

# Enhanced Stormwater Management Control Ordinance



Updated January 2024

This action has been updated to assist municipalities in meeting and going beyond the minimum requirements of the New Jersey Department of Environmental Protection (DEP) Inland Flood Protection rule, which became effective on July 17, 2023. The rule change necessitates that New Jersey's municipalities update their Stormwater Management Control Ordinance to ensure the design of new infrastructure uses updated information on current and future levels of rainfall, runoff and flooding. Municipalities have one year (deadline July 16, 2024) to update their ordinance and can find sample model minimum ordinances on the DEP website – <u>Appendix D of the New Jersey Stormwater Best Management Practices Manual</u>.

Please Note: Municipalities applying for certification in 2024 that adopted an enhanced stormwater management control ordinance between March 2020 and July 16, 2023 that met the previous action requirements can earn points for that ordinance in 2024. Previous action requirements can be found <u>here</u>. Municipalities applying for certification in 2025 and beyond will be required to meet the new ordinance and action requirements.

This action awards points to municipalities for the adoption of an Enhanced Stormwater Management Control Ordinance that goes beyond the NJDEP model minimum ordinance requirements linked above. Using an Enhanced Stormwater Management Control Ordinance assists municipalities in managing stormwater more effectively to improve water quality, promote more widespread use of green infrastructure, reduce local flood risks and better water management.

This action links to two sources for enhanced model stormwater management control ordinances, one developed by the Watershed Institute and the other developed by New Jersey Future. Municipalities can use the guidance and adopt specific ordinance language from either or a combination of both of these model stormwater management control ordinances developed by <u>New Jersey Future</u> and the <u>Watershed Institute</u>.

The enhancements to the ordinance provide municipalities with different approaches to better manage stormwater including:

- Ensure the use of low impact development techniques in site design;
- Reduce the threshold for "major development";
- Improve onsite retention requirements to clean and manage stormwater;
- Reduce the maximum contributory drainage area to promote management closer to the source of stormwater generation;
- Modify the definition of impervious surfaces to include net increase
- Modify the stormwater runoff quality standard to treat all impervious surfaces
- Create a threshold for "minor development" to reduce the cumulative impact of small changes
- Clarify how to calculate stormwater for Redevelopment projects with existing impervious cover
- Modify the stormwater runoff quality standards when stormwater is directed to an impaired body of water
- Strengthen the maintenance requirements.

Municipalities that modify their ordinance language using the enhanced models linked in this action can receive 5 points for any of the enhancements listed above for up to 35 points. Though not required, the municipality is also strongly encouraged to amend its stormwater management plan (master plan element), to provide the justification for the ordinance's more stringent standards.

For certified communities, this action can count toward Gold Stars in both Health and Water. See the Gold Star Standard section of this action for more information.

## Why is it important?

The reliance of stormwater management on traditional "gray" infrastructure, pipes and outlets, is known to exacerbate local flooding, stream erosion and water quality degradation. As more intense storms and heavy precipitation are predicted to continue, these problems will only worsen, unless alternative means of stormwater management are implemented.

In gray infrastructure systems, stormwater quickly flows off parking lots, roadways, rooftops, and other paved or hardened surfaces, carrying with it surface pollutants and litter, and emptying the polluted water into streams, rivers, and tidal waters. The relatively fast rate and high volume of water also causes bank erosion and flooding in and downstream of developed areas. Further, combined sewer systems (CSS) in many older urban areas of the state carry stormwater and wastewater in the same pipes to treatment facilities. The volume of runoff produced during storm events routinely overwhelms the capacity of these systems, resulting in combined sewer overflow (CSO) events, which discharge untreated sewage and polluted stormwater directly to nearby water bodies.

Green infrastructure - stormwater practices that restore or mimic natural conditions - minimizes real and potential risk for erosion, flooding and pollution by capturing stormwater at its source, filtering water through soils and providing for the reuse of stormwater. Examples of these practices include bioswales, porous pavement, green roofs, parks, roadside plantings, and cisterns, which can be implemented at site, neighborhood, or regional scales. Green infrastructure also provides multiple co-benefits such as cooling and cleansing the air, social and economic benefits of greener neighborhoods, reducing asthma and heat-related illnesses, and providing savings in cooling costs.

This action promotes the required use of green infrastructure and guides how to effectively pair it with low impact development strategies, and establish a new on-site retention standard for regulated development. In addition, it provides guidance on how to lower development thresholds for applicability because of the cumulative impact of small developments that would otherwise be exempt from stormwater management practices. The action also outlines additional enhancements to the stormwater management control ordinance including applicability to redevelopment, minor development as well as linking to water quality standards and stormwater facility maintenance.

## Who should lead and be involved with this action?

While any Green Team member (or other official) can take the lead in championing this action, the Planning Board is primarily responsible for implementing the stormwater management control ordinance through the land development process and the review and recommendations of the board engineer. For this reason, the person(s) taking the lead in this action should reach out to the Planning Board to first determine its level of support for adopting enhancements to the stormwater management control ordinance and imposing stricter requirements than those that are provided for in the NJDEP model ordinance.

Please note: When a municipality updates or revises their stormwater control ordinances, they are required by the Municipal Land Use Law at N.J.S.A. 40:55D-15. b and -16 to submit the ordinance to the appropriate County Planning Board for review.

### Timeframe

The Planning Board and board engineer will need 1-2 months to review an Enhanced Stormwater Management Control Ordinance, understand the impacts of the various enhancements available and determine which option to pursue. It will take another 2-4 months to introduce the ordinance at a governing body meeting, remand it back to the Planning Board for formal comments, and adopt the ordinance at a subsequent meeting. The municipality will need to allow time for the required review of a change in their stormwater management control ordinance by the County Planning Board as specified in the Municipal Land Use Law. If the municipality chooses to amend its stormwater management plan (master plan element), prior to adopting the ordinance, it will take approximately 2-4 months to complete and adopt the plan amendment. For municipalities pursuing Tier 1 of this action, the training requirement is on-going.

### Project costs and resource needs

The primary costs associated with this action are the professional fees of the municipal engineer, planner and attorney that are charged with reviewing and assessing the model Enhanced Stormwater Management

Control Ordinance, and preparing the final ordinance for adoption. The guidance for the development of an enhanced model ordinance with sample language provided should help reduce the costs of these professional fees.

# What to do, and how to do it ("How to")

This section provides guidance and recommendations for implementing the action. A municipality does not need to follow this guidance exactly as long as it meets the requirements for earning points for this action.

There are two sources for enhanced model stormwater management control ordinances, the Watershed Institute and New Jersey Future. In meeting the requirements of this action, municipalities can select enhancements from either or both of these model stormwater management control ordinances developed by <u>New Jersey Future</u> and <u>Watershed Institute</u>.

Stormwater is generated in a variety of settings in New Jersey, it is important to consider the pattern and existing amount of development found in your community when selecting the ordinance enhancements to manage future stormwater runoff. Rural and suburban communities with extensive open spaces may want to select enhancements that ensure onsite retention to promote recharge to groundwater as well as enhancements that link impaired waters with treatment standards. Suburban and urban communities approaching "build out", with few new applications for large development may want to consider enhancements that reduce the threshold for development by revising the definition of major and/or minor development. Most municipalities can benefit from including enhancements in their stormwater management ordinance related to use of low impact development strategies in site design, as well as the management of runoff from all regulated impervious surfaces and strengthening of maintenance requirements.

Step One: To start the process the Green Team or Environmental Commission point person(s) should reach out to the municipal Stormwater Program Coordinator (SPC - often the municipal engineer or other municipal point-of-contact who is designated as such to ensure local compliance with the NJDEP stormwater management program). Planning Board Chair and Council liaison to explore the opportunity to strengthen your municipal stormwater management ordinance. Together this group should review the enhancements found in the two enhanced stormwater management control ordinances to determine those your community would like to include. There are several ways to include language to enhance your ordinance points range from 5 to 35 points depending on the number of enhancements incorporated into the municipal stormwater.

The 10 possible enhancements to consider are:

- Add definition and update requirements to use Low Impact Development Techniques: Emphasis on use of natural site features landform, slope and cover to reduce impact of development and enhance function of green infrastructure.
- Modify the definition of "Major Development": Reduce the threshold of disturbance as found in the definition of "major development" in order to manage more stormwater.
- Modify the definition or criteria for Onsite Retention: Improve onsite retention to clean and manage more stormwater and promote infiltration to allow water to soak into the ground during storm events to reduce the volume of runoff.
- Revise requirements for Major Development to reduce maximum contribution area: Reduce the maximum contributory drainage areas for green infrastructure best management practices (BMPs). This provides for a distributed approach to the design and location of green infrastructure on a site.
- Modify Definition of Regulated Impervious Surface: Include all impervious areas within the project area, instead of net increase of impervious cover. This provides for the water quality improvements inherent in the use of green infrastructure to apply to all impervious areas of a site existing and new.
- Modify the Stormwater Runoff Quality Standard: Include regulated impervious area and regulated motor vehicle surface. This provides for water quality treatment for all impervious areas.
- Add a definition for "Minor Development": Additional definition: minor developments, defined as a minimum disturbance of between 250 square feet and 1,000 square feet (or less) of new impervious surface in order to reduce the cumulative impact of stormwater generated from many small projects.
- Add Redevelopment to the definitions: To clarify what should be included in calculations for stormwater design, on a previously developed site.
- Modify Runoff Quality: Total Maximum Daily Loads (TMDL) and Impaired Water: Ensures when stormwater runoff is directed to water with a TMDL or listed as impaired design includes a corresponding reduction of total suspended solids (TSS) to ensure runoff does not further impair water quality.
- Add Maintenance Permit: Align stormwater maintenance and reporting requirements for all Municipal Stormwater Facilities structural and non-structural and outline permit and maintenance requirements. This provides for municipal reporting requirements on stormwater facilities to line up with those found in

the MS4 permit with the SCO.

To receive points for this action, the NJDEP minimum model stormwater ordinance (July 2023) must be adopted with enhancements – modifiedl language -- to strengthen the ordinance. Recommendations on the specific language to include to enhance a municipal ordinance in any of the ten different ways listed above is found on <u>Table 2</u> – References to enhance the NJDEP model stormwater management control ordinance. Municipalities are encouraged to include all the enhancements and appropriate language in their ordinance, recognizing that each enhancement as outlined on Table 2 – provides for 5 points for up to 35 points. <u>New</u> <u>Jersey Future</u> and the <u>Watershed Institute</u> have developed extensive guidance for municipalities to explain the enhancements and rationale for strengthening municipal stormwater control ordinances.

Step Two: The group or committee formed to work on this action in consultation with the municipal Stormwater Program Coordinator SPC, should forward the proposed draft ordinance (NJDEP model minimum ordinance as well as the proposed enhancement language) to the Planning Board, board engineer, and request the stormwater control ordinance be included as a discussion item on the Board agenda. The committee should provide the Planning Board a written explanation of the rationale behind strengthening the municipal stormwater ordinance and a summary of the differences between the existing and proposed ordinance, and which enhancements are being pursued. At the Planning Board meeting the committee should present the information and determine the board's general support for the ordinance.

Step Three: Pending the Planning Board's support for the ordinance and identification of enhancements to be added, the SPC working with the Board attorney should be asked to prepare an ordinance for final consideration and adoption.

Step Four: Once the Planning Board has agreed upon the final contents of the enhanced stormwater management control ordinance, a copy will be forwarded to the governing body for consideration and adoption.

Step Five: The governing body adopts the enhanced stormwater management control ordinance, which takes a minimum of two meetings, and includes the step of remanding it back to the Planning Board for formal comments prior to the final adoption. In addition, as required by the Municipal Land Use Law at N.J.S.A. 40:55D-15.b and -16, the municipality must provide a copy of any proposed Stormwater Control Ordinance (SCO) (or amendment) to the county planning board at least 10 days prior to the date of the public hearing held by the municipal governing body. The municipality must also file a copy of any adopted SCO (or amendment) with the county planning board and/or the county review agency as designated by the Board of Chosen Commissioners.

OPTIONAL Step: The Planning Board may first choose to update the Goals section of its stormwater management plan (master plan element), to make clear the municipality's desire to achieve higher goals such as improving water quality, reducing localized flooding and pollution from stormwater runoff, and increasing groundwater recharge through infiltration. Updates to the plan should be undertaken prior to the adoption of the ordinance. In that case, the Board will work with its professionals to draft the master plan changes and present them at a Board meeting for adoption.

## What to submit to earn points for this action

In order to earn points for this action, the following documentation must be submitted as part of the online certification application in order to verify that the requirements have been met.

Description of Implementation – In the text box provided on the submission page for this action provide a short narrative (300 words or less) of what has been accomplished and the impact it has or will have on the community. Also describe which enhancements included in the ordinance and the number of points for which you are applying.

- Upload a certified copy of the adopted stormwater management control ordinance. The ordinance must have been adopted after July 2023.
- Upload the action <u>submission worksheet</u> which a municipality will use to record the ordinance section and page number for each enhancement.

OPTIONAL: Upload the amendment to the stormwater management plan that justifies the additional ordinance requirements.

## **Resubmission Requirements**

Resubmission for points under this action, please provide updated information for the past submit the

following:

- Upload: Upload a certified copy of the adopted stormwater management control ordinance to establish the ordinance is still in effect. The ordinance must have been adopted after July 2023.
- Upload the action <u>submission worksheet</u> which a municipality will use to record the ordinance section and page number for each enhancement

## **Approved Action Expiration Date**

Approved actions will be set to expire after two full calendar years after the adoption of the Enhanced Stormwater Management Control Ordinance. For example, an action approved in 2021 will be set to expire on December 31, 2023.

Approval Note: Approvals under this action are conditional and may be modified by Sustainable Jersey in the case of significant changes or modifications to the requirements found in the NJDEP Stormwater Rules (NJAC 7:8). In response to Governor Murphy's climate change goals outlined in Executive Order 100 - NJ-Protecting Against Climate Threats (NJ-PACT) – Resilient Environment and Landscapes (REAL), NJDEP anticipates further amendments to the stormwater management rules (NJAC 7.8) in 2024.

#### **IMPORTANT NOTES:**

There is a limit of six uploaded documents per action and individual files must not exceed 50 MB. Excerpts of relevant information from large documents are recommended.

All action documentation is available for public viewing after an action is approved. Action submissions should not include any information or documents that are not intended to be viewed by the public.

## **Gold Star Standard**

Health: Successful completion of this action at the 5-point level will meet the requirement of a High Impact action for earning a Gold Star in Health.

Water: Successful completion of this action at any point level will meet the requirement of a High Impact action for earning a Gold Star in Water.

For more information on earning Gold Stars in Health and Water see the <u>Gold Star Standards section</u> of the website.

### Spotlight: What NJ municipalities are doing

To date, no municipalities have adopted an enhanced stormwater management control ordinance that complies with the March July 2023 changes in the NJDEP stormwater management rules.

Look for future updates to this section.

#### Resources

The following resources may be helpful in completing this action.

#### Stormwater Ordinance Resources:

New Jersey Stormwater Best Management Practices Manual – Appendix D <a href="https://www.nj.gov/dep/stormwater/bmp\_manual/">https://www.nj.gov/dep/stormwater/bmp\_manual/</a>

Watershed Institute – Model Enhanced Stormwater Management Control Ordinance 2023 <u>https://thewatershed.org/the-watershed-institute-releases-enhanced-stormwater-management-model-ordinance/</u>

New Jersey Future – Green Infrastructure Municipal Toolkit and model Enhanced Stormwater Management Control Ordinance <u>https://gitoolkit.njfuture.org/stormwater-rules-and-regs/#stormwater-ordinance</u>

New Jersey Future - New Jersey Developers Green Infrastructure Guide 2.0

### https://developersguide.njfuture.org/

### Green Infrastructure Resources:

The Watershed Institute - Exploring Green Infrastructure <u>https://thewatershed.org/green-infrastructure-2/</u>

New Jersey Green Infrastructure Guidance Manual <a href="http://water.rutgers.edu/GreenInfrastructureGuidanceManual.html">http://water.rutgers.edu/GreenInfrastructureGuidanceManual.html</a>

Jersey Water Works Green Infrastructure Design Recommendations <u>https://www.jerseywaterworks.org/wp-content/uploads/2016/12/Memo-GI-Design-Recos-for-Parks-2016\_11\_29.pdf</u>

New Jersey Rain Garden Manual <a href="http://water.rutgers.edu/Rain\_Gardens/RGWebsite/RainGardenManualofNJ.html">http://water.rutgers.edu/Rain\_Gardens/RGWebsite/RainGardenManualofNJ.html</a>

US EPA Green Infrastructure Information <u>https://www.epa.gov/green-infrastructure</u>

Green Infrastructure Design and Implementation Website <u>https://www.epa.gov/green-infrastructure/green-infrastructure-design-and-implementation</u>

New York City Green Infrastructure Standards and Specifications <a href="https://www1.nyc.gov/site/dep/water/green-infrastructure.page">https://www1.nyc.gov/site/dep/water/green-infrastructure.page</a>

US EPA Green Infrastructure Policy Guides <u>https://www.epa.gov/green-infrastructure/policy-guides</u>

#### Green Streets:

Jersey Water Works New Jersey Green Streets Case Studies <u>https://www.jerseywaterworks.org/wp-content/uploads/2020/08/NJ-Green-Streets-Case-Studies\_Aug-2020\_FINAL.pdf</u>

Green Streets: A Conceptual Guide to Effect Green Streets Design Solutions <u>https://nacto.org/docs/usdg/2000\_green\_streets\_epa.pdf</u>

National Association of City Transportation Officials Urban Street Stormwater Guide <u>https://nacto.org/publication/urban-street-stormwater-guide/</u>

Philadelphia Water Department Green Streets Design Manual <a href="http://www.phillywatersheds.org/what\_were\_doing/gsdm">http://www.phillywatersheds.org/what\_were\_doing/gsdm</a>

EPA's Learn About Green Streets https://www.epa.gov/G3/learn-about-green-streets