

Comments on Resilient Environments and Landscapes (REAL) Rule Proposal

Submitted on behalf of the Jersey Water Works Climate Resilience Committee and Green Infrastructure Committee on November 7, 2024

INTRODUCTION:

Jersey Water Works (JWW) is a collaborative effort of many diverse organizations and individuals who embrace the common purpose of transforming New Jersey's outdated water infrastructure by investing in sustainable, cost-effective solutions that provide communities with clean water and waterways; healthier, safer neighborhoods; local jobs; flood and climate resilience; and economic growth. The **Jersey Water Works Climate Resilience and Green Infrastructure Committees** submit the following comments on the New Jersey Department of Environmental Protection's (NJDEP) Resilient Environments and Landscapes (REAL) rule proposal. We recognize the immense efforts devoted to developing the proposed REAL reforms. We commend New Jersey for initiating this comprehensive update of land resource protection regulations focused on the impacts of a changing climate.

The NJDEP has made a great effort, through the REAL rules, to outline an integrated approach aligned with watershed management. Jersey Water Works understands that the "REAL rule proposal would amend New Jersey's existing flood hazard, stormwater, coastal zone, and freshwater wetlands regulations statewide to address these ongoing impacts, while improving water quality and flood protections, and tackle issues particularly concerning overburdened communities." These goals align with the JWW's shared goals. **Some members of Jersey Water Works found this approach to be moving in the right direction. The rule proposal, which utilizes more recent scientific data, signifies a shift in policy and updates to the outdated processes.** We acknowledge that there will be some growing pains when the amendments move forward. Still, many aspects of the rule are aligned with Jersey Water Works' goals, specifically opportunities to prioritize nature-based solutions.

Some Jersey Water Works members have expressed concerns about the 1,000+ page rule document. They noted a layer of complexity that is hard to comprehend. Additionally, some members pointed out that the mapping is complicated and may significantly impact critical infrastructure projects. They commented that the rules may be best understood once they are in place. Members also mentioned that the rules are complex and difficult to deconstruct and that they need to understand how the elements integrate.

The following questions came up during our review:

1. Can NJDEP clarify how the rules intersect by providing a flow chart of the rules and their relationship? Can you provide guidance on how to think of the project process as a whole to increase the level of efficiency? The concern is that professionals in the field are finding it difficult to understand and therefore others, with less familiarity but with the duty to execute the rules, will not be able to implement it. This especially concerns staff at the municipal level, who may not have the skills to do this work. *Recommendation: Offer a visual way to understand the rules, such as a flow chart on how to coordinate projects and which entities are involved.*
2. What processes can the NJDEP implement to expedite project approvals? Some members have noted that project approvals already take a long time, and they are worried that the new rules may further delay the approval process by adding additional levels of approval. *Recommendation: Offer the ability to move projects quickly, to move the implementation process, and streamline.*
3. How might the department improve the GIS mapping components? *Recommendations: Improve the GIS interactive mapping component on the NJ Flood Indicator Tool and NJ Geoweb. Provide a geographic application of the rules and a visual where jurisdiction overlaps.*
4. Which state agencies will be responsible for implementing the different components of the rules? Several rules and laws from different entities govern projects, such as municipal land use ordinances, NJDEP rules, county stormwater regulations, soil conservation districts, the Delaware River Basin Commission, and the Delaware & Raritan Canal Commission. How will coordination happen between interstate, state, county, and local entities? *Recommendation: Create guidance to clarify who is responsible for approving projects and how the coordination will happen.*
5. How might the department clarify the information regarding how the rules will impact drinking water and wastewater systems in the coastal zone areas? If the systems need to make significant site improvements, they will need to elevate their sites or possibly relocate them. It does not appear that the rules account for fortification. *Recommendation: Create guidance to clarify the information for water and wastewater systems.*

Highlights, Questions, and Recommendations for Specific Items:

Flood Hazard Area Control Act (FHACA) Rules (N.J.A.C. 7:13)

Climate Adjusted Flood Elevation (CAFE)

- JWW cares about reduced flooding and improved water quality, while strengthening local economies, community health, and long-term resiliency to climate change. The use of a

five-foot rise in sea level by 2100 as a metric for the proposed Climate Adjusted Flood Elevation (CAFE) standard represents a promising shift toward integrating climate science into land use planning. Under a moderate emissions scenario – which assumes that global emissions trends will be significantly lower than they are today – there is a 17% chance that sea level rise will exceed 5.1 feet. This CAFE standard will require new developments, redevelopment, substantial improvements, and roadways to be raised five feet above base flood elevation to ensure safety from potentially life-threatening flooding events. Given that sea level rise is not the only issue - coastal storm intensity is also expected to increase, creating more extensive storm surge and wave damage potential - using a preventive approach (the proposed CAFE standard) is appropriate.

- Municipalities should be required to use the CAFE in their local and county hazard mitigation plans to ensure consistent sea level rise standards for project planning and implementation.

Inundation Risk Zone (IRZ)

- The Department should prioritize the processing of “Blue Acres” home buyout applications for properties located within the IRZ. Department staff should also increase community outreach initiatives in these areas to ensure residents are properly informed of the severity of future flooding and their eligibility for the Blue Acres program. Given local concerns about loss of property tax revenue, the Department should also help municipalities understand budgetary and social benefits (e.g., reduced emergency response risks, property damages, and health threats; increased property values next to open space, increased recreational opportunities). In addition, more attention to Blue Acres as part of a broader community planning process could help identify redevelopment options that will provide housing for displaced residents, increased property tax revenue over time, and community improvements.
- The Department should issue expanded guidance on the IRZ submission requirements for development. This may include a template and checklist for the required inundation risk assessment, the extent to which on-site alternative analysis is required, and sample language for the required risk acknowledgment.

Coastal Zone Management (CZM) Rules (NJAC 7:7)

Nature-Based Solutions Permitting

- The new definition of “nature-based solution” within the CZM rules expands the scope of activities that can be implemented to protect, restore, and enhance New Jersey’s wetlands, such as living shorelines, marsh restoration and enhancement, and shallow submerged habitat creation projects. The new rule encourages the use of native vegetation, which we believe should be a requirement for all nature-based solution projects to better improve the health of local ecosystems.

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

Redevelopment Requirements

- The new requirement for redeveloped motor vehicle surfaces to address water quality through the removal of 80 percent of Total Suspended Solids (TSS) or 95 percent when discharged within a 300-foot riparian zone of Category One (C1) waters aligns with JWW goals. Redevelopment projects occur more frequently in urbanized communities, which disproportionately suffer from water quality degradation, such as in instances of Combined Sewer Overflows (CSOs). The removal of TSS will have the added benefit of reducing stormwater runoff volume that would otherwise contribute to CSO events.
- Whereas the majority of motor vehicle surfaces were constructed prior to the enactment of NJDEP's 2004 Stormwater Management Rules and are therefore ill-equipped to manage current and future storms, the proposed redevelopment requirement provides an opportunity to address existing impervious surfaces and outdated stormwater management systems.

Stormwater Retention Standards

- JWW action agenda goals propose that utilities and state agencies employ green infrastructure to reduce flooding caused by inadequate wastewater and stormwater systems. This goal aligns with the proposed Stormwater Runoff Quantity Standards, which would require that stormwater runoff volume equal to the water quality design storm of 1.25 inches of rainfall in 2 hours be retained on-site through green infrastructure BMPs. If green infrastructure BMPs are not practicable, this can alternatively be achieved through the removal of existing impervious surfaces within the same HUC14.
- The Department should consider creating an exemption for stormwater retrofit projects to encourage the use of green stormwater infrastructure. Municipalities will be required to improve stormwater management facilities as part of their Watershed Improvement Plans, and retrofit projects offer a multitude of environmental benefits beyond volumetric reduction, such as improved water quality, floodplain reconnection, and stream restorations. While these projects may not be able to fully meet the stormwater retention standard, they should still be encouraged to improve outdated stormwater management systems.
- The Department should require the use of native plants for green stormwater infrastructure in all new developments and redevelopment projects. Native plants support local biodiversity and more effectively retain stormwater than non-native species.

Stormwater Management Plans

- The Department should provide municipalities with guidance on integrating climate-change-related hazards into stormwater management and mitigation plans. Regional stormwater management plans should be incentivized through a regional planning grant or technical assistance program through NJDEP.
- The rules also require municipalities to update their local Stormwater Control Ordinances (SCO) to be in compliance with REAL. The Department should release its model SCO and Stormwater Management Plan guidance within the same time frame to allow

municipalities to adopt both simultaneously. This will aid with implementation and boost compliance.

TMDLs

- The Department should consider updating TMDL standards for pollutants to prevent outdated TMDLs from harming surface water quality.

Public Transportation Entities

- The rules require transportation projects to investigate adjacent properties for the siting of stormwater management facilities if there is disturbed land adjacent to the public roadway or railroad. The Department should supply better guidelines to determine how far agencies are required to investigate adjacent properties and alternative procedures if there are jurisdictional concerns.
- The Department needs to clarify how public transportation entities should investigate adjacent properties for suitability of green infrastructure BMPs if public transportation entities do not have access to conduct proper surveying.

Combined Sewer Overflow (CSO) Considerations

- NJDEP should work with CSO permittees to review plans for CSO removals and understand how the precipitation and sea level rise projections used in REAL could affect their Long Term Control Plans (LTCPs).
- CSO communities that are impacted by both river-level rise and sea-level rise, such as those along the Hackensack, Passaic, Cooper, and Rahway Rivers, must be evaluated to ensure that CSO outfalls will continue to discharge against the higher coastal tides and river levels.
- The new stormwater retention standards will help address increased runoff volume, which benefits CSO communities where quantity contributes to the overflow issue. This new standard aligns with JWW's goal of reducing CSO events. Members of JWW want to see LTCPs that prioritize proven approaches to reduce CSO events, such as green infrastructure, which captures combined sewage during wet weather.

Freshwater Wetlands Protection Act (FWPA) Rules (N.J.A.C. 7:7A)

- The rules propose requiring the removal of existing impervious surfaces, where practicable, within 25 feet of wetlands under a special activity transition area waiver for redevelopment of a significantly disturbed area. We recommend that this 25-foot zone be extended to 300 feet to restore a natural riparian buffer zone, which will protect water quality, improve biodiversity, and protect nearby properties from flood risk.

Other Comments

- Include licensed "Landscape Architects" in the document, where "licensed professional engineer or registered architect" is mentioned. "Landscape Architects" are not mentioned anywhere in this document, but "Architects" and "Engineers" are. Most architects are not

trained in stormwater management, such as green infrastructure, but landscape architects by their training have the background to be involved in these issues. While this may be an oversight via the stakeholder groups, it's imperative that Landscape Architects are mentioned, as the scope mentioned in the document and on the NJ REAL page falls within the ability and expertise of licensed landscape architects.

- REAL replaces the current “permit-by-rule” process with “permit-by-registration”, which lengthens the permitting process by requiring user registration and submittal of compliance information to the Department via its online portal. The Department should increase staffing capacity to compensate for these more stringent permitting requirements.

Conclusion

JWW is interested in working with the Department to ensure the implementation of REAL is effective, equitable, and results in climate-resilient infrastructure.

These comments advance best practices and were developed with the input of the Jersey Water Works Green Infrastructure and Climate Resilience Committee members, but neither the committees nor Jersey Water Works takes a position on any proposed regulations.

Contact persons:

Chris Sotiro, Backbone staff, Green Infrastructure Committee, csotiro@njfuture.org

Zeke Weston, Backbone staff, Climate Resilience Committee, zweston@njfuture.org

[*Jersey Water Works Collaborative*](#)