and then local schools that are on--in that same area that are in flood zones, what are we doing in and around those schools as well, and then using those opportunities for also education moments right?

ANGELA LICATA: Uh-hm.

CHAIRPERSON CONSTANTINIDES: Building those into the curriculums that we are educating our

young people about what these rain gardens do, and—
and why they're important and resiliency and
sustainability as well.

ANGELA LICATA: Precisely. We're on the
same wavelength there. So, we—I don't have that
information at my fingertips, but I will certainly
provide it to you.

CHAIRPERSON CONSTANTINIDES:
[interposing] Yeah, great. I just didn't expect it
today. [laughs]

ANGELA LICATA: Yes.

CHAIRPERSON CONSTANTINIDES: But if you
can get it back to me, that's amazing

ANGELA LICATA: And—and with respect to
the educational opportunities we do have a fantastic
program on—with the Trust for Public Land on school
yards. So, we are taking the opportunity to work
with the Trust for Public Land who's doing some
really nice design work with the students. So,
they're getting involved in the entire process for
the green infrastructure, and we have been able to
pay for some of that play material such as the
asphalt playing surfaces and the running tracks
because located below that is really a tremendous

opportunity for storage. In many cases we have completely eliminated the runoff from the school yard that used to be completely asphalt to the sewer system in the majority of storms. So, it's really been a tremendous partnership and a great opportunity for public education. The third basket is as the Commissioner mentioned, our private property. We have to incentivize our private property to retrofit. So, it's not good enough just to have new construction install green infrastructure as they go forward because we only turn over a certain small percentage of land every year. So, with our Grant Program, we have \$53 million in opportunity to really look at the largest properties first using a third-party administrator, and the reason we have gone in this direction is because our Grant Program wasn't seeing enough interest. The private sector doesn't necessarily like the transactional costs or cost of doing business with the city. So, having a third-party administrator limits their transactions with the city specifically, and that is a mode that was used in Philadelphia, and it's been quite successful for them. So, I'm—I'm quite hopeful for us as well.

CHAIRPERSON CONSTANTINIDES: So, who—who are our target there? This is the first year that that—that grant program exists? Because the program has gone for a couple of years. Who is taking advantage and then who do we want to take advantage that may not be taking advantage yet, and how—what outreach are we doing to sort of make sure that we're doing it?

ANGELA LICATA: Yeah. So the—the current Grant Program we probably have about 18 individual projects now, and it's been a wide array of people who have taken advantage of that program. We have rooftops at the Bishop Laughlin School in Brooklyn. We have the Brooklyn Navy Yard that has taken advantage of that. We have small installations in Manhattan that have taken advantage of the Grant Program, but what we really would like to see happen, and this is where this new private incentive grant program is going to focus on the large properties. So we think there's ample opportunity for those large properties to do a series of installations that will manage stormwater and once again, as I described it for the school yards keep that water from running

into the sewer system for probably 90% of the storms that we see.

CHAIRPERSON CONSTANTINIDES: So, if someone—if—if—I know this is kind of common (sic) but if DOB is granting a permit for a new large building or if there's an existing renovation of a large building, are we reaching out to the owners of these properties and saying here's a grant program that you may be able to take advantage of that the city is going to help fund that is going to make it more resilient around your property and—and less stormwater. Are we—are we connecting those dots or how do we—how do are we doing that?

ANGELA LICATA: Okay. So I apologize. It's getting to be a little complicated, but for new construction, they have to comply with the city's stormwater rule.

CHAIRPERSON CONSTANTINIDES: Right.

ANGELA LICATA: So, we actually don't provide grant money for that because it's regulated already.

CHAIRPERSON CONSTANTINIDES: Right.

ANGELA LICATA: So, the grant money is actually trying to incentivize the retrofits of properties that don't--

CHAIRPERSON CONSTANTINIDES: [interposing] That don't--don't exist?

ANGELA LICATA: --already, right, have to--

CHAIRPERSON CONSTANTINIDES: [interposing] But how do we--how are we doing? Again, I'm just trying to figure out like for those--for those large buildings, great, new construction we're good.

ANGELA LICATA: Right.

CHAIRPERSON CONSTANTINIDES: The older buildings how do we bring them on board in a--in a--

ANGELA LICATA: [interposing] So--

CHAIRPERSON CONSTANTINIDES: --in a larger way that we're--and I--and I want these big developers to be paying for things as well. Like I'm not looking to give grants to big corporations, but I am looking to incentivize things that make sense, right?

ANGELA LICATA: Right. So, the current Grant Program we've been doing a series of workshops.

We have a lot of outreach at all of the DEP events.

We promote that through our Long-Term Control

Planning meetings. We try to work with the Swim

(sp?) Organization and other organizations that are

out there to spread the word. We've reached out

individual property owners ourselves. With the new

\$53 million program we--the third-party administrator

will be doing a lot of that hand-holding, and the

department will do everything it can to also help.

We're going to be specifically reaching out to those

large property owners, and doing everything we can to

encourage them to take advantage of this grant. We

really want it to be successful.

CHAIRPERSON CONSTANTINIDES: Thanks. I'm

looking forward to hearing more on that topic. I'll

stop that--that line of questioning right now, but I

will definitely want to hear more about our schools,

our NYCHA, our parks, and meet with you about that in

the near future to discuss how it's implemented and

how we're moving it out especially in--in boroughs

like Queens and--and Brooklyn and the Bronx as well.

Not just Manhattan. Not through the local Manhattan.

We love Manhattan, too, but how we're getting all the

boroughs activated. So, next, about the Capital

Plan. So, I see that, you know, we have—we're—we're, you know, we're spending about, you know, we have those—those large numbers and about \$2.9 billion in 2020, \$2.6 billion in 2021, and then about 2024 or 2025 there's about a billion dollar sort of decrease. We go from, you know, \$2.6 billion to about \$1.5, and at the end of the Ten-Year Capital Plan we're only at, you know, \$931 million. Are we frontloading these projects or what's our sort of long-term mission here? I mean what's the thought process with this Capital Plan that there is such a significant drop in this—from '24 to '25?

COMMISSIONER SAPIENZA: So, so a couple of things, Mr. Chair. I should mention this past year DEP designated a Chief Engineer to actually help us develop our—our long-term planning, and—and working with our budget folks to determine where there are needs, when there are needs and just to better quantify our capital planning in general. So, the Chief Engineer and his office are determining what assets need to be replaced, what years they need to be replaced, and also looking at mandated work from—from the State and Federal Government in the years when those necessary. In this plan there's—

there's significantly more work that needs to be done over the--the first four or five years. Then we can project going out. As time goes on, there may be other work that we identify and--and budgets will be adjusted in future years.

CHAIRPERSON CONSTANTINIDES: The questions that I'll ask then is I know with our long-term control plans we're supposed to invest over \$4.4 billion over 25 years. So, is that baked into that number, and can we be doing more there? I mean what's--what's and I know we have other long-term control plans that are going to be coming online soon. So, we expect these numbers to stay static? Are we expecting increases as we identify these long-term control plans?

COMMISSIONER SAPIENZA: Yeah, so, we've--we've certainly done I think a good job in--in reducing CSOs to date, but there's still, you know, some significant to do. We've spent a little over \$4 billion already but, we--we anticipate that the--the long-term plans over the next generation will--will cost another at least \$4 billion probably \$5 billion. The current shows \$1.7? [background comments] Okay for CSOs there's--there's \$3.2 billion, but that's a

mix of gray and green. So, we--[background comments]
So that includes things like tanks and tunnels for
storage, but also green infrastructure.

CHAIRPERSON CONSTANTINIDES: So, in that
vain, how are things at Alley Ponds? I know last
year we had this whole discussion about the issue
with, you know, where we have the CSO. We're putting
the chlorine in to—we're chlorinating and then we're
putting another chemical in to kill the chemicals
from the chlorine. You know, I made the analogy last
year it's sort of like the old lady who swallowed the
fly. At the end of the story she dies because she a
horse, of course. Like are we still doing that or I
know as you said that there was the trial program,
and we were going to see the test results. Where are
we on that, and I'm registering still my concern over
this whole thing.

COMMISSIONER SAPIENZA: Yes.

CHAIRPERSON CONSTANTINIDES: And so I and
the residents of that neighborhood have that concern
as well.

COMMISSIONER SAPIENZA: Yeah. So
recognizing the significant cost and time that it's
going to take to—to eliminate CSOs, the New York

State Department of Environmental Conservation proposed that when there are over flows, we should at least be disinfecting them. So that the thought was much like we do our wastewater treatment plants to disinfect the overflows there, is to add Sodium Hypochlorite. It's just a Clorox beach essentially in a stronger form to combine (sic) our overflows to at least disinfect them, but then we—we heard from the environmental community that if you're adding Chlorine, you can also be impacting marine biota that lives in these waterways. So, we should be adding another chemical to eliminate the Chlorine after that's done. Those are part of the long-term control plans.

CHAIRPERSON CONSTANTINIDES: And is it— what are—I mean I know there was a pilot program going on. Refresh my memory on—on top of my head that we waiting for results because this had been done in that pilot program. It still seems that we're going to have impact on marine biota even with that disinfectant, right. I mean that's—yeah, my—my son hearing this—this—this description he was concerned and he's—he was eight at the time so— [laughs]

COMMISSION ER SAPIENZA: Yeah. No--

CHAIRPERSON CONSTANTINIDES:

[interposing] So, I'm still concerned about that.

COMMISSION ER SAPIENZA: Yeah, we-we did a pilot at our Spring Creek facility in-in-in South Brooklyn. We're doing the other pilot up by Alley Creek facility, but with-with the right control measures and it's -it's tough. I think Deputy Commissioner Water who is not here today testified last year that control scheme are tough, but-but we, you know, through these pilots are looking to make sure that where we do add chlorine that-that it's eliminated before the ultimate discharge.

CHAIRPERSON CONSTANTIN: Okay. I definitely want to hear more as I'm just registering my concern there. On the issue related to biosolids, I know that there was, you know, an increase. I know we were budgeted--this are the agreements correct? The budget--we were budgeted for in FY15 for \$37,000 (sic) and we spent like, you know millions. Yeah, we spent about \$37 million, we spent \$40 million. We budgeted in FY16 \$38 million and we spent \$44, \$50 and then \$55. So we're--we're spending more beyond our budget on biosolids. I know you talked about it in

your testimony. How is these—when we're changing—
yeah, the issue around biogas, that conversion for—
for use, what are we doing there to sort of reduce
our spending on biosolids, and sort of turn it into
more beneficial uses?

COMMISSIONER SAPIENZA: So, a few
things. One, increasing costs is I think we're—we're
a victim of our own success. As we do a better job in
wastewater treatment, we're removing more organic
material and generating more biosolids. So, the
amounts have gone up a bit. The other thing is
disposal costs. So, we—we for several years around
2009, '10 and '11, saw very low landfill costs. When
there was the recession in the economy, landfills
were—were—were charging very low fees, tipping fees
because they weren't getting construction material.
So, we saw low rates, but those have been picking up
over time and landfill costs are—are getting higher.
The landfill costs are essentially at the point now
where it—it make sense for us to start looking at
more beneficial uses of our biosolids to—to—to do
further processing of them so that we can use the
nutrient values of them, and—and other good
characteristics to actually use them beneficially on

lands like grazing lands, crop lands, and—and we're studying that going forward.

CHAIRPERSON CONSTANTINIDES: Okay and then so my last question, my last group of questions. I know you—you have this program Trash It Don't Flush It. This looks—this looks really great. I know we have the Cease the Grease Campaign. I know that there's a lot of sort of outreach campaigns that we're working on. How much are we spending to do these things? What is our success rate? What could we be doing better to do outreach in communities to make sure that we aren't throwing grease down the—the pipes that we aren't throwing all these materials down into our system. You know, sort of walk me through our spending and—and our outreach component with that.

COMMISSIONER SAPIENZA: So, I'll start it and then I'll turn it over to Deputy Commissioner DeLoath, but—whose—whose team is actually put this campaign together and did a great job. But at our wastewater treatment plants we've been seeing more and more of these wipes over the years, and we actually put a graph together that shows how they—the increase that we're seeing actually winds up with

what the manufacturer's say they're selling. So, it's-it's-it's, you know, obvious why things are happening, but we want to get the word out that to-to consumers and-and to residents of the city that even though a wipe says on the box that it might be flushable, you know, all that necessarily means is that it's not going to clog your toilet, but ultimately that-that plastic-based product is going somewhere, and it's going to either our wastewater treatment plants or it's getting clogged with-with grease products in our sewers. It's costing the city a lot of money. It causes environmental issues when it causes impacts on it.

CHAIRPERSON CONSTANTINIDES: Have you see those fat burgers pictures, which are haunting. You can't turn away from them, but they're pretty gross.

COMMISSIONER SAPIENZA: Yeah.

CHAIRPERSON CONSTANTINIDES: Yeah.

COMMISSIONER SAPIENZA: They real-they really are. So, we knew we had to expand our outreach and our communication and our education, and Mike follow up.

DEPUTY COMMISSIONER DELOATH: Yeah, I would just say there was a lot of effort in the Cease

the Grease in parts of Brooklyn and Queens, and we're trying to really got more citywide so, and not just on grease, but also on other things that you shouldn't be flushing. So, we're spending a million and a half on this campaign with commercials and subway ads and social media ad buys, and we're going to revamp Cease the Grease to sort of transition over to this more formally of more in addition to grease the other, you know, things that people shouldn't be doing and we're going to sort of revamp. We have an education team that's on the ground that's currently going door-to-door in NYCHA developments and other-other properties. So, we're going to expand that citywide.

CHAIRPERSON CONSTANTINIDES: How many people are part of that team? Are you looking to staff more?

DEPUTY COMMISSIONER DELOATH:
[interposing] There's four-four or five, but we have interns during the summer, but we're currently going to sort of re-envision how it's done so we're going to ramp it up more and again be more strategic around the city and partner like with more populated events

or street fairs. We're going to do sort of a bigger bang.

CHAIRPERSON CONSTANTINIDES: Do we think we need more than four or five people to do it or that it sounds like we could probably use a few more.

COMMISSIONER SAPIENZA: I think in addition to the education staff that we have, the Campaign and continuing to do, you know, more behavioral change campaigns is an important component. I think our Education team they've now done tens of thousands of doors. They're pretty-pretty impactful. So, I think we're-we're good there for now, but I definitely think we need to continue to spend more money on more campaigns to reach all New Yorkers.

DEPUTY COMMISSIONER DELOATH: And-and we'll continue to monitor issues and the sewer system issues at our plants if we see that we're making improvements great, and if not, you know, we'll look at potentially putting more resources into it.

CHAIRPERSON CONSTANTINIDES: Because I think also and I know that there was an issue around green infrastructure, right? I mean there was a pushback on green infrastructure, and I think having

the Education teams going into communities to talk about those things as well, right, and saying: You may, you know, have—you may not like the way it looks but these are issues that, you know, these green infrastructure projects are helping keep our neighborhoods safe through resiliency. There's—here's why they're important. Here's why we need to take care of them. You know, here are some of the concerns that we have and—and why they need to be in our neighborhoods and why this one is really important.

DEPUTY COMMISSIONER DELOATH: Yes.

CHAIRPERSON CONSTANTINIDES: Are we, you know, they—is that the same educational team or is that a different group?

DEPUTY COMMISSIONER DELOATH: It's separate. So, we just--we branded (sic) our green infrastructure assets as well—as well. So, we're currently working on a puck (sic) to sort of just, you know, discuss what are different assets are in terms of green infrastructure, and we're working with communities to help organizers sort of about the block including education, but also maintenance needs. One thing I would say also in addition to the

public service campaign that we're working on, I think, you know, it's important that we work with you and -and the Council on some more legislative solutions to some of these issues. The, you know the disposable, flushable wipe industry is gaining so much attraction, and sort of this is becoming a larger problem for us. So, I think in addition to the behavior change stuff that we're working on, you know, spending real money on, I think we want to figure out a way that we can either put some requirements on packaging or we can restrict usage and certainly since there's web (sic) this is really problematic. So, I think we look forward to working with you and Council on-on that as well.

CHAIRPERSON CONSTANTINIDES: Yeah, I mean I was watching a cartoon with my son as we're getting ready for school the other day, something called Bit City Greens that's on Cartoon Network or something at 7:30 in the morning, and all of a sudden one of the characters on the show started yelling about how like "No, wipes are flushable. Even though it says on the package." [laughter] Which I'm-I'm sitting there and I'm like, the work is following me home. [laughs] But I definitely look forward to-to working with you

on that, but I will say— So, looking at the last, and in that same vain, right looking for efficiencies, and we see an increase in overtime, and having ne needs, right. We talk about do we have enough staff? It seems that we have—are we able to pull the names from the DCAS fast enough to fill slots that were not paying overtime? Do we have enough slots at DEP to do the work that we're doing? And we're paying really hard-working men and women a lot of overtime, and I know they're probably excited about that overtime on the one hand, and then also missing their families on the other. So, are we hiring up? Are we fill slots? Are we creating new slots? Are we—do we have enough manpower at DEP to avoid paying so much overtime, and being able to—to do the work that we do that's so important.

COMMISSIONER SAPIENZA: So, yeah, it's a great question and it's something Joe Murin and I actually monthly we meet to go over all of our—our overtime. We—we at DEP spend between \$42 to \$46 million a year on overtime. We have done that for the past few years, and primarily it's because of vacancies that we have. So, we—we typically and for the last several years have had about 500 vacant

positions, and it's just a matter of when people give us their two-weeks notice and leave. It can often take a few months before we can replace them. A lot of our facilities work 24 hours a day, 7 days a week. So, if someone leaves, you know, maybe the guy who's working the day shift has to stay an evening shift on overtime, and that's typically the reason.

CHAIRPERSON CONSTANTINIDES: No, question I'll ask is—is-is that long-term vacancy is it because we don't have enough applicants? Is it because we're unable to pull people from a list quick enough? I mean like what's our process here? So, once someone leaves a job, what--what--what's the-the impediment to getting someone rather quickly? I mean, you know, I'm not saying right away, right, but within a month or two months to be starting to get trained, to start learning the job, what's the challenge there?

JOSEPH MURIN: Yeah, so just, we're—for—for many of those titles, the blue collar titles that we hire, sewer drainage worker, construction laborers, you know, there—there are the Civil Service Requirements that we have to go through either lists or postings, getting someone interviewed, then on-

boarded and trained and—and it can take a few months before someone is on board. So again, that—that—while that—that slot is vacant, someone has got to cover that—that watch, and —and we pay overtime for it.

CHAIRPERSON CONSTANTINIDES: And—and do we have enough at DEP to do all of this work, right? I mean, you know, we have about five, and, you know, there are a lot of really hard-working men and women, DC37 members including so many different unions. I know everyday they—they're out there. They're doing this work. They're keeping, you know, they're doing all this hard work, and we're grateful for that, but can—do we have enough people to do it?

COMMISSIONER SAPIENZA: Yeah. So, that's something we—we always look at as—as. You know, we want to make sure that we're meeting service targets, and that's something we—we always monitor, but for—at the present time we think our—our current budgeted allocation is—is efficient, and effective and again, we continue to work with OMB when we do identify any new resource needs.

CHAIRPERSON CONSTANTINIDES: Alright. So, the last question I'll ask because I know that—I know my colleague is not here today, but I'll—I'll

ask it. So, derelict boats, abandoned boats in local water bodies, how much funding? I know you had spoken to the Mondays and to Council Member Ulrich--

COMMISSIONER SAPIENZA: [interposing]
Yes.

CHAIRPERSON CONSTANTINIDES: --about funding, about what? Was it--was it \$200,000?

COMMISSIONER SAPIENZA: Yes.

CHAIRPERSON CONSTANTINIDES: Is that in this year's budget again?

COMMISSIONER SAPIENZA: It-it is. So there are a lot of either derelict boats or-or boats that wash up on-on our local shoreline that-that the folks along Jamaica Bay had asked for some additional funding beyond a budget that we already had and I think it's 700. What was the number, Joe?

JOSEPH MURIN: [off mic] I think it's exactly here. (sic)

COMMISSIONER SAPIENZA: \$792,000 we have. We-we had waited through the winter months because there's a lot of, you know, local-coastal storms that-that wash up more beach debris. So, the work is going to start next month, and by the end of June we should have those-those boats removed.

CHAIRPERSON CONSTANTINIDES: I mean do we have enough resources there? Because I know that—do we have a program if somebody doesn't want—just wants to get rid of their boat, do we have the capacity to just take it from them, and dispose of it? Because very often the easiest way if you can't pay the taxes, you've had it forever, just cut the line and let it float off, and it disappears into the Jamaica Bay or some other waterway, and then, you know, we're stuck cleaning it up. Is there a way—do we have the capacity to just do events to say no questions asked. You don't want this any more. You don't want this marine material.

JOSEPH MURIN: Yeah

CHAIRPERSON CONSTANTINIDES: We want to get rid of it.

JOSEPH MURIN Yeah, I mean we—we could look at that.

CHAIRPERSON CONSTANTINIDES: [interposing]
We could look into that. We don't have any--

JOSEPH MURIN: [interposing] That's a great question.

COMMISSIONER SAPIENZA: --big problem (sic) DEP, but we can we can work with our sister agencies.

JOSEPH MURIN: Yeah. We know that Sanitation and Parks have also removed derelict boats, but-but you're right. I mean the material-the boats that we're removing are, you know, it seems obvious people just didn't want to deal with it any more.

CHAIRPERSON CONSTANTINIDES: I mean that, you know, that-that boat-there is one particular boat that has like a special place in my heart. In the-by the gazebo going into Broad Channel we've had a couple of press conferences there, and we had the-the press conference there at the-for the Jamaica Bay Long-Term Control Plan, and then I went back a few months later to talk about some other bills, and it was there. If that derelict boat could maybe finally find a home, as much as it's-it's growing on me because I keep seeing it. If that-if that could to-to finally go to-to boat heaven, that would be wonderful. [laughs]

JOSEPH MURIN: We'll make sure it's on the list.

COMMISSIONER SAPIENZA: It's on the list.

CHAIRPERSON CONSTANTINIDES: Okay, great and-and staying out Broad Channel, in relation to the box culvert store system out there, which will eliminate street flooding, can you provide and update-and up-and update on that timeframe?

COMMISSIONER SAPIENZA: Tasos, do you have the timeline or we'll have to get back to him or--?

TASOS RUDELLES: [off mic] We're going to have to get back to him.

COMMISSIONER SAPIENZA: Okay, we'll get back to you on that.

COMMISSIONER SAPIENZA: Okay, we'll get back to you on that one.

CHAIRPERSON CONSTANTINIDES: Please do, please do. Alright, great. Let me-alright, so with that, Commissioner, thank you for your time and taking these questions. If you can give me the answers to the questions that you didn't have answers for today, that would be much appreciated. I look definitely forward to setting up a meeting to talk about some of the schools and-and NYCHA developments

that we're doing green infrastructure around as well.
So, thank you very much.

COMMISSIONER SAPIENZA: Thank you.

JOSEPH MURIN: Thank you.

CHAIRPERSON CONSTANTINIDES: Alright, so
if there's anyone who wanted to testify who's here
presently and did not fill out one of these cards,
now is your moment. Please go and fill it out
because I only have one person to testify after this
panel, and this--this hearing will be done. So, Mr.
Phil Voss from Energy Vision, and if anyone else
wants to testify, now is that moment. Alright.
[pause] Alright, Mr. Voss, always good to see you.
Please begin your testimony.

PHIL VOSS: Is this on? Good to see you
as well, Mr. Chairman. Thank you for the opportunity
to testify. My name is Phil Voss. I am Program
Director at Energy Vision, and environmental non-
profit focused on commercial and cost-effective
options for decarbonizing our economy. The
Commissioner's testimony referenced the huge energy
opportunity represented by biogas production at the
city's 14 wastewater treatment plants. Biogas
production takes place in the anaerobic digesters at

the plants. These are critical systems that contribute to the city's high level sustainability goals, but which in many cases need repair or upgrading. Anaerobic digestion is the decomposition of organic materials and the absence of oxygen at wastewater treatment plants. This sewage is anaerobically digested in sealed vessels over a period of weeks capturing significant amounts of biogas. This gas capture is critically important. Biogas from anaerobic digestion of sewage is 55% to 60% methane, a greenhouse gas with 86 times the global warming potential of carbon dioxide in the near term. Uncaptured, this methane would escape into the atmosphere accelerating climate change. Biogas capture at wastewater treatment plants is generally burned on site to produce heat and/or electricity. Surplus gas is flared or burned off. In New York City 70% of biogas is currently flared. This is largely because there are few uses for this raw biogas beyond on-site combustion. There is a much better option for surplus gas upgraded to pipeline quality biomethane. Biomethane can be used just like conventional natural gas for heating and cooling, electricity generation or as a vehicle fuel,

but its greenhouse gas emissions are 50% or more lower on a life cycle basis, and no drilling or fracking is required. Biomethane from wastewater could be used to heat city buildings, to fuel city or MTA fleets, greatly reducing greenhouse gas emissions from those sources in keeping with our 80x50 sustainability goals. It could also be sold to generate revenue as recommended in a 2018 analysis by the Independent Budget Office. The Newtown Creek facility is a great example of the possibilities. Commercial food waste is being added to the digesters, which increases biogas production. Such co-digestion of city generated food scraps is a path towards the city's 0x30 goal of reducing waste sent to landfills. Also, equipment to upgrade gas is being installed at Newtown Creek. Once this process is completed biomethane from the facility will be injected directly into National Grid's network for use by businesses, residents and vehicle fleets. Improve anaerobic digestion systems at our wastewater plants will contribute to reducing greenhouse gas emissions by capturing methane and reducing solid waste going to landfill. Upgrading the biogas captured by the digesters would provide a renewable

source of clean energy that the city could use or turn into revenue to support state of good repair at the treatment plants and infrastructure upgrades. We encourage the committee to support upgrades to anaerobic digestion infrastructure at our wastewater plants, and to evaluate producing biomethane from captured biogas. Thank you very much.

CHAIRPERSON CONSTANTINIDES: Mr. Voss, I think we—we spoke on the record on February 25th, which was--

PHIL VOSS: I was afraid it might find a bit familiar.

CHAIRPERSON CONSTANTINIDES: [laughs] So, but I—I agree that we need to—as I brought up today with our use of biosolids, we're spending more and more to dispose. The opportunity here for renewal, cleaner—cleaner sources of energy, we should always be looking and better utilizing that within our wastewater treatment is a great opportunity. So, look forward to continuing to work with you on that, and appreciate you always coming to testify. So, we're not going to have a hearing until April. So, I many not see you for a little bit, but [laughter] but I will—I will definitely—I definitely appreciate you

coming and spending your time here today, and you efforts to advocate for a clean New York. Thank you.

PHIL VOSS: Thank you.

CHAIRPERSON CONSTANTINIDES: Alright. So seeing no one else here to testify, I again want to thank Jonathan Seltzer at my left who is our Financial Analyst; our Samara Swanston our Legislative Attorney; Nadia Johnson and Nicky Cholla (sp?) who are Policy Analysts; my colleague Kalman Yeger whose been here for the duration, and to the great sergeant-at-arms staff who always do a great job keeping things moving and keeping us safe. With that, I will gavel this committee budget hearing of the Department of—Committee on Environmental Protection closed. [gavel]

C E R T I F I C A T E

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



Date April 6, 2019