



**Date:** November 7, 2024

**To:** New Jersey Department of Environmental Protection  
501 E State Street  
Trenton, NJ 08609

**Re:** New Jersey Coastal Resilience Collaborative Comments on the on the proposed Resilience Environments and Landscape Rule (REAL) -- DEP Docket No. 05-240

**Introduction:**

Thank you for the opportunity to submit comments regarding the proposal of the Resilient Environments and Landscapes (REAL) reforms. The New Jersey Coastal Resilience Collaborative (NJCRC) supports adoption of the REAL rules, which take a proactive and comprehensive approach to incorporating the very real threats of climate change into state planning, regulation, and management. These comments developed by the partners of the NJ Coastal Resilience Collaborative do not necessarily represent the views and opinions of all Collaborative partners.

NJCRC recognizes that additional work and investment is necessary to support coastal community adaptation and ecosystem resilience. In addition to adoption of the proposed rule, the state should also provide guidance and technical assistance for municipalities and potential impacted property owners to support implementation. The DEP will likely have to increase its capacity to monitor and enforce the final version of the proposed rule in order to ensure regulatory compliance and successful attainment of the goals of the proposed rule.

The NJCRC is a network established after Superstorm Sandy to foster sustainable and resilient coastal communities and ecosystems by generating informed action. NJCRC has over 100 partners that include, but are not limited to, state and private universities, non-profit and for-profit groups, national estuary programs and reserves, advocacy groups, state agency representative, and regional planning groups.

The NJCRC has several workgroups dedicated to specific topics aligned with the proposed rule that are comprised of representatives of partner organizations and other practitioners. These include the Municipal Workgroup and the Ecological Restoration and Science Workgroup. The NJCRC workgroups provide technical assistance to coastal communities, offer guidance and synthesize regional knowledge on areas of expertise such as ecological restoration and the beneficial use of dredged material, and are available to help support implementation of REAL.

Sandy's devastating damage to our coastal communities and ecosystems resulted in the recognition of the need for a collaborative effort to support community resilience efforts. Evidenced by the impacts of more recent storms, the current drought, many sunny-day flood events along our coastline, and extreme temperatures this summer, the impacts of climate change are real. According to the Union of Concerned Scientists, more than 62,000 New Jersey homes—valued at \$26.8 billion—could be underwater, displacing nearly 80,000 people, by 2045. The

REAL rule will enable action now and will result in reduced community risk and vulnerability. Recent storm events in North Carolina and Florida clearly exposed the increased risk of inaction, not planning for the future, and relying on the status quo. Implementation and consistent application of the REAL rule will ensure that not only are past storm impacts not forgotten, but also that future impacts are planned for as practicably as possible. New Jersey has been a leader in supporting resilience efforts as recognized by the recent award of a \$72 million federal grant to support a *Building a Climate Ready NJ* initiative. This includes support for many NJCRC partners to work directly with communities and leverage our expertise to provide technical assistance that includes working with communities to plan, design, and ultimately implement resilience projects to make NJ more resilient.

## **NJCRC REAL Specific Comments**

### *1. Guiding Principles*

NJCRC commends DEP for adopting the following principles to guide and inform the rule:

- Increased protection against future flood inundation and damage,
- Protecting critical facilities and infrastructure from the effects of climate change,
- Increased protection of land and water resources,
- Planning for climate change,
- Facilitating nature-based solutions,
- Improved stormwater management, and
- Administrative process improvements.

The proposed REAL rule reflecting these principles will result in a positive economic impact increasing risk management certainty, and reducing uncertainty of the adverse effects of climate change by reducing long-term costs related to disaster assistance, infrastructure repair, and insurance claims from flooding. The avoided costs of flooding to homeowners, businesses, and local/state government entities are well documented. In response to Governor Murphy's Executive Order 100 for NJPACT, Moody's Investors Service determined that New Jersey's adoption of stronger building codes, especially along the 130-mile coastline, is "credit positive" and indicated that "New Jersey's economic vulnerability to increased flooding is substantive." However, to fully realize these gains and avoid unintended consequences, it is important for DEP to consider the concerns and, where possible, reduce the uncertainties and the potential increased administrative burden on DEP, municipalities, and homeowners.

### *2. The Scientific basis for the coastal rule changes is sound.*

Some assertions have been made that the science that provides the basis for this rule proposal is neither sound nor appropriate. As documented in the NJ Climate Science Report, which is a widely accepted scientific documentation of sea level rise data and modeling, sea level rise is occurring throughout the world, and is an indicator of Earth's increasing temperature (NJDEP, 2020). In 2016, Rutgers University convened a New Jersey Science and Technical Advisory Panel (STAP) on sea level rise and changing coastal storms. This effort synthesized the most

recent climate science needed to inform efforts to increase the resilience of New Jersey's people, places, and assets to regional sea level rise and changing coastal storms and resulting flood risk. In 2016, STAP produced a comprehensive report after these deliberations, entitled "Assessing New Jersey's Exposure to Sea-Level Rise and Coastal Storms: Report of the New Jersey Climate Adaptation Alliance Science and Technical Advisory Panel." <https://doi.org/10.7282/T3ZP48CF>.

In 2019, in response to the DEP's request, the STAP reconvened and produced an updated report entitled "New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel" (STAP report), ([www.nj.gov/dep/climatechange/pdf/nj-rising-seas-changing-coastal-storms-stap-report.pdf](http://www.nj.gov/dep/climatechange/pdf/nj-rising-seas-changing-coastal-storms-stap-report.pdf)). According to the report, sea level in New Jersey could rise from 2000 levels by up to 1.1 feet by 2030, 2.1 feet by 2050, and 6.3 feet by 2100 (Kopp et al., 2019). DEP is committed to continuing to update these reports to ensure that their actions and implementation of the rule will be informed by the best available science. The NJCRC supports the science that provides the basis for this rule proposal.

*3. How and where we develop in the coastal zone needs to be based on and recognize the threats of climate change, including sea level rise.*

The Coastal Zone Management rules are enforceable policies of the New Jersey Coastal Management Program (NJCMP), as approved under the Federal Coastal Zone Management Act (16 U.S.C. §§ 1451 et seq.), which aim to balance the protection of coastal resources with the many competing uses of coastal areas. The coastal goals at N.J.A.C. 7:7-1.1(c) set forth the results that the NJCMP strives to achieve. Each goal is supplemented by related policies that describe the means to achieve that goal. The two new proposed goals and related policies to reflect the necessity of combatting climate change impacts and achieving environmental and social justice in New Jersey's coastal zone are important and relevant. Having new goals related to climate change impacts and environmental and social justice will provide a policy platform for the NJCMP to address two of the most important and critical issues of our time.

The proposed changes to the CZM rules ( N.J.A.C. 7:7-13) regarding the minimum criteria for determining consistency with a State Planning Commission approved planning area boundary, center, core, or node are an important addition that provides a bright line of what NJDEP will find acceptable for areas within the state's coastal zone to encourage development or be protected from development. These changes will support more transparency and predictability for DEP to determine whether State Planning Commission approved map changes will or will not result in unacceptable harm to the coastal ecosystem or the resources of the built or natural environment.

*4. Inundation Risk Zones:*

Under the CZM rules, the definition of the "Inundation Risk Zone" special area is contained within its own rule. The proposed new definition of "inundation risk zone" refers to the special area rule at N.J.A.C. 7:7-9.50. The inundation risk zone is the portion of a tidal flood hazard area that has been determined to be at significant risk for future permanent or daily inundation and

which therefore represents a high level of hazard for existing or proposed development or habitation and is important to identify to ensure adequate measures are taken to ensure development and redevelopment are resilient to climate change impacts.

The creation of Inundation Risk Zones properly recognizes both from past experience and scientifically based projections of future threats that inundation will impact communities not currently in the floodplain. Taking into account these increasing threats and planning for resilient development in these areas as proposed will reduce community vulnerability and risk, and associated loss and damage. However, it will also be important to work closely with communities and potentially impacted property owners to provide transparency and clear guidance for implementing these new rules, reduce additional administrative burden where possible, and provide technical assistance where needed. The final rule should also consider the capacity of DEP to administer these programs to ensure timely review of permit applications.

*5. Prioritize the use of nature-based solutions where possible.*

As defined in the proposal, “nature-based solutions” are projects designed to protect, restore, or enhance shorelines, wetlands, and in-water areas, utilizing natural features and processes to address erosion and flooding issues, and to restore or create ecological habitat. The proposed amendments would incentivize the permitting and implementation of nature-based solution projects by making them easier to implement. As previously noted, NJCRC’s workgroups have prioritized support for nature-based solutions.

The proposed rule requires the use of sediment from the same regulated water, estuary, or ecosystem to the maximum extent practicable (See: 7-6.24 (nonstructural and hybrid); 7:7-9.27 Wetlands (f)). While DEP and NJDOT have long had a policy of “keeping sediment in the system” most of the sediment dredged from state waterways has been disposed of in confined disposal facilities. Our waters have already lost a great deal of sediment. Additionally, upstream development has hardened natural riparian zones resulting in minimal new, natural sediment being conveyed into the system to feed marshes and other riparian areas. As a result, many of our watersheds are sediment starved. The rule should not only encourage the beneficial reuse of dredge material for nature-based solutions, but also incorporate discouraging transportation of suitable dredge material out of the ecosystem through modification of dredged material placement on land and/or creating a sediment bank. (See: 7:7-15.12.) It would be beneficial for the state to establish a beneficial use target similar to the USACE 70% by 2030.

Please clarify the following:

- Can you please clarify how the rule may open more opportunities and lift current restrictions that hinder the use and growth of live oysters in living shorelines for GP 24 qualifying projects?

- Can you please clarify how the term "living" for living shorelines may impact the ability to include non-living sediment additions that will promote resilient habitat, even if they do not inherently have a living component, for exam? (For example, a protective marsh-fringing beach.)
- Can you please clarify how the rule facilitates projects that may have near-term impacts on single habitats (like seagrasses or marshes), but are projected to provide long term benefits for those habitats and the system as a whole, and how that is weighed in the permitting process?
- Can you please clarify how the rule can promote coastal resilience projects that may need to cross the 1977 line for biological, habitat, or coastal resilience reasons?

## **Conclusion**

While NJCRC supports the REAL rule, there remains significant work to be done by all to ensure our coastal communities and ecosystems are resilient. Technical and financial assistance for communities in rule compliance and resilience planning and action in general need to be increased substantially. New Jersey's critical infrastructure including existing stormwater systems, water, wastewater, energy, and transportation infrastructure were generally built and designed lacking climate change science and retrofits and redesign of this infrastructure needs to begin concurrent with adoption of the REAL rule.