

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATERSHED AND LAND MANAGEMENT PROGRAM

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PHILIP D. MURPHY Governor

TAHESHA L. WAY Lt. Governor

January 31, 2024

VIA EMAIL

Nicholas Long, City Administrator City of North Wildwood 901 Atlantic Avenue North Wildwood, New Jersey 08260

Re: City of North Wildwood Emergency Authorization Request Division of Land Resource Protection Determination (Denial) DLRP File No. 0507-03-0009.8 (CAF 240001)

Dear Mr. Long:

The following is the New Jersey Department of Environmental Protection's (Department) determination on the City of North Wildwood's (NWW or the City) request for an Emergency Authorization (EA) that was submitted to the Department on January 19, 2024. For the reasons that follow, this current EA request is hereby **denied**.

Emergency Authorization Request

On January 11, 2024, counsel for NWW sent an email to the Department's Division of Land Resource Protection (DLRP) indicating that the dune at 13th-14th avenues "had breached or nearly so" and that NWW would be submitting a request for an EA to install a bulkhead between 12.5th and 15th Avenues. On January 19, 2024, NWW submitted the EA request, proposing installation of ±752 linear feet cantilevered steel bulkhead (coated) with timber cap at elevation 12.0 feet (NAVD 88), extending from the area between the midpoint of 12th and 13th Avenues to 15th Avenue within portions of Block 317.03, Lot 4 extending west, then southeast along the Beach Patrol building walkway. The proposed bulkhead is depicted on one sheet entitled: "*Plan Showing: Proposed Bulkhead between Mid Block 12th & 13th Avenues and 15th Avenue, City of North Wildwood, Cape May County, N.J.*", prepared by Van Note-Harvey, dated January 17, 2024 (Site Plan).

The proposed bulkhead is configured to tie into an existing bulkhead to the north (extending from 3^{rd} Avenue to the midpoint between 12^{th} and 13^{th} Avenue), which was installed without

authorization from DLRP. The southeast portion of the proposed bulkhead is designed to tie into a bulkhead located waterward of the Beach Safety Patrol building, which was authorized through a previous EA issued on September 26, 2023. To date, NWW has failed to comply with the condition of the September EA requiring submittal of an Individual Permit application for the work conducted under the September 2023 EA.

In its January 19th 2024 EA request, NWW stated the proposed bulkhead is necessary to address "recurrent storm damage that has continued to deplete sand volumes from the North Wildwood dunes and beaches" and due to a threat to public and private property along a "more expansive area of the waterfront;" and that "these conditions ultimately resulted in a breach in the dune at midblock between 13th and 14th Avenues causing significant damage to the dune and vegetated areas behind the dune, as well as resulting in several locations of overwash¹ areas into delineated wetlands[.]" NWW stated that "in the absence of effective shore protection, the City's infrastructure is at significant risk and erosion is expected to be accelerated by the most recent breach in the dune" and that there is a threat to public and private property "along a more expansive area of the oceanfront due to the vulnerability of the City's dune system[.]"

NWW stated that "the majority of the former dune is now gone and any storm surge or lunar tide with moderate to strong wave action continues to erode into and through the dune, unimpeded by a beach berm or any other protective measures[.]" The submission claims that "as erosion continues, these overwash conditions are likely to be exacerbated and deposit sand into the bike path and JFK Boulevard, exposing the storm drainage system to sediment inundation, which risks failure. Once sand enters the storm drainage system, flow and discharge will be inhibited, causing widespread, prolonged flooding within the City, and the system would require substantial maintenance and even replacement of certain components. Additionally, freezing temperatures prohibit the effective operation of sewer trucks from conducting storm drain cleanouts[.]" The City submitted photographs depicting a portion of the area in question in support of their EA request.

Standards Applicable to Review of this Emergency Authorization Request

For DLRP to approve an EA, the applicant must first demonstrate that a threat to life, severe loss of property, or environmental degradation exists or is imminent(N.J.A.C. 7:7-21.1(a)). If such demonstration is made, then DLRP can issue an EA only if the emergency 1) can only be prevented or ameliorated through undertaking a regulated activity, and 2) is likely to occur, persist, or be

¹ NWW states that this is an overwash area. However, overwash areas are areas subject to accumulation of sediment, usually sand, that is deposited landward of the beach or dune by the rush of water over the crest of the beach berm, dune or a structure (N.J.A.C. 7:7-9.17(a)). In this case, the deposited sand is just landward of the initial dune face and does not extend landward to the eastern limit of the dunes. Therefore, this sand deposition along the waterward edge of the dune system does not meet the definition of an overwash area, and the DLRP will refer to it as "sand deposition" throughout this decision.



exacerbated before the Department can issue authorization under a general permit or an individual permit for the preventative or ameliorative activity (N.J.A.C. 7:7-21.1(a)1 and 2).

Pursuant to N.J.A.C. 7:7-21.3(h) and (i), the EA applicant must demonstrate compliance with the requirements of the Coastal Zone Management (CZM) rules or provide an explanation as to why full compliance could not be achieved. However, as a condition of EA approval, the applicant is required to submit a complete application for an individual or general permit to authorize the activities(N.J.A.C. 7:7- 21.3(e)). In other words, even if an emergency exists, ultimately, any measure approved under an EA must meet the applicable rules.

Per N.J.A.C. 7:7-1.5, a bulkhead is defined as "a vertical shore protection structure installed to withstand the forces of waves and current." Most relevant to this EA determination, NWW must demonstrate that the installation of a bulkhead complies with the Coastal engineering rule at N.J.A.C. 7:7-15.11, among other CZM rules. N.J.A.C. 7:7-15.11(b) requires consideration of an alternatives analysis which allows DLRP to authorize structural shore protection measures, such as a bulkhead, only upon a demonstration that non-structural and hybrid shore protection measures are not feasible or practicable.

The rules require that non-structural and hybrid measures be used where feasible because structural shore protection measures have greater environmental impact and can cause wave reflection, thus worsening erosion to the adjacent beach and dune system. This alternatives analysis is complex and technical. A dune system is an effective non-structural solution for shore protection. The Coastal engineering rule rationale states "as documented by the Department, the Federal Emergency Management Agency and others, dunes have proven to be very effective in providing protection from coastal storm surges, wave action and flooding. Dunes have been shown to reduce the level of storm damage particularly to boardwalks, gazebos and residential oceanfront structures. Creation, restoration, enhancement, and maintenance of dunes are, therefore, encouraged." (N.J.A.C. 7:7-15.11(h)).

The EA includes impacts to freshwater wetlands and associated transition that are designated as intermediate resource value (RV). However, on March 28, 2023, the Department sent NWW a notice of intent to reclassify the wetlands as exceptional RV with a high value as habitat for threatened and endangered species and critical wildlife. Thus, the proposal must also comply with the Freshwater Wetland Protection Act Rules (N.J.A.C. 7:7A-5.7). NWW has proposed bulkhead installation within these areas, but the submittal does not address these standards. The EA also requests a RV reclassification of these wetland areas to intermediate. An EA request is not the appropriate venue for this reclassification discussion and DLRP will continue to review the reclassification request which was previously submitted to DLRP.

Analysis of NWW's EA Request

Upon receipt, DLRP immediately reviewed the entirety of the EA submission and information pertaining to the existing site conditions including aerials, photographs taken by Department staff, and video footage. DLRP also consulted with the Department's Office of Coastal Engineering, which has extensive experience in the design and siting of shore protection measures.



DLRP first examined whether an imminent threat to life, severe loss of property, or environmental degradation exists at the site. NWW cited as its emergency the risk to the City's infrastructure and public and private properties from water and sand inundation. DLRP determined, after careful review of the materials referenced above, that no such imminent threat exists, despite the initial impression that may be given by the photographs and video footage submitted by NWW. To be clear, DLRP does not disagree that there is erosion that must be addressed in NWW; it disagrees that this erosion represents the imminent threat required for DLRP to issue an EA.

DLRP field-verified that a vegetated dune system and wetlands remain on site. The proposed bulkhead would be located approximately 20 feet waterward of the municipal infrastructure/concrete walkway within the existing dune system, freshwater wetlands, and associated freshwater wetland transition areas. From 15^{th} Avenue north to the area between 12^{th} and 13^{th} Avenue, there is an established, vegetated dune system, located approximately 15 - 22 feet (depending on the location) waterward of the existing concrete walkway, and extending east with a width of approximately 100 to 160 feet (depending on location) and small beach berm within the majority of this area (collectively, the "dune system"). The dune system includes areas of freshwater wetlands and associated transition areas. Dunes and dune vegetation provide substantial protection from storm-induced erosion, and there is a significant distance to the stormwater infrastructure from the eastern edge of the dune system, which is currently functioning as effective, non-structural natural shore protection for this area.

NWW represented that there were "areas of overwash of sand resulting from the last storm from the dune crest into vegetated and wetland areas to the west". But based on DLRP's review, there are small areas of sediment deposition along the immediate, waterward side of the dune system. These deposition areas are located substantially waterward (100 to 160 feet) of the municipal infrastructure that is depicted on the submitted Site Plan. NWW did not submit any information demonstrating that there is an immediate or imminent threat of direct wave attack, or water or sand overwash reaching the area located west of this dune system where the municipal infrastructure is located.

While NWW states the sand deposition that occurred means failure of the dune system, in fact, the wave-induced, landward deposition of small areas of sand within the dune system is part of a dynamic beach and dune system experiencing the natural exchange of sand. This seasonal sand exchange (landward/waterward) without breach into the street shows that the dune system still is functioning as non-structural natural shore protection for this area.

DLRP's review showed that within the area in question, existing public infrastructure (i.e., concrete walkway and stormwater management system) is located approximately 100 - 160 feet landward of the eastern edge of the dune system, with privately owned structures approximately 200 feet landward of the easterly extent of the dune system, and it has not been represented or demonstrated that this area or these structures are experiencing or are at significant risk of erosion/storm induced direct wave attack.



For the above reasons, DLRP has determined there is no threat to life, severe loss of property, or environmental degradation, and thus the threshold standard for issuance of an EA has not been met.

We note that by contrast, when DLRP issued an EA in September 2023 for the installation of a bulkhead immediately waterward and along the southern face of the NWW Beach Patrol building at 15th Avenue, an emergency condition was confirmed due to the Beach Patrol building being situated as the most waterward structure on the beach, with little to no setback from the eastern limit of the dune, unlike the 100-200 foot setback that exists in the area subject to the current EA request.

Conclusion and Path Forward

NWW's request for an EA to construct a bulkhead between the midpoint between 12th and 13th Avenues, extending to 15th Avenue is **denied for the reasons stated above**. However, the Department remains committed to helping NWW obtain approval for responsible shore protection measures. DLRP strongly recommends NWW continue to engage with the Department on the pending CAFRA Individual Permit application (DLRP File No. 0507-03-0009.6 LUP 200001), submitted on November 20, 2020, which remains deficient while awaiting submission of further information from NWW. This application, in part, proposes a bulkhead in the location at issue in the EA request.

If the required information is submitted for the pending but deficient application, DLRP could consider appropriate, rule-compliant shore protection along the entire oceanfront beach and dune system. This analysis is critical as an oceanfront beach is a dynamic, interconnected system and the authorization of singular stretches of bulkhead can have damaging consequences to the overall functioning of the beach and dune system. To reiterate, a bulkhead, if it were to experience direct wave attack in this location, is likely to increase erosion to the beach and dune system waterward of the structure (interfering with sand transport and sand volume), and to the north and south of the structure (end-effect erosion). Without careful collaboration with the Department on design and use of hybrid or non-structural measures in some locations, a bulkhead could exacerbate, rather than alleviate, conditions during future storms. As the Department has explained in previous correspondence, we have already seen this unfortunate consequence play out in NWW, resulting from the illegal dune destruction and unauthorized bulkhead installation.

DLRP is more than willing to participate in another meeting with NWW to discuss the information that we have previously stated is necessary to begin the technical review of this application. To this end, along with this denial letter, DLRP is also enclosing a letter dated today renewing its request for outstanding information and providing additional guidance related to the pending CAFRA Individual Permit application.

Finally, the Department is aware of the construction materials previously delivered to the subject location in preparation for bulkhead installation. As noted in the Department's January 25, 2024 correspondence, any unauthorized work will lead to further enforcement action.



January 31, 2024 Page **6** of **6**

Should you have any questions, please do not hesitate to contact the below signed via email at <u>colleen.keller@dep.nj.gov</u> or by phone at (609) 633-2289.

Sincerely,

Colleen Keller Assistant Director, Division of Land Resource Protection

C: Katrina Angarone, Assistant Commissioner, Watershed and Land Management, NJDEP Kimberly Cahall, Chief Enforcement Officer, NJDEP Dennis Reinknecht, Director, Resilience, Engineering, & Construction, NJDEP Jennifer Moriarty, Director, Division of Land Resource Protection, NJDEP Janet Stewart, Bureau Chief, Bureau of Coastal Permitting, NJDEP Kara Turner, Bureau Chief, Bureau of Coastal Permitting, NJDEP Mike Lutz, Bureau of Coastal and Land Use Enforcement, NJDEP Mayor Patrick Rosenello, City of North Wildwood Jim Verna, III, PE, Van Note-Harvey Associates, Inc. Peter Lomax, The Lomax Consulting Group Neil Yoskin, Esq. Anthony Bocci, Esq. Kristina Miles, DAG Jason Kane, DAG Kevin Fleming, DAG Dianna Shinn, DAG

