



2005 Market Street, Suite 1700      215.575.9050 Phone  
Philadelphia, PA 19103-7077      215.575.4939 Fax

901 E Street NW, 10th Floor      202.552.2000 Phone  
Washington, DC 20004      202.552.2299 Fax  
[www.pewtrusts.org](http://www.pewtrusts.org)

February 17, 2021

Jill Aspinwall  
New Jersey Department of Environmental Protection  
Office of Policy Implementation  
401 East State Street, 7th Floor  
Trenton, NJ 08625-0420

*Submitted via e-mail*

Re: New Jersey Protecting Against Climate Threats (NJ PACT)

Dear Ms. Aspinwall:

The Pew Charitable Trusts (Pew) appreciates the opportunity to comment on the Department of Environmental Protection’s (DEP) proposed regulatory framework for New Jersey’s Protecting Against Climate Threats Initiative (NJ PACT). Pew broadly supports NJ PACT as a vital mechanism for better understanding and preparing for current and future climate impacts and is grateful to Governor Phil Murphy’s leadership in creating the initiative through Executive Order No. 100. Pew specifically applauds the order’s forward-thinking mandate to “integrate climate change considerations, such as sea level rise, into its regulatory and permitting programs.”

As a component of NJ PACT, regulatory amendments proposed by DEP within its Resilient Environment and Landscapes (REAL) effort demonstrate a thoughtful and comprehensive approach to modify land use and environmental policies in the context of New Jersey’s current and future climate vulnerabilities and will have a long-term net positive impact in reducing flood risk. Outlined below are specific aspects of the REAL framework Pew supports and areas where additional expansion or clarification may be appropriate prior to finalization.

### **I. A Strong Basis in Applied Scientific Data**

Pew commends the State for basing this initiative to address climate impacts on a New Jersey-specific approach employing available scientific data. The 2020 “New Jersey Scientific Report on Climate Change,” is an important foundation for the proposed regulatory changes and one that

should be re-reviewed and updated as additional knowledge, modeling capability, and location-specific data becomes available. Prepared by DEP staff and peer reviewed by the Department's Scientific Advisory Board, the report offers a sobering assessment of the predictions regarding sea-level rise, changes in precipitation patterns, and prospects for impacts from higher intensity coastal storms. This report, as well as the "New Jersey Climate Change Alliance Science and Technical Advisory Panel Report" (STAP), make a clear case for ambitious regulatory changes to protect the people, natural resources, and property of the State of New Jersey.

## **II. A Watershed Approach to Adaptation and Protection**

Pew supports and applauds REAL's utilization of a watershed approach to climate-threat protection and the Department's important recognition of the clear links between land use decisions and a host of water management issues, from water quality to flooding threats. This framework and recognition will enable New Jersey to make durable and effective investments in flood risk reduction and to avoid short-sighted solutions that fail to account for future flood risks. It will also help ensure that land uses – and flooding solutions – employed in one community do not simply transfer risk onto another area. However, applying a watershed approach in a flood risk reduction context is relatively new as a best practice both nationally and in New Jersey and requires philosophical shifts in cross-jurisdictional governance, particularly for units of local government. Therefore, Pew encourages DEP's new Division of Watershed Restoration and Protection to continue and expand outreach to local officials and meaningful engagement with residents, specifically to and with those in flood-prone communities, to maximize awareness and support for land use and flood-resilience planning at a watershed scale.

## **III. Preparing for Future Inundation**

As DEP clearly understands, flood mitigation and adaptation work across the country has largely focused on storm events and flooding issues that cause extensive damage and temporary disruptions to community life and business. Few efforts have fully confronted the implications for areas that will be impacted by recurrent flooding and eventual permanent inundation, but as the scientific data shows, this will be the case for areas within New Jersey. This proposal recognizes the likelihood of such impacts in certain areas and seeks to ease the difficult transition that will be required. By requiring additional risk analysis and resilient design within the Inundation Risk Zone (IRZ), the State will better protect residents, limit resources required for rescue and recovery, and help direct new investment into areas that are anticipated to remain safe and dry over time.

Pew supports the criteria that have been selected for designation of this zone, including the 2100 timeframe for planning and the selection of the moderate emissions scenario from the STAP report. While this timeframe may appear long compared with traditional land use planning timeframes, we would point out that it is within the functioning life of many structures in the state. Census data, for example, shows that residential properties in several states, including New Jersey, have median functional lifetimes of greater than 50 years.<sup>i</sup> A regulatory program to

address the vulnerability of these structures and their occupants, then, must look at a relatively long time horizon.

DEP calls for a prohibition on new buildings in the IRZ, which can be waived if an applicant is granted a hardship exception by illustrating “there is no other reasonable use for the site and that preventing construction of a new building would constitute an exceptional and undue hardship.” Pew believes this is an appropriate and fair method of addressing the special risks in the IRZ, and we encourage the Department to assure that the function of reviewing any hardship requests is managed by unbiased technical experts who will render decisions consistently and fairly. Pew recognizes DEP’s need to maintain situational flexibility in considering and deciding upon potential hardship exceptions; not all situations can be contemplated in policy. However, DEP should elaborate on both the process by which an applicant may pursue a hardship exception and provide additional detail regarding what may or may not reach the standards constituting a hardship as described. It should also make it clear that any exceptions granted may be subject to appropriate conditions and safeguards, including requirements for dry access. In no case should exceptions be granted for self-imposed hardships, for example, arising from an applicant’s own actions to sell or modify portions of a tract of land that leave only an IRZ-impacted lot.

Other important requirements mentioned in DEP’s presentations involve infrastructure. As presented, these requirements appear to be targeted to roads, bridges, culverts, and other associated surface transportation facilities. We support the suggested restrictions on construction of critical infrastructure in the inundation risk zone and believe review requirements might appropriately apply to onsite wastewater treatment or extension of water, gas, or other utilities. Septic system failures, water well contamination, inflow and infiltration of sanitary sewer and water lines, and other degradation of utilities may occur and threaten public health as well as natural resources. In addition, near or at the point at which permanent inundation occurs, some of these utilities may require decommissioning. We recommend DEP consider incorporating the review of at least some of these associated infrastructure vulnerabilities into the hardship exception reviews for building projects.

Specifically regarding surface transportation, the State may wish to segment reviews into two types: those associated with new projects and those associated with serving existing land uses. Transportation projects that serve to increase new development pressures should be avoided as should projects aimed solely at serving new construction. Conversely, projects enhancing the safety and security of existing residents and allowing for evacuation and emergency management may remain appropriate.

Another important aspect of the IRZ proposal is the additional freeboard required for substantially damaged and substantially improved (SD/SI) structures in this zone to be elevated to the Climate Adjusted Flood Elevation +1. As you know, the minimum requirements for participation in the National Flood Insurance Program (NFIP) already call for elevation above base flood elevation for any SD/SI structure. We see the additional margin of safety as a sensible

expansion of this requirement and believe that it will serve to enhance public safety and help building owners save money on insurance as flood levels rise.

Other elements associated with the IRZ include the “climate impact statement,” deed restrictions, and disclosure statements. Pew supports the use of these mechanisms and we look forward to reviewing the format and content that will be required for such impact statements.

#### **IV. Adjusting Floodplain Management Rules to Account for Future Risk**

Pew supports the proposal to adjust the State’s current floodplain management, incorporating a workable and reasonable approach to managing for future flood risk in both tidal and riverine areas. Given the underlying data on sea level rise and increasing precipitation, the assumption of a 5-foot elevation in tidal areas and use of the data for what is now considered a 500-year event in riverine areas will allow for new investments to remain resilient to flood risks over time.

These precautions will not only reduce the cost of future flood damage and recovery, but also save money for businesses and homeowners who purchase flood insurance. While 5 feet may appear to be a large increment for elevations, we note again the longevity of building life within the State as well as significant changes in flood height elevations based on mapping changes in many areas of the State. For example, in the Borough of Belmar, some areas not shown as a flood zone in a 2009 adopted map now appear with a 10-foot flood elevation in a 2015 preliminary map.

#### **V. Nature-Based Solutions**

Pew supports DEP’s emphasis on use of nature-based solutions (NbS) as a sustainable mechanism to build flood-disaster resilience. Specifically, DEP’s encouragement of the use of living shorelines, native vegetation, oysters, marine mussels, and shell bags as a best practice for shoreline stabilization should be applauded. However, Pew encourages additional contemplation of how NbS may be utilized to bolster fluvial flood resilience inland through use of established green and blue infrastructure best practices, as well as used to better protect and restore coastal habitats.

Nearshore habitats play a critical role in New Jersey. From hosting abundant marine life to bolstering resilience, habitats like oysters and submerged aquatic vegetation support the economic vitality of coastal communities across the state. In our previous PACT comments<sup>ii</sup>, Pew emphasized that New Jersey should prioritize the mapping, restoration and monitoring of coastal resources while seeking out regulatory changes that align and enhance habitat protection and restoration. Specifically, we recommended updating the state’s approach to shellfish restoration in impaired waters to boost restoration efforts and population recovery. We also recommended implementing a statewide mapping, restoration and monitoring program for submerged aquatic vegetation to aid coastal resilience. And we continue to urge that these recommendations be implemented via PACT to secure successful conservation outcomes of ecological and economic importance to New Jersey’s coastal communities.

The REAL framework provides a strong foundation for updating environmental regulations in response to climate change. While we understand that a number of the anticipated regulatory changes will present challenges for local residents and businesses, we believe that DEP’s proposals, thus far, have been carefully drawn to address the very real and specific climate impacts that New Jersey will experience. The cost of inaction in the face of these impacts would far outweigh any regulatory burden associated with the framework. That said, we would encourage the State to work closely with those communities and businesses that will be most heavily affected both by climate change and by new building restrictions. By listening to community leaders, working with diverse stakeholders, and providing technical assistance and financial resources, where feasible, the State can help these communities prepare to prosper in a safer, more resilient future. In our view, a significant level of support and assistance should be specifically directed to socially vulnerable and historically marginalized communities.

Again, we appreciate the opportunity to provide these comments and look forward to future stakeholder discussions as DEP works to finalize vital regulatory reforms through NJ PACT. We are available and eager to answer any questions or engage in future dialogue as requested.

Sincerely,

*Mathew Sanders*

Mathew Sanders  
Senior Manager, flood-prepared communities  
The Pew Charitable Trusts  
[msanders@pewtrusts.org](mailto:msanders@pewtrusts.org)

*Zachary Greenberg*

Zachary Greenberg  
Officer, Conserving Marine Life in the U.S.  
The Pew Charitable Trusts  
[zgreenberg@pewtrusts.org](mailto:zgreenberg@pewtrusts.org)

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<sup>i</sup> See, for example, the summary of state data available here: <https://housemethod.com/home-warranty/median-home-age-us/>

<sup>ii</sup> Pew Recommends Reforms to Improve Flood Resilience in New Jersey, Flood-Prepared Communities & Conserving Marine Life in the United States, October 8, 2020, <https://pew.org/37sAEW1>.