Stormwater Management

NJPACT - Resilient Environments and Landscapes

REAL will modernize New Jersey's environmental land use rules to respond to climate change by considering risks such as sea-level rise and chronic flooding, and to facilitate climate resilience by supporting green infrastructure and renewable energy.

REAL Science

According to the *2020 New Jersey Scientific Report on Climate Change:*

- Annual precipitation in New Jersey is expected to increase by 4% to 11% by 2050.
- The size and frequency of floods will increase as annual precipitation increases due to climate change.
- Combined sewer overflow communities may be further challenged as sea-level rise and/or increased rain events submerge discharge points that are currently above the waterline.
- Surface and groundwater quality will be impaired as increased nutrients and contaminants enter waters due to runoff from more intense rain events.

REAL Facts

- Over the last 50 years, storms that resulted in extreme rain increased by 71% in New Jersey, which is a faster rate of increase than anywhere else in the United States (Huang et al., 2017).
- Stormwater management practices that were designed based on historical rainfall patterns will become increasingly unable to manage the storm events they were initially designed to manage thereby increasing the risk of flooding to the surrounding community.
- REAL builds upon the Inland Flood Protection rule adopted on July 17, 2023, by addressing the impacts of climate change on stormwater runoff, onsite stormwater retention and water quality.
- REAL reflects the most current science and considers future conditions to supplement past observations of flood events and stormwater management.

REAL Action

- Require runoff from reconstructed motor vehicle surfaces to receive the same water quality treatment currently required for new motor vehicle surfaces, with flexibility provided to public transportation entities. This protects water quality and is of particular importance given the State's commitment to environmental justice.

- Clarify that runoff discharged into an existing or proposed stormwater conveyance system, which ultimately discharges within a 300-foot riparian zone located within the same HUC14 as the major development, is provided water quality treatment to at least 95 percent TSS removal.

- Require a reduction of runoff volumes to ensure a significant portion of stormwater volume, particularly in more frequent, smaller storm events, will not be discharged offsite, thereby helping to reduce local and regional flooding.

- Incorporate climate resilience planning in the municipal stormwater master plan and the regional stormwater management plan. This requires an evaluation of how climate change impacts, (e.g., sea level rise, increased flooding frequency and extents, and increased rainfall depth and intensity) will impact stormwater management and will aid municipalities in identifying vulnerable stormwater infrastructure and mitigation measures.

- Amend the definition of "major development" to ensure consistency between State and municipal stormwater review and eliminate a gap in the level of protection for water quality and flood prevention.

- To facilitate the use of small-scale green infrastructure BMPs, eliminate the minimum size requirement for the orifice diameter from the intake to the outlet of a stormwater management basin, as long as the design of the flow control device in the outlet is proven to prevent clogging and remain functional.

- Incorporate additional measures from the NJPDES rules into Water Quality Design and Performance Standards. For example, in municipalities located in a watershed that have established, approved, or adopted Total Maximum Daily Load (TMDL(s)), require that major developments incorporate additional measures to address the established, approved, or adopted TMDL(s).