

#### **BRONX COMMUNITY BOARD 8**

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Laura Spalter, Chairperson

Ciara Gannon, District Manager

#### **AMENDED MEETING NOTICE ENVIRONMENT & SANITATION COMMITTEE**

Secretary Robert Jacklosky

Vice Chairperson Bob Bender

**OFFICERS:** 

Wednesday, October 19, 2022 Time: 7 PM **Board Office** 

Join Zoom Meeting: https://us02web.zoom.us/j/2114033690

**COMMITTEE CHAIRS:** 

Aging Lisa Daub

Treasurer

Vacant

Budaet David Gellman

**Economic Development** Nicholas R. Fazio

Education, Libraries & **Cultural Affairs** Sylvia Alexander

**Environment & Sanitation** Dr. Camelia Tepelus

Health, Hospitals & Social Services Omar Murray

Housing Stephen Vazquez

Land Use Charles G. Moerdler

Law, Rules & Ethics Martin Wolpoff

Parks & Recreation Debra Travis

Public Safety Edward Green

**Traffic & Transportation** Kelli Buford

Youth Julia Gomez Location: 5676 Riverdale Avenue, Suite 100

Join Zoom Meeting by Phone: +16465588656

Pin: 2114033690#

#### AGENDA

I. Roll Call

Date:

II. Approval of Minutes Meeting September 21, 2022

**III.** Chairperson Report

- IV. NYC Department of Environmental Protection Topic: "Unified Stormwater Rule" Melissa Enoch, Managing Director, Infrastructure Planning & Partnerships
- V. Old Business
- VI. New Business
- VII. Adjournment

Dr. Camelia Tepelus Chair, Environment & Sanitation Committee

# **Unified Stormwater Rule**

### **Informational Briefing**

**October 19, 2022** 



### USWR Regulatory Context

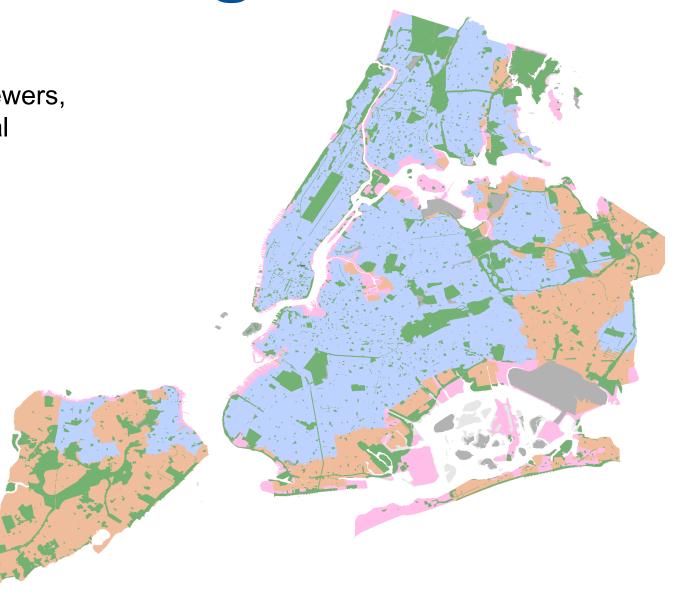




# **NYC Sewer Drainage Areas**

Approx. 60% of NYC is served by combined sewers, while 30 - 40% is served by the City's Municipal Separate Storm Sewer System (MS4)





### **Regulatory Context – Previous Rules**

**Ch. 19.1** Water Quality Requirements

Ch. 31 Stormwater Quantity and Flow Rates

#### **Stormwater Construction Permit**

- Applied to MS4 projects that disturb 1 acre or more of soil
- Manage volume of 1.5-inch rainfall event



#### Site/House Connection Proposal

- Release rate and volume requirements based on allowable flow for site (varied based on location)
- Additional release rate requirements for CSS projects, per 2012 Stormwater Rule

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### **USWR Overview**

Ch. 19.1 Water Quality Requirements Ch. 31 Stormwater Quantity and Flow Rates

#### **Stormwater Construction Permit**

- Applies to CSS/MS4 projects that disturb 20,000 sf or more of soil, OR add 5,000 sf or more of new impervious area
- On-site projects must manage volume of 1.5inch rainfall event using a new retention-first stormwater management practice hierarchy
- ROW projects also have construction and postconstruction requirements

#### Site/House Connection Proposal

- Applies to CSS/MS4 projects that require a sewer connection proposal
- Projects must provide new detention volume and maximum-release rates
- Simplified formulas and change in minimum orifice size to streamline design

**APPENDIX\*** NEW YORK CITY **STORMWATER** MANUAL

Clear guidance on how green infrastructure volume can be applied towards multiple goals

### **USWR Benefits**

Aligns stormwater management regulations citywide and improves the way that new and redeveloped properties manage stormwater by requiring green infrastructure where feasible and updating detention volumes and controlled release rates for stormwater entering city sewers.



Reduced

362 MGY

From new green infrastructure by 2030, contributing to CSO Order goals

**CSO Volume** 



10,515 Tons TSS\*

**Removed** After 30 years of implementation, contributing to NYC MS4 Permit goals



**Retention-First** 

Requires evaluation of stormwater retention/reuse to be the first option properties select



#### Design Flexibility

New stormwater management practice options and guidance to maximize design flexibility for development teams

## **Chapter 19.1 Applicability:**

Requires compliance	Does not require compliance
≥ 20,000 sq ft of disturbance, submitted to DOB after 2/14/22	≥ 20,000 sq ft of disturbance, submitted to DOB before 2/15/22
≥ 1-acre of disturbance, submitted to DOB after 3/25/21 in CSS	≥ 1-acre of disturbance, submitted to DOB before 3/26/21 in CSS
≥ 1-acre of disturbance, in MS4	≥ 1-acre of disturbance, in MS4, that has coverage under State General Permit before June 1, 2019



## **Chapter 31 Applicability:**

#### New § 31-09:

Does not apply to any site with a sewer availability certification issued prior to the effective date of USWR.

#### **Except that**

Does apply to any site located in a **rezoned area** and developing the site pursuant to the rezoning, even if applied for or received certification prior to effective date of USWR.

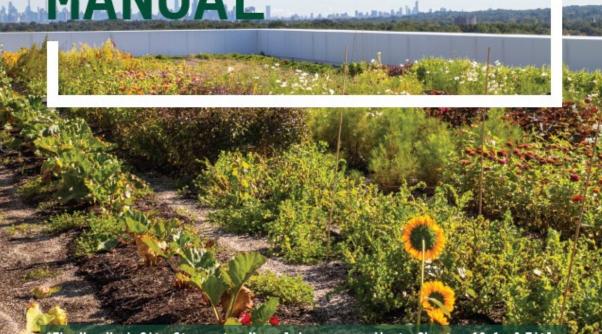


### NYC Stormwater Manual

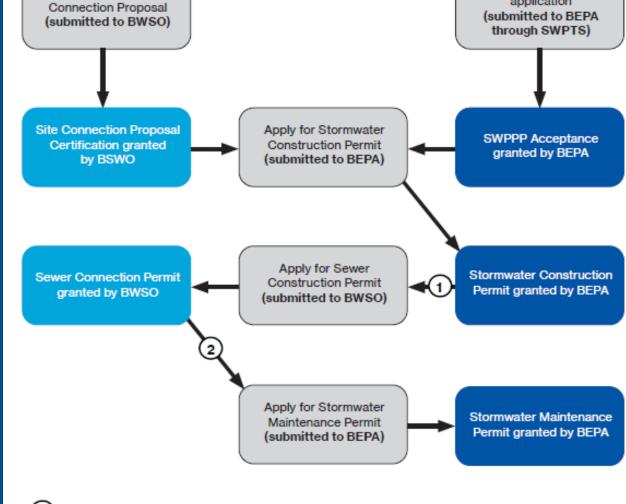




## APPENDIX\* NEW YORK CITY STORMWATER MANUAL



## USWR **Permit Process**

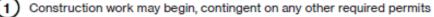


Stormwater Construction

Permit Related (BEPA)

Applicant submits SWPPP

application



Site connection work may begin (2)

Sewer Connection Permit Related (BWSO)

Applicant submits Site



### **MS4 Area Hierarchv**

#### **Primary Goal: Retention**

<ul> <li>Vegetated Retention</li> <li>Bioretention</li> <li>Rain garden</li> <li>Stormwater planter</li> <li>Green roof</li> <li>Tree planting / preservation</li> <li>Dry basin</li> <li>Grass filter strip</li> <li>Vegetated swale</li> <li>Other dual function systems with retention capability</li> </ul>	<ul> <li>Vegetated Treatment</li> <li>Bioretention</li> <li>Stormwater planter</li> <li>Constructed wetland</li> <li>Other dual function systems with treatment capability</li> </ul>	Capture & Reuse • Rain tank • Cistern
Non-vegetated Retention	Non-vegetated Treatment	TIER 1
<ul><li>Dry well</li><li>Stormwater gallery</li></ul>	<ul><li>Porous pavement</li><li>Synthetic turf field</li></ul>	TIER 2
<ul><li>Stone trench</li><li>Porous pavement</li></ul>	<ul><li>Sand filter</li><li>Organic filter</li></ul>	TIER 3
<ul> <li>Synthetic turf field</li> <li>Other dual function systems with retention capability</li> </ul>	<ul> <li>Wet basin / pond</li> <li>Other dual function systems with treatment capability</li> </ul>	ANYTIME / OPTIONAL

### **CSS Area Hierarchy**

#### **Primary Goal: Retention**

#### Vegetated Retention

- Bioretention
- Rain garden
- Stormwater planter
- Green roof
- Tree planting / preservation
- Dry basin
- Grass filter strip
- · Vegetated swale
- Other dual function systems with retention capability

#### Vegetated Detention

- Dry basin
- Constructed wetland
- Other dual function systems with detention capability

#### Capture & Reuse

- Rain tank
- Cistern

#### Non-vegetated Retention

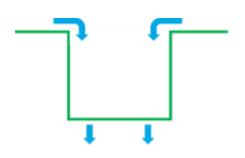
- Dry well
- Stormwater gallery
- Stone trench
- Porous pavement
- · Synthetic turf field
- Other dual function systems with retention capability

#### Non-vegetated Detention

- Wet basin / pond
- Subsurface gallery
- Blue root
- Detention tank
- Other dual function systems with detention capability

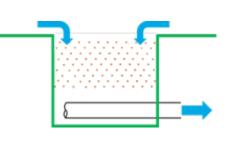


# **SMP Function Types**



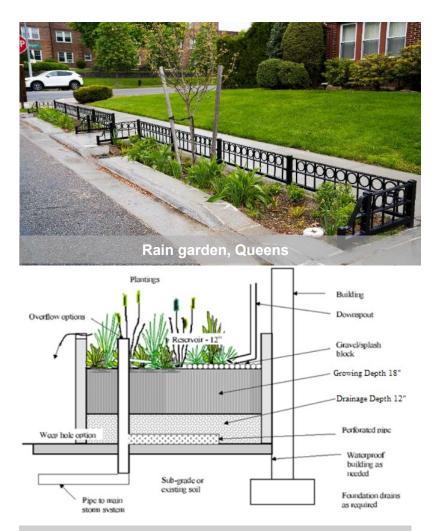
#### Infiltration

- Water is captured and infiltrated into the underlying soils, which is sometimes referred to as exfiltration.
- Relies on sufficient permeability rates of underlying soils. Practices do not use outlet pipes to drain water.
- Example: Bioretention, no outlet pipe



#### Filtration

- Water passes through a filtration media to remove various pollutants.
- Relies on steady flow of water through the filtration media.
   Practices have an outlet pipe to support filtration.
- Example: Sand filter

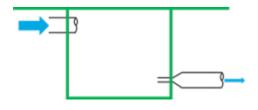


# **SMP Function Types**



#### Evapotranspiration

- Water is captured and evaporated or transpired back into the atmosphere.
- Relies on ET occurring between rainfall events. Practices are usually shallow and have no or limited ability to infiltrate water.
- Example: Green roof



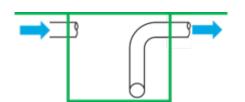
#### Detention

- Water is temporarily stored and released at a lower flow rate.
- Relies on ability to control release rate. Practices have a controlledflow device, such as an orifice.
- Example: Detention tank



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# **SMP Function Types**



#### Reuse

Water is captured and reused for non-irrigation purposes.
Relies on continuous reuse of water. Practices can be integrated into existing nonpotable and non-contact water uses.
Example: Reuse in cooling tower



## **NYC Green Infrastructure**

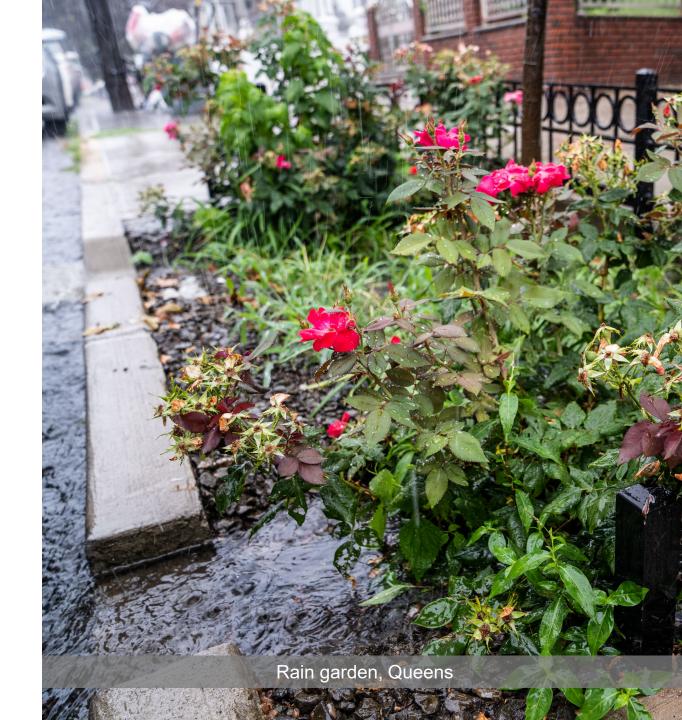
INFRASTRUCTURE DESIGN STANDARDS

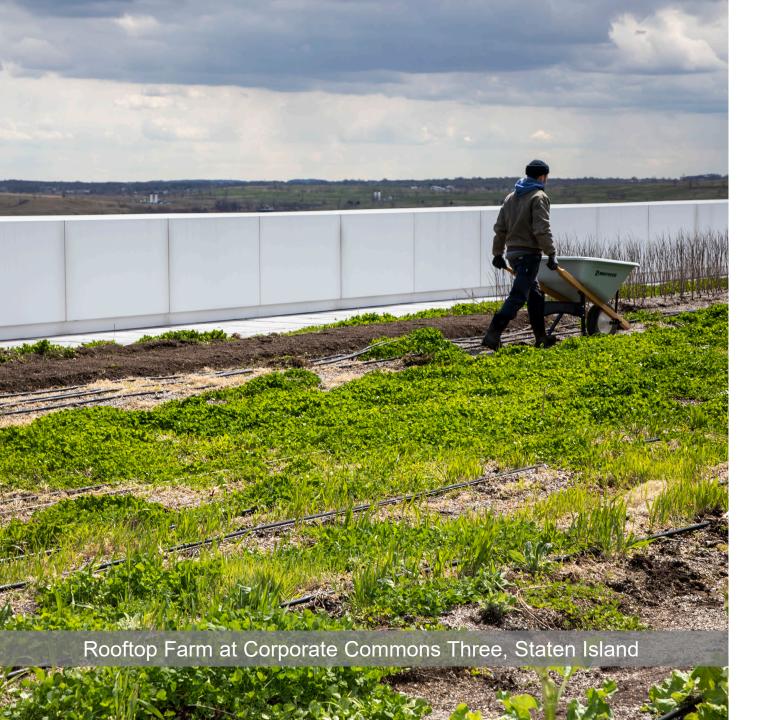
**APPENDIX\*** 



### Resources

- 1. Unified Stormwater Rule Overview
- 2. Chapter 31
- 3. Chapter 19.1
- 4. NYC Stormwater Manual





### **Questions?**

Chapter 19.1 questions: <u>StormwaterPermits@dep.nyc.gov</u>

Chapter 31 questions: <u>SewerInfo@dep.nyc.gov</u>