TO: Assistant Commissioner Vince Mazzei, Watershed and Land Use Management

FROM: Grant Lucking, COO
New Jersey Builders Association

DATE: February 2, 2021

RE: Protecting Against Climate Threats (PACT) Stakeholder Comments

The New Jersey Builders Association (NJBA) appreciates the opportunity to comment on potential rule changes discussed during the PACT stakeholder process.

General
NJBA recognizes the threat that climate change and sea level rise pose to New Jersey and supports the New Jersey Department of Environmental Protection’s (DEP) efforts to address this threat. NJBA is an ardent supporter of public policies that reflect contemporary scientific consensus and is dedicated to its mission to advocate for policies that create a more vibrant, greener, and affordable housing market in New Jersey.

New Jersey’s housing market faces multiple threats, climate change, environmental justice issues, aging infrastructure, and a shortage of affordable and market cost housing. NJBA believes that a coordinated planning effort is necessary to help address these challenges which at times have conflicting solutions. We appreciate that DEP has included NJBA in the numerous stakeholder sessions surrounding the PACT rulemaking. However, NJBA is disappointed that a greater emphasis was not placed on finding solutions to address the economic challenges the PACT rules will place on many of New Jersey’s communities. For instance, many already economically burdened areas will now be faced with new land use regulations that may significantly devalue land and property. To date, there has not been a major discussion of how significant the economic impact may be or how to assist residents who face dueling economic and environmental threats. DEP’s proposed regulatory re-alignment is expected to result in extensive and immediate economic impacts. DEP must engage in a meaningful, holistic economic impact analysis, and not simply rely on a one-sided analysis of potential economic impacts from future, projected climate change related threats. Moreover, the emerging risks from climate change and sea level rise and DEP’s contemplated response thereto, demand an evaluation of methods to incentivize growth in alternative areas to accommodate current and future housing needs.

NJBA believes that it would have been prudent for policy officials and stakeholders to review and evaluate New Jersey’s official resiliency report, which has not yet been published, before proposing rules that seek to solve the many issues the report will purportedly identify. Absent these
discussions, NJBA offers the following comments which both support and oppose various aspects of the PACT proposals.

**A Watershed-Based Approach to Land Resource Protection**
NJBA supports DEP’s effort to establish a holistic approach to environmental protection. However, DEP must recognize that New Jersey is a highly developed state and therefore, it may be too late to implement a watershed-based approach simply because of the lack of undeveloped land to be used for watershed wide protection and control purposes. For instance, regional stormwater facilities to limit flooding may be more feasible in some watersheds, but not in others. A cookie cutter approach should be avoided as regulations often impose mandatory provisions with little flexibility. NJBA recognizes that certain benefits may be achieved through regulations that account for regional concerns, though NJBA maintains that DEP’s regulatory programs must provide for sufficient flexibility where applicants are not able to offset or mitigate impacts within the same watershed. Aligning DEP resources will serve as a benefit to the environment and regulated community through increasing efficiencies.

**Sea Level Rise & Climate Adjusted Flood Elevation**
NJBA supports DEP’s effort to address the risks posed by climate change and sea level rise. However, NJBA believes that incentives for development in alternative locations and retrofitting existing structures must be implemented in concert with any further restrictions on development and redevelopment to help offset costs and to provide reasonable alternatives to address the state’s housing demand, including low- and moderate-income housing. New Jersey has one of the highest costs of housing in the nation and a severe shortage of constitutionally mandated affordable housing and market rate housing. NJBA is concerned about the financial impact to property owners and municipalities where the new Climate Adjusted Flood Elevation (CAFE) is implemented. Properties in newly designated inundation zones and flood areas will undoubtedly face reductions in property values, impacting both homeowners and municipal tax bases. NJBA believes the best way to mitigate the financial strain of new regulated areas is to implement financial or regulatory incentives to encourage development elsewhere. The Blue Acres program is an excellent example of this approach. NJBA urges DEP to make property owners and local authorities aware of these potential rule changes if they may be impacted by the new Flood Hazard Area (FHA) boundaries.

NJBA objects to the use of the year 2100 time horizon for sea level rise planning. While scientific consensus exists that climate change is occurring and that sea levels are rising, divergence in modeling occurs frequently and is especially dependent on future emissions beyond the year 2050, as noted by the Rutgers University’s Science and Technical Advisory Panel (STAP) Report. For example, the sea level rise projection of 5.1 feet under moderate emissions and 6.3 feet under high emissions depicted in the STAP Report are on the high end of estimates for each emissions scenario when compared to estimates by the National Oceanic and Atmospheric Administration (3% chance of exceeding 1 meter by 2100 under RCP 4.5) and a recent survey of sea level rise experts (0.63–

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1.32 m under RCP 8.5). NJBA acknowledges that regional sea level rise rates in the Northeast may vary and holds no opinion about which model is most accurate, but rather advocates that given these variances in modeling, utilizing a shorter-term sea level rise projection for standards, such as the year 2050, with a re-evaluation every ten years, would be most prudent. This approach would ensure that protections for sea level rise are updated frequently and that the latest scientific consensus is applied to DEP rules while appropriately balancing protection and economic interests.

Given the large amount of land and number of properties that may be impacted by this rule proposal, NJBA urges DEP to make detailed mapping available. At present, detailed mapping depicting the proposed CAFE has not been made available to the public or regulated community, making it extremely difficult to assess the impact of the proposed CAFE. NJBA recognizes that njfloodmapper.org does allow users to simulate the effect of the CAFE but has concerns regarding the ability of the public to successfully navigate this tool and its variety of inputs needed to depict the proposed CAFE. If mapping is not made easily available, DEP has a constitutional obligation to provide notice of these regulations to impacted property owners.

Further, in some areas the proposed CAFE is set at a higher elevation than that projected by NJFloodMapper. An example is a neighborhood in Woodbridge. The effective Federal Emergency Management Agency (FEMA) base flood elevation (BFE) is 9 feet North American Vertical Datum (NAVD) and the preliminary BFE is 12 feet NAVD. NJFloodMapper uses the effective maps. Mapping was run using Sandy Hook as the tidal station, using 5.1 feet sea level rise for 2100 and choosing the 100-year flood elevation of 6.8 feet above the Mean Higher High Water (MHHW). This resulted in a total of 12 feet to the MHHW elevation to project the future flooded areas. As visible below, the projected flood area extends beyond the current 500-year flood zone. No elevations are given on the mapper, so contours generated from the United States Geological Survey Digital Elevation Models topography were added using a GIS system.

As depicted, NJFloodMapper projects a 100-year flood elevation of approximately 15 feet NAVD (purple line). This is consistent with adding 12 feet (the total water level from the mapper) to the MHHW in this area of approximately 2.65 feet NAVD for a future flood elevation of 14.65 feet NAVD. This is also consistent or slightly higher than adding 5 feet to the effective FEMA BFE of 9 feet for a future BFE of 14 feet. However, adding 5 feet to the FEMA preliminary BFE (which will become the effective rate in a few years) yields a CAFE of 17 feet NAVD. This encompasses a larger area than predicted by NJFloodMapper (red contour).

If DEP’s intention is to use the current effective flood zones plus 5 feet, then that should be clarified in the rules. Further, it can be expected that FEMA will further update the flood maps in the next 80 years, especially with rising sea levels. The rules should clarify that the CAFE will be set in accordance with today’s FEMA BFEs and would not continue to be based on FEMA BFE plus 5 feet when FEMA updates the maps.

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2 [https://www.nature.com/articles/s41612-020-0121-5](https://www.nature.com/articles/s41612-020-0121-5)
Adding complexity to this issue, the National Flood Insurance Program (NFIP) is preparing to unveil Risk Rating 2.0 which will update Flood Insurance Rate Maps to assess risk more accurately and to account for factors such as sea level rise, different types of flooding risk, and the type of structure at risk. Risk Rating 2.0 will also provide credits to property owners who chose to raise structures. NJBA supports the use of Risk Rating 2.0 to help property owners accurately evaluate their risk and the cost of insuring properties, and to make decisions accordingly. NJBA urges DEP to coordinate with FEMA to ensure that DEP regulations accurately reflect Risk Rating 2.0.

It is unclear if the new CAFE will also apply to ongoing operations. In addition to buildings, expansion of the flood zone will impact commercial, industrial and agricultural operations that are currently in or will be within CAFE zones. For example, storage of unsecured materials or of recyclable materials would need to be secured at an elevation that is not anticipated for many years. The continuation or expansion of such existing operations, with the accompanying jobs and economic benefit could be significantly impacted.

**Inundation Zone**
NJBA does not support the requirement for applicants to obtain a hardship waiver for development activity if their property is in the proposed future inundation zone absent information on how applicants may be able to demonstrate an exceptional or undue hardship and provided a hardship exception mechanism provides a realistic and meaningful opportunity for relief. Current hardship provisions under DEP’s existing regulatory programs are deliberately limiting and intended to be infrequently utilized or approved. If all new and redeveloped buildings require a hardship, the standards to obtain a hardship exception must provide a reasonable and realistic opportunity to successfully obtain relief.

NJBA urges DEP to coordinate with the insurance industry in its proposed implementation of the inundation zone, particularly as it relates to the requirement to reconstruct residential buildings to CAFE+1. It is crucial that the insurance industry factors in new replacement costs into its policies.
to ensure that homeowners that suffer damage are not left without adequate resources to both repair and raise their homes.

NJBA is opposed to the requirement to elevate new and substantially damaged/improved properties to one foot above the CAFE. The currently proposed CAFE is based on a long-term planning horizon and a conservative 17% chance of occurrence for 5.1 feet of sea level rise. There appears to be no scientific basis for adding the additional one foot of elevation. NJBA recognizes that the “flood hazard area design flood” under DEP’s current Flood Hazard program regulates with a level of redundancy, 1 foot above the 100-year flood, as a factor of safety in the event the 100-year flood is exceeded. The same level of conservative redundancy is not necessary under the proposed regulatory framework given DEP’s intention to conservatively regulate based upon an 80-year planning period and a 17% risk scenario of 5.1 feet of potential sea level rise. Risk redundancy is already built into the rule proposal under DEP’s suggested scenario and an additional one-foot factor of safety is unnecessarily burdensome and not warranted simply as a carryover from the existing rules.

**Fluvial Flood Hazard Areas**

NJBA is opposed to the utilization of 500-year flood limits in place of current 100-year flood limits. NJBA is unaware of a scientific consensus regarding the rate at which rainfall rates may be increasing and urges DEP to conduct additional research on increasing rainfall rates in New Jersey. The PACT stakeholder materials reference a singular unnamed study that suggests rainfall rates will increase 35% by 2100. NJBA notes that DEP’s 2020 Scientific Report on Climate Change states rainfall rates may increase in New Jersey from 4%-11% by 2050 but makes no mention of 2100. Meanwhile, the Fourth National Climate Assessment states “Further increases in rainfall intensity are expected, with increases in precipitation expected during the winter and spring with little change in the summer. Monthly precipitation in the Northeast is projected to be about 1 inch greater for December through April by end of century (2070–2100) under the higher scenario (RCP8.5).”

NJBA does not dispute any of these varying findings or present them as a complete body of research but objects to making planning decisions with an 80-year horizon where scientific consensus is lacking.

NJBA is also opposed to the proposed addition of one additional foot of elevation above the FEMA 500-year flood, or the additional 2 feet of elevation above DEP’s design flood or additional 3 feet of elevation above the FEMA 100-year flood, as these additional elevations appear arbitrary. NJBA appreciates the need to be more protective and is not opposed to the utilization of standards that reflect climate change and the increasing risk of flooding, but again urges that standards have a clear scientific basis and reflect a consensus of the scientific community. Regulating on top of conservative projections by one foot reflects unwarranted redundancy and appears to be simply a carryover of existing regulations that are based upon the 100-year, rather than the 500-year, flood.

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3 [https://nca2018.globalchange.gov/chapter/18/#:%7E:text=Monthly%20precipitation%20in%20the,Northeast,5).&text=Ocean%20and%20coastal%20ecosystems%20are,of%20climate%2Drelated%20environmental%20conditions.](https://nca2018.globalchange.gov/chapter/18/#:%7E:text=Monthly%20precipitation%20in%20the,Northeast,5).&text=Ocean%20and%20coastal%20ecosystems%20are,of%20climate%2Drelated%20environmental%20conditions.)
The stakeholder presentation states, “Today's 500-year flood limits may therefore be a good approximation of the future 100-year flood limits.” However, the CAFE is proposed to be set an additional foot higher with no basis.

The stakeholder presentation did not clarify how the new fluvial zone will be utilized in the rules. The rules will require calculation of fill from the 100 year to the CAFE elevation but it is unclear if zero net fill will be required in that zone.

NJBA is opposed to the provision that stipulates if work has not begun in a flood hazard area within 180 days of approval that work may not commence without re-approval. No basis was provided for this requirement, as these permits are issued for five years. It is unclear if permits for work not initiated would be able to be rescinded. This proposal would make financing many projects unfeasible. The timing of development work is often uncertain for a multitude of reasons. Many projects obtain permits from DEP and then require local approvals which may take some time or have financing or other reasons for delay. Economic and planning interests demand that parties who successfully navigate the DEP approval process can meaningfully and with certainty, rely on the approvals issued by DEP for their stated term. Requiring recertifications or re-approval every six months would introduce significant uncertainty in real estate transactions and financing related to development for which approvals are obtained and threatens to throw the land development process and many related economic industries into disarray. Moreover, it seems incongruous that DEP has eschewed regulating based upon interim, shorter term planning periods as suggested by NJBA among others, and instead is proposing to regulate and hold applicants, today, to year 2100 projections, and yet will ask permittee’s to come back every 6 months for verification of consistency with the NFIP.

Calculating Flood Zones
The stakeholder presentation states that applicants that “assert FEMA flood mapping is inaccurate” must seek the appropriate map change document from FEMA. DEP uses the preliminary maps and there is no mechanism through FEMA to request changes to those maps. FEMA will not review or entertain requests to change preliminary maps, since these have not been adopted. Thus, there is no way for applicants to obtain such approval from FEMA.

Elevation of Roads
NJBA supports the need to raise roads and critical buildings along with residential properties but is concerned about the functionality and feasibility of constructing road surfaces one foot above the CAFE in areas where surrounding road surfaces may be substantially lower. Accordingly, NJBA appreciates that this requirement is based on an “as practicable” approach but seeks further clarification as to what method DEP would use to determine when raising a roadway is “impractical.” Flexibility must be provided in the regulatory framework, particularly as it relates to existing developed areas to recognize and account for the fact that in many such areas elevating roadways, including along evacuation routes, is not realistic or feasible. Many other state policies dictate that redevelopment of such areas be promoted, including facilitating brownfield redevelopment and transit-centric development, stimulating low- and moderate-income housing, and addressing environmental justice concerns in impoverished communities. Provisions must be
imbedded in the regulations to allow for meaningful relief from unattainable standards. DEP’s current hardship exception provisions, often considered in the context of existing rules relating to roadway elevation for residential and critical buildings, do not provide such realistic and meaningful opportunity for relief. DEP must do more in the contemplated rules, particularly given the move toward reliance on conservative projected conditions, to provide for flexibility with respect to unattainable standards, and NJBA urges DEP to create clear and predictable standards that will help applicants and communities plan accordingly. Lastly, it is not clear why full-depth paving is included along with new roads. Such paving would not be expected to last until the time when sea level rises significantly.

**CZM Rules**
NJBA is opposed to the proposal to modify the traffic rule to ensure that any impacted roadway or intersection meets Level of Service D and is unaware of a need to institute this change. Applicants for new development should not be made to shoulder the burden of mitigating for existing roadway conditions where Level of Service D is already exceeded.

NJBA requests additional information regarding how applicants may contemplate the impacts of a changing climate on mitigation projects.

NJBA agrees that functional dunes behind a primary dune may have ecological and flood protection benefits. However, a remnant sand feature on a lot along a row of homes will have limited to no such benefits. The DEP should consider an infill exception that would allow a single-family home or duplex to be constructed on an existing infill lot that meets the dune exception requirements, other than being more than 500 feet from the Mean High Water (MHW) line, if the area is already developed with homes at the same distance from the MHW line.

**FHACA Rules**
NJBA is opposed to the expansion of the definition of regulated waters to include any isolated waters draining less than 50 acres. NJBA is unclear how much area this entails and requests that mapping and data be provided to the public and regulated community so that stakeholders may accurately evaluate the economic, environmental, and affordable housing impacts of this proposal. It is unclear if this would require an FHA and riparian zone be set on such waters.

NJBA is unaware of scientific justification for the expansion of riparian zones to 150 feet for all Threatened and Endangered (T&E) species and believes that riparian zone width should be dependent upon species needs. If this expansion relies on Landscape Project Mapping, further updates to the maps are needed. In addition, redevelopment rules should be clarified, particularly in areas that are actively disturbed (e.g. lawn) even if a few trees are present.

The stated reason of consistency among regulatory programs is an insufficient justification for the proposed substantial expansion of regulated buffer areas. Should DEP be intent on achieving consistency, NJBA recommends that exceptional resource freshwater wetland buffers be aligned with the current flood hazard riparian zone buffers for consistency and regulated based upon wetland areas critical for use as habitat for T&E species. Moreover, DEP has not demonstrated any
causal link between climate change threats and a need to substantially expand regulated riparian buffers.

NJBA is opposed to the expansion of mitigation requirements to all riparian zone impacts which creates inconsistency with other regulatory programs such as wetland transition area buffers. DEP has not demonstrated any nexus between protecting against climate threats and this mitigation rule change.

Requiring mitigation for all disturbance, such as a road crossing or stormwater outfall, can be difficult on sites that already contain a wooded riparian zone that is being mostly preserved. Exceptions are needed for unavoidable disturbance. Further, DEP also should consider allowing some form of riparian zone averaging, especially for actively disturbed sites and for unavoidable disturbance that has been minimized.

The proposed change to mitigation in the 50-foot riparian zone and what cumulative limit is being considered is not clear. The requirement should depend on the nature of the vegetation being disturbed.

NJBA objects to requiring an Individual Permit (IP) for in-kind replacement of a culvert or bridge, which is now a permit-by-rule. This will be burdensome and costly to municipal and county agencies and the regulated community. Most culverts and bridges are in place to serve existing roads. At the least, culverts that are not in areas of T&E habitat should not be required to obtain an IP.

**Freshwater Wetlands Rules**

NJBA is opposed to requiring stormwater review for all projects as it is excessive for General Permits (GP) or Transition Area Waivers (TAW) which do not directly impact stormwater, as opposed to GP#11 for outfall for which stormwater must be addressed. This would result in duplicative reviews from municipalities and DEP for simple GPs, drastically increasing costs and permitting times.

NJBA requests that DEP provide scientific justification for the requirement that all activities remain 25 feet from wetlands. The significance of 25 feet is unclear and is contrary to the Freshwater Wetlands Protection Act as adjudicated by New Jersey courts.

The requirement to remove pavement within 25 feet of a wetland for a redevelopment TAW should be clarified as to how “practicable” is defined. This could have a significant impact on urban redevelopment, particularly in industrial areas along tidal river shorelines where wetlands may be present along the shoreline. The continuation/expansion of industrial and commercial development in these areas provides economic benefits. The riparian zone rules require removal of impervious cover within 25 feet of the top of bank but exempt riparian zones along shorelines that have bulkheads or revetements along tidal or impounded surface waters. Thus, many of the industrial areas in North East New Jersey would not be impacted. However, in some of these areas there may be wetlands along the base of the revetment or bulkhead and, even though the upland may not actually serve as a buffer, under this proposal it appears the first 25 feet could not be redeveloped.
The reason for the requirement to set a conservation restriction on the entire wetland transition area when an averaging plan is used should be clarified. The requirement should only apply to the expanding transition area not the entire transition area on the property. This requirement should not apply for projects that propose a minimal amount of averaging or to wetlands on the site that are not subject to the averaging plan.

**Stormwater**

NJBA does not support the potential proposal to require the on-site retention of the Water Quality Design Storm (WQDS). The Green Infrastructure (GI) stormwater management rule proposal has yet to be made effective and it is a major change to the stormwater management rules which will have positive effects on both stormwater quality and quantity, including retention. The GI rule and the required GI Best Management Practices (BMP’s) should result in an increased ability for stormwater systems to retain the WQDS. The economic and design challenges presented by requiring retention of the WQDS could outweigh any measurable gains following the implementation of the GI rule. NJBA is also concerned about the additional burden placed on applicants seeking a waiver when retention may not be feasible due to site specific conditions.

NJBA is also concerned that the requirement to retain the WQDS could be particularly burdensome to urban redevelopment projects. Increasing the regulatory burden on redevelopment projects increases costs and thereby decreases the likelihood of investment in remediation and redevelopment. NJBA believes insufficient consideration and study has been conducted to determine if the reintroduction of stormwater into the soil and groundwater table in urban areas could have unintended consequences. In many of these areas, infiltration and recharge has not occurred for decades, and in some areas for more than a century. Sudden reintroduction of stormwater in these areas could have the unintended consequence of mobilizing historic toxic discharges, not only below the subject property, but within the surrounded area generally as the water migrates. NJBA believes that this and future rulemaking by DEP should incentivize redevelopment due to its significant environmental, social and economic benefits.

NJBA is opposed to increasing the 50% Total Suspended Solids (TSS) removal rate for redeveloped impervious surfaces. As stated in the prior section, redevelopment offers significant environmental, social and economic benefits not realized by greenfield development. The current 50% TSS removal rate requirement is itself evidence of how redevelopment offers environmental benefits. NJBA also believes that many GI BMPs will also contribute to gains in TSS removal rates and that further action by DEP is unwarranted.

**Planning for Climate Change**

NJBA requests additional information regarding the changing minimum criteria for determining consistency with a State Planning Commission (SPC) approved center or core.

NJBA is opposed to immediately deleting DEP-delineated coastal centers from the Coastal Zone Management (CZM) rules as many municipalities do not possess the expertise or resources needed to efficiently navigate the center designation process. Municipalities should be given ample
warning before the removal of centers from the CZM rules due to the potentially massive economic impact it may have and given DEP’s long-standing practice of implementing coastal centers. Municipalities may have deferred action based upon DEP’s past practice and will need significant time to make resources available to begin to navigate the SPC process. This will result in an unfunded mandate for municipalities that desire to retain Center designations. Further, this proposed action will unduly prejudice applicants who are at the mercy of municipalities and the state, including with the significant involvement of DEP, with respect to the SPC process.

**Nature Based Solutions**
NJBA supports the creation of permits-by-certification for nature-based solutions which offer clear environmental and often, aesthetical benefits, including the beneficial re-use of dredged material to support wetlands. NJBA urges that DEP maintain permits-by-rule whenever feasible to reduce the cost and time needed to perform these beneficial projects.

NJBA requests clarification of the intent of the statement regarding restriction of the installation of new bulkheads.

**Process Improvements**
NJBA is opposed to the proposed requirement to replace permits-by-rule with a new registration system. This registration defeats the purpose of permits-by-rule and creates a new burden and cost for applicants. The public may not have access to, or be able to, navigate the registration process. NJBA requests that DEP provide information on, and the basis for, replacing all the FHA permits-by-rule to narrow exemptions from permitting or to require other types of permits. Permits-by-rule were established to allow certain types of projects that were generally issued and found to have minimal adverse impacts.

NJBA requests that DEP clarify the requirements to demonstrate that wetland impacts are required for a project, even if the disturbance meets the general permit requirement. This is contrary to the entire rationale for General Permits, which are issued based on the conclusion by DEP that the activities so authorized will not have a substantial adverse impact on the resource.

NJBA is opposed to the requirement to have a licensed engineer apply for and certify each item in an FHA permit-by-certification. NJBA supports engineering certification where necessary but opposes requiring the high cost of engineering services when it is not warranted. NJBA is concerned that proposed process improvements relating to automated permit condition compliance concerns may lead to unnecessary enforcement and added burdens and costs to the regulated community and DEP if not appropriately managed, considering practical considerations regarding the time needed to address permit conditions. If DEP implements automated compliance notices, it should introduce flexibility into various permit condition deadlines, such as timeframes for recording conservation restriction instruments, to allow automated relief where timeframes may not be achieved.

Thank you for your consideration of NJBA’s comments. Please feel free to reach out to us with any questions.
Sincerely,

Grant Lucking  
Chief Operating Officer  
New Jersey Builders Association

C: NJBA Environmental Counsel Michael Gross, Esq.