

Testimony of James Roberts, P.E.
Deputy Commissioner, New York City Department of Environmental Protection
before the
New York City Council Committee on Economic Development, the Committee on
Consumer Affairs and the Committee on Environmental Protection
concerning
Oversight - Assessing the Economic Impact of New York's Failing Infrastructure
Hearing 1: Gas, Steam and Water

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Council Chambers, City Hall, 10 a.m.

Good afternoon Chairpersons Garodnick, Espinal, Richards and Members. I am James Roberts, Deputy Commissioner of the Bureau of Water and Sewer Operations (BWSO) in the New York City Department of Environmental Protection (DEP). I am joined today by James Garin, Director of Engineering in BWSO, Joseph Murin, Assistant Commissioner for Budget, and other DEP staff. Thank you for the opportunity to testify on the de Blasio Administration's efforts to address improving New York City's underground infrastructure.

One of the most important challenges we face is managing the nearly 15,000 miles of water and sewer infrastructure that is very much the lifeblood of the City. Like many older cities our infrastructure is aging; there is no secret about that. But what sets New York City apart has been our standing commitment to making the necessary investments to continue to improve and rebuild that infrastructure. Keeping this commitment has at times been difficult. We understood the challenge of escalating water and sewer charges during some difficult economic times. But we also understood that investments in critical infrastructure are essential. This year, with the support of Mayor de Blasio, we were able to deliver the lowest water and sewer rate increase in nine years, while increasing our spending on water and sewer projects. And, through the support of the Mayor in returning part of the rental payment, we will be spending an additional \$100 million per year on a program designed to accelerate replacement of the some of the oldest assets we have in the ground. I will say more about this program shortly.

In the past decade we have invested almost \$3.5 billion dollars in our water and sewer infrastructure, which is in addition to \$4.7 billion on City Water Tunnel No. 3 since construction began in the '70s. This past fall we activated stage II of Tunnel No. 3 in lower Manhattan and for the first time in my nearly 30-year career, we have reached the point where we are not completely dependent on City Tunnel No.1, which we put into service nearly a century ago in 1917. During the past decade we also invested \$3 billion on our new Croton Drinking Water Filtration Plant, the first of its kind in the City's history, and \$1.6 billion on our state-of-the-art Catskill / Delaware Ultraviolet Light Disinfection Facility, ensuring the quality and public health of the 8.5 million city residents (approximately 9 million New Yorkers) who enjoy the best water in the nation. We have invested \$5 billion, an extraordinary amount, in our Newtown Creek Wastewater Treatment Plant. Investments like this account for harbor water quality being the best it has been in a century.

While many of these major investments were mandated, thereby putting uncomfortable pressure on our water rates, we were also able to make critical investments in pieces of the system that are not as obvious to everyday New Yorkers. Projects like a new \$225 million Staten Island Siphon, to ensure drinking water supply to the borough, and the rehabilitation of the Gilboa Dam at the farthest reach of the watershed are examples of our commitment to keeping the system sound and reliable. We have budgeted \$262 million for the reconstruction of dams in our three watersheds and \$40 million for pressurization of a two-and-one-half mile segment of the Catskill Aqueduct, which 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.

At the same time, our commitment to continued improvement of our in-city infrastructure has never wavered. Since 2002, we have constructed or reconstructed over 500 miles of sewer and 510 miles of water mains. We have constructed 61 out of 127 best-management-practice treatments of the Staten Island Blue Belt program for stormwater management; they will serve as part of the stormwater management system for one-third of Staten Island. For example, from FY '02 - '13, DEP spent \$438 million on sewers and \$210 million on water mains in Southeast Queens alone. Going forward, DEP has \$582 million in the Four Year Plan (FY14-17) for Queens of which \$283.8 million is budgeted for Southeast Queens, including \$194.8 million for sewers and \$89 million for water mains.

Also in Queens, work on two shaft sites connected with the Brooklyn/Queens section (Stage II) of City Water Tunnel No. 3 is budgeted for \$43 million. We project \$143 million 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 drought or other instances in which the City's surface water supplies are not adequate.

In Staten Island, the Executive Budget projects a total of \$492 million, of which \$321 million is for much needed sewers and \$182 million for the Blue Belt program. The Snug Harbor Blue Belt project is budgeted for \$23.9 million. Repairs to the Oakwood Beach Wastewater Treatment Plant and to the Hannah Street pumping station are projected to cost \$79.6 million.

In the Bronx, the Executive Budget projects \$533 million of capital spending from FY15-18. Approximately \$143 million is budgeted for the Hunts Point Wastewater Treatment Plant, including \$50 million for new centrifuges and \$91 million for new digesters. To reduce combined sewer overflows into Pugsley Creek and the Long Island Sound, DEP has budgeted \$72 million in FY 2015 for construction of a parallel sewer that will help divert flow away from the Creek. And for sewers we have \$84 million and water mains, \$93 million.

In Manhattan, the Executive Budget allocates \$720 million between FY15 and FY18. The largest single project is the \$175 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 \$270 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. In addition to the funds budgeted for City Water Tunnel No. 3, \$116 million will fund the construction of

water mains connecting two of the City Water Tunnel No. 3 shafts with the local water distribution system. Sewers are budgeted for \$35 million and water mains, \$162 million.

In Brooklyn, the Executive Budget includes \$860 million of planned commitments. The 26th Ward Wastewater Treatment Plant and associated sewer work to reduce CSOs into Fresh Creek account for \$282 million. An additional \$102 million is projected in FY15-18 for Coney Island sewers. Sewers overall in Brooklyn are budgeted for \$259 million and water mains are at \$118 million.

Over the past six years we have also improved our maintenance and repair programs significantly, driving our water main breaks to record lows and decreasing sewer back-up and flooding issues across the city. There is admittedly much work to be done, but I believe it is important to highlight that, for example, our water main break rate per 100 miles has been between 5-9, while accepted benchmarks across the nation are in the 22-25 range. We have reduced our catch basin repair backlog to less than 500 on a total of almost 150,000 basins and our critical hydrant repair numbers have been reduced from what had been 17 days to 3, on a basis of nearly 110,000 hydrants.

So, the news is not all bad. In fact some of it is very promising. At the direction of Mayor de Blasio and Deputy Mayor Shorris, an underground infrastructure working group, comprising key City agencies and private utility partners, was established and tasked with improving emergency response, coordination of underground construction, and accelerating the pace of improvements.

DEP is currently working on a pilot program to partner with the private gas utilities, Con Edison and National Grid, to identify potential areas of mutual need and concern. By sharing data on maintenance history and planned replacements we believe we can seize upon the natural nexus between the age of each system and the neighborhoods they lie in, and accelerate replacement of the older infrastructure in our systems, most of which is cast iron. DEP is currently working with both utilities to map areas of potential opportunity and we hope to begin actual construction on one or more locations by the end of the summer.

We believe that, in addition to the synergy of replacing the older infrastructure, there will be opportunity for efficiencies with street opening and repair as well. The Department of Design and Construction (DDC) already performs coordination on major capital projects it executes for both DEP and the Department of Transportation, but we intend to create a focused population of locations to be administered for the purpose of this accelerated program of \$100 million per year of additional spending. Finally, we have asked DDC to look at all our current projects for opportunities to include any older cast-iron facilities that may not have been included in the original project with an eye toward reducing the inventory of cast-iron water mains more rapidly than we have planned.

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