

Summary and Description of 2014 Enhancements to New Jersey Model Stormwater Control Ordinance for Municipalities

This document summarizes and provides explanation for the purpose and intent of major recommended enhancements to the 2004 New Jersey Model Stormwater Control Ordinance for Municipalities. The revisions to the 2004 model ordinance are intended to provide controls that exceed the requirements established as design and performance standards in the New Jersey Stormwater Management Rules at N.J.A.C. 7:8-5, drawing on best practices from other jurisdictions around the country. The major differences between this enhanced model ordinance and the 2004 model ordinance are:

1. The development project size threshold for applicability has been reduced to sites that add or replace (alone or in combination)¹ 5,000 square feet of impervious surface or disturb 5,000 square feet of land, and an option has been included to extend applicability to minor development that exceeds 1,000 square feet;
2. The ordinance has been clarified to apply requirements to redevelopment as well as new development;
3. An overall on-site stormwater retention requirement has been added in addition to the previously existing standards for groundwater recharge, runoff quantity, and runoff quality; and
4. Provisions have been provided for an alternative compliance option in cases of technical infeasibility.

Municipalities are encouraged to incorporate more stringent requirements, or lower size thresholds for application of these standards, as appropriate or necessary to achieve public health, safety, general welfare, environmental, or other goals.

Sections 1.A & 1.B: Policy Statement & Purpose

These sections have been expanded to describe the problems that stormwater runoff causes for both separate storm sewer and combined sewer system communities, and to explain the benefits of implementing the low impact development (green infrastructure) practices required by the ordinance. Environmental objectives have been added, along with a stated preference for the use of nonstructural techniques to manage stormwater.

¹ The revised project threshold is meant to apply to the addition, replacement, or any combination thereof of impervious surface at the development site. For example, if an existing development were to replace 3,000 square feet of previously existing impervious surface, and add an additional 3,000 square feet of new impervious surface, the combined 6,000 square feet of added or replaced impervious surface would exceed the project threshold for major development.

Section 1.C: Applicability

This section has been revised to provide that developments requiring zoning approval and/or a building or construction permit are subject to the ordinance, in addition to developments requiring preliminary or final site plan or subdivision review. It also clarifies that the requirements of the ordinance apply in addition to any other requirements associated with local, state, or interstate construction, building, zoning, or environmental permits or reviews. It requires a legally authorized municipal body or official to issue written findings, based on a technical review, that a development is in compliance with the ordinance. These changes were made to ensure more consistent enforcement of the ordinance's requirements.

A note in this section introduces the option of applying certain provisions of the ordinance to projects defined in Section 2 as "minor development," and explains that additional Sustainable Jersey points will be awarded to municipalities that do so.

Section 2: Definitions

Clarifications and additions to this section include the following:

Added term "bioretention" – this management practice is defined as a bed filled with soil, gravel, or other material and planted with vegetation, which filters stormwater runoff through the planting bed before conveying it downstream by an underdrain system or infiltrating it into the subsoil. (New section 4.F.1.d.2 provides that treatment of runoff using practices including bioretention shall be used in cases where on-site retention is not technically feasible.)

Revised term "compaction" – the definition has been amended to clarify that soil compaction can occur due to construction, development, or other causes.

Amended term "development" – the definition now includes clearing, grading, or excavation or any other activity that results in land disturbance. This change aligns the definition of this term more closely with the definitions of "major development" and "minor development," which use the amount of land disturbance as an applicability threshold.

Added term "green street" – provides definition for public right-of-way engineered to make use of low impact development practices to reduce stormwater runoff volume and pollutant loads. (Revised Section 4.D.2 provides that road and highway construction projects must exhaust all practicable opportunities for using green streets techniques before seeking a waiver from strict compliance with performance standards.)

Revised term "major development" – this term now includes redevelopment in addition to new development, and it clarifies that "major development" includes both public and private projects. It also establishes a reduced threshold of applicability (addition or replacement of 5,000 square feet of impervious surface, or disturbance of 5,000 square feet of land).

Added term “minor development” – this term refers to development or redevelopment that adds or replaces 1,000 or more square feet but less than or equal to 5,000 square feet of impervious surface, or that provides for ultimately disturbing 1,000 or more square feet but less than or equal to 5,000 square feet of land. A note in this definition encourages municipalities to require “minor development” to comply with the requirements for stormwater retention under Section 4.H and all pertinent requirements of Section 3 and Sections 6 through 10.

Added term “redevelopment” – this term is defined to include land-disturbing activity that results in the creation, addition, or replacement of impervious surface area on an already developed or disturbed site.

Section 3: General Standards

The references to other ordinance sections in Section 3.A.1 were revised to reflect the amendments made to the rest of the model ordinance.

Section 3.A.2 has been revised to state that “alternative standards” must provide for as much stormwater retention as required by the ordinance’s new on-site retention standard. (Pre-existing language in a note accompanying this section required that “alternative standards” must be as protective as the standards in the state’s stormwater regulations.)

A new Section 3.A.3 has been added. It provides that, where redevelopment that adds, replaces, or disturbs greater than 5,000 square feet of impervious surface results in an alteration to more than 50% of the impervious surface of a previously existing development, the entire existing development must meet the requirements of the ordinance.

Section 4: Stormwater Management Requirements for Major (and Minor) Development

Title and Section 4.A provide suggested language to indicate that a municipality has chosen to apply the ordinance to minor development.

The requirement to meet stormwater retention standards, in addition to existing standards for groundwater recharge, runoff quantity, and runoff quality, has been added throughout Section 4.

Section 4.C.1 has been revised to prioritize the use of native plant species for revegetation.

Section 4.D.2 has been revised to clarify that any demonstration of a roadway project’s compliance with ordinance requirements to the maximum extent practicable must be submitted in writing, and a new requirement has been added that road or highway projects must at minimum follow U.S. EPA guidance for green streets before seeking a waiver from strict compliance.

Section 4.E.1 has been amended to delete the phrase “to the maximum extent practicable” and instead provide that the standards in Sections 4.F and 4.G shall be met using nonstructural stormwater management strategies unless the use of structural practices is determined to be

absolutely necessary. It further states that applicants shall consider each strategy listed in Section 4.E.2 before identifying the measures ultimately incorporated into the project design. They shall also provide a basis for any contention of infeasibility for a nonstructural practice that is not used. This section also clarifies that its requirements trump any other local laws that allow site designs that conflict with these requirements.

The title of Section 4.F has been revised to specify that its standards (for erosion control, groundwater recharge, stormwater retention, and runoff quantity) apply only to major development (as opposed to minor development, the standards for which are set forth in Section 4.H).

Section 4.F.1.b previously set forth two options for demonstrating compliance with the ordinance's groundwater recharge standard. This section has been amended to provide that the option that results in the greater recharge volume performance standard must be used. This section's pre-existing language regarding waivers from the recharge requirement has been moved to Section 4.F.1.d (and revised, as discussed below).

Section 4.F.1.c has been revised to incorporate new stormwater retention requirements for major development.

- 4.F.1.c.1 requires major development to retain on-site, with no discharge, the 1.25-inch, 2-hour rainfall event. This is the water quality design storm volume in New Jersey.
- 4.F.1.c.1.a provides that groundwater recharge performed in compliance with the ordinance's recharge standard may count toward satisfying the on-site retention obligation. Where meeting the recharge requirement does not result in retention of the full retention volume, the development shall retain additional volume as needed to meet the retention requirement, using infiltration, evapotranspiration, and/or capture and on-site reuse.
- 4.F.1.c.2 states that no finding of technical infeasibility (under Section 4.F.1.d.2) can be made unless green infrastructure practices have been used to the maximum extent technically feasible.

Section 4.F.1.d establishes an alternative compliance option in cases where technical infeasibility prevents full compliance with the recharge and/or retention requirements.

- 4.F.1.d.1 provides that where it is technically infeasible to meet the recharge standard, compliance with the retention requirement may constitute compliance with the recharge standard. It lists certain factors that may create conditions under which groundwater recharge is technically infeasible.
- 4.F.1.d.2 establishes that where it is technically infeasible to meet the on-site retention requirement, the development shall use bioretention, constructed wetlands, or other practice that relies on vegetation and soil for water quality treatment, to treat 1.5 times

the volume that is not retained on-site. It lists certain factors that may create conditions under which stormwater retention is technically infeasible.

A note accompanying Section 4.F.1.d provides that municipalities may add language authorizing the use of a neighborhood or regional scale stormwater management practice (like a green street, park retrofit, or groundwater spreading field) to meet the groundwater recharge and/or stormwater retention standard for any project, if certain conditions are met.

A new Section 4.F.2 has been added to explain how the requirements of Section 4.F shall apply to sites having more than one on-site drainage area.

Section 4.G.1 has been revised to apply the ordinance's runoff quality standards if an additional 5,000 square feet of impervious surface is proposed at a development site, rather than an additional ¼ acre of impervious surface. It also now states that pollution reductions achieved by measures installed to satisfy the recharge standard, stormwater retention requirement, or alternative compliance treatment option may be counted toward satisfaction of the runoff quality standard.

A new Section 4.H has been added to establish a simplified retention standard for minor development.

- 4.H.1.a requires minor developments to retain 450 gallons of stormwater on-site, using green infrastructure practices, for each 250 square feet of impervious surface on the site.
- 4.H.1.b provides that in cases of technical infeasibility, the minor development shall comply with the alternative treatment requirements in Section 4.F.1.d.2.

Section 5: Calculation of Stormwater Runoff, Stormwater Retention, and Groundwater Recharge for Major Development

The title of Section 5 has been revised to clarify that it applies only to major development.

Section 5.A.1 has been amended to provide that only the USDA Natural Resources Conservation Service (NRCS) methodology may be used to calculate runoff. The Rational Method for peak flow is no longer an allowable methodology.

Section 5.A.2 has been revised to state that, for purposes of calculating runoff coefficients and groundwater recharge, land cover is to be based on an undeveloped condition. This is intended to clarify that calculations are not to be based on runoff produced from paved, altered, or other man-made or disturbed surfaces existing prior to construction of a regulated development.

Section 6: Standards for Structural Stormwater Management Measures

A new Section 6.A.6 was added to require stormwater conveyance systems to match the downstream stormwater management design event.

Section 7: Sources for Technical Guidance

The U.S. EPA's green infrastructure resource page was added as a recommended technical resource for stormwater management measures.

Section 8: Safety Standards for Stormwater Management Basins

The note accompanying Section 8.A was revised to clarify that Section 8 implements mandatory minimum requirements as per state regulations. This clarification is meant to improve consistent enforcement of the safety standards.

Section 9: Requirements for a Site Development Stormwater Plan

Section 9.A. was revised to clarify which components of the section apply to major development and which apply to minor development.

Section 9.B was revised to state that building and construction permits as well as zoning approvals may not be issued unless the requirements of the ordinance are met. Approval of other state and local permits ("prior approvals") is not a substitute for local approval of a project's site development stormwater plan.

Section 9.C.8 previously specified the circumstances when a waiver from submission requirements could be granted. That text has been deleted, and instead the provision now simply cross-references the waiver conditions in the state's Municipal Land Use Law.

A new Section 9.D has been added to establish a submission checklist for minor developments (with the checklist in 9.C applying to major developments). Minor developments need only submit a subset of the information that major developments must provide.

Section 10: Maintenance and Repair

Section 10.B.2. now contains a requirement for maintenance plans to consider winterization for structural BMPs.

A new Section 10.B.3 has been added to require that maintenance plans provide a municipal right of access, including easements or covenants, for facility inspections and maintenance as required.

A new Section 10.B.10 has been added to provide that the person responsible for maintenance shall annually submit to the municipality a certification of compliance during the prior year. A note accompanying this section encourages municipalities to establish clear procedures regarding the submission of these certifications and the responsibilities of the reviewing official.