

**Testimony of Carter H. Strickland, Jr.
Commissioner, New York City Department of Environmental
Protection**

**Before the
New York City Council Committee on Environmental Protection
Concerning the
FY 2013 Preliminary Budget**

Monday, March 11, 2013, 1:30 p.m.

Good afternoon Chairman Gennaro and Members. I am Carter Strickland, Commissioner of the New York City Department of Environmental Protection (DEP). I am joined today by Steven Lawitts, DEP's Chief Financial Officer; Joseph Murin, DEP's Assistant Commissioner for Budget; and other senior managers. Thank you for the opportunity to testify on the Fiscal Year 2014 Preliminary Budget and the Preliminary FY 2013 Mayor's Management Report (MMR).

Since my last testimony on the Preliminary Budget, Hurricane Sandy brought tragic consequences to the City. At DEP, the storm caused approximately \$95 million in damages at ten of our wastewater treatment plants and 42 of our 96 wastewater pumping stations and disrupted an essential project to replace the backup water supply for Staten Island. Through the efforts of our staff and our contractors DEP was able to restore treatment for 99% of the City's wastewater flow

within three days of the storm. And New York City's drinking water remained safe and reliable the entire time.

Sandy notwithstanding, in the past year DEP has achieved a number of goals, highlighted in the 2012 Progress Report on our strategic plan. Issued two years ago with Mayor Bloomberg, *Strategy 2011-14* identified 100 distinct initiatives that will help DEP fulfill its core mission to protect public health and the environment by providing clean drinking water, managing stormwater, treating wastewater, and regulating air, asbestos, and noise pollution. At the plan's mid-way point, 57 initiatives have been fully achieved, 30 are on track to be completed on schedule, and the remaining 13 are in the planning and design phase. That 2012 Progress Report was released last week and can be found on our website at www.nyc.gov/dep.

There are a number of performance metrics in the Mayor's Management Report (MMR) and other documents that are closely related to the core goals and functions to which our capital and expense budgets are directed, and are of interest to our customers and your constituents. After reviewing those metrics and some other milestones of the past year, I will review highlights of the expense and capital sections of the FY14 Preliminary Budget, and finally I will review the capital investments in each borough.

Performance metrics

In the last decade, DEP has implemented technologies and procedures to shift from reactive to proactive sewer maintenance. That shift has led to significant improvements in three key metrics:

- a thirty percent (30%) decrease in the amount of time it takes to resolve sewer backups;
- a nineteen percent (19%) decrease in the number of sewer backup complaints; and
- a fifty percent (50%) decrease in the time it takes to resolve a catch basin complaint.

These improvements are the results of a number of specific changes we have made in the way our Water and Sewer Operations personnel do business. Last November, DEP released for the first time a report called “State of the Sewers 2012” in which we documented some of the important changes in how we maintain and improve the system for collecting and conveying stormwater and sanitary waste. For example, we restructured with a focus on borough-based management and accountability and we created the Capacity, Management, Operations and Maintenance (CMOM) section to employ the most up-to-date strategies in areas that would benefit most from proactive interventions like increased cleaning. To support this section and improve service, DEP enhanced our use of geographic information

systems and computers in the field; developed procedures and guidelines for field personnel; expanded tracking data on customer service requests related to sewer back-ups; deployed “smart” manhole covers to detect high elevations, and built the first ever field training facility with live sewers and water mains.

Our effort to improve sewer service also benefited from the work of our Sewer Operations and Analysis Program, which analyzes trends in data and investigates areas that have a high frequency and density of confirmed issues. Analysts create maps of reported sewer backups to better identify segments and neighborhoods that have recurring problems. Once DEP identifies the likely factors behind confirmed backups or other service issues, we develop a remediation plan that can include degreasing, regular cleaning, and repair or replacement of infrastructure. Although we can’t prevent sewers from surcharging during storms that exceed the design capacity of the sewer, we can deploy resources more efficiently to make sure that the existing system consistently meets the criteria for which it was designed.

Another key metric where we have seen dramatic improvement is water main breaks. In the period covered by the most recent MMR (July to October 2012), DEP reduced the number of water main breaks by over 26 percent, to just 65, the lowest number of breaks in any comparable four-month period in the last ten years. In all of 2012 there were 347 breaks in the city’s network of nearly 7,000 miles of water

mains, down from a high of 632 in 2003. This year DEP averaged less than six breaks per 100 miles of pipe, well below the accepted industry average of roughly 23-25 breaks per 100 miles annually.

The decrease is due, in large part, to an enhanced preventive maintenance program for water main valves and regulators that is designed to minimize the potential for water main breaks and establish proper water pressure zones. Another factor is our expanded network of remote water pressure sensors at key locations, allowing engineers to identify problems and make repairs proactively.

Other key initiatives

In addition to surpassing key performance indicators related to sewer backups, catch basin repairs, water main breaks, and other water and sewer-related services, there are several other initiatives that I would like to highlight:

- In March 2012, DEP finally received the official green light for the groundbreaking \$2.4 billion NYC Green Infrastructure Plan, which was incorporated into a consent order with the state. The Green Infrastructure Plan will improve the water quality of New York Harbor using gray infrastructure where it is still cost effective as well as cutting-edge green technologies that not only absorb the water where it lands, but enhance the local quality of life by providing shade and beautifying the city. The Green

Infrastructure Plan represents a breakthrough in how we re-envision stormwater management and I want to thank our partners at the State Department of Environmental Conservation for working with us to make it happen.

- Many Members know that there are persistent leaks in the Rondout-West Branch Tunnel, a key section of the Delaware Aqueduct. In January of this year, we began preparing for construction at the sites for the two shafts needed to accomplish a bypass of the Tunnel: one in Newburgh on the west side of the Hudson and one in Wappinger on the east side. Later this year, a DEP contractor will break ground on a shaft that will be approximately thirty feet in diameter and 900 feet deep at Newburgh, and 700 feet deep at Wappinger. From these two shafts DEP will construct a bypass tunnel that will allow us to route water around that section of the existing tunnel which has the more significant leaks. The decision to proceed with the bypass tunnel reflects Mayor Bloomberg's commitment to critical infrastructure and is the single most important component of the City's \$1.4 billion "Water for the Future" program. The site work and bypass construction are also the subject of a Project Labor Agreement that will save the City between \$16 million and \$23 million over the life of the work.

- In January of this year, we announced the availability of an optional Service Line Protection Plan. The water and sewer service lines that connect homes to the City-owned water and sewer mains are the responsibility of the homeowner. Repairs to broken service lines can cost between \$3,000 and \$15,000 and be financially devastating to a homeowner. Under the Service Line Protection Plan, American Water Resources (AWR) will repair an enrolled customer's leaking water service line or a broken or clogged sewer service line for a small monthly fee, currently \$3.99 per month for the water service line and \$7.99 for the sewer service line. Homeowners who choose to enroll in the Plan sign a contract with AWR and have the convenience of paying the enrollment fees through their water bills. In less than two months, over 47,000 customers have enrolled in the Plan. Based on historical repair rates, these 47,000 enrolled customers are likely to generate about 1,800 repair calls per year. Coverage under the Protection Plan will save these enrolled customers collectively more than \$2.6 million per year.
- In the spring of this year, DEP will substantially complete the \$1.6 billion Catskill-Delaware Ultraviolet (UV) Disinfection Facility, the largest facility of its kind in the world. That facility was constructed pursuant to a federal mandate that requires treatment of surface water supplies with two forms of disinfection.

- Finally, by the end of 2013 we will approach completion of the Croton Filtration Plant, which will allow the Croton supply to meet all water quality goals even during times of the year when in the past it would be taken off-line because of seasonal color variations that were aesthetically unpleasing. A consistent and reliable Croton supply is a key part of our planning to meet the City's needs in the 21st century.

I appreciate the opportunity to discuss these recent achievements. I'll turn now to a discussion of the expense and capital budget highlights.

The Preliminary FY 2014 Expense Budget

The projected expense budget for the current fiscal year, FY13, is \$1.7 billion, which includes approximately \$500 million in general funds for the Rapid Repairs program for which DEP served as the contracting entity, pending reimbursement from the Federal Emergency Management Agency. For FY14 we expect DEP's expense budget to be \$1.108 billion. That number includes an 8% reduction on the tax levy part of the agency's budget, largely achieved by revenue increases. Although we are not changing fee schedules we are expecting additional filings from firms reporting on-line to the Right-to-Know program, and also an increase in the issuance of asbestos permits and other certifications. After considering efficiency gains from our Operational

Excellence program and offsets for new needs and programs to modernize the agency, the net reduction in the preliminary FY14 expense budget as compared to FY13 is projected to be \$23 million. I note that decrease is only temporary and will change as we continue the discussions leading up to the Executive Budget submission later in the year.

The expense budget breaks down into the following large categories:

- The Preliminary FY 2014 budget projects \$452.6 million, 41% of the total, in personal services to pay the salaries for our nearly 6,000 funded positions.
- Taxes on upstate watershed lands make up the next largest category, accounting for \$153.5 million or nearly 14% of the expense budget. As the Chairman and Committee members know well, the ownership of watershed lands represents a critical investment in maintaining the high quality of NYC's drinking water by protecting it at the source and ensuring that it does not require expensive treatment such as filtration. I am pleased to report that we have successfully negotiated agreements with upstate jurisdictions to make our tax obligations more stable and predictable and, in some cases, to reduce them.

- Heat, light and power – DEP’s energy costs – account for over \$113.4 million or 10% of the FY14 expense budget. DEP is the second largest municipal consumer of electric power in New York City and our consumption will grow as we bring online new treatment facilities for both drinking water and wastewater. To control energy costs and meet PlaNYC’s goals for greenhouse gas reduction DEP is investing in projects to reduce energy needs. One of these is a cogeneration plant at North River that I mention below.
- Sludge management of 1,200 tons per day is projected to cost about \$43.7 million in FY14, or about 4% of our projected FY14 expenses.

Preliminary FY2014-FY2023 Ten-Year Capital Plan

The Preliminary Budget projects capital spending of \$12.2 billion between fiscal years 2014 and 2023. That number, while very large, in fact represents a balance between the need to keep water rates affordable and the need to provide necessary investment in assets which are critical to our quality of life. Last year, during testimony on the proposed Four Year Plan, I noted that DEP’s projected capital needs were, for the first time in a decade, weighted towards the non-mandated projects that are of critical interest to our customers and to the long term viability and resiliency of the water system, but are not required by our regulators,

such as City Water Tunnel No. 3. The Preliminary Ten Year Plan continues that trend of the non-mandated, “state of good repair” projects receiving a much larger proportion of capital funding than mandated projects, consistent with the directive of the Bloomberg Administration to rigorously analyze whether project costs are in proportion to the value provided by the project. In 2012 DEP launched an asset database tool to track age, condition, criticality, replacement cost, and performance of various assets. That tool will be used in our Asset Management program to track critical information on various parts of our system to improve the choices we make concerning capital investments. To date we have evaluated and “scored” more than 26,000 assets and have used that information to prioritize more than 400 repair and replacement projects.

Highlights of the preliminary Ten Year Plan are as follows.

Wastewater Treatment

The Preliminary Ten Year Plan projects a \$4.5 billion investment in wastewater treatment projects, \$3.5 billion for the reconstruction or replacement of components of the wastewater treatment plants and pumping stations. The remaining \$1.0 billion investment will be used to control combined sewer overflows, with \$644 million for green infrastructure such as green roofs and bioswales and the remainder for grey infrastructure, such as tanks and tunnels to store wastewater. I am pleased to announce that this past January we awarded consulting

contracts to three firms to create green infrastructure implementation plans for the key watersheds of Newtown Creek, the Gowanus Canal and Flushing Bay. In addition, \$194 million is budgeted for the construction of a new cogeneration plant at the North River Wastewater Treatment Plant. The new cogeneration plant will use renewable digester gas produced by the wastewater treatment process to both power equipment and heat the facility. It will help us reduce our energy use and help the City meet the ambitious greenhouse gas emission reduction goals in PlaNYC.

Reservoirs, Dams, Treatment Facilities and Water Mains

The capital budgets of the Bloomberg Administration reflect the mayor's belief that New York City's drinking water supply system, particularly the unfiltered Catskill and Delaware systems, is one of the City's most important assets. Over the next ten years, the Administration is proposing to invest an additional \$3.4 billion in protecting the quality of our reservoirs and the integrity of our dams, providing for treatment where necessary, and maintaining and repairing the water main system conveying potable water to all New Yorkers. Two categories of projects account for more than a billion dollars of that: \$383 million for the reconstruction of dams in our three watersheds and \$535 million for pressurization of a two and one-half mile segment of the Catskill Aqueduct that will increase the volume of

water available to the city and re-establish DEP's ability to bypass the Kensico Reservoir when necessary to access the highest quality water. For the continuation of our current Filtration Avoidance Determination programs, the preliminary FY14-23 Capital Plan includes \$163 million, covering all our capital needs for the current FAD, including \$84 million for land acquisition.

The Rondout-West Branch Tunnel and Water For The Future

Although this project extends beyond the Ten Year Plan, in the FY14-23 period the Preliminary Budget provides \$560 million for the bypass itself and \$113.4 million for other projects related to providing supplemental sources of water during the Delaware Aqueduct shutdown. Increasing the capacity of the Catskill Aqueduct – a project distinct from pressurization – accounts for an additional \$164 million.

City Water Tunnel No. 3

City Water Tunnel No. 3 is one of the longest-running public works projects in the City's history. When complete it will improve the reliability of our water supply and allow for the inspection of City Water Tunnel No. 1 for the first time since it came on line in 1917. City Water Tunnel No. 3 has been built in stages. The first stage – running from Yonkers to midtown Manhattan and then Astoria – was completed in 1998. To modify the chambers built during Stage I at the Hillview

Reservoir, the Preliminary FY14-23 Capital Plan allots \$392 million. Stage II of City Tunnel No. 3 includes a section running through lower Manhattan as well as a section running from Astoria to Red Hook, Brooklyn. Although the Manhattan leg and the Manhattan shafts for City Water Tunnel No. 3 have been substantially completed, we are budgeting \$389 million in FY 14-23 for additional work related to the activation of the Manhattan leg of Tunnel 3. Later this year, the Department of Design and Construction will complete those water mains critical to activating the Manhattan leg and we can start using that section of Tunnel 3, enabling us to provide much-needed redundancy to City Water Tunnel No. 1.

Sewers

The Preliminary FY14-23 Capital Plan projects \$2.0 billion of spending on sewers:

- \$672 million for replacement of sewers (storm, sanitary or combined);
- \$915 million is for new sewers (of all types);
- Storm sewers as a category by itself (either new or reconstructed) accounts for \$645.9 million of projected spending
 - of which \$330 million is for high-level storm sewers, including Third Avenue in Brooklyn; and

- \$202 million is for both the conventional sewers and the lands necessary to create Bluebelt systems, which are also being extended beyond Staten Island to Springfield Lake in Queens, Van Cortlandt Park and the Bronx Botanical Gardens, and other locations.

The FY14-23 Capital Plan Highlights by Borough

In Queens, the preliminary Ten Year Plan shows a total of \$1.89 billion allocated for projects of all types. Sewers account for \$373 million. \$336 million is budgeted for work on two shaft sites connected with Stage II of City Water Tunnel No. 3. \$84 million is projected to evaluate, assess and restore groundwater wells in Southeast Queens for the purpose of providing additional water during the Rondout bypass construction, and during any droughts or other instances where the City's surface water supplies are not adequate.

In Staten Island, the Preliminary Ten Year Plan projects a total of \$678 million, of which \$337 million is for sewers. The Snug Harbor sewer project (SE 846) is budgeted for \$24 million. Repairs to the Oakwood Beach plant and to the Hannah Street pumping station are projected to cost \$137 million.

I note that the Preliminary Ten Year Plan does not include the cost of repairing damage to the Staten Island siphon project caused by Sandy. The costs of the damage to that project are under discussion. Some of

the costs may be covered by the contractor's insurer. We are hopeful that the Federal Government will cover any uninsured costs.

In the Bronx, the Preliminary Budget projects \$676 million of capital spending from FY14-23. Approximately \$146 million is budgeted at the Hunts Point treatment plant, including \$50 million for new centrifuges and \$96 million for new digesters. Restoration of the Mosholu driving range, clubhouse and related work is budgeted for \$48.9 million in fiscal years 2014 and 2016. To reduce CSOs into Pugsley Creek and Long Island Sound DEP has budgeted \$72 million in FY 2016 for construction of a parallel sewer that will help divert flow away from the Creek.

In Manhattan, the Preliminary Budget shows \$930 million over the ten years between FY14 and FY23. The largest single project is the \$195 million cogeneration project at the North River Wastewater Treatment Plant. The cogeneration project will replace existing equipment for recycling digester gas with a more efficient system that will allow more of the plant's energy needs to be generated by the plant itself, thereby reducing energy costs and air emissions. Another \$183 million is for several projects at the Wards Island Wastewater Treatment Plant: reconstruction of final tanks; reconstruction of the boiler complex; and, installation of new dewatering centrifuges. \$128 million will fund the construction of water mains connecting two of the City Water Tunnel No. 3 shafts with the local water distribution system.

In Brooklyn, the Preliminary Budget includes \$1.03 billion of planned commitments. The 26th Ward wastewater treatment plant and associated sewer work to reduce CSOs into Fresh Creek account for \$359 million. \$31 million for Coney Island sewer improvements is funded in FY 13. An additional \$106 million is projected in FY14-23 for Coney Island sewers

I also want to take this opportunity to remind the Committee that DEP remains concerned about unfunded state and federal mandates that threaten our ability to provide real value and services for every dollar we receive from our ratepayers. As you know, we have expressed doubt about the timing or need for certain federally-mandated projects that created enormous pressure on the rates. One continuing concern is the EPA-led Superfund processes at the Gowanus Canal and Newtown Creek, which could be distorted to have DEP fund cleanups instead of those responsible for over a hundred years of industrial contamination. The Administration feels strongly that such a mandate would not be fair. We are very involved in sponsoring scientific research and in promoting sensible solutions.

In closing, I want to take a moment to highlight what this agency has been able to accomplish over the last twelve years for the citizens of New York. We have been able to extend the FAD, allowing New Yorkers to enjoy clean, world-class drinking water even in times of natural disasters like Hurricanes Irene and Sandy, and we've made the

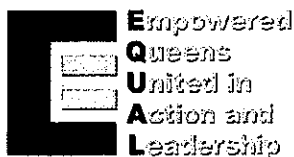
system strong by investing \$2.8 billion in our upstate assets between 2002 and 2012. In the City itself, we have laid 159 miles of new sewers, reconstructed 143 miles of old sewers, and replaced 473 miles of water mains. That's 775 miles of pipe, or about the driving distance between New York and Chicago (the actual driving distance is 789). While working with the City Council we have overhauled the City's noise and air codes, including groundbreaking initiatives to promote clean fleets and clean heating fuels, substantially reducing the public health threats from air pollution. By the end of this administration, we will have constructed the Croton Filtration Plant (with the exception of the surface restoration work), opened the world's largest Ultraviolet Disinfection facility, turned on the Manhattan leg of City Water Tunnel No. 3 and put in place the City's Green Infrastructure plan, which will forever change the way that this city deals with managing its storm water, and will have worked with the Council on much needed updates to the Air Code.

Going forward, to improve the resiliency of our infrastructure in the face of climate change, DEP is currently conducting a detailed study of the effects of climate change and population growth on the City's wastewater and drainage systems. This study initially focused on pilot areas of the City, namely the Hunts Point Wastewater Treatment Plant, eight pumping stations and a 16,377 acre drainage area within the Flushing Bay/Flushing Creek watershed, to assess the sensitivity of

DEP's infrastructure to future climatic conditions based on projections for sea level rise, storm surge, precipitation and temperature in 2050. In the aftermath of Sandy, DEP expanded this study to identify protections for pump station, sewer, and wastewater treatment plant assets citywide based on a cost-risk approach comparing the expected cost of taking no action and the cost of implementing specific adaptation strategies. This information will be part of the Special Initiative for Rebuilding and Resiliency launched by Mayor Bloomberg on December 6, 2012 and led by the New York City Economic Development Corporation and the Mayor's Office of Long Term Planning and Sustainability to develop wastewater and water system recommendations.

There are many more accomplishments to highlight but I also want to thank this Committee and specifically Chairman Gennaro for his advocacy on environmental issues throughout the city of New York and thoughtful approach. Though at times the Council and the Administration may have differences of opinion on policy, this Committee has been able to consider costs and benefits fairly and thus to navigate the balance between policy and operations. On behalf of the almost 6,000 employees of DEP who make a difference each and every day for our environment I want to thank the Chairman publically for his partnership with our agency and to express our commitment to work with the Chair and this committee during our remaining days in office.

That completes my prepared statement. Thank you for the opportunity to present testimony. I look forward to answering any questions that you have.



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Good afternoon

My name is Deacon John Butler and I'm a leader in Bethany Baptist Church and EQUAL (a group of congregations and other organizations representing over 4,400 families in Queens, and part of Metro IAF, representing 118 organizations and tens of thousands more families across New York).

I'm here to speak about the problem of flooding and excess water in Southeast Queens.

For more than 40 years, our communities have been plagued with such intense flooding that basements are constantly inundated, people have to move their cars every time it rains, and during even moderate storms people have had to paddle down residential streets in canoes.

This flooding has destroyed the foundation of many homes, caused huge repair bills and other economic damage, and even created significant amounts of mold that have led to serious health problems.

For example, during any significant rain, the streets and basements of my Church, Bethany Baptist, would flood so heavily that toilets would overflow, and elderly people sometimes couldn't even enter the church.

In order to solve this, leaders from EQUAL and other organizations have gathered specific information about the problem, and we've learned what some of the real solutions are. We, and others, have brought this to the attention of the City Department of Environmental Protection, and other relevant agencies. They have taken some steps to solve the problem, but much more is needed.

For example, after numerous calls to 311, along with correspondence and meetings, DEP launched a major cleaning blitz to clear the storm sewers and drains. After they removed over 1,500 tons of debris, we saw some flood relief in key areas, including around my Church, which floods far less frequently now. However, money must be allocated to ensure this improved maintenance is kept up and expanded, as many areas have not seen relief.

We have identified several other steps that must be implemented (which are outlined further in our accompanying report), all of which need funding:

1) The extension of storm sewers to flood prone areas without them. Current City plans have huge parts of our communities waiting years, or longer, for relief, and that is not acceptable.

2) Beginning to pump the Jamaica Water Company Wells again immediately. When one of them, Station 24, was pumped, those living near the pump said the water levels in their basements declined. This must happen on a wider scale. This will likely require non-potable uses for this water, such as improving the water balance of Jamaica Bay, washing planes at JFK.

3) Expansion of new drainage methods, like Reverse Seepage Basins, which lower the water table by draining excess ground water into nearby storm sewers. All available evidence suggests these basins are working, and they are very cost effective (they reportedly cost between \$10,00 and \$35,000 a piece). DEP must move as quickly as possible to install as many as will be effective.

4) Environmentally friendly, cost effective, methods of increasing drainage, Green Infrastructure (GI), must be used as much as possible to help solve this problem.

I appreciate this opportunity to appear before this committee to discuss how the flooding situation will finally be solved. This is a major problem that has gone on for over 40 years, and it cannot be allowed to continue. I'm confident money will be set aside to help solve the problem.

Thank You.



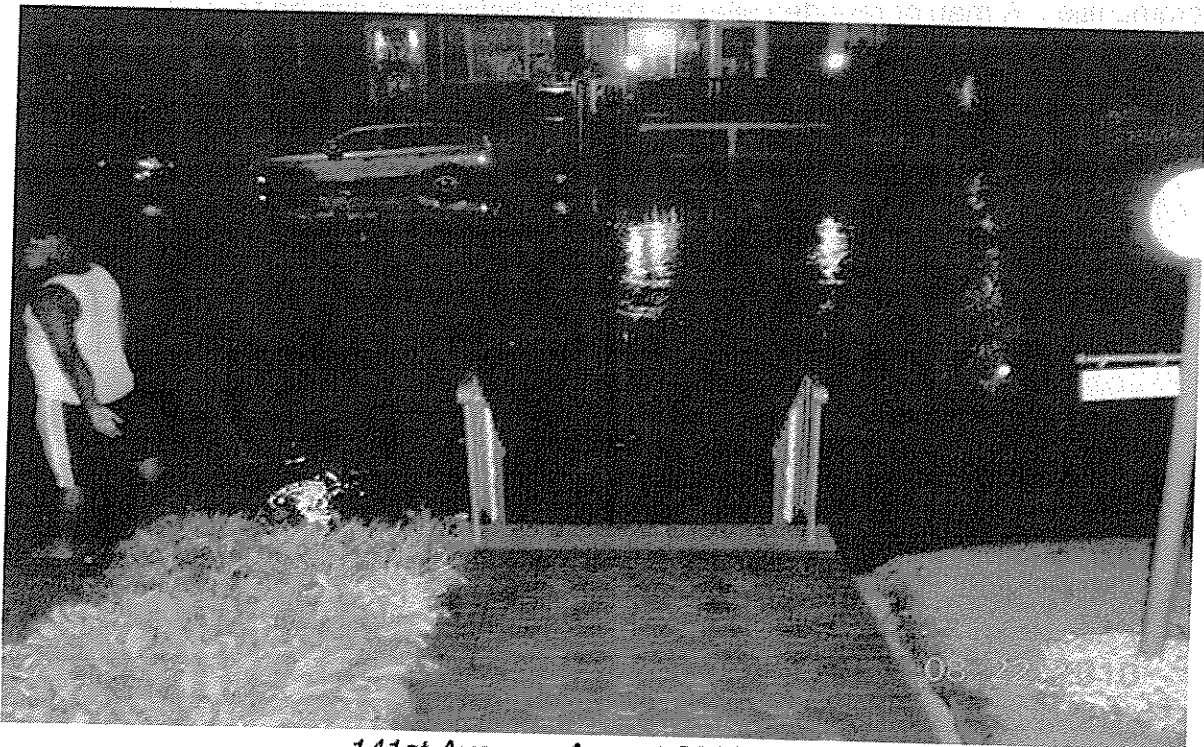
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EQUAL's Report Flooding in Southeast Queens, Winter 2013

Southeast Queens has been plagued with flooding for over 40 years, particularly in the last decade. This has caused far too many homes and other property to be damaged, economic well being to be harmed, and health to be put at risk by mold, or worse, every time there is a significant amount of rainfall.

E. Thomas Oliver, a member of New Jerusalem Baptist Church and a leader in Empowered Queens United in Action and Leadership (EQUAL), lives in Laurelton, Queens. "I've seen my street [141st Ave] so flooded that people paddled past my home in canoes." Due to repeated basement flooding, he bought a \$4,000 sump pump to help save his home, and "after my car was totaled by flood water in 1999, no matter what time of night the rain starts, my neighbors and I have to move our cars to higher ground." However, this problem goes far beyond Laurelton, as can be seen by the Hillside Ave picture. EQUAL leaders are working to understand the problem, and find real solutions.



141st Avenue, August 22, 2010.



Hillside Ave and 196th Street on Wednesday July 18th, 2012

Background: After receiving many complaints about flooding, sewer backups and other problems, EQUAL leaders did a survey of their congregations and communities. A map of reported sites is included below and can be found [here](#).



EQUAL leaders have heard too many stories of economic harm and health risk. As Mr. Oliver said, "We are disheartened that our one major investment, our homes, have been terribly damaged by constant flooding. More importantly, our health has been put at risk by mold."

Another EQUAL leader, Keisha Phillips-Kong, from Our Lady of Light Roman Catholic Parrish, and native of Trinidad, lives near at 194th Street and 119th Ave in St. Albans. "After my husband and I were able to buy our own home in St. Albans in 2010, I saw flooding worse than I ever saw in Trinidad." When it rains for even a short period of time, the catch basins overflow, and streets flood. "When it continues, it floods our front yard, and driveway, so that we have to hop into our truck directly from our backdoor."

Like Mr. Oliver and his neighbors, Ms. Phillips-Kong, her family and neighbors, must move their cars to higher ground when it rains. On their block, flooding has gotten so bad that they have had to sandbag their basement window to prevent water from pouring in from the street. "We love living here," Ms. Phillips-Kong said, "but we should not have to fear the rain."



119th Ave and 194th Street in St. Albans, Queens, August 10, 2012



Front yard on 119th Ave, facing 195th St.

Causes

While many communities experience flooding, Southeast Queens has dealt with more than most because of a combination of factors:

1) Inadequate Storm Sewers. Southeast Queens' (like other areas) population has far outstripped the capacity of its storm sewer system, and homes were built where no storm sewers exist at all.

2) Poor Sewer Maintenance. Catch basins are often clogged. There have also been enough reports of backups to indicate sewer line maintenance needs to be improved as well.

3) Reduction of Permeable Areas. For example, the water that was absorbed by the wetlands that preceded JFK now has nowhere to go.

4) Increased Rainfall often attributed to global warming.

5) Rise in the Ground Water. Beginning in 1997, Southeast Queens residents stopped using water from wells owned by the Jamaica Water Company (JWC), and started getting drinking water from the same upstate aquifers that the rest of the City uses. This was necessary, as those wells were polluted, but not pumping them caused the water table in Southeast Queens to rise significantly.

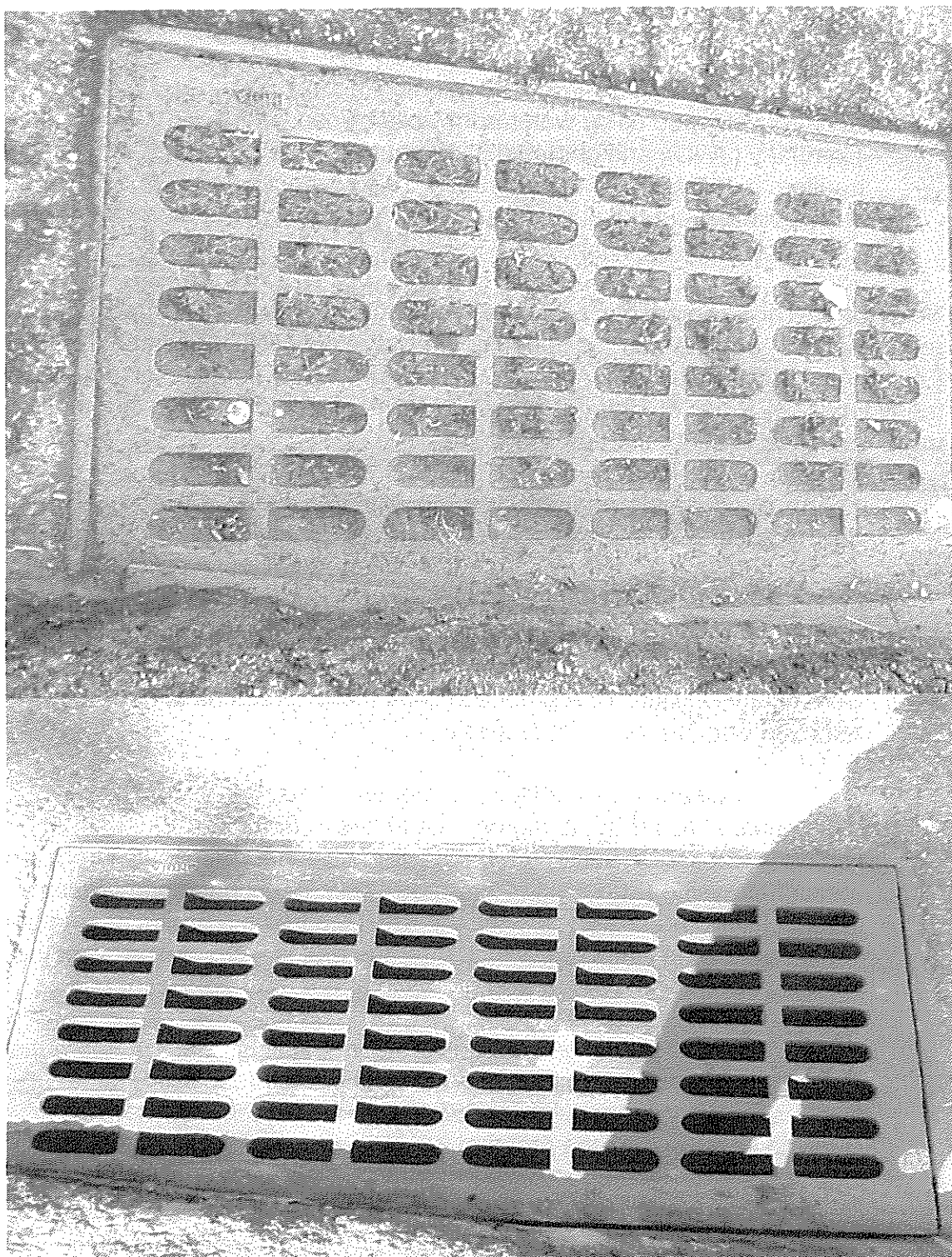
Solutions. This problem has been brought to the attention of the agency most responsible for dealing with the flooding, the New York City Department of Environmental (DEP) by EQUAL and others trying to solve the flooding problem many times. DEP has started to take action to improve the situation, but much more is needed in several areas, including:

1) Improved Sewer and Catch Basin Maintenance. EQUAL has been able to push DEP to make progress here. EQUAL leaders surveyed flood prone areas in the Spring of 2012 and reported several clogs and back ups to DEP. As a result of EQUAL's pressure, almost all of these problems have been resolved (examples can be seen in the photos of before and after cleaning). Further, DEP committed to cleaning all clogged drains in Community Districts 12 and 13 and confirmed 1,562 tons of debris was removed from drains in those areas.

This cleaning has led to real improvements. For example, the basements at two EQUAL member churches in Southeast Queens, (Bethany Baptist Church and Morningstar Missionary Baptist Church), and one in Sunnyside (Sunnyside Reformed Church), used to flood regularly. In response to pressure from EQUAL, DEP cleared the drains near these churches several times. Each time after the drains were cleared flooding reduced significantly, but picked up again after a few significant rains.

While this cleaning has made a difference, it is clear that more than a one-time cleaning blitz is needed. In flood prone areas like Southeast Queens, the City cannot wait for flood-ravaged residents to complain loudly to stop ignoring the problem. More regular maintenance of sewers and catch basins than once every three years is needed to prevent flooding before it starts. DEP said it is considering "a more proactive, less reactive" maintenance policy. It is critical that they adopt one. Catch basins in these areas should be incorporated into DEP's Flash Flood Plan, as part of this effort; DEP should also have a program for inspecting and

cleaning storm sewers in flood prone areas to ensure that storm sewer capacity is not lessened by the buildup of debris.



Catch Basin at Guy R. Brewer and Phroane Ave, before and after cleaning



Catch Basin on Baisley Blvd, near Smith Street before and after cleaning

2) Construction of New Storm Sewers and Catch Basins in Areas that Lack Them. Current DEP plans have many parts of Southeast Queens waiting years, or longer (decades after they were opened to residential development), to finally have storm sewers installed. This is particularly dangerous in flood prone areas, like the ones on the attached list. We understand that sewer extensions often take years because they have to be built out in a grid plan. New York State DEC reported that NYC DEP proposed that storm sewer pipe extensions could be built directly to flood prone areas, and could thus be done much more quickly. Sewer pipes and catch basins must be extended as quickly as possible to all the areas that need them and do not have them, including those on the attached list and any others.

3) Lowering the Water Table. The water table in Southeast Queens that rose due to wells not being pumped must be lowered. DEP's initial plan was to wait until 2016 (later postponed to 2018) when the Delaware Aquifer is to be taken offline, and then start pumping the wells again. This is far too long. Steps must be taken far more quickly:

A) EQUAL is happy that DEP has installed three "Reverse Seepage Basins" (RVBs) at 175th Street and Sayers Ave, 109th Ave and 155th Street, and Linden Blvd. and 155th Street. Anecdotal evidence suggests that they are reducing groundwater infiltration into people's basements by draining the excess water into nearby sewer pipes. We presume the RVB's flow monitoring devices also indicate they work, since City Council officials reported that DEP identified nine other sites where RVB's may be effective. Given the desperate need for action to end flooding in Southeast Queens, the fact that RVBs' appear to be effective, and cost only \$10,000-\$35,000 a piece, according to DEP estimates, EQUAL believes these nine other sites should be pursued on an emergency basis (as the first three were). Given the 40 year long crisis, residents should not have to wait through the 18 month RFP process to learn if further relief is even possible.

Further, DEP must do a comprehensive study of the rest of Southeast Queens to determine any other areas where RVBs' can be effective. Any other RVBs must also be installed on an emergency basis.

B) When the JWC well at Station 24 was pumped again by the New York State Department of Environmental Conservation (DEC) during the summer and fall of 2012, DEC told EQUAL it was removing 2.7 million gallons per day from the aquifer, treating the water and putting in Jamaica Bay. People in the area reported the level of groundwater infiltration in their basements reduced substantially. We were greatly disappointed

when Station 24 stopped being pumped. It is clear that a comprehensive plan must be developed to pump many, if not all, of these wells, not in 2018, but as soon as possible. Sustaining the pumping over the long term will likely require finding non-potable uses for this water (as it is not clean enough to drink). NYS DEC and Council officials have reported that DEP officials suggested well water could be used for improving the water balance of Jamaica Bay, washing planes at JFK, or landscape irrigation. Such a plan must be developed and implanted immediately.

4) Green Infrastructure (GI) is an environmentally friendly, cost effective, method of replacing lost natural drainage. While some GI does not work in areas with high water tables, other methods (like green roofs) do. Any GI that will work must be used, where appropriate, to end flooding. It is critical that a compressive study to determine what GI will work in Southeast Queens, beyond the two blue belts that DEP has already planned for Baisley Pond and Springfield Lake be done, and that such these methods be constructed on as wide a scale as will be effective. We understand this would be a shift in focus for DEP on GI, but it is one that needs to be made.

As is stated above, we appreciate that some progress is finally being made. However, what is being done now is only a small fraction of what is needed. EQUAL is working with the US Environmental Protection Agency (EPA) and the Office of City Council Speaker Christine Quinn, and has reached out to other Council Members and elected officials, to ensure this problem is being solved. We have also had some very encouraging conversations with Venetia Lannon from the New York State Department of Environmental Conservation. EQUAL leaders met with DEP Commissioner Cater Strickland, Associate Commissioner Mahoney and several other staff members twice. We had frank exchanges of views both times, and we hope this is the beginning of a productive relationship. A summary of EQUAL's view on the flooding problem can be found in a [December 6, 2012 New York Daily News Op-Ed](#) written by two of our leaders.

[EQUAL](#) is a broad-based, non-partisan, grassroots community organization made up of dues paying member congregations representing almost 4,500 families, many of whom have been effected by the serious flooding problems described above. EQUAL is also the Queens affiliate of [the Industrial Areas Foundation \(IAF\)](#); which has over 60 organizations in the US, Europe, and Australia, including three other organizations in New York City, as well as in Westchester County, Long Island, and New Jersey.

Capital Projects at Sites of Chronic Flooding or other Drainage Problems

EQUAL leaders have recently observed persistent flooding, or other drainage problems, at the sites listed below, amongst others. Page numbers referred to are from DEP's project list, which is being sent as well.

This is not a comprehensive list. All the flooding sites reported to EQUAL since 2011, along with descriptions and 311 reference numbers, can be found [here](#).

A) Areas of chronic flooding where capital projects are apparently planned:

1) 158th Street and 111th Ave, 11433. 311 Ref #: C1-1-778130931.

2) 157th Street and 111th Ave, 11433. 311 Ref #: C1-1-778157271.

It appears this area is covered by Project HWQ121B3 (p 3), which is set to start in FY 2015 (estimated cost \$12,317,000). Given the frequent flooding in this area, this project should be sped up as much as possible.

3) 194th Street and 119th Ave, 11412 (311 Ref # C 1-1-778151391),

Project SEQ200517 (p 17), a storm sewer build out and water main replacement, is planned for 119th Ave between 192nd and 195th Street. It is slated to begin in FY 2014 and is listed as costing \$1,645,000.

Project SEQ200480 (p 16), which extends storm sewers to areas close to this intersection, would seem to have an impact here as well. It began in FY 2011 and is listed as costing \$1,937,159. These projects need to be completed as soon as possible.

4) 196th Street, between 118th Ave and 119th Ave, 11412. (311 Ref #: C1-1-778130571).

It seems that the combination of the above projects could provide relief here as well, but DEP has not verified that.

5) 204th St and Linden Blvd, 11412

Work appears to have begun here, through Project SEQ200489 (p 16), listed as starting in 2013 and costing \$6,547,083). It is critical this work continue.

6) 146th Terrace and 183 St., 11413. (311 Ref #: C1-1-779261331).

Project HWQ562A "West of Springfield Lake" seems to include this area. It is unclear if it was completed yet. There are still flooding problems in this area.

B) Areas of chronic flooding or other drainage problem that appear to not have storm sewers or planned capital projects (but clearly need them).

- 1) Hillside Ave, between 192nd St and 199th St, 11423
- 2) 171st Street and Foch Blvd, 11434
- 3) 225-22 Menton Ave. 311 Ref #: 185409718.
- 4) 229th Street and 115th Ave, 11411
- 5) 146-59 222nd St., 11413.
- 6) 156-09 107th Ave, 11433- Frequent flooding has been reported here and it appears a catch basin is needed in the middle of the block.
- 7) 106th Rd. and 180th St, 11433. (311 Ref #: C1-1-778151611).
- 8) 226-05 (and 06) 141st Ave., 11434 (311 Ref # 185409719)

The kind of expedited sewer extensions DEC and DEP discussed may make sense in some or all of these locations.

C) Areas of chronic flooding that appear to currently have storm sewers, but still have significant flooding.

- 1) 115th Ave and Springfield Blvd, 11411.
- 2) 225 Street and 115th Ave, 11411. 311 Ref #: C1-1-778088041
- 3) 224th Street and 115th Ave, 11411. 311 Ref #: C1-1-778037891
- 4) 227th Street and 115th Ave, 11411. 311 # C1-1-778151191
- 5) 228th Street and 115th Ave, 11411. 311 Ref# C1-1-778151231
- 6) 198th Street, and 113th Ave, 11412. (311 Ref #: C1-1-778151391).
- 7) 196th St. and 113th Ave, 11412. (311 Ref# C1-1-778130521).
- 8) 169-15 120th Ave, 11434

Obviously other measures are needed here.

DAILY NEWS

OPINION

Fighting the waters in southeast Queens

Our troubles started long before Sandy

BY KEISHA PHILLIPS-KONG AND E. THOMAS OLIVER / NEW YORK DAILY NEWS



As our region continues to recover from the devastation of superstorm Sandy, Gov. Cuomo and Mayor Bloomberg have rightly said that the city and state need to update their infrastructure to deal with the increased likelihood of future flooding. Bloomberg even based his endorsement in the presidential race on President Obama's position on climate change.

It is regrettable that it takes such a dramatic and deadly event to focus the minds of political leaders on a long-standing and growing problem.

In southeast Queens, flooding is a fact of life. While Noah's flood lasted for 40 days, our flooding has been going on for more than 40 years. Even a minor rainstorm causes water to rise in our basements, yards and streets. Some residents have bought canoes so that they can paddle to higher ground when the rains arrive.

The prospect of a storm drives residents out of their homes in the middle of the night to move their cars to safer sites. People with more means have invested in pumps and other preventive measures. Others simply clean up the mold and sewage as best they can.

Yet, with a few exceptions, the same political leaders who responded so well to Sandy have largely ignored the plight of neighborhoods like Jamaica, Hollis, St. Albans and Springfield Gardens.

In fact, public policy, such as it is, has only worsened the problem. Overdevelopment was allowed without any provision for the extension of sufficient sewer lines to those neighborhoods. Natural drainage areas like swamps and streams were covered over by builders, with little done to provide alternative ways to siphon off water.

Consequently, the water table has risen significantly ever since the city stopped pumping the wells of the old Jamaica Water Company. Add climate change to this equation, and it is clear that the flooding problems in our area will only worsen unless aggressive action is taken.

True, some are working to fix these very serious problems. Our leaders have joined with the city's Department of Environmental Protection and state and federal officials to make sure that 1,500 tons of debris were removed from area storm drains. Some basins had been clogged for so long that grass and small shrubs had begun to grow up through the grates.

New drainage initiatives have been added to the city's capital plan, and several pilot projects designed to lower the water table are in the works.

However welcome, this action is not enough to solve the problem. A responsible response would include:

! Finishing sewer infrastructure development in areas that have gone decades without it.

! Accelerating and expanding the use of green infrastructure techniques — like green roofs and blue belts — throughout southeast Queens. Two pilot projects are underway. But there is room for a much more extensive approach, such as using effective and environmentally friendly strategies that will also create local jobs.

! Lowering the water table by renewing well pumping, installing reverse seepage basins and planting even more trees.

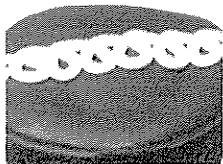
Cuomo has called for us to "build the city back smarter." The human, emotional and financial costs of Sandy have been staggering. We need our leaders to remain focused on these issues — and not just for a few more days and weeks, but for the next many months and years.

After all, we now know how vulnerable our infrastructure is when confronted by a dramatic and deadly event like Sandy — or the much less dramatic but persistently worsening situation in southeast Queens.

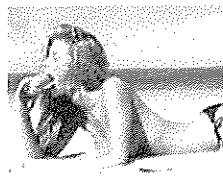
Being New Yorkers, we know that we can do better than just keep our fingers crossed and hope it doesn't happen again. If we can fix it here, we can fix it anywhere.

Phillips-Kong is a leader in Our Lady of Light Roman Catholic Church in St. Albans. Oliver is a leader in the New Jerusalem Baptist Church in Jamaica. Both are leaders in Empowered Queens United in Action and Leadership, an affiliate of Metro Industrial Areas Foundation.

OTHERSTORIES



11 Foods You Can't Buy Anywhere Anymore
(The Fiscal Times)



The next Kate Upton? Sexy Sports Illustrated model Nina Agdal stars in Carl's Jr. mouth-watering Super Bowl ad



Obama's Parting Gift to Hillary Clinton
(BusinessWeek)

Readers sound off on a transgender 6-year-old using the girls' room and stupid Washington politicians

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THE CITY OF NEW YORK**

Appearance Card

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

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Steve Lawitts,

Address: Chief Financial Officer

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

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(PLEASE PRINT)

Name: Carlos Stickland, Commissioner

Address: DEP

I represent: _____

Address: _____

**THE COUNCIL
THE CITY OF NEW YORK**

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

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Date: _____

(PLEASE PRINT)

Name: Deacon John Butler

Address: 85-18 61st Rd Rego Park, N.Y. 11271

I represent: EQUAL

Address: 157 111th Ave, Jamaica, N.Y.

Please complete this card and return to the Sergeant-at-Arms