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**TESTIMONY SUBMITTED BY
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**HEARING ON SUSTAINABLE STORMWATER MANAGEMENT
(INTROS. 628, 629, 630, *et al.*) BEFORE THE COMMITTEE ON ENVIRONMENTAL
PROTECTION OF THE COUNCIL OF THE CITY OF NEW YORK**

NOVEMBER 8, 2007

Thank you for the opportunity to testify today on behalf of NRDC and our New York City members. I am Larry Levine, a Project Attorney with NRDC's NY/NJ Harbor-Bight Project. NRDC also offers this testimony as a member of S.W.I.M., or "Storm Water Infrastructure Matters," a coalition of nearly 50 organizations, including community and environmental groups, environmental justice organizations, architects, water engineers, and community development corporations, that are dedicated to ensuring swimmable waters around New York City through natural, sustainable storm water management practices in our neighborhoods.

NRDC appreciates this Committee's continuing interest in the City's combined sewer overflow (CSO) problem. As you know, in the last several years, the Committee has held several hearings on the topic of CSOs: in September 2004, on a state enforcement order against the Department of Environmental Protection (DEP), which requires DEP to develop of a Long Term Control Plan (LTCP) for CSOs, to achieve compliance with the federal Clean Water Act; in October 2006, on DEP's progress to date in developing a city-wide LTCP, which is not scheduled to be complete

until 2017, with implementation requiring an unknown number of additional years; and in February 2007, on the water quality goals of Mayor Bloomberg's PLANYC.

NRDC, too, has a longstanding involvement in efforts to abate the City's CSOs. NRDC has been party to state administrative proceedings, from 1992 to the present, concerning the terms of the permits that govern the city's CSO discharges. In 2006-2007, we participated in two DEP advisory committees established in connection with the LTCP development process; we remain involved in more informal public input into that process. Since late 2006, we have engaged with the Mayor's office in the development and implementation of PLANYC's water quality initiatives. Also, my colleague at NRDC, Brad Sewell, has served as the co-chair of the Jamaica Bay Watershed Protection Plan Advisory Committee, established pursuant to legislation, known as Local Law (L.L.) 71, which originated in this committee in 2005. CSOs and stormwater have been among the many issues addressed in the comprehensive planning process that has unfolded pursuant to that legislation. In fact, DEP and the Mayor's Office of Sustainability and Long Term Planning now point to the CSO elements of the Jamaica Bay plan under L.L. 71 as a model on which they hope to build citywide.

This committee is all-too-familiar with the significance of New York City's CSO problem, and NRDC and others have offered testimony to this Committee defining the problem on many prior occasions. In short, due to our outdated and overburdened sewer system, during rainfall events of as little as one-tenth of an inch, New York City annually dumps some 27 billion gallons of raw sewage and polluted stormwater, spewing from approximately 460 CSO outfalls, into virtually every waterbody surrounding New York City – from the Hudson, East, and Bronx Rivers, to Jamaica and Flushing Bays, to Newtown Creek, to the Gowanus Canal, and many

more.¹ Pathogens and other pollutants released from CSOs cause beach closures, restrict shellfish uses, and damage our waterways' aesthetic qualities and ability to support human recreation and aquatic and marine life. In some areas of the city, a system of separate stormwater sewers avoids the CSO problem, but nonetheless carries significant amounts of metals, pesticides, and organic and other pollutants washed by rain water off of our streets, parking lots, yards, and other surfaces, depositing that pollution directly into our waters, untreated in any way. Due to CSO and stormwater pollution (as well as excessive nitrogen pollution coming from the city's 14 sewage treatment plants), New York City, 35 years after the passage of the Clean Water Act, remains a long way from restoring its waterways to "fishable and swimmable" condition, as promised in that landmark federal law.

Under a series of plans DEP submitted to the New York State Department of Environmental Conservation (NYSDEC) in June of this year, DEP proposes an array of end-of-pipe and other engineering fixes that, by DEP's estimate (which is still under review by NYSDEC), would reduce CSO discharges by approximately 11 billion gallons per year – but would still result in nearly 18 billion gallons of CSOs annually accounting for population growth through 2045.²

¹ See, e.g., *In the Matter of Alleged Violations of Articles 17 and 71 of the Envtl. Conservation Law and Part 750, et seq., of Title 6 of the Official Compilation of Codes, Rules, and Regs. of the State of New York by The City of New York and the New York City Department of Environmental Protection*, Order on Consent, No. C02-20000107-8 (N.Y. Dept. Envtl. Conserv., 1/14/05), at Whereas Clauses ¶ 5; Design Trust for Public Space and NYC Office of Environmental Coordination, *Sustainable New York City*, at 21 (Jan. 2006) (avail. at http://www.nyc.gov/html/oec/downloads/pdf/sustainable_nyc_final.pdf); see also HydroQual, *Combined Sewer Overflows to New York Harbor Waters from New York City Watersheds for an Average Precipitation Year (JFK 1988) Current Conditions (2003 Dry Weather Flow, 2003) Operations* (2004) (on file with NRDC).

² These totals are derived from figures given in DEP's June 2007 "Waterbody/Watershed Facility Plan Reports," submitted to NYSDEC pursuant to a 2005 Administrative Consent Order with the state. Because DEP's several reports do not report their data in consistent format, nor has DEP provided any cumulative city-wide totals, these estimates reflect NRDC's best effort to aggregate the numbers from these multiple reports.

The data in these same plans also reveal that nearly 1/3 of public access points to our waterfront, city-wide, are within less than 3 city blocks (i.e., 750 feet) of a CSO outfall.³

NRDC and SWIM Urge Your Support for Intros. No. 628, 629, & 630

The legislation before the Committee today is designed to help bridge the gap between the modest water quality improvements envisioned by DEP's most recent CSO-reduction proposals and the "fishable/swimmable" waters New Yorkers deserve. I would like to use the remainder of my testimony to highlight the purposes and most significant features of Intros. No. 628, 629, & 630, as well as a few amendments that we believe would clarify and improve the legislation. I will also briefly address Intro. No. 321.

Intro No. 630, modeled after Local Law 71 of 2005, which required development of the Jamaica Bay Watershed Protection Plan and established the associated Jamaica Bay Watershed Protection Plan Advisory Committee, would provide for the development of a "Sustainable Stormwater Management Plan" for the city and establish a citizens' advisory committee to assist in that process, including representatives from the environmental, land use, and development communities.

As you know, under L.L. 71, DEP submitted its final Jamaica Bay plan to the Council just over one month ago, and the L.L. 71 advisory committee submitted its comments on the final plan at the beginning of this month. In the view of that advisory committee, the plan "comprehensively catalogues the bay's resources and its problems, and proposes a considered suite of initiatives. In

³ This is based on a preliminary database of access points developed by Metropolitan Waterfront Alliance (MWA). See DEP, Open Waters and East River Waterbody/Watershed Facility Plan, at 7-5 (June 2007). MWA has since updated the database, although DEP has not yet re-calculated its figures on the proximity of CSO outfalls to these access points.

the Committee’s view, there would be significant benefits for the bay *if* these initiatives were fully developed and implemented in a timely fashion.”⁴ Although the job of restoring Jamaica Bay is far from complete, we believe this Jamaica Bay planning process has been a strong example of what the focused and combined efforts of city officials and engaged members of the public can achieve.

At the same time, Mayor Bloomberg, through the Water Quality initiatives of PLAN NYC, and the ongoing work of the Mayor’s Office of Long Term Planning and Sustainability – picking up on the ideas advanced by a wide array of stakeholders in DEP’s LTCP development process – has begun to engage in a similar planning process to address the city’s CSO and stormwater pollution problems through the widespread implementation of stormwater “Best Management Practices” (BMPs). These BMPs are often collectively referred to as “source control,” “Low-Impact Development,” “Green Infrastructure,” or “Better Site Design” techniques. These approaches – such as green roofs, enhanced planting of street trees, permeable pavement, rain gardens and swales, wetlands restoration, and many others – collectively serve to re-make the urban landscape to mimic more closely the way natural systems handle rainwater, using it to green our city before it ever has a chance to enter the sewer system and cause CSOs. Such measures were specifically included in DEP’s Jamaica Bay Watershed Protection Plan and, moreover, have been endorsed by the U.S. Environmental Protection Agency and the National Association of Clean Water Agencies (NACWA) as effective – and cost-effective – tools for

⁴ Letter from B. Sewell and D. Adamo, Co-Chairs, Jamaica Bay Watershed Protection Plan Advisory Committee, to Council Speaker Quinn and DEP Commissioner Lloyd (11/1/07) (emphasis in original).

reducing CSO and stormwater pollution.⁵ Indeed, they are already in wide use in cities such as Chicago, Pittsburgh, Portland, Seattle, Toronto and others.⁶

Drawing lessons from the L.L. 71 process and building upon PLANYC's commitment to using stormwater BMPs to improve water quality around the city, Intro. No. 630 would set the city on a path to a sustainable, long-term approach to stormwater management. It would require, by late next year, the completion of a city-wide Sustainable Stormwater Management Plan, including detailed and measureable goals, milestones, and timelines for implementation, followed by regular reporting to the Council on progress toward implementing the plan. The plan would, among other things, identify financial incentives, regulatory changes, inter-agency coordination, and funding needed to facilitate and promote the widespread implementation of "source control" stormwater BMPs, on both private and public property, in both new and existing development. We believe this legislation is an excellent vehicle for realizing – and perhaps even exceeding – the water quality goals of PLANYC.

NRDC and S.W.I.M. do, however, strongly recommend that the text of Intro. No. 630 be revised to provide, explicitly, that DEP shares the responsibility for developing the Sustainable Stormwater Management Plan with many other key city agencies that have jurisdiction over public and private activities affecting the flow of stormwater into city sewers – including but not limited to the Departments of Transportation, City Planning, Buildings, Parks and Recreation, Design and Construction, and others. The collaboration of many city agencies will be crucial to the success of any stormwater management effort. Attached to this testimony is a list of specific

⁵ See <http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm>. We also note that DEP is a member of NACWA. See http://www.nacwa.org/index.php?option=com_content&task=view&id=3&Itemid=70&.

⁶ See, e.g., NRDC, *Rooftops to Rivers* (2006) (avail. at <http://www.nrdc.org/water/pollution/rooftops/contents.asp>).

amendments to the bill that would implement this recommendation and help clarify the bill in other ways.

Next, **Intro. No. 629** would require that new City-funded capital projects be designed to minimize the post-construction runoff of stormwater into the City’s sewer system, using the same menu of “source control” BMPs described in Intro. No. 630. The most important function of this bill is to ensure that during the interim period, before the Sustainable Stormwater Management Plan is complete and its elements codified in specific guidelines and regulations, new city capital projects – such as construction of roads and institutional facilities – will be designed to embody the underlying principles behind Intro. No. 630. Accordingly, it would require that city projects be designed so as to minimize the amount of stormwater and stormwater-related pollution discharged offsite into the city’s sewers, through the use of appropriate “source control” BMPs. The attached list of proposed amendments proposes specific language to clarify the applicability of this requirement during the interim period before a comprehensive city-wide plan is complete. That attachment also includes another proposed amendment to expand modestly the range of projects covered by the bill, to ensure that city agencies seize all of the easy opportunities – the “low-hanging fruit” – available to integrate sustainable stormwater management practices into new construction.

Third, **Intro. No. 628** would require that new plantings of trees and other vegetation along our streets and sidewalks – especially the million trees to be planted as part of PLANYC 2030 – are installed in such a way as to maximize their capacity to absorb stormwater. Currently, the Department of Parks and Recreation uses specifications for the installation of street trees that include deep and broad tree pits, use of specially absorbent soils, and other features that act to both capture stormwater that would otherwise runoff into the sewers and to promote the health

and growth of the tree. This legislation would authorize and require that the Department of Parks and Recreation to establish standards binding on all private parties and public agencies engaged in street tree plantings, which ensure that the Departments' know-how is brought to bear to achieve the maximum benefits from the massive tree planting initiative under PLAN NYC – starting now, even before the more comprehensive Sustainable Stormwater Management Plan called-for by Intro. 630 is complete. The attachment to this testimony includes proposed revisions to this bill to clarify that the Parks Department's standards would apply uniformly to all street tree plantings in the city and would address critical features, such as grading of the sidewalk surrounding a street tree, that go beyond the four corners of the tree pit itself.

Finally, **Intro. 321** would amend outdated city law to provide broader authority for DEP to authorize the use of the entire range of “green” stormwater management strategies, which serve to retain, detain, reuse, and/or infiltrate stormwater on-site, rather than mandating the “disposal” of all stormwater from almost all lots directly into the storm sewer system. This would provide property owners – effective immediately – with new opportunities, subject to DEP oversight, to implement “green” stormwater management practices, on a case-by-case basis, where appropriate. This legislation is wholly consistent with, and serves to complement, Intros. No. 628, 629, & 630, and we urge its passage as well.

* * *

In closing, I would like to thank the Committee for the opportunity to submit testimony on this important legislation. We urge the Committee to pass Intros. 321, 628, 629, and 630, with the revisions proposed in the attachment to this testimony, and look forward to working with the City Council and the Bloomberg administration to achieve further improvements in water quality around the City, for the benefit of all who call it home.

S.W.I.M. – Proposed Amendments to Intros. No. 628, 629, & 630

Intro. No. 628

- In § 18-104(b), as amended, insert after “including the installation of tree pit guards” the following phrase: “and any other features appurtenant to such plantings”.

***Rationale:** Clarifies that all matters related to the installation of street trees and vegetation are covered by this section. For example, in addition to tree pit guards, other “features appurtenant” would include specifications, as appropriate, for the grading of any portion of the street surface to be replaced immediately adjacent to the new planting.*

- At the end of § 18-104(b), as amended, add the following: “No person or agency shall plant any tree or vegetation in a street, or install any street tree guard or other feature appurtenant to such planting, without prior authorization of the commissioner.”

***Rationale:** Clarifies that even projects approved of or carried out by other city agencies, such as the Departments of City Planning, Buildings, or Transportation, are subject to the requirements of this section.*

- In § 18-105, as amended, insert after each appearance of the word “trees” the following: “and other vegetation”.

***Rationale:** Ensures consistency with § 18-104, which provides jurisdiction over both trees and other vegetation in streets.*

Intro No. 629

- In the new § 224.2, immediately before the final sentence, add the following: “Prior to completion of the sustainable stormwater management plan established prepared pursuant to section 24-526.1 of chapter 5 of title 24 of the administrative code of the city of New York, the agency responsible for the design of each capital project shall consult with the department of environmental protection at the earliest practicable stage in the design process and shall modify the design of such project as deemed necessary by the department of environmental protection to ensure that such project conforms to the requirements of this section.”

***Rationale:** Ensures that all projects subject to this section, pursuant to the effective date set forth in § 2 of Intro. No. 629, will, in practice, be designed in accordance with the general design principles set forth in this section, notwithstanding that the sustainable stormwater management plan required under Intro. 630, to which this section refers, may not be complete by the time this section becomes effective.*

- In the final sentence of the new § 224.2, immediately following the words “is paid for in whole or in part from the city treasury and”, insert the word “either”; and, immediately preceding the period at the end of the sentence, insert the following: “or has as its primary purpose the construction or substantial reconstruction of, or addition to, any public park, plaza, or other outdoor public space.”

***Rationale:** Ensures that capital projects costing below \$2 million, but which, by their nature, allow for easy incorporation of sustainable stormwater management techniques, are covered by this section.*

- In § 2 of Intro. 629, replace the semi-colon with a period, and replace all language following that period with the following: “This local law shall also apply to any capital project that receives capital dollars from the city treasury before July 1, 2008, unless the agency responsible for the design of such project determines that such application is not feasible.”

***Rationale:** Places the onus on the agency responsible for projects funded before July 1, 2008 to make a determination as to whether or not it would be practicable to revise the project design to conform to the requirements of the new § 224.2.*

Intro. No. 630

- In the new § 24-526.1(a), add a definition for “blue roof,” which appears in the text of the legislation, as follows: ““Blue roof” means flat rooftops designed to detain stormwater temporarily in place for subsequent release to the sewer system or for beneficial reuse, including, but not limited to, use of the method referred to as ‘rooftop detention.’”

***Rationale:** Provides a definition for a key term in the legislation, the meaning of which is not otherwise obvious.*

- In the first sentence of the new § 24-526.1(b)(1), insert after “The department” the following language, offset by commas: “in consultation with other appropriate agencies and offices”.

***Rationale:** Ensures that all agencies with jurisdiction over public and private activities affecting the flow of stormwater into city sewers – including but not limited to the Departments of Transportation, City Planning, Buildings, Parks and Recreation, Design and Construction, and others – are involved in the development of the plan. (Note also that § 24-526.1(c)(1)(iii) requires the Department of Environmental Protection to include in the Sustainable Stormwater Management Plan “an identification of the agencies and/or office that shall be responsible” for implementing each aspect of the plan and a set of “protocols for inter-agency coordination” with respect to such implementation.)*

- In the last line of the new § 24-526.1(b)(4), replace the words “where revised” with “where such plan has been revised”.

Rationale: Clarifies the language by using parallel construction to that used in a preceding portion of this sub-section.

- In the new § 24-526.1(d)(1)(v), insert after the words “public open space, parks, and plazas” the following, offset by commas: “whether publicly or privately owned”.

Rationale: Ensures that privately-owned public spaces, such as plazas constructed on private property in exchange for a floor area bonus under the zoning code, are covered by this sub-section.

- In the new § 24-526.1(c)(1)(iii)(a), immediately preceding the word “protocols,” insert the word “for”.

Rationale: Minor editorial change to avoid potential mis-interpretation of existing language; demarcates more clearly the scope of the words “and/or”, as they appear in this sub-section.