

# Stormwater Management Rules Applicability and Amendments

Gabriel Mahon  
Bureau of Nonpoint Pollution Control  
Division of Water Quality  
New Jersey Department of Environmental Protection

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# How is Post-construction Stormwater Managed in NJ?

- Stormwater Management rules at N.J.A.C. 7:8
  - Compliance required through permits issued by the NJDEP-Division of Land Use Regulation
    - Direct Implementation by NJDEP
  - Compliance required through MS4 Permits issued by the NJDEP-DWQ-Bureau of Nonpoint Pollution Control
    - Implementation by municipality
      - RSIS for residential projects
      - Stormwater Control Ordinance for non-residential projects

# Amendments to Stormwater Management Rules

- Dec. 3, 2018: NJDEP proposed amendments to the Stormwater Management rules.
- Jan. 8, 2019: Public Hearing
- Feb. 1, 2019: Close of 60-day public comment period
- Dec. 3, 2019: NJDEP filed adoption package to OAL
- March 2, 2020: Adoption of Rule
  - One year delayed operative date, effective 3-2-2021
  - Current rules are in effect until 3-1-2021
  - Same timeframe municipalities have to update ordinances in accordance with MS4 permits

# What Projects Must Comply?

- “Major Development” means an individual “development,” as well as multiple developments that individually or collectively result in:
  1. The disturbance of one or more acres of land since February 2, 2004;
  2. The creation of one-quarter acre or more of “regulated impervious surface” since February 2, 2004;
  3. The creation of one-quarter acre or more of “regulated motor vehicle surface” since March 2, 2021; or
  4. A combination of 2 and 3 above that totals an area of one-quarter acre or more.
- If reviewed by the municipality
  - Through RSIS – ultimate disturbance of one acre or more
  - Through Stormwater Control Ordinance – as defined in ordinance (but must at least cover projects where the ultimate disturbance is one acre or more)

# Rule Layout – Existing/Prior to Adoption

## SUBCHAPTER 5. DESIGN AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT MEASURES

7:8-5.1 Scope

7:8-5.2 Stormwater management measures for major development

7:8-5.3 Nonstructural stormwater management strategies

7:8-5.4 Erosion control, groundwater recharge and runoff quantity standards

7:8-5.5 Stormwater runoff quality standards

7:8-5.6 Calculation of stormwater runoff and groundwater recharge

7:8-5.7 Standards for structural stormwater management measures

7:8-5.8 Maintenance requirements

7:8-5.9 Sources for technical guidance

# Rule Layout Re-arrangement

## SUBCHAPTER 5. DESIGN AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT MEASURES

7:8-5.1 Scope

7:8-5.2 Stormwater management measures for major development

7:8-5.3 ~~Nonstructural stormwater management strategies~~ GI

7:8-5.4 Erosion control, groundwater recharge and runoff quantity standards

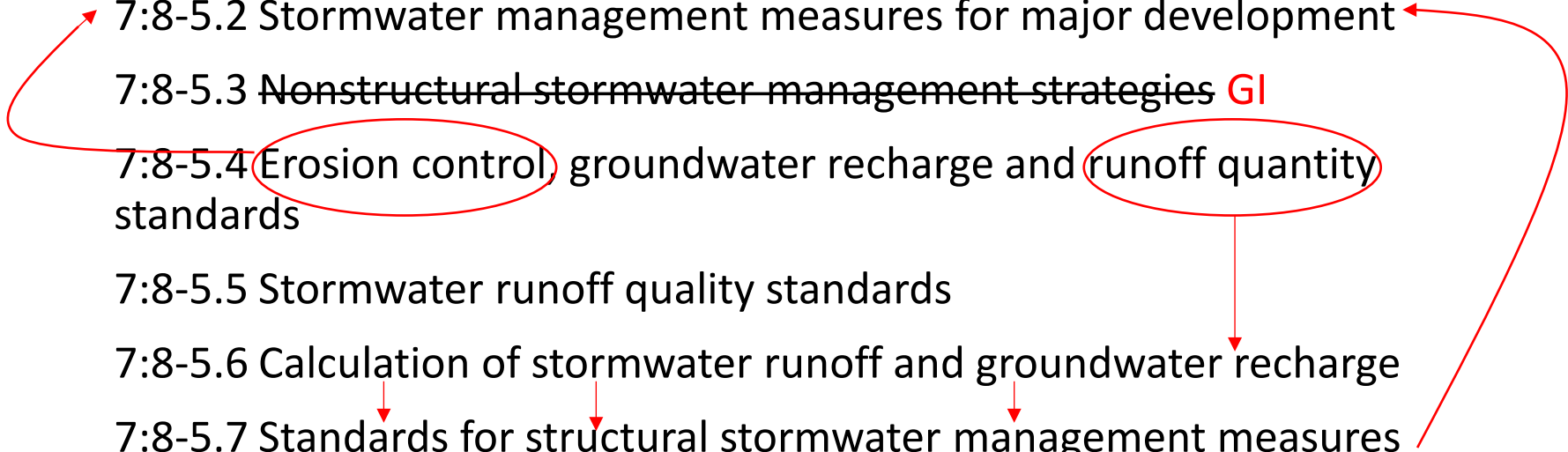
7:8-5.5 Stormwater runoff quality standards

7:8-5.6 Calculation of stormwater runoff and groundwater recharge

7:8-5.7 Standards for structural stormwater management measures

7:8-5.8 Maintenance requirements

7:8-5.9 Sources for technical guidance



# Rule Layout – As Adopted

## SUBCHAPTER 5. DESIGN AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT MEASURES

7:8-5.1 Scope

7:8-5.2 Stormwater management measures for major development

7:8-5.3 Green infrastructure

7:8-5.4 Groundwater recharge standards

7:8-5.5 Stormwater runoff quality standards

7:8-5.6 Stormwater runoff quantity standards

7:8-5.7 Calculation of stormwater runoff and groundwater recharge

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# Green Infrastructure Definition

N.J.A.C. 7:8-1.2

Means a stormwater management measure that manages stormwater close to its source by:

1. Treating stormwater runoff through infiltration into subsoil;
2. Treating stormwater runoff through filtration by vegetation or soil; or
3. Storing stormwater runoff for reuse.



# Green Infrastructure Standard

## N.J.A.C. 7:8-5.3

- GI BMPs must be used to satisfy recharge, quantity, and quality
  - Small-scale (limited drainage area) for recharge and quality
- 3 Tables identifying the performance of each BMP in meeting the 3 standards
  - Table 5-1: Recharge, Quality, and Quantity Control
  - Table 5-2: Quantity Control
  - Table 5-3: Recharge, Quality, and Quantity Control ONLY with Waiver or Variance
- Maintain existing ability to propose an alternative stormwater design. Alternative design must meet GI definition and must meet drainage area limitation if similar to BMP with limit.

**Table 5-1: BMPs for recharge, quantity, and quality**

Best Management Practice	Quality TSS removal rate (percent)	Quantity	Recharge	Minimum separation from seasonal high water table (feet)
Cisterns	0	Yes	No	-
Dry Wells	0	No	Yes	2
Grass Swales	50 or less	No	No	2
Green Roofs	0	Yes	No	-
Manufactured Treatment Device (MTDs)	50 or 80	No	No	Dependent upon the device
Pervious Paving Systems	80	Yes	Yes	2
			No	1
Small-scale Bioretention Systems	80 or 90	Yes	Yes	2
			No	1
Small-scale Infiltration Basins	80	Yes	Yes	2
Small-scale Sand Filters	80	Yes	Yes	2
Vegetative Filter Strips	60-80	No	No	-

**Drainage area limitation applies to: dry wells, MTDs, pervious paving system, and small-scale bioretention, infiltration, and sand filters.**

**Table 1 only includes MTDs that meet the definition of GI**

**Table 5-2: BMPs may only be used for quantity**

Best Management Practice	Quality TSS removal rate (percent)	Quantity	Recharge	Minimum separation from seasonal high water table (feet)
<b>Bioretention Systems</b>	80 or 90	Yes	Yes	2
			No	1
<b>Infiltration Basins</b>	80	Yes	Yes	2
<b>Sand Filter</b>	80	Yes	Yes	2
<b>Standard Constructed Wetlands</b>	90	Yes	No	N/A
<b>Wet Ponds</b>	50-90	Yes	No	N/A

Wet ponds used under Table 2 must be designed to have native vegetation and a reuse component

**Table 5-3: BMPs may only be used with waiver**

<b>Best Management Practice</b>	<b>Quality TSS removal rate (percent)</b>	<b>Quantity</b>	<b>Recharge</b>	<b>Minimum separation from seasonal high water table (feet)</b>
Blue Roofs	0	Yes	No	N/A
Extended Detention Basins	40-60	Yes	No	1
Manufactured Treatment Device	50 or 80	No	No	Dependent upon the device
Sand Filters	80	Yes	No	1
Subsurface Gravel Wetlands	90	No	No	1
Wet ponds	50-90	Yes	No	N/A

# Water Quality – Motor Vehicle Surface

- The water quality standard will apply to motor vehicle surface instead of impervious surface
  - Rule does not require roofs or sidewalks to be treated – consistent with current implementation
  - Requires pervious motor vehicle surfaces to be treated – consistent with scientific studies
- Include in definition of major development
  - “regulated motor vehicle surface”

# Definitions to Clarify Applicability

## N.J.A.C. 7:8-1.2

- Added definition of “regulated motor vehicle surface”
- Added definition of “regulated impervious surface”
- Definitions of regulated motor vehicle surface and regulated impervious surface will include FAQ 10.2 (newly collected impervious surface and changes to existing drainage systems count as “new”)

# Clarification of Applicability

- Require quantity, quality, and groundwater recharge to be met in each drainage area on-site (unless they converge before leaving the property)
  - N.J.A.C. 7:8-5.2(l)
- Move mounding analysis requirement from recharge standard to apply to all infiltration BMPs
  - N.J.A.C. 7:8-5.2(h)
  - Chapter 13 of BMP Manual

# Deed Notice

- Remove rule requirement for conservation restriction, or equivalent, for nonstructural strategies
- Maintain existing requirement that maintenance plans be recorded on deed (new N.J.A.C. 7:8-5.2(m)) and, additionally, must now include:
  - Description of the BMP(s); and
  - Location information for the BMP(s)
- Provide a pathway for property owner to alter or replace a BMP provided review agency ensures quantity, quality, and recharge will be maintained. (new N.J.A.C. 7:8-5.2(n))



# CSO Related Changes

- Clarify that water quality treatment is required for discharges into combined sewer systems
  - New N.J.A.C. 7:8-5.5(c)
- Clarify that water quantity control is required in tidal areas except discharges directly into lower reach of major tidal waterbodies
  - New N.J.A.C. 7:8-5.6(b)4
- Create the option for a community basin, which will allow several properties in a CSS community to use a single large basin for quantity control
  - Other standards must still be met on-site (including GI)
    - New N.J.A.C. 7:8-4.2(c)14

# BMP Manual Changes

- Finalized new chapter on groundwater mounding (chapter 13)
- Released draft for public comment
  - Revised chapter on calculations (chapter 5)
    - Allows infiltration in GI BMPs
  - Revised soil testing (chapter 12)
    - Adds new soil testing requirements for distributed GI systems
- Revised model ordinance
- Additional changes to BMPs coming when chapter 5 is finalized

# Existing Variance

## N.J.A.C. 7:8-4.6

- Municipality may approve a variance or exemption if:
  - Municipal Stormwater Management Plan contains a mitigation plan:
    - that identifies what measures are necessary to offset the deficit created by granting the variance
    - ensures mitigation happens in the same drainage area and for the performance standard for which variance is granted
  - Municipality submits a written report to county review agency and DEP describing the variance or exemption and the required mitigation

# Adopted Variance

N.J.A.C. 7:8-4.6

- Municipality may approve a variance if Applicant demonstrates:
  - Technically impracticable to meet any one or more of the design and performance standards on site
  - Technical impracticable exists only when the standard can not be met for engineering, environmental, or safety reasons
  - That the proposed design achieves maximum compliance with the design and performance standard
- Approval of variance applies to individual drainage area and design and performance standard

# Adopted Variance – Mitigation

## N.J.A.C. 7:8-4.6

- Mitigation:
  - selected from municipal mitigation plan or proposed by applicant, provided it meets the criteria within the municipal mitigation plan
  - be approved no later than preliminary or final site plan approval of the major development
  - be located in the same HUC 14 as the portion of the major development that was granted the variance
  - be constructed prior to or concurrent with the major development
  - comply with the green infrastructure standards at N.J.A.C. 7:8-5.3
  - Applicant or party responsible for the maintenance of the major development shall be responsible for maintenance of mitigation
  - Maintenance responsibility may only be transferred to a public agency, with a written agreement submitted to the review agency
- Approved variance must be submitted to county review agency and DEP within 30 days of approval

# Adopted Variance – Mitigation

## N.J.A.C. 7:8-4.6

- If variance is from green infrastructure
  - Mitigation project must provide green infrastructure BMPs to manage an equivalent or greater area and amount of impervious surface than the area of major development granted the variance
  - Vegetative filter strips and grass swales excluded as mitigation measures if used without other GI BMPs
  - GI BMPs used for mitigation must be sized to manage the Water Quality Design Storm (at a minimum)
  - GI BMPs used for mitigation are subject to the drainage area limitation

# Road Reconstruction Examples

1. No other improvements
2. Add curbs and drainage system
3. Increase drainage system capacity
4. Reconstruction with widening

# Questions?

Think of one later?  
ask any time:

Gabriel Mahon

[Gabriel.mahon@dep.nj.gov](mailto:Gabriel.mahon@dep.nj.gov)

609-633-7021