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Title: A Local Law to amend the administrative code of the City of New York, in relation to developing and implementing a sustainable stormwater management plan.

Sponsors: James F. Gennaro, Gale A. Brewer, Lewis A. Fidler, Vincent J. Gentile, Sara M. Gonzalez, Letitia James, G. Oliver Koppell, Michael E. McMahon, Michael C. Nelson, Domenic M. Recchia, Jr., Diana Reyna, James Sanders, Jr., Kendall Stewart, David I. Weprin, John C. Liu, Melissa Mark-Viverito, Thomas White, Jr., Mathieu Eugene, Helen Sears, Melinda R. Katz, Daniel R. Garodnick

Indexes:

Attachments: 1. Int. No. 630 - 10/17/07, 2. Committee Report 11/8/07, 3. Hearing Testimony 11/8/07, 4. Hearing Transcript 11/8/07, 5. Press Release, 6. Hearing Transcript 1/30/08, 7. Fiscal Impact Statement, 8. Letter from Mayor, 9. Hearing Transcript - Stated Meeting 1/30/08, 10. Local Law

Date	Ver.	Action By	Action	Result
10/17/2007	*	City Council	Introduced by Council	
10/17/2007	*	City Council	Referred to Comm by Council	
11/8/2007	*	Committee on Environmental Protection	Hearing Held by Committee	
11/8/2007	*	Committee on Environmental Protection	Laid Over by Committee	
1/30/2008	*	Committee on Environmental Protection	Hearing Held by Committee	
1/30/2008	*	Committee on Environmental Protection	Amendment Proposed by Comm	
1/30/2008	*	Committee on Environmental Protection	Amended by Committee	
1/30/2008	A	Committee on Environmental Protection	Approved by Committee	Pass
1/30/2008	A	City Council	Approved by Council	Pass
1/30/2008	A	City Council	Sent to Mayor by Council	
2/19/2008	A	Mayor	Hearing Held by Mayor	
2/19/2008	A	Mayor	Signed Into Law by Mayor	
2/19/2008	A	City Council	Recved from Mayor by Council	

Int. No. 630-A

By Council Members Gennaro, Brewer, Fidler, Gentile, Gonzalez, James, Koppell, McMahon, Nelson, Recchia Jr., Reyna, Sanders Jr., Stewart, Weprin, Liu, Mark-Viverito, White Jr., Eugene, Sears, Katz and Garodnick

A Local Law to amend the administrative code of the City of New York, in relation to developing and

implementing a sustainable stormwater management plan.

Be it enacted by the Council as follows:

Section 1. Legislative findings and intent. The Council finds that New York City receives, on average, 44 inches of precipitation a year, more than most other major United States cities. The combined sanitary and storm sewer system is designed to divert stormwater runoff during certain precipitation events to ambient surface waters so that the flow to wastewater treatment plants does not exceed their capacity or cause the backup of sewer water into residences and onto streets. As a result of combined sewer overflows, an average of approximately 27 billion gallons of combined sewage and stormwater are discharged, untreated, into the City's ambient surface waters in a typical year.

It has been reported that such combined sewer overflows ("CSOs") introduce significant amounts of bacteria such as fecal coliform and other pollutants such as nitrogen, into the City's waterbodies, posing a danger to the public health, damaging the ecology, and making some of such waterbodies unsuitable for many recreational activities. In portions of the City where separate sewers convey sanitary sewage and stormwater, untreated stormwater discharge carries significant amounts of bacteria and other pollutants, as does stormwater that by-passes the sewer system altogether and flows directly into the City's waterbodies.

Source control strategies that decrease the amount of stormwater entering the wastewater treatment system are valuable tools to reduce the occurrence and volume of CSOs and other stormwater discharges. Effective source control strategies also provide other benefits, such as decreased energy consumption and economic benefits associated with supporting local markets for source control strategies. The Council finds that the development and implementation of a sustainable stormwater management plan is vital to improve water quality in the City and thereby better protect the public health through the restoration and protection of the ecological health of the City's waterbodies and to the enhanced use and enjoyment of the City's waterbodies for recreational activities.

§2. Chapter 5 of title 24 of the administrative code of the city of New York is amended by adding a new

section 24-526.1 to read as follows:

§24-526.1 Sustainable stormwater management. a. Definitions. For the purposes of this section only, the following terms shall have the following meanings:

1. “Best Management Practices” or “BMPs” mean source control measures.

2. “Bioretention” means using living vegetative systems to capture, store, and cleanse stormwater. Bioretention may be achieved by, among other things, rain gardens, vegetated buffers, swales, and medians.

3. “Bluebelt” means engineered and natural aquatic systems, such as existing wetlands, streams and ponds, that control the movement of water and prevent flooding,

as an alternative to constructing storm sewers.

4. “Blueroof” means a rooftop detention system.

5. “Cisterns” means storage tanks that are used to capture and store rainwater and other precipitation.

6. “City” means the city of New York.

7. “Downspout disconnections” means disconnecting downspouts from the sewer system, such that water from downspouts drains into bioretention devices, cisterns, or other stormwater control devices.

8. “Green roof” means a living vegetative system partially or wholly covering a roof.

9. “Green street” means a street that incorporates environmentally beneficial engineering techniques into its design, including vegetative source control measures.

10. “Green wall” means a living vegetative system partially or wholly covering a wall.

11. “Grey-water reuse” means reuse of wastewater for beneficial purposes such as irrigation.

12. “High level storm sewer” means a storm sewer in which the catch basin connection is removed from the combined sewer under streets or in the public right-of-way and connected to a new storm sewer that will convey stormwater directly to ambient surface waters. As a general matter this type of separation is also called “partial separation.”

13. "Loading" means an amount of matter that is introduced into a receiving waterbody.

14. “Non-technological measure” or “non-technological source control measure” means a source control measure that does not use technology to control stormwater, such as operational strategies, procedural changes to design and construction protocols, or performance standards.

15. “Office” shall mean such office or agency as the mayor shall designate.

16. “Permeable pavement” means any area paved with material that permits water penetration into a suitably designed discharge bed. Permeable pavement may consist of any porous surface materials that are installed, laid, or poured.

17. “Pollution loading” means an amount of pollutants that is introduced into a receiving waterbody.

18. “Rain barrel” means a barrel used to hold rainwater.

19. "Source control measure" means any stormwater management practice designed to reduce and/or slow the flow of stormwater into a combined sanitary and stormwater sewer or a separate stormwater sewer, including, but not limited to, any such practices commonly referred to as "Low Impact Development" or "Best Management Practices."

20. “Subgrade storage chambers” means underground stormwater storage facilities that are designed to hold stormwater to prevent such water from entering combined or other sewer systems.

21. “Technological measure” or “technological source control measure” means a source control measure that uses a technology to control stormwater, such as rooftop detention or a constructed bioswale.

22. “Tree cover” means the extent to which an area is covered by the canopy of living trees.

23. “Tree pit design” means the specifications according to which space is created for the planting of trees in paved areas, including but not limited to the depth and breadth of the planting area, the type of soil, and the type of barrier, if any, constructed around the perimeter of the planting area.

24. "Vegetative source control measure" means a source control measure that relies on living vegetative systems to reduce and/or slow the flow of stormwater into a combined sanitary and stormwater sewer or a

separate stormwater sewer.

25. "Waterbody means any river, tidal estuary, bay, creek, canal, or other body of surface water.

b. Development of sustainable stormwater management plan. 1. The office shall develop a proposed and final sustainable stormwater management plan. Such plan shall identify and provide for the implementation throughout the city, on both public and private properties, of efficient, effective, and feasible technological and non-technological source control measures to reduce the volume of water flowing into the city's sewer system and the pollution loadings carried by stormwater into the city's waterbodies. The overall goals of such plan shall be to reduce the volume of stormwater flowing into the city's sewer system, to improve water quality in the city's waterbodies and to protect the public health through the restoration and protection of the ecological health of the city's waterbodies, and to enhance use and enjoyment of the city's waterbodies for recreational activities.

2. No later than October 1, 2008, the office shall submit a draft sustainable stormwater management plan that meets the requirements of this section to the mayor, speaker of the council, and the public for review and comment. Submission to the public may be made by posting a draft plan on the internet.

3. Two months after the release of the draft plan, but no later than December 1, 2008, the office shall submit a final sustainable stormwater management plan that meets the requirements of this section to the mayor, speaker of the council, and the public. Such plan shall be reviewed and revised by the office as necessary to achieve such plan's goals; provided that such review must occur at least once every four years. Any such revisions and the reasons for such revisions should be clearly indicated in such plan.

4. No later than October 1, 2010, and no later than October 1 of every second year thereafter, the office shall submit a report to the mayor, the speaker of the council, and the public, which shall include, but not be limited to, the implementation status of the measures included in the plan prepared pursuant to this subdivision, including a quantitative assessment, where susceptible to quantification, and a qualitative assessment of the progress made toward achieving each of the milestones identified in such plan and, where revised, an

explanation for such revision.

c. Plan elements. The plan prepared pursuant to subdivision b of this section, as it may be revised pursuant such section, shall include but not be limited to the following:

(1) a statement of goals related to reducing the volume of stormwater flowing into the city's sewer system, improving water quality in the city's waterbodies, protecting the public health through the restoration and protection of the ecological health of the city's waterbodies, enhancing use and enjoyment of the city's waterbodies for recreational activities, and such other aspects of stormwater management deemed appropriate.

(2) an identification and description of the technological and non-technological measures included in such plan, including, for each such measure, (i) a statement regarding the general site conditions required and types of properties where each such measure is typically feasible for implementation and (ii) identification to the greatest extent feasible of the areas in the city that satisfy those conditions and a prioritization of such areas according to the magnitude of potential benefits achievable through implementation of source control measures;

(3) for each of the technological measures included in such plan, (i) an identification of the agencies and/or offices of the city that would oversee and/or be responsible for constructing, permitting or otherwise approving or promoting such measures and (ii) any prerequisites to adoption of such technological measures, including but not limited to technical studies, pilot projects, funding and budgetary considerations, and federal, state or local legislative or regulatory action;

(4) for each of the non-technological measures included in such plan, (i) an identification of protocol amendments and the agencies and/or offices of the city that would be responsible for adopting such measures and (ii) any prerequisites to adoption of such measures, including but not limited to funding and budgetary considerations, and federal, state or local legislative or regulatory action;

(5) descriptions of any modeling methodologies used to identify technological measures, a statement of all inputs used to complete any modeling run, and the results of any modeling, or a compilation of other

supporting data, whether derived from a model or not;

(6) for each of the specific goals, measures and prerequisites included in such plan, (i) a timeline setting forth target dates to achieve interim and final milestones, including but not limited to protocols for monitoring, assessing, and reporting progress toward achieving such milestones, provided that such milestones shall, where susceptible to quantification, be expressed quantitatively, and any potential prerequisites to achieving such milestones, including but not limited to technical studies, pilot projects, and federal, state or local legislative action and (ii) identification of budgetary authorizations, appropriations, or other allocations that are necessary to implement the measures and goals included in such plan;

(7) protocols for signage and for a program of public notification to inform the public of the location and occurrence of combined sewer overflow events, which such program shall include a mechanism to alert potential users of the waterbodies affected by combined sewer overflow events, through the use of radio, print media, internet, 311, e-mail alerts or similar modes of communication, of the estimated nature and duration of conditions that are potentially harmful to users of such waterbodies;

(8) a methodology to be used for quantitatively measuring the performance of source control measures undertaken and/or monitored by the city where feasible;

(9) a summary of public input provided during the development of such plan, steps taken to solicit input pursuant to subdivision e of this section, the office's responses to comments received from the public pursuant to subparagraph (i) of paragraph 1 of subdivision e of this section, and a summary of steps the department has taken and will take to involve the public, including organizations and members of the public with relevant knowledge and expertise, in the implementation of such plan.

d. Initial assessment of measures. 1. In addition to any other source control measure the office deems appropriate in the plan prepared pursuant to this section, the office shall assess the technical and environmental feasibility, benefits, costs and cost-effectiveness of including the following source control measures:

(i) amending the protocols, procedures and/or rules and regulations applicable to the scoping, design,

preliminary and final budget approval, and operations and maintenance of city-owned or city-financed projects, to require the consideration of source control measures and other stormwater controls at the earliest possible stage;

(ii) establishing performance, construction and/or design standards for the minimization and control of stormwater runoff from new or existing roads, bridges, and other portions of the public right-of-way;

(iii) establishing performance, construction and/or design standards for the minimization and control of stormwater runoff from new or existing public open space, public building green roofs, parks, or plazas;

(iv) requiring mandatory technological source control measures on public and private property, including, but not limited to, bluebelts, green roofs, bioretention, tree cover and tree pit design, permeable pavement, wetland preservation and creation, green streets, green walls, blue roofs, rain barrels, cisterns, downspout disconnections, subgrade storage chambers, and grey-water reuse; provided that such plan shall prioritize vegetative source control measures where feasible;

(v) creating incentives, including, but not limited to, tax incentives, grant programs, low-interest financing, expedited permitting, and restructuring of water and sewer rates, to encourage the owners of new and existing private buildings to retrofit or construct such buildings and improvements with appropriate source control measures;

(vi) amending provisions in the building code, housing maintenance code, zoning resolution, and other applicable federal, state and local laws, rules and regulations applicable to all new or existing public or private construction projects or property, to require the implementation of source control measures and to institute quantitative performance standards for the minimum amount of stormwater that must be retained, detained, infiltrated, and/or reused on-site;

(vii) using new and existing public open space, public building roofs, parks, and plazas for detention, retention, infiltration, reuse and natural filtering of stormwater;

(viii) implementing a public education program to increase awareness about the need to reduce the flow

of stormwater into the city's sewer systems and waterbodies, and about specific methods and practices for doing so;

(ix) supplementing high-level storm sewers with source control measures to reduce stormwater runoff volume and/or pollutant loadings at sites where high-level storm sewers are built, have been proposed, or are under consideration;

(x) promoting water conservation;

(xi) adapting ongoing ambient water quality monitoring programs to provide for regular collection of samples in the immediate vicinity of combined sewer outfalls during or immediately following combined sewer overflow events; and

(xii) encouraging the development of existing and new local markets, job training, and employment opportunities to support the implementation and maintenance of source control measures.

2. For purposes of the assessments carried out pursuant to paragraph one of this subdivision benefits considered shall be quantified to the greatest extent practicable and shall include, but not be limited to (i) water quality benefits to particular waterbodies, stormwater capture rates, reductions in combined sewer overflow discharge volumes, the potential savings in hard infrastructure, construction and maintenance costs, and reduction of the city's operating expenses for sewage treatment and (ii) non-water quality related environmental, public health, aesthetic, and economic benefits, such as those associated with cooling and cleansing the air, reducing energy demand, sequestering and reducing emissions of greenhouse gases, beautifying neighborhoods, providing habitat for birds and other wildlife, and developing new local markets that can stimulate job growth.

e. Public input. 1. The office shall solicit public input during the development of the plan prepared pursuant to subdivision b of this section. Opportunities for such input shall include, at a minimum, (i) a thirty day comment period immediately following the release of the draft plan pursuant to this section, at which time the office shall consider all comments received on such plan and (ii) quarterly public forums at which

representatives of the office shall provide updates on the office's progress in preparing such plan and invite feedback from participants. The office shall respond to all substantive comments received pursuant to subparagraph (i) of paragraph 1 of this subdivision.

2. The office shall involve the public and organizations and members of the public with relevant knowledge and expertise in the implementation of the measures included in such plan.

f. Each management report and preliminary management report submitted to the council by the mayor pursuant to section 12 of the New York city charter shall include, with respect to each agency or office identified in paragraphs 3 and 4 of subdivision c of this section, quantitative indicators of progress towards implementing the measures included in the plan prepared pursuant to subdivision b of this section.

§3. This local law shall take effect immediately.

LP/SS
LS#4030
1/22/07 11:30 p.m.