New Jersey Stormwater Management Rules (N.J.A.C. 7:8) Briefing

Executive Summary

This document provides a comprehensive synthesis of the New Jersey Stormwater Management Rules as outlined in N.J.A.C. 7:8, with a rule amendment date of January 20, 2026. These regulations establish a robust framework for managing the impacts of stormwater runoff from new and existing development to reduce flood damage, prevent water pollution, maintain groundwater recharge, and protect the integrity of the state's water bodies.

Key takeaways from the regulations include:

- **Mandatory Green Infrastructure:** The rules mandate the use of Green Infrastructure (GI) Best Management Practices (BMPs) as the primary method for meeting stormwater management standards for major developments. GI measures, which manage stormwater close to its source, are required for groundwater recharge, water quality, and quantity control.
- **Tiered Planning Structure:** A hierarchical planning system is established, beginning with the development of optional Regional Stormwater Management Plans. These regional plans, once adopted, must be implemented by municipalities through mandatory Municipal Stormwater Management Plans and associated ordinances, which are subject to county review and approval.
- **Stringent Design and Performance Standards:** The rules set specific, quantitative standards for major developments, including maintaining 100% of pre-construction groundwater recharge, achieving up to 95% Total Suspended Solids (TSS) removal for water quality, and significantly reducing post-development peak runoff rates for flood control.
- **Climate Change Resilience:** Both regional and municipal plans are required to incorporate a climate change resilience strategy. Furthermore, stormwater calculations must now use updated precipitation data (NOAA Atlas 14) and apply "Future Precipitation Change Factors" to account for increased rainfall depth and intensity, with a required review of this data every five years.
- **Comprehensive Maintenance and Safety:** The regulations emphasize long-term functionality and public safety. A detailed maintenance plan is required for all stormwater measures, with responsibility legally assigned and recorded on the property deed. Subchapter 6 establishes explicit safety standards for stormwater basins, including requirements for trash racks, overflow grates, escape provisions, and safety ledges.
- **Defined Applicability:** The rules apply to "major development," a term specifically defined by thresholds for land disturbance (one or more acres) and the creation or reconstruction of impervious or motor vehicle surfaces (one-quarter acre or more). Specific provisions and limited exemptions exist for projects like public transportation infrastructure and designated film production facilities.

I. Scope, Purpose, and Applicability

The Stormwater Management Rules (N.J.A.C. 7:8) establish the general requirements, design standards, and safety protocols for stormwater management across New Jersey. The rules are authorized under a range of state laws, including the Municipal Land Use Law, the Water Quality Planning Act, and the Flood Hazard Area Control Act.

A. Goals of Stormwater Management Planning

All stormwater management plans and ordinances created under these rules must be designed to achieve nine primary goals:

1. Reduce flood damage to life and property.
2. Minimize increases in stormwater runoff from new development.
3. Reduce soil erosion from development and construction.
4. Ensure the adequacy of existing and proposed culverts and bridges.
5. Maintain groundwater recharge.
6. Prevent, to the greatest extent feasible, increases in nonpoint source pollution.
7. Maintain the integrity of stream channels for biological and drainage functions.
8. Minimize pollutants in stormwater to restore and maintain the integrity of state waters.
9. Protect public safety through the proper design and operation of stormwater basins.

B. Definition of "Major Development"

The applicability of these rules is primarily triggered by projects that meet the definition of "major development." A major development is any individual or collective development that results in one or more of the following:

- The disturbance of **one or more acres of land** since February 2, 2004.
- The creation of **one-quarter acre or more of "regulated impervious surface"** since February 2, 2004.
- The creation of **one-quarter acre or more of "regulated motor vehicle surface"** since March 2, 2021.
- The reconstruction of **one-quarter acre or more of "motor vehicle surface" or "impervious surface"** since January 20, 2026.
- A combination of the above surface creations/reconstructions totaling one-quarter acre or more.

This definition includes projects undertaken by government agencies and phased developments that collectively meet these thresholds.

C. Applicability, Exemptions, and Special Provisions

The rules effective January 20, 2026, apply to major development applications submitted for Department of Environmental Protection (DEP) review. However, several exemptions and special provisions exist:

- **Prior Applications:** Applications declared complete before July 20, 2026, are subject to the rules in effect on July 17, 2023. This exemption expires with the associated permit.
- **Public Transportation Projects:** Public roadway or railroad projects are subject to the rules in effect on the date they reached a "preferred alternative or equivalent milestone."
- **Film Production Facilities:** Projects designated as a "New Jersey studio partner" or "New Jersey film-lease partner facility" before January 20, 2026, are subject to the rules in effect on July 17, 2023.

II. Stormwater Management Planning Framework

The regulations establish a comprehensive planning framework operating at both the regional and municipal levels.

A. Regional Stormwater Management Planning (Subchapter 3)

Entities may form a Regional Stormwater Management Planning Committee to create a plan for a continuous drainage area (e.g., a HUC 14 subwatershed).

- **Plan Elements:** A regional plan is a detailed document that must include:
    - A characterization and assessment of the planning area, including mapping of land use, soils, water bodies, and environmentally critical areas.
    - A hydrologic and hydraulic analysis of the area under existing and projected full build-out conditions.
    - Drainage area-specific objectives for water quality, groundwater recharge, and water quantity.
    - Drainage area-specific design and performance standards that are at least as protective as the statewide standards in Subchapter 5.
    - A **climate change resilience strategy** that evaluates the impacts of sea level rise and increased rainfall and identifies measures to reduce these impacts.
    - An implementation strategy with schedules, cost estimates, and a long-term monitoring program.
- **Adoption and Implementation:** The completed plan is submitted to the DEP for review and adoption as an amendment to the areawide Water Quality Management Plan. Once adopted, all municipalities within the planning area must amend their local plans and ordinances to conform.

B. Municipal Stormwater Management Planning (Subchapter 4)

Municipalities are required to adopt a Municipal Stormwater Management Plan as part of their master plan.

- **Plan Requirements:** The municipal plan must:
  - Conform to any adopted regional plan.
  - Incorporate the design and performance standards from Subchapter 5.
  - Include a **climate change resilience strategy**.
  - Evaluate how the municipal master plan and zoning ordinances implement green infrastructure and nonstructural strategies.
  - Include a **mitigation plan** that identifies projects or criteria for offsetting the impacts of any variances granted from the stormwater standards.
  - Provide for long-term maintenance and compliance with basin safety standards.
- **Review and Adoption:** Municipalities must adopt their plan and implementing ordinances and submit them to a designated county review agency. The county agency has 60 days to approve, conditionally approve, or disapprove the plan. An approved plan and ordinance take effect immediately.

III. Core Design and Performance Standards (Subchapter 5)

This subchapter sets the minimum technical standards for stormwater management measures in major developments.

A. The Green Infrastructure (GI) Mandate

The rules require that the standards for groundwater recharge, stormwater quality, and stormwater quantity be met by incorporating green infrastructure. GI is defined as a measure that manages stormwater close to its source by infiltration, filtration through vegetation or soil, or storage for reuse.

- **Approved GI BMPs:** Table 5-1 of the rules lists specific GI BMPs presumed to meet the standards, including pervious paving, small-scale bioretention basins, small-scale infiltration basins, and others. Many of these have maximum contributory drainage area limitations (e.g., 2.5 acres for a small-scale bioretention system).
- **Conditional BMPs:** Tables 5-2 and 5-3 list other BMPs (such as standard infiltration basins, wet ponds, and extended detention basins) that may only be used to meet the standards if a variance or waiver from the GI requirement is granted.

Table	BMP Category	Usage Condition	Example BMPs
5-1	**Green Infrastructure BMPs**	Primary measures for meeting recharge, quality, and quantity standards.	Pervious Paving, Small-Scale Bioretention, Dry Well, Green Roof
5-2	**Green Infrastructure BMPs for Quantity**	Can be used for quantity control, but require a variance/waiver for quality/recharge.	Bioretention System, Infiltration Basin, Sand Filter
5-3	**Non-GI BMPs**	May only be used if a variance or waiver from the GI mandate is granted.	Extended Detention Basin, Wet Pond, Blue Roof

B. Groundwater Recharge Standards (N.J.A.C. 7:8-5.4)

The standards require that a development must either:

1. Maintain **100 percent of the average annual pre-construction groundwater recharge volume** for the site; or
2. Infiltrate the **increase in stormwater runoff volume** from the pre-construction to post-construction condition for the 2-year storm event.

These requirements do not apply to projects in designated "urban redevelopment areas" or where stormwater is from high pollutant loading areas (e.g., gas stations, industrial material storage areas).

C. Stormwater Runoff Quality Standards (N.J.A.C. 7:8-5.5)

These standards apply to developments that create or reconstruct one-quarter acre or more of motor vehicle surface.

- **TSS Removal:** The primary requirement is the reduction of Total Suspended Solids (TSS) from runoff generated by the **water quality design storm (1.25 inches of rain in 2 hours)**.
    - **95% TSS Removal:** Required for runoff from new/reconstructed motor vehicle surfaces discharged within or draining to a 300-foot riparian zone of a Category One waterbody.
    - **80% TSS Removal:** Required for all other applicable motor vehicle surfaces.
- **Nutrient Reduction:** The design must reduce the post-construction nutrient load to the "maximum extent feasible" using GI BMPs that optimize nutrient removal.

D. Stormwater Runoff Quantity Standards (N.J.A.C. 7:8-5.6)

To control flooding, a design engineer must demonstrate compliance through one of the following methods for the 2, 10, and 100-year storm events:

1. **Match Hydrographs:** Post-construction runoff hydrographs do not exceed pre-construction hydrographs at any point in time.
2. **No Peak Increase:** Post-construction peak runoff rates do not increase, and the change in volume/timing will not increase downstream flood damage.
3. **Reduce Peak Rates:** Post-construction peak runoff rates are reduced to **50% (2-year storm), 75% (10-year storm), and 80% (100-year storm)** of the pre-construction rates.

Additionally, a **volumetric reduction standard** requires that the water quality design storm be retained on-site using GI BMPs, unless technically impracticable.

E. Calculation Methodology and Climate Change Adjustments

Stormwater calculations must adhere to specific methodologies and incorporate forward-looking precipitation data.

- **Methodology:** The USDA Natural Resources Conservation Service (NRCS) methodology (e.g., TR-55) must be used. There is a **presumption that the pre-construction site condition is "woods in good hydrologic condition,"** which establishes a conservative baseline unless the applicant can verify a different land cover has existed for at least five years.
- **Climate-Adjusted Precipitation:** Calculations for the 2, 10, and 100-year storm events must use data from **NOAA Atlas 14**, adjusted by two sets of factors provided in the rules:
    - **Table 5-5:** "Current Precipitation Adjustment Factors"
    - **Table 5-6:** "Future Precipitation Change Factors" The DEP will review and, if necessary, amend this precipitation data every five years.

F. Maintenance and Deed Notice Requirements (N.J.A.C. 7:8-5.8)

Long-term functionality is ensured through legally binding maintenance requirements.

- **Maintenance Plan:** The design engineer must prepare a detailed maintenance plan specifying tasks, schedules, cost estimates, and the responsible party.
- **Deed Notice:** For any property with a stormwater management measure, a deed notice must be filed with the county. This notice describes the measure, its location, and references the maintenance plan, making these obligations legally binding on all future property owners.

IV. Variances, Waivers, and Special Provisions

The regulations include strict procedures for deviating from the standards.

- **Municipal Variances (N.J.A.C. 7:8-4.6):** A municipality may only grant a variance if its stormwater plan includes a mitigation plan and the applicant demonstrates that meeting the standard is **technically impracticable** for engineering, environmental, or safety reasons. A mitigation project, located in the same HUC 14, must be implemented to offset the deficit.

- **Waivers for Public Roadway/Railroad Projects (N.J.A.C. 7:8-5.2(e)):** A waiver from the GI, recharge, quality, and quantity standards may be obtained for the enlargement of an existing public roadway or railroad if the applicant demonstrates a public need and, through an extensive alternatives analysis, shows that compliance is not practicable and would require condemning existing homes or buildings.

V. Safety Standards for Stormwater Basins (Subchapter 6)

This subchapter establishes minimum safety standards for all new stormwater management basins to protect public safety.

- **Trash Racks:** Must be installed at basin outlets with parallel bars spaced no more than six inches apart to prevent clogging.
- **Overflow Grates:** If used, must have spacing no greater than two inches across the smallest dimension.
- **Escape Provisions:**
    - Outlet structures must incorporate permanent ladders, steps, or rungs.
    - Basins with a permanent pool of water deeper than 2.5 feet must have **two-step safety ledges**. As illustrated in Appendix A, one step is constructed 1 to 1.5 feet above the permanent water surface, and the second step is 2.5 feet below the surface. Each step must be 4 to 6 feet wide.
- **Slopes:** The maximum interior slope for any earthen dam, embankment, or berm cannot be steeper than **3 horizontals to 1 vertical (3H:1V)**.