

**Raritan Bay and Sandy Hook Bay,  
Highlands, New Jersey  
Coastal Storm Risk Management  
Feasibility Study**

**Final Integrated Feasibility Report  
and Environmental Assessment  
May 2020**

**Appendix A2:  
Coastal Zone Act Consistency Statement**

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**New Jersey Coastal Zone Management Evaluation  
Highlands Coastal Storm Risk Management Feasibility Study  
Monmouth County, New Jersey**

**INTRODUCTION**

The Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. §§1451-1466) was enacted by Congress in an effort to balance the often competing demands of growth and development with the protection of coastal resources. Its stated purpose is to "...preserve, protect, develop, where possible, to restore or enhance, the resources of the nation's coastal zone..." The Act established the framework for achieving this balance by encouraging the states to develop coastal zone management programs, consistent with minimum federal standards, designed to regulate land use activities that could impact coastal resources. The Coastal Zone Act Reauthorization Act Amendments of 1990 further strengthened the act by requiring the state programs to focus more on controlling land use activities and the cumulative effects of activities within designated coastal zones.

The State of New Jersey administers its federally approved coastal zone program through the Department of Environmental Protection, Land Use Regulation Program (LURP). Pursuant to the Federal CZMA, New Jersey has defined its coastal zone boundaries and developed policies to be utilized to evaluate projects within the designated coastal zone, as set forth in New Jersey's Rules on Coastal Zone Management (CZM) (N.J.A.C. 7:7, dated July 15, 2019). The Waterfront Development Law (N.J.S.A. 12:5-3) and related requirements (N.J.A.C. 7:7-3) provide the authority for issuance of permits for, among other activities the reconstruction (with or without expansion) of single-family homes.

The State's Land Use Regulation Program in the review of permit applications and coastal decision-making employs New Jersey's rules on Coastal Zone Management; they address issues of location, use, and resources. New Jersey's rules provide for a balance between economic development, and coastal resource protection, recognizing that coastal management involves explicit consideration of a broad range of concerns, in contrast to other resource management programs that have a more limited scope of concern.

The Highlands project site is located within the coastal zone of New Jersey. The following assessment identifies the coastal zone management policies relevant to the proposed coastal storm risk management project.

The proposed project is a coastal storm risk management project involving approximately 8,000 linear feet along the coast of the borough of Highlands, NJ and ties into high ground (+14 ft. NAVD88) at each end. Because the project follows the actual perimeter of the shoreline, its total length is 10,737 linear ft. The project includes a detention pond, diversion culverts, and a pump station for interior drainage.

## **DISCUSSION OF NEW JERSEY COASTAL ZONE MANAGEMENT POLICIES APPLICABLE TO THE PROPOSED PROJECT**

The following section identifies the New Jersey CZM policies, identifies how they are applicable to the proposed project, and discusses the project issues relevant to each.

### **SUBCHAPTER 9. SPECIAL AREAS**

#### **7:7-9.1 Purpose and scope**

Special areas are areas that are so naturally valuable, important for human use, hazardous, sensitive to impact, or particular in their planning requirements, as to merit focused attention and special management rules.

#### **7:7-9.2 Shellfish habitat**

This policy generally limits disturbance of shellfish habitat.

NJDEP studies have identified that the project site is adjacent to hard clam habitat that was documented in 1983, 2000, and 2014. Reviewing west to southeast, along the shoreline: In 1983, the area was documented as occurrence (low density) and moderate density. In 2000, the area was documented as occurrence, moderate, and high density. In 2014, the area was documented as moderate and occurrence density. When reviewing the maps collectively, the entire project site is adjacent to moderate and/or high-density hard clam habitat. The proposed project will have no adverse permanent impacts to shellfish as most of the project is above mean high water and not in shellfish habitat but near shellfish habitat.

#### **7:7-9.3 Surf clam areas**

This policy prohibits development that would destroy or contaminate surf clam areas.

This policy prohibits development that would destroy or contaminate surf clam areas. Surf clams inhabit waters from 30-160 feet deep. The project area is in shallow waters along the shoreline. Actions of the project will not occur in or affect any surf clam areas; therefore, this policy is not applicable.

#### **7:7-9.4 Prime fishing areas**

This policy prohibits sand or gravel submarine mining, which would alter existing bathymetry in a manner that would significantly reduce high fishery productivity in prime fishing areas. Prime fishing areas include tidal water areas and water's edge areas which have a demonstrable history of supporting a significant local intensity of recreational or commercial fishing activity in addition to areas identified in "New Jersey's Recreational and Commercial Fishing Grounds of Raritan Bay, Sandy Hook Bay and Delaware Bay and the Shellfish Resources of Raritan Bay and Sandy Hook Bay" by Figley and McCloy (1988) and those areas identified on the map titled, "New Jersey's Specific Sport Ocean Fishing Grounds".

The proposed project is not located in a prime fishing area as defined above nor does the proposed project involve any sand or gravel mining. Therefore, this policy is not applicable.

#### **7:7-9.5 Finfish migratory pathways**

This policy prohibits development such as dams, dikes, spillways, channelization, tide gates, and intake pipes that would create physical barriers to migratory fish or degrade water quality such that it interferes with fish movement.

The proposed project would not create permanent physical barriers to migratory fish nor would it degrade water quality. Erosion and sediment control best management practices will be implemented during construction to minimize impacts to water quality. The proposed project will have no permanent adverse impacts to water quality. Therefore, the proposed project complies with this policy.

#### **7:7-9.6 Submerged vegetation habitat**

This policy prohibits or restricts development at or near submerged vegetation habitats unless compensation efforts establish self-sustaining habitat for the appropriate species. As defined by the State, submerged vegetation consists of an area that supports or is documented as supporting rooted, submerged vascular plants such as widgeongrass (*Ruppia maritima*), sago pondweed (*Stuckenia pectinata*), horned pondweed (*Zannichellia palustris*), and eelgrass (*Zostera marina*). N.J.A.C. 7:7-9.6 states that in New Jersey, submerged vegetation is most prevalent in the shallow portions of the Navesink, Shrewsbury, Manasquan, and Metedeconk Rivers, and in Barnegat, Manahawkin, and Little Egg Harbor Bays.

Based on a review of “New Jersey Submerged Aquatic Vegetation Distribution” mapping, this policy is not applicable since the proposed project is not located in water areas supporting or documented as previously supporting rooted, submerged vascular plants.

#### **7:7-9.7 Navigation channels**

This policy prohibits construction that would extend into a navigation channel or would result in the loss of navigability. This policy discourages the placement of structures within 50 feet of any authorized navigation channel, unless it can be demonstrated that the proposed structure will not hinder navigation. This policy requires appropriate mitigation measures for development, which would cause terrestrial soil and shoreline erosion and siltation in navigation channels.

The Shrewsbury River within the project area does not have a constructed navigation channel. However, it is navigable for small watercraft. All elements of the proposed project are located on land, and are therefore in compliance with this policy.

#### **7:7-9.8 Canals**

This policy prohibits actions that would interfere with boat traffic in canals used for navigation, defined as navigation channels for boat traffic through land areas, which are

created by cutting and dredging or other human construction technique sometimes enlarging existing natural surface water channels.

This policy is not applicable because the proposed project does not involve or affect navigation canals used for boat traffic through land areas.

#### **7:7-9.9 Inlets**

This policy prohibits filling and discourages submerged infrastructure in inlets, which are natural channels through barrier islands allowing movement of fresh and salt water between the ocean and the back-bay system.

This policy is not applicable because the proposed project will not impact any inlets as defined above.

#### **7:7-9.10 Marina moorings**

This policy prohibits non-water dependent development in marina mooring areas and discourages any use that would detract from existing or proposed recreational boating use in marina mooring areas.

This policy is not applicable since the proposed project does not involve development in any marina mooring areas nor does it detract from existing or proposed recreational boating use in marina mooring areas.

#### **7:7-9.11 Ports**

This policy prohibits actions that would preempt or interfere with port uses. Ports are water areas having, or lying immediately adjacent to, concentrations of shoreside marine terminals and transfer facilities for the movement of waterborne cargo (including fluids), and including facilities for loading, unloading and temporary storage.

This policy is not applicable since the proposed project is not located in a port.

#### **7:7-9.12 Submerged infrastructure routes**

This policy prohibits any activity that would increase the likelihood of submerged infrastructure damage or breakage, or interfere with maintenance operations.

There is an existing natural gas pipeline in the western-most footprint of the proposed levee. This pipeline runs perpendicular to the levee, therefore only a small portion of the pipeline will be affected. As part of construction of the levee, the Corps will modify the pipeline to extend emergency shut off valves outside of the levee footprint and the 15 feet no vegetation zone in order to maintain emergency access to the pipeline. Therefore, the proposed project complies with this policy.

#### **7:7E-9.13 Shipwreck and artificial reef habitats**

This policy restricts the use of areas with shipwrecks and artificial reefs that would adversely affect the usefulness of the area as a fisheries resource.

This policy is not applicable since there are no shipwrecks or artificial reef habitats in the proposed project area.

#### **7:7-9.14 Wet borrow pits**

Wet borrow pits are scattered artificially created lakes that are the results of surface mining for coastal minerals extending below groundwater level to create a permanently flooded depression. This includes, but is not limited to, flooded sand, gravel, and clay pits, and stone quarries. Where a wet borrow pit is also a wetland and/or wetlands buffer, the wetlands rule, N.J.A.C. 7:7-9.27, and/or wetlands buffers rule, N.J.A.C. 7:7-9.28, shall apply.

This policy is not applicable since the proposed project does not contain nor will make use of any wet borrow pits.

#### **7:7-9.15 Intertidal and subtidal shallows**

This policy discourages disturbance of shallow water areas (all permanently or temporarily submerged areas from the spring high water line to a depth of four feet below mean low water).

The buried floodwalls will be partially constructed within the intertidal and subtidal shallows. However, the construction will be built in accordance with this rule. As well, the proposed project is in the interest of public safety. Additionally, the proposed project is compatible with existing land and water uses and is consistent with the filling rule (N.J.A.C. 7:7-12.11). Therefore, the project would be consistent with this policy.

#### **7:7-9.16 Dunes**

This policy prohibits development on dunes and removal of vegetation from dunes. A dune is a wind or wave deposited or man-made formation of sand (mound or ridge), that lies generally parallel to, and landward of, the beach and the foot of the most inland dune slope.

The project is not creating any dunes and there currently are no dunes at the site. Therefore, the project would be consistent with this policy.

#### **7:7-9.17 Overwash areas**

This policy restricts development in over-wash areas, an area 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, a dune or a structure.

The project involves construction of coastal storm risk management methods. The plan does not include or encourage development in any overwash areas. The project involves acceptable coastal storm risk management activities including restoration of overwash areas; therefore, the selected plan would be consistent with this policy.

#### **7:7-9.18 Coastal high hazard areas**

This policy restricts development in coastal high hazard areas, flood prone areas subject to high velocity waters as delineated on FEMA maps and areas within 25 feet of oceanfront shore protection structures, which are subject to wave run-up and overtopping. The coastal high hazard area is identified as Zone V on Flood Insurance Rate Maps (FIRMs).

Based on a review of FEMA Flood Insurance Rate Maps, the proposed project area is located in Zone VE and some in AE. The project involves construction of coastal storm risk management methods. The plan does not include or encourage development in any coastal high hazard area. The project involves acceptable coastal storm risk management activities including restoration of erosion hazard areas; therefore, the selected plan would be consistent with this policy.

#### **7:7-9.19 Erosion hazard areas**

This policy prohibits development in erosion hazard areas under most circumstances, to protect public safety. Erosion hazard areas are shoreline areas that are eroding and/or have a history of erosion, causing them to be highly susceptible to further erosion, and damage from storms.

The project does not include or encourage development in an erosion hazard area. The project will comply with coastal engineering rule, N.J.A.C. 7:7-15.11; involves acceptable coastal storm risk management activities including restoration of erosion hazard areas; therefore, the selected plan would be consistent with this policy.

#### **7:7-9.20 Barrier island corridor**

This policy restricts new development on barrier islands. Barrier island corridors are the interior portions of oceanfront barrier islands, spits, and peninsulas.

The borough of Highlands is not within a barrier island corridor; therefore, this policy does not apply.

#### **7:7E-9.21 Bay islands**

This policy restricts development on bay islands, islands or filled areas surrounded by tidal waters, wetlands, beaches, or dunes, lying between the mainland and barrier island.

The project does not contain any bay islands; therefore, this policy does not apply.

#### **7:7-9.22 Beaches**

This policy restricts development on beach areas. Beaches are gently sloping areas of sand or other unconsolidated material, found on all tidal shorelines, including ocean, bay, and river shorelines that extend landward from the mean high water line.

The project involves the construction of floodwalls along the beach. These are all acceptable activities that will meet the conditions listed within this coastal zone management plan; therefore, the project would be consistent with this policy.



#### **7:7-9.23 Filled water's edge**

This policy seeks to promote water dependent uses at areas along the waterfront that have been previously filled. Filled water's edge areas are existing filled areas lying between wetlands or water areas, and either the upland limit of fill, or the first paved public road or railroad landward of the adjacent water area, whichever is closer to the water.

The proposed activities will not reduce or adversely affect the area currently or recently devoted to any water dependent use and complies with the Public Access rule (N.J.A.C. 7:7- 16.9) as public access to the waterfront will be maintained by creating walkovers and reconstructing existing access. Therefore, the selected plan is consistent with this policy.

#### **7:7-9.24 Existing lagoon edges**

This policy restricts development at lagoon edges. Existing lagoon edges are defined as existing manmade land areas resulting from the dredging and filling of wetlands, bay bottom, and other estuarine water areas for the purpose of creating waterfront lots along lagoons for residential and commercial development.

This policy is not applicable since the proposed project is not located along any lagoon edges.

#### **7:7-9.25 Flood hazard areas**

This policy is designed to restrict development in flood hazard areas to ensure that the waterfront is not pre-empted by uses that could function equally at inland locations. The goal of this rule is to reduce losses of life and property resulting from unwise development of flood hazard areas, and allow uses compatible with periodic flooding. Flood hazard areas are areas subject to flooding from the flood hazard area design flood, as defined by NJDEP under the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. Flood hazard areas include those areas mapped as such by the NJDEP, areas defined or delineated as an A or a V zone by the FEMA, and any unmapped areas subject to flooding by the flood hazard area design flood.

The proposed project is located in Flood Zone VE and AE. Since the proposed project is a coastal storm risk management project involving the implementation of floodwalls the project is compatible with this policy.

#### **7:7-9.26 Riparian zones**

This policy restricts development in riparian zones around regulated waters.

The proposed project is within and along the Atlantic Ocean and therefore, this policy is not applicable.

#### **7:7-9.27 Wetlands**

This policy restricts disturbance in wetland areas and requires mitigation if wetlands are destroyed or disturbed.

The proposed floodwalls will permanently impact approximately 1 acre of freshwater wetlands. Approximately another 1 acre of wetlands will be temporarily impacted by construction of the floodwalls. There are also marine and estuarine mapped wetlands. However, these mapped wetlands do not contain vegetation and would not be delineated as wetlands. During Preconstruction Engineering and Design (PED) phase, a complete delineation will be conducted.

The temporarily impacted wetlands and buffers will be restored after construction and the permanently impacted freshwater wetland will be mitigated for utilizing a mitigation bank. All permits will be applied for after the project is authorized for construction and during the PED.

#### **7:7-9.28 Wetland buffers**

This policy restricts development in wetland buffer areas in order to protect wetlands.

The proposed alignment is located within the 150 feet wetland buffer area. The majority of the wetland buffer area has already been modified by development. However, temporary impacted wetlands and buffers will be restored and permanently impacted areas will be mitigated through the purchase of mitigation credits.

#### **7:7-9.29 Coastal bluffs**

This policy restricts development on coastal bluffs.

This policy is not applicable since the proposed project is not located along any coastal bluffs.

#### **7:7-9.30 Intermittent stream corridors**

This policy restricts actions in intermittent stream corridors.

This policy is not applicable since the proposed project is not located in intermittent stream corridors.

#### **7:7-9.31 Farmland conservation areas**

This policy seeks to maintain and protect large parcels of land used for farming for farming or farm dependent uses.

This policy is not applicable since the proposed project is not located near or on farmland conservation areas.

#### **7:7-9.32 Steep slopes**

This policy seeks to preserve steep slopes by restricting development in such areas.

This policy is not applicable since the proposed project is not located on steep slopes.

The topography within the project area is relatively flat, with significant slopes limited to the proposed levee.

#### **7:7-9.33 Dry borrow pits**

This policy restricts the use and provides maintenance of dry borrow pits within acceptable limits.

This policy is not applicable since the proposed project is not located near dry borrow pit areas.

#### **7:7E-9.34 Historic and archaeological resources**

This policy protects the value of historic and archaeological resources and may require cultural resource surveys and other protective measures.

Cultural resource surveys and coordination with the New Jersey Historic Preservation Office carried out for this study determined there are no archaeological resources within the shoreline protection portion of this project. However, there are portions of the project area where the project alignment has shifted and these areas will be evaluated in the Preconstruction, Engineering and Design (PED) Phase as stipulated in the Programmatic Agreement drafted to address all potential effects. There are several historic structures within the project area however; none of these will be directly impacted by the project. An assessment of the project's effect to their setting and viewsheds will also be undertaken as stipulated in a Programmatic Agreement. This project is consistent with this policy

#### **7:7-9.35 Specimen trees**

This policy seeks to protect specimen trees.

This policy is not applicable since the proposed project does not contain any known specimen trees.

#### **7:7-9.36 Endangered or threatened wildlife or plant species habitats**

This policy restricts development in endangered or threatened wildlife or vegetation species habitat areas.

Endangered or threatened wildlife or plant species habitats are terrestrial and aquatic (marine, estuarine, or freshwater) areas known to be inhabited on a seasonal or permanent basis by or to be critical at any stage in the life cycle of any wildlife or plant identified as "endangered" or "threatened" species on official federal or state lists of endangered or threatened species, or under active consideration for state or federal listing. The definition of endangered or threatened wildlife or plant species habitats includes a sufficient buffer area to ensure continued survival of the population of the species as well as areas that serve an essential role as corridors for movement of endangered or threatened wildlife. Absence of such a buffer area does not preclude an area from being endangered or threatened wildlife or plant species habitat.

Development of endangered or threatened wildlife or plant species habitat is prohibited unless it can be demonstrated, through an endangered or threatened wildlife or plant species impact assessment as described at N.J.A.C. 7:7-11, that endangered or threatened wildlife or plant species habitat would not directly or through secondary impacts on the relevant site or in the surrounding area be adversely affected.

Based on an official Endangered and Threatened species list the District obtained from the U.S. Fish and Wildlife Service, there is the potential for the federally threatened northern long-eared bat (*Myotis septentrionalis*), federally threatened piping plover (*Charadrius melodus*), federally threatened red knot (*Calidris canutus rufa*), and the federally threatened seabeach amaranth (*Amaranthus pumilus*) to occur within the project area. The District has determined there is “No effect” on the federally threatened northern long-eared bat, a “May affect, but is not likely to adversely affect” on the federally threatened piping plover, a “May affect, but is not likely to adversely affect” on the federally threatened red knot, and a “May affect, but is not likely to adversely affect” on the federally threatened seabeach amaranth.

There are no reported piping plovers within the project alignment. Most of the project alignment is along existing bulkhead that does not provide beach habitat for piping plovers. The little beach areas that do exist do not provide habitat for piping plovers. The beaches are very small, surrounded by homes or commercial buildings, and provide no foredune or washover areas. However, there are breeding piping plovers nearby on Sandy Hook beaches about a ¼ of a mile away for the project alignment. The use of vibratory pile driving may provide noise disturbance to the piping plovers. Current design level does not detail the type of pile driving, materials, or duration. During the Preconstruction Engineering and Design phase of the project, the District will coordinate with the Service in order to mitigate any noise impacts (dBA at nest cannot exceed 6dBA higher than ambient level). Such measures may include but are not limited to construction windows and noise dampening measures.

The District will survey for seabeach amaranth one week prior to construction on the beaches during the growing season (May 15 – Nov 30). If any seabeach amaranth plants are identified, the District will install string-and-post fencing to allow a 3-meter buffer around each plant or group of plants. Fencing will be marked with flagging and signs. No intrusions (including personnel, equipment, or materials) will be allowed within fenced areas. Surveys and fencing will be coordinated with the Service before and during the construction period.

There are no mitigation measures proposed for the northern long-eared bat and red knot.

Coordination with National Oceanic and Atmospheric Administration (NOAA) – Fisheries identified the endangered Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*), endangered shortnose sturgeon (*Acipenser brevirostrum*), endangered leather back sea turtle (*Dermochelys coriacea*), endangered loggerhead sea turtle (*Caretta caretta*), endangered Kemp’s ridley sea turtle (*Lepidochelys kempii*), endangered green sea turtle (*Chelonia mydas*), endangered North Atlantic right whale (*Eubalaena glacialis*), and endangered fin whale (*Balaenoptera physalus*).

In accordance with the 2017 Not Likely to Adversely Affect Programmatic Consultation, with NOAA – Fisheries, the District has determined that the proposed project complies with all applicable project design criteria and is not likely to adversely affect listed species

Based on a review of NJDEP Landscape 3.3, the project area is within suitable foraging habitat for the State endangered, black skimmer (*Rynchops niger*), State special concern, common tern, (*Sterna hirundo*), State endangered, least tern (*S. antillarum*), state threatened, osprey (*Pandion haliaetus*), State threatened, black-crowned night heron (*Nycticorax nycticorax*) and State special concern silver-haired bat (*Lasionycteris noctivagans*).

Houses and other buildings surround the project area. The beach habitat that does exist for the above listed species is very small: in about five 1 acres beaches, bisected by development. In a 2016 letter, NJ Division of Fish and Wildlife (NJDFW) – Endangered and Nongame Species stated no concerns for the above listed bird species. The District will follow the recommendation to conduct tree clearing only in the winter months for the silver-haired bat. The District will continue to coordinate with U. S. Fish and Wildlife Service (USFWS), NOAA –Fisheries and NJD

Therefore, the proposed project is compliant with this policy. The District will continue to coordinate with USFWS, NOAA –Fisheries and NJDFW – Endangered and Nongame Species

#### **7:7-9.37 Critical wildlife habitats**

This policy discourages development that would adversely affect critical wildlife habitat. Critical wildlife habitats are specific areas known to serve an essential role in maintaining wildlife, particularly in wintering, breeding, and migrating. Definitions and maps of critical wildlife habitats are currently available only for colonial waterbird habitat in the 1979 Aerial Colony Nesting Waterbird Survey for New Jersey. Other sites are considered on a case-by- case basis by the Division of Fish and Wildlife.

Development that will directly or through secondary impacts on the relevant site or in the surrounding region adversely affect critical wildlife habitats is discouraged, unless: minimal feasible interference with the habitat can be demonstrated; there is no prudent or feasible alternative location for the development; and the proposal includes appropriate mitigation measures.

The proposed project is not known to serve as critical wildlife habitat as defined by the state of New Jersey. Therefore, the proposed project complies with this policy.

#### **7:7-9.38 Public open space**

This policy encourages new public open spaces and discourages development that might adversely affect existing public open space. Public open space refers to lands owned or maintained by federal, state, or local agencies and which are dedicated to the conservation of public recreation, natural resources, visual or physical public access, and/or the protection and management of wildlife.

Development that adversely affects existing public open space is discouraged. Development within existing public open space is conditionally acceptable, provided that the development is consistent with the character and purpose of public open space, as described by the park master plan when such a plan exists. All new development adjacent to public open space will be required to provide an adequate buffer area.

A portion of the proposed project is located within the borough of Highlands, Veterans Memorial Park. The park includes a playground, basketball court, and a memorial. The basketball court and playground will not be impacted. The memorial will be elevated as a levee but still maintain the memorial.

The project would serve to protect public open space from coastal storm and hurricanes. Therefore, the proposed project is consistent with this policy.

#### **7:7-9.39 Special hazard areas**

This policy discourages development in hazard areas. Special hazard areas include areas with a known actual or potential hazard to public health, safety, and welfare, or to public or private property, including areas where hazardous substances are used or disposed, including adjacent areas and areas of hazardous material contamination.

This policy is not applicable since the proposed project does not affect special hazard areas.

#### **7:7-9.40 Excluded federal lands**

Excluded federal lands are those lands, the use of which is, by law, subject solely to the discretion of, or held in trust by the federal government, its officers, or agents. New Jersey has the authority to review activities on Federal lands if impacts may occur in New Jersey's Coastal Zone.

This policy is not applicable since the proposed project is not on the list of Excluded Federal Lands.

#### **7:7-9.41 Special urban areas**

This policy seeks to encourage development that would help to restore the economic and social viability of certain municipalities that receive state aid. Special urban areas

are those municipalities defined in urban aid legislation (N.J.S.A.52:27D178) qualified to receive state aid to enable them to maintain and upgrade municipal services and offset local property taxes.

This policy is not applicable since the proposed project is not located in special urban areas.

#### **7:7-9.42 Pinelands National Reserve and Pinelands Protection Area**

This policy allows the Pinelands Commission to serve as the reviewing agency for actions within the Pinelands National Reserve.

This policy is not applicable since the proposed project is not within the Pinelands National Reserve.

#### **7:7-9.43 Meadowlands District**

This policy allows the Meadowlands Development Commission to serve as the reviewing agency for actions within the Meadowlands District.

This policy is not applicable since the proposed project is not within the Meadowlands District.

#### **7:7-9.44 Wild and scenic river corridors**

This policy recognizes the outstanding value of certain rivers in New Jersey by restricting development to compatible uses. Wild and scenic river corridors are all rivers designated into the National Wild and Scenic Rivers System and any rivers or segments thereof being studied for possible designation into that system pursuant to the National Wild and Scenic Rivers Act (16 U.S.C. 1271-1278).

This policy is not applicable since the proposed project is not located in any Wild and Scenic River Corridor.

#### **7:7-9.45 Geodetic control reference marks**

This policy discourages the disturbance of geodetic control reference marks. Geodetic control reference marks are traverse stations and benchmarks established or used by the New Jersey Geodetic Control Survey pursuant to P.L. 1934, c.116. They include monuments, disks, points, rivets, and marks.

This policy is not applicable since the proposed project area does not contain any known geodetic control reference marks.

#### **7:7-9.46 Hudson River waterfront area**

This policy restricts development along the Hudson River Waterfront and requires development, maintenance, and management of a section of the Hudson Waterfront Walkway coincident with the shoreline of the development property.

This policy is not applicable since the proposed project is not located in the Hudson River Waterfront Area.

#### **7:7-9.47 Atlantic City**

This policy restricts development within the municipal boundary of the City of Atlantic City.

This policy is not applicable since the proposed project is not located in Atlantic City.

#### **7:7-9.48 Lands and waters subject to public trust rights**

This policy restricts development that adversely affects lands and waters subject to public trust rights. Lands and waters subject to public trust rights are tidal waterways and their shores, including both lands now or formerly below the mean high water line, and shores above the mean high water line. Tidal waterways and their shores are subject to the Public Trust Doctrine and are held in trust by the state for the benefit of all the people, allowing the public to fully enjoy these lands and waters for a variety of public uses.

This policy is not applicable since the proposed project is not located on lands and waters subject to public trust rights.

#### **7:7:9.49 Dredged material management areas**

A dredged material management area is an area documented through historical data, including, but not limited to, aerial photography, historic surveys, and/or previously issued permits, as having been previously used for the placement of sediment associated with the dredging of State and/or Federal navigation channels and marinas.

This policy is not applicable since the proposed project is not located within or near any dredged material management areas.

### **SUBCHAPTER 10. STANDARDS FOR BEACH AND DUNE ACTIVITIES**

#### **7:7-10.1 Purpose and scope**

This subchapter sets forth the standards applicable to routine beach maintenance, emergency post-storm restoration, dune creation and maintenance, and construction of boardwalks. These standards are referenced at N.J.A.C. 7:7-9.16, Dunes; N.J.A.C. 7:7-9.17, Overwash areas; N.J.A.C. 7:7-9.19, Erosion hazard areas; N.J.A.C. 7:7-9.22, Beaches; and N.J.A.C. 7:7-15.11, Coastal engineering. In addition, N.J.A.C. 7:7-10.2, 10.3, and 10.4 are the standards for the general permit for beach and dune maintenance activities, N.J.A.C. 7:7-6.2.

#### **7:7-10.2 Standards applicable to routine beach maintenance**



Routine beach maintenance includes debris removal and clean-up; mechanical sifting and raking; maintenance of accessways; removal of sand accumulated beneath a boardwalk; removal of sand from street ends, boardwalks/promenades, and residential properties; the repair or reconstruction of existing boardwalks, gazebos, and dune walkover structures; and limited sand transfers from the lower beach to the upper beach or alongshore (shore parallel).

This policy is not applicable since the proposed project is not routine beach maintenance.

#### **7:7-10.3 Standards applicable to emergency post-storm beach restoration**

This section on emergency post-storm beach restoration will apply to all beaches, which are impacted by coastal storms with a recurrence interval equal to or exceeding a five-year storm event. Emergency post-storm beach restoration projects not specifically identified in this section may be authorized by the Department through an emergency authorization pursuant to N.J.A.C. 7:7-21 if the Department determines that there is an imminent threat to lives or property.

This policy is not applicable since the proposed project is not an emergency post-storm beach restoration.

#### **7:7-10.4 Standards applicable to dune creation and maintenance**

Dune creation and maintenance includes the placement and/or repair of sand fencing (including wooden support posts), the planting, and fertilization of appropriate dune vegetation, the maintenance, and clearing of beach access pathways less than eight feet in width, and the construction or repair of approved dune walkover structures.

The project will not create dunes. Any vegetation planted will be native to New Jersey, floodwall walkovers will be constructed as described in Beach Dune Walkover Structures (Florida Sea Grant, 1981), and trees will not be used.

#### **7:7-10.5 Standards applicable to the construction of boardwalks**

The construction of oceanfront or bayfront boardwalks should address a number of engineering concerns related to structural support, resistance to vertical and horizontal water and wind loads, and scouring.

There are no boardwalks in the proposed project and therefore this policy is not applicable.

### **SUBCHAPTER 11. STANDARDS FOR CONDUCTING AND REPORTING THE RESULTS OF AN ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITAT IMPACT ASSESSMENT AND/OR ENDANGERED OR THREATENED SPECIES HABITAT EVALUATION**

This section details the performance and reporting standards for impact assessments for endangered and threatened wildlife species. If required, based on updated relevant agency correspondence, habitat/impact assessments for endangered and threatened species will conform to the performance and reporting standards listed.

This policy restricts development in endangered or threatened wildlife or vegetation species habitat areas.

Refer to Section 7:7-9:36. The District will continue coordination with the USFWS, NOAA-Fisheries, and NJDFW throughout all phases of the project.

## **SUBCHAPTER 12. GENERAL WATER AREAS**

### **7:7-12.1 Purpose and scope**

General water areas are all water areas, which are located below either the spring high water line or the normal water level of non-tidal waters. Sections 7:7-12.2-12.24 set forth the requirements for specific types of development within general water areas.

### **7:7-12.2 Shellfish aquaculture**

This policy sets standards for shellfish aquaculture. Shellfish aquaculture means the propagation, rearing, and subsequent harvesting of shellfish in controlled or selected environments, and the processing, packaging and marketing of the harvested shellfish. Shellfish aquaculture includes activities that intervene in the rearing process to increase production such as stocking, feeding, transplanting, and providing for protection from predators. For the purposes of this section, shellfish means any species of benthic mollusks including hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), surf clams (*Spisula solidissima*), bay scallops (*Aequipectin irradians*), and oysters (*Crassostrea virginica*). Shellfish shall not include conch, specifically, knobbed whelks (*Busycon carica*), lightning whelks (*Busycon contrarium*), and channeled whelks (*Busycotypus canaliculatus*).

This policy is not applicable because the proposed project is not related to shellfish aquaculture.

### **7:7-12.3 Boat ramps**

This policy sets standards for the installation of boat ramps.

This policy is not applicable because the proposed project is not constructing boat ramps.

### **7:7-12.4 Docks and piers for cargo and commercial fisheries**

This policy sets standards for the installation of docks and piers specific for cargo and passenger movement either supported on pilings driven into the bottom substrate or floating on the water surface, used for loading and unloading passengers or cargo and ensure they do not interfere with navigation.

This policy is not applicable because the proposed project is not constructing docks or piers as described above.

#### **7:7-12.5 Recreational docks and piers**

This policy sets standards for recreational and fishing docks and piers supported on pilings driven into the bottom substrate or floating on the water surface or cantilevered over water, which are used for recreation fishing or for the mooring of boats or jet skis used for fishing or recreation.

This policy is not applicable because the proposed project is not constructing recreational docks or piers.

#### **7:7-12.6 Maintenance dredging**

This policy sets standards for maintenance dredging is the periodic removal of accumulated sediment from previously legally dredged navigation and access channels, marinas, lagoons, canals, or boat moorings for the purpose of safe navigation.

This policy is not applicable because it does not involve maintenance dredging.

#### **7:7-12.7 New dredging**

New dredging is the removal of sediment that does not meet the definition of maintenance dredging at N.J.A.C. 7:7-12.6 or the definition of environmental dredging at N.J.A.C. 7:7-12.8.

This policy is not applicable because it does not involve new dredging.

#### **7:7-12.8 Environmental dredging**

Environmental dredging means new dredging performed in a special hazard area designated as such pursuant to N.J.A.C. 7:7-9.39 specifically to remove contaminated sediments for the purpose of remediating to an environmental standard as specified in the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E.

This policy is not applicable to the proposed project, as it does not involve dredging as described above.

#### **7:7-12.9 Dredged material disposal**

Dredged material disposal is the discharge of sediments removed during dredging operations in water areas. Dredged material disposal does not include the beneficial use of dredged material for the purposes of habitat creation, restoration, or enhancement, artificial reef construction, or the establishment of living shorelines.

This policy is not applicable because the proposed project does not involve dredged material disposal.

#### **7:7-12.10 Solid waste or sludge dumping**

This policy prohibits the dumping of solid waste or sludge into a water areas. Solid waste or sludge is defined as the discharge of solid or semi-solid waste material from industrial or domestic sources or sewage treatment operations into a water area.

The construction contractor will be required to prepare an Environmental Protection Plan that will outlined measures taken to prevent any unregulated discharges.

#### **7:7-12.11 Filling**

This policy sets standards related to fill activities within water areas. Filling is defined as the deposition of material including, but not limited to, sand, soil, earth, and dredged material, into water areas for the purpose of raising water bottom elevations to create land areas.

In cases where there is no alternative to filling, filling is conditionally acceptable provided: 1) The use that requires the fill is water-dependent; 2) There is a demonstrated need that cannot be satisfied by existing facilities; 3) There is no feasible or practicable alternative site on an existing water's edge; 4) The minimum practicable area is filled; 5) The adverse environmental impacts are minimized; 6) Minimal feasible interference is caused to special areas, as defined at N.J.A.C. 7:7-9; and 7) Pilings and columnar support or floating structures are unsuitable for engineering or environmental reasons.

This policy is not applicable because the proposed project is not conducting any filling as defined by this rule.

#### **7:7-12:12 Mooring**

This policy sets standards for mooring structures. A boat mooring is a temporary or permanently fixed or floating anchored facility in a water body for the purpose of attaching a boat.

This policy is not applicable because the proposed project does not involve mooring structures.

#### **7:7 12.13 Sand and gravel mining**

This policy sets standards for sand and gravel mining in water bodies. Sand and gravel mining is the removal of sand or gravel from the water bottom substrate, usually by suction dredge, for the purpose of using the sand or gravel at another location.

This policy is not applicable, as the proposed project does not involve sand or gravel mining.

#### **7:7-12.14 Bridges**

This policy sets standards for the construction of bridges located within the CZM area.

This policy is not applicable, as the proposed project does not involve the construction or modification of any bridges.

### **7:7 -12:15 Submerged pipelines**

This policy sets standards for submerged pipelines (pipelines) are underwater pipelines, which transmit liquids or gas, including crude oil, natural gas, water petroleum products, or sewerage.

The proposed project includes a pump station with associated pipes for interior drainage. Pipelines for interior drainage are a necessary part of the project and will be constructed according to the rules of this policy.

### **7:7-12:16 Overhead transmission lines**

This policy sets standards for overhead transmission lines installed along or within waterbodies.

This policy is not applicable, as the proposed project does not involve the construction of overhead transmission lines.

### **7:7-12:17 Dams and impoundments**

Dams and impoundments are structures that obstruct natural water flow patterns for the purpose of forming a contained volume of water. Impoundments include dikes with sluice gates and other structures to control the flow of water.

This policy is not applicable, as the proposed project does not involve the construction dams or impoundments as defined by this policy.

### **7:7-12:18 Outfalls and intakes**

This policy sets standards for the installation of outfalls and intakes within waterways. Outfalls and intakes are pipe openings that are located in water areas for the purpose of intake of water or discharge of effluent including sewage, stormwater, and industrial effluents.

The outfalls associated with the project will meet the rules of this chapter. Therefore, the proposed project complies with this policy.

### **7:7-12.19 Realignment of water areas**

Realignment of water areas means the physical alteration or relocation of the surface configuration of any water area.

The proposed is not realigning any water areas. Therefore, this policy is not applicable.

### **7:7-12.20 Vertical wake or wave attenuation structures**

Vertical wake or wave attenuation structures are structures designed to protect boat moorings, including those at marinas, by intercepting wakes or waves and reducing the wake or wave energy, which would normally impact the adjacent boat mooring areas. Typically, timber, metal, or vinyl wake or wave attenuation structures are designed and

utilized to protect boat moorings. For the purposes of this section, a vertical wake or wave attenuation structure does not include a breakwater constructed of concrete or rubble mound. Breakwaters designed to protect shoreline areas shall comply with the filling rule, N.J.A.C. 7:7-12.11, and the coastal engineering rule at N.J.A.C. 7:7-15.11.

The proposed project does not involve the construction of any structures defined above. Therefore, this policy is not applicable.

#### **7:7-21 Submerged cables**

This policy sets standards for the construction of submerged cables such as underwater telecommunication cables, and all associated structures in the water such as repeaters.

The proposed project does not involve the installation of submerged cables and is therefore not applicable.

#### **7:7-12.22 Artificial reefs**

This policy sets standards for the construction of artificial reefs. Artificial reefs are man-made structures intended to simulate the characteristics and functions of natural reefs created by placing hard structures on the sea-floor for the purpose of enhancing fish habitat and/or fisheries. In time, an artificial reef will attain many of the biological and ecological attributes of a natural reef. Artificial reefs do not include shore protection structures, pipelines, fish aggregating devices, and other structures not constructed for the sole purpose of fish habitat.

The proposed project does not involve the creation of artificial reefs and is therefore not applicable.

#### **7:7-12.23 Living shorelines**

This policy sets to standards to the creation of living shorelines. Living shorelines are a shoreline management practice that addresses the loss of vegetated shorelines and habitat in the littoral zone by providing for the protection, restoration, or enhancement of these habitats. This is accomplished through the strategic placement of vegetation, sand or other structural and organic materials.

The proposed project does not involve the creation of living shorelines and is therefore not applicable.

#### **7:7-12.24 Miscellaneous uses**

Miscellaneous uses are uses of water areas not specifically defined in this section or addressed in the use rules, N.J.A.C. 7:7-15.

The proposed project provides hurricane and coastal storm protection, which is in the public interest. Therefore, the proposed project complies with this policy

## **SUBCHAPTER 13. REQUIREMENTS FOR IMPERVIOUS COVER AND VEGETATIVE COVER FOR GENERAL LAND USE AREAS AND CERTAIN SPECIAL AREAS**

### **7:7-13.1 Purpose and Scope**

This policy sets forth requirements for impervious cover and vegetative cover on sites in the upland waterfront development area and CAFRA areas.

### **7:7-13.2 Definitions**

This section defines the terms used in the subchapter.

### **7:7-13.3 Impervious cover requirements that apply to sites in the upland waterfront development and CAFRA areas**

This section sets forth impervious cover requirements that apply to sites in the upland waterfront development and CAFRA areas.

The proposed project is not developing impervious cover as defined by this rule. Therefore, this rule is not applicable.

### **7:7-13.4 Vegetative cover requirements that apply to sites in the upland waterfront development and CAFRA areas**

This section sets forth vegetative cover requirements that apply to sites in the upland waterfront development and CAFRA areas. Vegetative cover percentages, specific to each of these areas, are found at N.J.A.C. 7:7-13.14 and 13.18. More trees may be planted or preserved than required, and if so, the herb/shrub area shall be reduced proportionately.

### **7:7-13.5 Determining if a site is forested or unforested**

This policy sets forth the vegetative cover percentage that applies to a site in the upland waterfront development area or CAFRA area varies depending on whether the site is forested. If only a portion of a site is forested, separate vegetative cover percentages shall be calculated for the forested and unforested portions of the site.

The portion of the project that contains trees is less than 1 acres and is surrounded on all sides with less than one tree per 100 square feet. This rule classifies the project as unforested.

### **7:7-13.6 Upland waterfront development area regions and growth ratings**

This policy set forth the growth rating for a site in the upland waterfront development area and is determined by the region in which it is located, and the growth rating assigned to that region.

The proposed project is in the northern waterfront region and assigned a development growth rating.

### **7:7-13.7 Determining the environmental sensitivity of a site in the upland waterfront development area**

This policy sets forth the environmental sensitivity of a site in the upland waterfront development area, which is based on the soil type and the depth to seasonal high water table or the presence of paving or structures. Different portions of a site may have different environmental sensitivities.

Portions of the project are low environmental sensitivity while the portions that contain beach are a medium environmental sensitivity.

**7:7-13.8 Determining the development potential of a site in the upland waterfront development area**

This policy set forth the development potential as determined by the type of development proposed and the presence or absence of certain development-oriented elements at or near the site of the proposed development, including roads; wastewater conveyance, treatment and disposal system; and existing development. Development potential may be high, medium, or low, as determined under N.J.A.C. 7:7-13.9 through 13.11. A single development potential applies to an entire site.

The proposed project is not in the upland waterfront development area as defined by this policy and therefore this policy is not applicable.

**7:7-13.9 Determining the development potential for a residential or minor commercial development site in the upland waterfront development area**

Subject to the limitation at N.J.A.C. 7:7-13.8(c)1, the development potential for a residential development site or a minor commercial development site in the upland waterfront development area is determined using (b) through (d) below

The proposed project is not a residential or minor commercial development as defined by this policy and therefore this policy is not applicable.

**7:7-13.10 Determining the development potential for a major commercial or industrial development site in the upland waterfront development area**

Subject to the limitations at N.J.A.C. 7:7-13.8(c)2, the development potential for a major commercial or industrial development site in the upland waterfront development area is determined under (b) through (d) below.

The proposed project is not a major commercial or industrial development and therefore this policy is not applicable.

**7:7-13.11 Determining the development potential for a campground development site in the upland waterfront development area**

Subject to the limitations at N.J.A.C. 7:7-13.8(c)3, the development potential for a campground development site in the upland waterfront development area is determined using (b) through (d) below.

The proposed project is not a campground and therefore this policy is not applicable.



**7:7-13.12 Determining the development intensity of a site in the upland waterfront development area**

This policy sets forth the development intensity for a site in the upland waterfront development area based on growth rating, environmental sensitivity, and development potential.

The development intensity for the proposed project site is low.

**7:7-13.13 Impervious cover limits for a site in the upland waterfront development area**

This policy sets forth the impervious cover limit for the site.

The proposed project is not constructing impervious cover. Therefore, this policy is not applicable.

**7:7-13.14 Vegetative cover percentages for a site in the upland waterfront development area**

This policy sets forth the amount in which trees and/or herb/shrub vegetation shall be planted or preserved.

The proposed project has a tree preservation and/or planting percentage of 5%. The project will plant with native vegetation that will cover more than 5% of the area. Therefore the project is consistent with this policy.

**7:7-13.15 Coastal Planning Areas in the CAFRA area**

This policy sets forth definitions of the coastal planning area.

The proposed project is within the Coastal Metropolitan Planning Area.

**7:7-13.16 Boundaries for Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes; non-mainland coastal centers**

The boundaries of the Planning Areas, the community development boundaries of centers, and the boundaries of cores and nodes formally approved by the State Planning Commission as of August 1, 1999, are incorporated by reference into this subchapter. These boundaries are the boundaries of the Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes and shall be operative for the purposes of applying the requirements for impervious cover and vegetative cover under this subchapter.

**7:7-13.17 Impervious cover limits for a site in the CAFRA area**

This policy sets forth the impervious cover limit for a site in the CAFRA area

The proposed project is not constructing imperious cover. Therefore, this policy is not applicable.

**7:7-13.18 Vegetative cover percentages for a site in the CAFRA area**

This policy set forth the vegetation cover percentages for a site in the CAFRA area.

The tree preservation and/or planting percentage for unforested portion of site is determined to be zero.

#### **7:7-13.19 Mainland coastal centers**

This policy sets forth that the boundaries delineated by the Department for mainland coastal centers not located on barrier islands, oceanfront spits, or peninsulas in the CAFRA area, which expired in 2007. The expired boundaries were re-established under the Permit Extension of Act of 2008 as amended January 18, 2010, September 19, 2012, and December 26, 2014. The boundaries of mainland coastal centers are described in Appendix J of this chapter.

### **SUBCHAPTER 14. GENERAL LOCATION RULES**

#### **7:7-14.1 Rule on location of linear development**

This policy sets conditions for acceptability of linear development (e.g., roads, walkways, pipelines).

This policy is not applicable since there is no linear development associated with the proposed project.

#### **7:7-14.2 Basic location rule**

This policy states that the NJDEP may reject or conditionally approve a project for safety, protection of certain property, or preservation of the environment.

The proposed project would involve protecting private and public property through the construction of floodwalls. The location of the coastal storm risk management measures is necessary to provide the necessary storm risk management to the surrounding community.

#### **7:7-14.3 Secondary impacts**

This policy sets the requirements for secondary impact analysis from the effects of additional development likely to be constructed as a result of the approval of a particular proposal. Secondary impacts are the effects of additional development likely to be constructed as a result of the approval of a particular proposal. Secondary impacts can also include traffic increases, increased recreational demand, and any other offsite impacts generated by onsite activities, which affect the site and surrounding region.

This policy is not applicable because the proposed project would not involve additional development nor would induce additional development.

### **SUBCHAPTER 15. USE RULES**

#### **7:7-15.1 Purpose and scope**

Use rules are rules and conditions applicable to particular kinds of development. In general, conditions contained in the use rules must be satisfied in addition to the location rules (N.J.A.C. 7:7-9 through 14), and the resource rules described in the following subchapter (N.J.A.C. 7:7-16).

### **7:7-15.2 Housing**

This policy sets standards for housing construction in coastal areas.

The proposed project involves implementing nonstructural measures and a levee to protect existing residential and business structures and does not include new construction or expansion of the existing footprint. The proposed project is compatible with this policy.

### **7:7-15.3 Resort/recreational**

This policy sets standards for resort and recreational uses in the coastal area.

This policy is not applicable because the proposed project does not involve resort or recreational uses.

### **7:7-15.4 Energy facility**

This policy sets standards for energy uses in coastal areas.

This policy is not applicable because the proposed project does not involve new construction that would require long-term energy use.

### **7:7-15.5 Transportation**

This policy sets standards for roads, public transportation, footpaths, and parking facilities in coastal areas.

This policy is not applicable since the proposed project does not involve construction of roads, public transportation, footpaths, and/or parking facilities.

### **7:7-15.6 Public facility**

This policy sets standards for public facilities (e.g., solid waste facilities) in coastal areas.

This policy is not applicable since the proposed project does not involve construction of a public facility.

### **7:7-15.7 Industry**

This policy sets standards for industrial uses in coastal areas.

This policy is not applicable because the proposed project does not involve construction of industrial facilities.

### **7:7-15.8 Mining**

This policy sets standards for mining in coastal areas.

This policy is not applicable because the proposed project does not involve mining.

#### **7:7-15.9 Port**

This policy sets standards for port uses and port-related development.

This policy is not applicable because the proposed project does not involve port use or the construction of a port.

#### **7:7-15.10 Commercial facility**

This policy sets standards for commercial facilities such as hotels, and other retail services in the coastal zone.

This policy is not applicable since the proposed project does not involve construction of commercial facilities.

#### **7:7-15.11 Coastal engineering**

This policy sets standards to protect the shoreline, maintain dunes, and provide beach nourishment. Coastal engineering measures include a variety of non-structural, hybrid, and structural shore protection and storm damage reduction measures to manage water areas and protect the shoreline from the effects of erosion, storms, and sediment and sand movement. Beach nourishment, sand fences, pedestrian crossing of dunes, stabilization of dunes, dune restoration projects, dredged material management, living shorelines, and the construction of retaining structures such as bulkheads, gabions, revetments, and seawalls are all examples of coastal engineering measures.

The proposed project includes the construction of floodwalls. Therefore, the Coastal Engineering Use Rule applies. The project will be designed to comply with the standards relevant to coastal engineering and provide maximum flood protection while minimizing impacts to natural resources and maintaining public access to the Sandy Hook Bay. Therefore, the proposed project complies with this rule.

#### **7:7-15.12 Dredged material placement on land**

This policy sets standards for placement of dredged materials landward of the spring high water line.

During construction, the contractor will be required to adhere to an Erosion and Sediment Control Plan and develop an Environmental Protection Plan to deal with any excavated material. There will be no placement of sand on the beach. The project is designed to protect human life and infrastructure.

#### **7:7-15.13 National defense facilities**

This policy sets standards for the location of defense facilities in the coastal zone.

This policy is not applicable since the proposed project does not involve national defense facilities.

#### **7:7-15.14 High-rise structures**

This policy sets standards for high-rise structures in the coastal zone.

This policy is not applicable because the proposed project does not involve high-rise structures.

### **SUBCHAPTER 16. RESOURCE RULES**

**7:7-16.1: Purpose and scope:** This subchapter contains the standards the Department utilizes to analyze the proposed development in terms of its effects on various resources of the built and natural environment of the coastal zone, both at the proposed site as well as in its surrounding region.

#### **7:7-16.2 Marine fish and fisheries**

This policy sets standards of acceptability so as to cause minimal feasible interference with the reproductive and migratory fish patterns of estuarine and marine species of finfish and shellfish.

The proposed project is located in Essential Fish Habitat (EFH) for a variety of species. The EFH assessment determined that the adverse effect on EFH is not substantial. Therefore, the project complies with this policy.

#### **7:7-16.3 Water quality**

This policy sets standards for coastal development to limit effects on water quality.

Short-term water quality impacts resulting from construction activities may occur and are anticipated to be localized to the vicinity of the footprint proposed levee. Erosion and sediment control best management practices will be implemented during construction to minimize impacts to water quality. No long-term impacts to the offshore or near-shore water quality are anticipated as a result of the proposed project.

#### **7:7-16.4 Surface water use**

This policy sets standards for coastal development so as to limit effects on surface water.

Short-term water quality impacts resulting from construction activities are expected and are anticipated to be localized proximal to the footprint of the proposed project. Erosion and sediment control best management practices will be implemented during construction to minimize impacts to surface water.

#### **7:7-16.5 Groundwater use**

This policy sets standards for coastal development so as to limit effects on groundwater supplies.

This policy is not applicable because the proposed project does not involve or effect future use of groundwater supplies.

#### **7:7-16.6 Stormwater management**

This policy sets forth that “major developments” must abide by the Stormwater Management Rules N.J.A.C. 7:8-1.2.

The proposed project will abide by the Stormwater Management Rules. Therefore, the project is compliant with this policy.

#### **7:7-16.7 Vegetation**

This policy sets standards for coastal development while protecting native vegetation. Vegetation is the plant life or total plant cover that is found on a specific area, whether indigenous or introduced by humans. Coastal development shall preserve, to the maximum extent practicable, existing vegetation within a development site. Coastal development shall plant new vegetation, particularly appropriate coastal species, and native to New Jersey to the maximum extent practicable.

Construction of the proposed levee, and to a lesser degree, the nonstructural measures will result in temporary and permanent disturbance of vegetation. Per USACE policy, a 15- foot vegetation free zone (maintained lawn only) is required on either side of the levee. Existing vegetation will be preserved to the maximum extent practicable. Most of the area within the project footprint has undergone prior disturbance. Invasive and nuisance species and monocultures of common reed are common within the footprint of the levee. Following construction, impacted areas would be stabilized and revegetated. Per USACE and state policy, all vegetation replanted will be native to New Jersey.

#### **7:7-16.8 Air quality**

This policy sets standards for coastal development with requirements that projects must meet applicable air quality standards.

Emissions to construct the proposed project do not exceed threshold levels for any emission variable. As a result, a Clean Air Act, Record of Non-Applicability has been prepared. The proposed project is consistent with this policy since it is not anticipated to increase air emissions above existing levels.

#### **7:7-16.9 Public access**

This policy requires that coastal development adjacent to the waterfront provide perpendicular and linear access to the waterfront to the extent practicable, including both visual and physical access.

A portion of the levee is located within Veterans Memorial Park. The park does not offer direct waterfront access (e.g. canoe launch), however, it does offer view of the bay. The design of the levee will maintain views of the bay from within most of the park. The buried levees will visually block views of the bay however; walkovers will be installed

providing access to the water. Along the bulkhead and floodwall sections, existing access to the water will be maintained with walkovers. Therefore, the proposed project is consistent with this policy. This policy does not apply to the portions of the project that are located on private property.

#### **7:7-16.10 Scenic resources and design**

This policy sets standards that new coastal development be visually compatible with its surroundings.

There will be a change in the scenery for most residents and businesses along the waterfront. The levee, bulkhead and, floodwall will obstruct views of the bay. However, the project is necessary to protect these homes and businesses from coastal storms. The height of the project will be 14 feet one foot less than the height discussed in this policy. Therefore, the proposed project is consistent with this policy.

#### **7:7-16.11 Buffers and compatibility of uses**

This policy sets standards for adequate buffers between compatible land uses. Buffers are natural or man-made areas, structures, or objects that serve to separate distinct uses. Compatibility of uses is the ability for uses to exist together without aesthetic or functional conflicts.

The proposed project is intended to protect surrounding land uses, which includes park facilities and residential and business structures from coastal storm damage. The proposed levee and floodwall in Veterans Memorial Park will be consistent with current park usage. Therefore, the proposed project is consistent with this policy.

#### **7:7-16.12 Traffic**

This policy sets standards that restrict coastal development that would disturb traffic systems.

The proposed project would make every effort possible to mitigate temporary impacts on traffic during construction. The proposed project would have no permanent effects on traffic and therefore is consistent with this policy.

#### **7:7-16.13 Subsurface sewage disposal systems**

This policy sets standards for subsurface sewage disposal systems in the coastal zone.

This policy is not applicable because the proposed project does not involve sewage disposal or the development of a subsurface sewage disposal system.

#### **7:7-16.14 Solid and hazardous waste**

This policy sets standards for handling and disposal of solid and hazardous waste.

This policy is not applicable because the proposed project does not involve solid and hazardous waste. The construction contractor will be required to develop an Environmental Protection Plan that details the prevention of accidental discharge of any solid waste during construction.





## State of New Jersey

PHILIP D. MURPHY  
Governor

SHEILA Y. OLIVER  
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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CATHERINE R. McCABE  
Commissioner

April 16, 2020

Mr. Peter Wepler, Chief  
Environmental Analysis Branch  
U.S. Army Corps of Engineers, New York District  
26 Federal Plaza  
New York, New York 10278-0090

RE: Raritan Bay and Sandy Hook Bay, Highlands, New Jersey  
Coastal Storm Risk Management Feasibility Study  
Final Integrated Feasibility Report & Environmental Assessment

Dear Mr. Wepler:

The NJDEP Division of Land Use Regulation (Division) is writing in regard to the U.S. Army Corps of Engineers (ACOE), New York District's Final Integrated Feasibility Report and Environmental Assessment (FIFR/EA) for the Raritan Bay and Sandy Hook Bay, Highlands, New Jersey, Coastal Storm Risk Management Feasibility and, more specifically, the Clean Water Act, Section 401 Water Quality Certification (WQC) and the Coastal Zone Management Act, Section 307 Federal Consistency decisions for the Project.

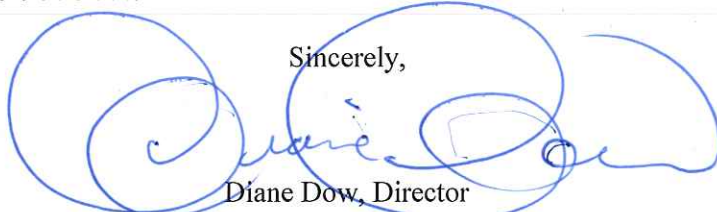
The FIFR/EA recommends authorizing a plan to reduce the risk of damages from flooding to the portions of northeastern New Jersey, within the New York City metropolitan area. The principle features of the National Economic Development plan include:

- a) I-Type and T-Type floodwalls to elevation +14 ft North American Vertical Datum of 1988 (NAVD88) with a total length of 10,737 linear feet along the bay shoreline; and
- b) For interior drainage purposes a detention pond, one pump station, and pressurized pipes.

The Division has no significant issues or major concerns with the ACOE moving forward with further design of this important project. The Division does not foresee any problems that would preclude issuance of a Federal Consistency determination/WQC for the Highlands Coastal Storm Risk Management Project, provided that the ACOE submits a Federal Consistency/WQC request for the final selected project design and the Division can confirm that the proposed project is consistent with its Coastal Zone Management rules.

The Division looks forward to coordinating with the ACOE during the next phase of the project and to receiving the Corps' request for the WQC and Federal Consistency decisions. If you have any questions, please contact me at 609 984-3444.

Sincerely,

A handwritten signature in blue ink, appearing to read "Diane Dow", is written over the typed name and title.

Diane Dow, Director  
NJDEP, Division of Land Use Regulation

cc: Virginia Kopkash, Assistant Commissioner  
Dave Rosenblatt, Assistant Commissioner  
William Dixon, NJDEP Division of Coastal Engineering