Routine Program Change Submission

Coastal Permit Program rules, N.J.A.C. 7:7
Coastal Zone Management rules, N.J.A.C. 7:7E

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Section I. Introduction

The New Jersey Coastal Management Program (NJCMP) is requesting approval by the Office of Ocean and Coastal Resource Management (OCRM) to incorporate regulatory amendments, repeal and new rules to the Coastal Permit Program rules and Coastal Zone Management (CZM) rules into the NJCMP that were adopted on an emergency basis to address the significant adverse, social, economic, and environmental impacts associated with Superstorm Sandy which hit New Jersey's coastline on Monday, October 29, 2012, and in support of the rebuilding and economic recovery of New Jersey's coastal areas in an expeditious and resilient manner; and to incorporate regulatory amendments to the CZM rules to implement legislative amendments to CAFRA concerning the construction of wind energy facilities on piers. A summary of the proposed changes to the NJCMP follows:

Changes in response to Superstorm Sandy

On April 16, 2012, the Department adopted regulatory amendments to its Coastal Permit Program rules and CZM rules to facilitate the expeditious rebuilding of more resilient coastal communities and coastal-related tourism industries, and help facilitate the recovery of the coastal ecosystem (see Section II for summary of Superstorm Sandy related changes). These amendments were adopted on an emergency basis and became effective upon acceptance for filing by the New Jersey Office of Administrative Law. Concurrently, the provisions of the emergency adoption were proposed for readoption pursuant to the rulemaking requirements of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq, and on June 17, 2013 the readopted amendments became effective upon acceptance for filing by the New Jersey Office of Administrative Law. Because the regulatory amendments, repeal, and new rules change existing enforceable policies of the NJCMP, the Department is seeking to include the following into New Jersey's approved CMP as enforceable policies:

Coastal Permit Program rules

- Regulatory amendments:
  Definitions, N.J.A.C. 7:7-1.3; CAFRA, N.J.A.C. 7:7-2.1; Waterfront development, N.J.A.C. 7:7-2.3; Permits-by-rule, N.J.A.C. 7:7-7.2; and Coastal general permit for marina support facilities at existing marinas, N.J.A.C. 7:7-7.13; and

- New rules:
  Coastal general permit for habitat creation, restoration, enhancement, and living shorelines, N.J.A.C. 7:7-7.29*; Coastal general permit for the dredging of sand from a man-made lagoon deposited as a result of a storm event for which the Governor declared a State of Emergency, N.J.A.C. 7:7-7.32; Coastal general permit for the dredging of material from a waterway at a residential or commercial development deposited as a result of the failure of a bulkhead as a result of a storm event for which the Governor declared a State of Emergency, N.J.A.C. 7:7-7.33; Coastal general permit for dredging and dredged material management of material management of material from a marina that was deposited as a result of the failure of a bulkhead as a result of a storm event for which the Governor declared a State of Emergency, N.J.A.C. 7:7-7.34; Coastal general permit for commercial aquaculture activities, N.J.A.C. 7:7-7.35; and Coastal general permit for placement of shell within shellfish lease areas, N.J.A.C. 7:7-7.36.

* This coastal general permit was adopted on April 17, 2006 and was not submitted to OCRM for incorporation into the NJCMP at that time. The Department modified this general permit as part of the April 2013 emergency rulemaking and concurrent readoption and is submitting it for inclusion as an enforceable policy of the NJCMP at this time.

CZM rules

- Regulatory amendments:
  Correspondence with the Department, N.J.A.C. 7:7E-1.7; Definitions, N.J.A.C. 7:7E-1.8; Shellfish habitat, N.J.A.C. 7:7E-3.2; Submerged vegetation habitat, N.J.A.C. 7:7E-3.6; Intertidal and subtidal shallows, N.J.A.C. 7:7E-3.15; Dunes, N.J.A.C. 7:7E-3.16; Beaches, N.J.A.C. 7:7E-3.22; Wetlands, N.J.A.C. 7:7E-3.27; Purpose and scope (standards for beach and dune maintenance activities), N.J.A.C. 7:7E-3A.1; Standards applicable to routine beach maintenance, N.J.A.C. 7:7E-3A.2; Standards applicable to emergency post-storm beach restoration, N.J.A.C. 7:7E-3A.3; Standards applicable to dune creation and maintenance, N.J.A.C. 7:7E-3A.4; Shellfish aquaculture, N.J.A.C. 7:7E-4.2; Filling, N.J.A.C. 7:7E-4.10; Vertical wake and wave attenuation structures, N.J.A.C. 7:7E-4.19; Resort/recreational use, N.J.A.C. 7:7E-7.3; Dredged material management on land, N.J.A.C. 7:7E-7.12; and Marine fish and fisheries, N.J.A.C. 7:7E-8.2;

- Repeal and new rule:
  Coastal engineering, N.J.A.C. 7:7E-7.11; and

- New rule:
  Living shorelines, N.J.A.C. 7:7E-4.23.

<u>Changes in response to legislative amendments to CAFRA, P.L.2011, c. 20</u>

In February 2011, the Legislature enacted N.J.S.A. 13:19-10.1 which amends CAFRA to allow for the construction of wind dependent energy facilities on piers in the coastal area provided the wind energy facility is an accessory use to the other uses of, or purposes of, the pier. As mandated by the legislation, the Department modified the CZM rules' energy facility use rule, N.J.A.C. 7:7E-7.4, through a special adoption to also except from the CZM rules' siting restrictions wind turbines on piers throughout the coastal area. The Department readopted the special adopted change on June 19, 2012. Because the special adoption and subsequent readoption modifies an existing enforceable policy of the NJCMP, the Department is seeking to include the following into New Jersey's approved CMP as enforceable policies:

CZM rules

- Regulatory amendments:
  Energy facility use, N.J.A.C. 7:7E-7.4.

The Department considers the above actions to constitute a "Routine Program Change" of the NJCMP. Under 15 C.F.R. 923.84(a), changes to an approved coastal management program constitute Routine Program Change when they do not result in the kind of amendments of the state's Coastal Management Program that can be described as "substantial changes to enforceable policies or authorities related to: (1) uses subject to management; (2) special management areas; (3) boundaries; (4) authorities and organization; and, (5) coordination, public involvement and national interest."

This submission was prepared in accordance with the requirements for Routine Program Changes as set forth in 15 C.F.R. §923.84 and the guidelines for Routine Program Changes contained in OCRM's Program Change Guidance (1997).

Section II. Changes to the Coastal Rules in Response to Superstorm Sandy

By virtue of their location at the interface between oceans and land, coastal areas are among the most dynamic environments on earth. As a result, they are particularly susceptible to a broad range of natural hazards, such as flooding, storm surge, erosion, and storms. Catastrophic events, such as Superstorm Sandy, alter beaches, dunes, and wetlands, and threaten people's lives and property. Given the State's density, flooding and storm surge present severe and deleterious social, economic and environmental impacts within New Jersey's coastal areas when structures are not built to modern, appropriate standards.

New Jersey suffered extraordinary levels of damage to homes, businesses, and infrastructure as a result of Superstorm Sandy which hit the New Jersey coast on October 29, 2012. In addition to the loss of life, damage to property and businesses, and disruption to the lives of the State's residents that occurred as a result of Superstorm Sandy, unprecedented damage was done to the coastal environment. To date, as much as 8 million cubic yards of debris from the storm had been removed, with removal continuing. As a result of the storm, nearly 1,400 vessels were either sunk or abandoned. In Mantoloking alone, 58 buildings and eight cars were washed into Barnegat Bay. The continued presence of sand washed into coastal water bodies and wetlands not only inhibits navigation, but also threatens the ecology of the bays and other waters, and wetlands.

The Department determined that changes to the Coastal Permit Program rules and CZM rules (coastal rules) were necessary in view of the significant adverse social, economic, and environmental impacts resulting from the storm and in support of the rebuilding and economic recovery of New Jersey's coastal areas in an expeditious and resilient manner. The changes to the coastal rules are intended to facilitate the expeditious rebuilding of more resilient coastal communities and coastal-related industries, and help facilitate the recovery of the coastal ecosystem. The changes fall into five broad categories: (1) facilitation of the expeditious rebuilding of residential and commercial developments; (2) facilitation of renovation or reconstruction of existing marinas and construction of new marinas; (3) restoration of New Jersey's shellfish aquaculture industry; (4) maintenance of engineered beaches and dunes and establishment of living shorelines; and (5) facilitation of removal of sand and other materials, as well as the availability of dredged material disposal/placement areas. In addition to facilitating the resilient recovery and rebuilding of New Jersey's coastal communities, the changes enable the Department to implement the coastal management program in an effective, efficient, and environmentally protective manner. The coastal management program, through the coastal rules, will continue to steer development away from naturally hazardous and sensitive areas, protect estuarine and marine environments from adverse impacts, and promote resource conservation and designs sensitive to the environment.

Facilitation of the expeditious rebuilding of residential and commercial developments

Superstorm Sandy was the worst storm to strike New Jersey in 100 years. As a result of Sandy, New Jersey's housing stock was significantly affected. In March 2013, the State reported that approximately 67,977 owners' primary residences sustained some amount of physical damage and this number continues to increase as the assessment of damages continues. Many dwellings that suffered significant damage will continue to deteriorate and need to be reconstructed in an expeditious, resilient, and environmentally mindful manner. Residents remain displaced. A large

number of commercial buildings also were physically damaged, many of which need to be substantially reconstructed. Many businesses that were not physically destroyed were economically harmed because of the impacts on their neighbors and the community at large.

The New Jersey shore, which encompasses 127 miles of ocean beaches from Sandy Hook to Cape May, is a magnet for visitors and is less than one tank of gas from more than one-quarter of the U.S. population. Tourism is vital to the State's economy, generating approximately $38 billion in revenue annually. Tourism employment in 2011 consisted of 312,000 jobs and $9.5 billion in wages, approximately 9.8 percent of the total State's economy (The Economic Impact of Tourism in New Jersey, Tourism Satellite Account, Calendar Year 2011, see http://www.visitnj.org/sites/visitnj.org/files/2011-nj-tourism-economic-impact-state-and-counties.pdf).

Those choosing to rebuild in coastal communities will do so in a more resilient and environmentally protective manner. To facilitate that resilient rebuilding of the New Jersey Shore, revitalize the State's economy, and take advantage of resources available for rebuilding, it was essential that changes be made immediately through the emergency rule making process. Taking these actions will allow individuals, businesses, municipalities, and communities to begin or continue to recover from the devastation inflicted by Superstorm Sandy, while remaining mindful of environmental impacts and ensuring that the shore is rebuilt in a more resilient manner.

To assist in the monumental task of rebuilding, as discussed in more detail below, the changes to the coastal rules streamline the permitting process through clarification of the exemption under the Waterfront Development Law concerning the reconstruction or replacement of structures in-place at N.J.A.C. 7:7-2.3(d)6 and 7; modification of the permit-by-rule at N.J.A.C. 7:7-7.2(a)7 for reconstruction of residential or commercial development; and addition of a permit-by-rule at N.J.A.C. 7:7-7.2(a)8 for expansion or relocation (with or without expansion) laterally or landward of a residential or commercial development.

Facilitation of renovation or reconstruction of existing marinas and construction of new marinas

New Jersey's recreational boating industry was also severely impacted by Superstorm Sandy, with docks, marine equipment, buildings and boats significantly damaged or destroyed. The Marine Trades Association of New Jersey conducted a survey to assess the damage to marinas and recreational boating related businesses affected by Superstorm Sandy. One hundred nine businesses responded to the survey. As reported by the Marine Trades Association, damage to facilities, including buildings, property and docks, exceeded $35.5 million, while total losses of inventory, equipment, supplies, buildings, property, and docks exceeded $54.6 million. Using the information provided from the surveys submitted, the Marine Trades Association of New Jersey estimates that, including anticipated damages to other marinas that did not complete the survey, uninsured losses are in excess of $100 million.

As a tradition in New Jersey, the boating season begins on April 1 with many boaters deciding at that time whether to dock their boats at New Jersey marinas or to go elsewhere, if they go anywhere at all. As marinas seek to rebuild it is imperative that our regulations reflect their need to rebuild quickly, better, with more resiliency, and in a manner that is cost effective and economically viable. Accordingly, the changes to the coastal rules needed to be in place as soon as practicable. These

regulatory changes will also help marina owners take advantage of grants and loans that may become available to them as part of the Superstorm Sandy recovery effort.

To facilitate the rebuilding of New Jersey's marinas, in addition to the clarification of the exemption under the Waterfront Development Law concerning the reconstruction or replacement of structures in-place at N.J.A.C. 7:7-2.3(d)6 and 7, modification of the permit-by-rule at N.J.A.C. 7:7-7.2(a)7 and addition of a new permit-by-rule at N.J.A.C. 7:7-7.2(a)8 noted above (which allow reconstruction of commercial development and the expansion or relocation of commercial development, respectively), the regulatory changes also added a new permit-by-rule at N.J.A.C. 7:7-7.2(a)15 for the reconfiguration of any legally existing dock, wharf, or pier located at a legally existing marina and a new permit-by-rule at N.J.A.C. 7:7-7.2(a)20 for the construction and /or installation of a pumpout facility and/or pumpout support facility, and modified the existing coastal general permit at N.J.A.C. 7:7-7.13 for the construction of support facilities at legally existing and operating marinas. In addition, the focus of the breakwater rule at N.J.A.C. 7:7E-4.19 was changed to the protection of boat mooring areas, and flexibility in the design of these structures has been added. To add flexibility in the design of new marinas, and reconstruction or renovation of existing marinas, the resort/recreational use rule at N.J.A.C. 7:7E-7.3 was modified.

Restoration of New Jersey's shellfish aquaculture industry

Information compiled by the New Jersey Department of Agriculture indicates that New Jersey's hard clam and oyster aquaculture industry suffered nearly $1,347,500 in damages to property, buildings, gear, structures and product as a result of Superstorm Sandy. Specifically, it is estimated that the hard clam aquaculture industry, which is the largest aquaculture sector and valued at $3.5 million, suffered approximately $1,118,000 in property damage, with an estimated $130,000 in lost hard clams. New Jersey's second largest aquaculture sector, oysters, incurred approximately $33,000 in property damage and $66,500 in oysters lost.

To facilitate the restoration of this industry and to encourage shellfish aquaculture activities, the changes to the coastal rules streamline the permitting process through the addition of three new permits-by-rule: placement of land based upwellers and raceways, N.J.A.C. 7:7-7.2(a)17; placement of predator screens and oyster spat attraction devices, N.J.A.C. 7:7-7.2(a)18; and placement of shellfish cages within a shellfish lease area, N.J.A.C. 7:7-7.2(a)19. The changes also add a new general permit for commercial aquaculture activities, N.J.A.C. 7:7-7.35, and a new general permit for placement of shell within shellfish lease areas, N.J.A.C. 7:7-7.36. The CZM rules' general water area rule at N.J.A.C. 7:7E-4.2, which contains the standards for aquaculture, has also modified to specifically address shellfish aquaculture.

Maintenance of engineered beaches and dunes and establishment of living shorelines

Superstorm Sandy wreaked havoc along the coast. Its effects on beaches, dunes, and wetlands varied in intensity based on the location of the beach, dune or wetland in relation to the center of the storm. As we rebuild we must do so in a way that is more resilient and better protects New Jerseyans and their property. Unfortunately, some of New Jersey's existing regulations do not easily allow for measures such as living shorelines or the maintenance of beaches and dunes at engineered levels. Therefore it was essential to immediately adopt these regulatory changes so that the most protective and ecologically beneficial shore protection measures can be implemented.

Observations made in a study by Richard Stockton College of New Jersey (Stockton) based on the New Jersey beach profile data shows severe beach erosion along the New Jersey coast. The Department has reviewed three reports by Stockton dated November 13, 2012, December 5, 2012 and December 12, 2012 that assessed the performance of beaches and dunes that are part of New Jersey's Beach Profile Network. The New Jersey Beach Profile Network consists of over 100 beach profile sites along the entire shoreline, including the Raritan and Delaware Bays (see http://intraweb.stockton.edu/eyos/page.cfm?siteID=149&pageID=4). The reports indicate that municipalities with an engineered dune system or a wide and well developed natural beach and dune system had less damage than those without such protections.

Superstorm Sandy also severely impacted New Jersey's tidal wetlands. Tidal wetlands buffer uplands from chronic and episodic erosion caused by wave action, as well as provide habitat for aquatic flora and fauna. Significant amounts of tidal wetlands have been lost. To address this loss, rather than armoring the shoreline with hard structures, such as bulkheads or revetments, the State is looking to a natural solution through the establishment of living shorelines, as an alternative that adds diversity to other shore protection measures. 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 establishment, management, and maintenance of a dune system along the developed shoreline and the establishment of living shorelines will enhance storm protection. These enhancements are achieved through changes to the dune and beach special area rules at N.J.A.C. 7:7E-3.16 and 3.22, respectively, as well as the new standards for beach and dune maintenance activities at N.J.A.C. 7:7E-3A, which will make it easier for municipalities to maintain engineered dune systems. Specifically, the changes allow for the maintenance of engineered beaches and dunes to the design template, and allow for the removal of accumulated sand beneath a boardwalk, as well as placement of temporary sand fencing during the winter months. A permit-by-rule at N.J.A.C. 7:7-7.2(a)16 is added for the placement of sand fencing to create or sustain a dune. To facilitate the establishment of living shorelines, changes were made to the general permit at N.J.A.C. 7:7.29 for habitat creation and enhancement, and to the CZM rules for shellfish habitat, N.J.A.C. 7:7E-3.2; submerged vegetation habitat, N.J.A.C. 7:7E-3.6; intertidal subtidal shallows, N.J.A.C. 7:7E-3.15; wetlands, N.J.A.C. 7:7E-3.27; filling, N.J.A.C. 7:7E-4.11; coastal engineering, N.J.A.C. 7:7E-7.11; and marine fish and fisheries, N.J.A.C. 7:7E-8.2. In addition, a new general water area rule at N.J.A.C. 7:7E-4.23 for living shorelines was created.

Facilitation of removal of sand and other materials, as well as the availability of dredged material disposal/placement areas

The navigability of New Jersey's coastal waters is significantly impeded by sand, other materials, and debris from Superstorm Sandy. The deposition of this material and debris threatens the health and safety of boaters, as well as the aquatic environment. The amount of debris that was deposited into the waterways is so significant that the Department has contracted with three contractors to identify, remove, dispose of, or recycle the debris and dredge and redistribute sand on the coastal barrier islands.

To streamline the permitting process for dredging activities, a new permit-by-rule has been added at N.J.A.C. 7:7-7.2(a)21 for the implementation of a sediment sampling plan in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated site. In addition, to facilitate the removal of sand and other materials from lagoons, marinas, and where a bulkhead failed, three new general permits were added: one at N.J.A.C. 7:7-7.32 to address the circumstance where material was deposited as a consequence of a storm event for which the Governor declared a State of Emergency, including the dredging of sand from a man-made lagoon; one at N.J.A.C. 7:7-7.33 for the dredging of material from a waterway at a residential or commercial development deposited as a result of the failure of a bulkhead; and one at N.J.A.C. 7:7-7.34 for the dredging and management of material from a marina. The regulatory changes also clarify the regulation of dredged material management areas under the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq. (CAFRA), at N.J.A.C. 7:7-2.1(b)13 and the beneficial use of dredged material is encouraged under the three new general permits at N.J.A.C. 7:7-7.32, 7.33, and 7.34 noted above, and the living shorelines rule at N.J.A.C. 7:7E-4.23, coastal engineering rule at N.J.A.C. 7:7E-7.11 and dredged material placement on land rule at N.J.A.C. 7:7E-7.12.

Section III. Coastal Permit Program Rules, N.J.A.C. 7:7

To facilitate the expeditious rebuilding of more resilient coastal communities and coastal-related industries, and help facilitate the recovery of the coastal ecosystem as described in Section II above, the Department has streamlined the coastal permitting process through the clarification of certain exemptions under the Waterfront Development Law, the addition of an exemption for the rehabilitation and reuse of dredged material management areas within the same footprint under CAFRA, the modification of 1 permit-by-rule and 2 general permits and the addition of 8 new permits-by-rule and 5 new general permits. These changes will eliminate or reduce potential time and submission requirements, while remaining protective of the coastal environment.

The Coastal Permit Program rules establish the procedures by which the Department reviews permit applications and appeals from permit decisions under CAFRA, the Waterfront Development Law and Wetlands Act of 1970. These rules also contain the permits-by-rule and coastal general permits. The authority for the Coastal Permit Program rules is founded in the following statutes:

- **N.J.S.A. 12:5-3, Waterfront Development Law:** This Law authorizes the Department to regulate the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipeline, cable or other similar development on or adjacent to tidal waterways throughout the state. Outside of the CAFRA area and Hackensack Meadowlands District, the Law applies in upland areas adjacent to tidal waters extending from the mean high water line to the first paved public road, railroad or surveyable property line. Upland jurisdiction extends from the mean high water line landward a minimum of 100 feet and not exceeding 500 feet. Within this area, construction, reconstruction, alteration, expansion or enlargement of any structure, or the excavation or filling of any area are subject to this Law;

- **N.J.S.A. 13:9A-1 et seq., Wetlands Act of 1970:** This Act authorizes the Department to regulate activities on coastal wetlands that have been delineated and mapped by the Department. Examples of regulated activities include excavation, dredging, fill or placement of a structure on a mapped coastal wetland;

- **N.J.S.A. 13:19-1 et seq., Coastal Area Facility Review Act (CAFRA):** CAFRA applies to projects near coastal waters in the southern part of the State. The CAFRA area begins where the Cheesequake Creek enters Raritan Bay in Old Bridge, Middlesex County. It extends south along the coast around Cape May, and then north along the Delaware Bay ending at Kilcohook National Wildlife Refuge in Salem County. The inland limit of the CAFRA area is an irregular line that follows public roads, railroad tracks, and other features. The width of the CAFRA area varies from a few thousand feet to nearly 17 miles. The law divides the CAFRA area into zones, and regulates different types and sizes of development in each zone. Regulated activities within the CAFRA area include a wide variety of residential, commercial, industrial or public development such as construction, relocation, and enlargement of buildings and structures; and associated work such as excavation, grading, site preparation and the installation of shore protection structures;

- **N.J.S.A. 13:1D-9, Powers of the Department:** This statute provides that the Department shall formulate comprehensive policies for the conservation of the natural resources of the State, the promotion of environmental protection and the prevention of pollution of the environment of the State; and

- **N.J.S.A. 13:1D-29 et seq., Ninety-Day Construction Law:** This Chapter establishes application submission requirements, public notice requirements, fees and review procedures for permit applications submitted to the Department under the Waterfront Development Law, N.J.S.A. 12:5-3; Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.; Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq. and Flood Hazard Area Control Act, N.J.S.A. 58:16A -1 et seq. as well as sewer extensions under the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

Table A, Routine Program Change, Coastal Program Permit rules (*Table A-RPC CPPR.doc*), identifies the changes to the rules and provides an analysis describing the changes and why they are not significant changes to New Jersey's approved CMP. These changes do not change the program approvability area of boundaries nor do they change special management areas. While the changes may affect the program approvability areas of uses subject to management, authorities and organization, or consideration of the national interest, these changes are not substantial for the reasons described in the analysis portion of Table A. The rule text subject to the Routine Program Change is found below.

Coastal Permit Program Rule Text Subject to Routine Program Change

Changes to existing rule text approved by OCRM are shown as follows:
Additions indicated in **underlined boldface**; and
Deletions shown in **[**~~bracketed strikethrough~~**]**.

SUBCHAPTER 1. GENERAL PROVISIONS
7:7-1.3 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Living shoreline" means a shoreline management practice that addresses the loss of vegetated shorelines, beaches, 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 plants, stone, sand, or other structural and organic materials. There are three types of living shorelines: natural, hybrid, and structural. Natural living shorelines include natural vegetation, submerged aquatic vegetation, fill, and biodegradable organic materials. Hybrid living shorelines incorporate natural vegetation, submerged aquatic vegetation, fill, biodegradable organic materials, and low-profile rock structures such as segmented sills, stone containment, and living breakwaters seeded with native shellfish. Structural living shorelines include, but are not limited to, revetments, breakwaters, and groins.

"Non-polluting material" means a material such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete, steel or other inert products. Creosote and pressure-treated lumber (that is, treated with preservatives such as CCA-C, ACZA, CC, and ACQ) which is susceptible to leaching is not considered "non-polluting material."

"Pumpout facility" means a facility intended to receive the discharge of wastewater from a marine sanitation device. Pumpout facilities include, but are not limited to, fixed pumpout stations, dockside pumpouts, portable pumpouts, pumpout boats, and dump stations.

SUBCHAPTER 2. ACTIVITIES FOR WHICH A PERMIT IS REQUIRED
7:7-2.1 CAFRA

(a) (No change.)

(b) The Department interprets its obligation and responsibility to regulate development as defined by CAFRA to include review of the potential impacts of any development, if at least part of that development is located within the area in which a CAFRA permit is required. Therefore, if any development requires a CAFRA permit, the Department will review all of the components of the development, not just those that triggered the regulatory thresholds of CAFRA. In addition, the Department will review all the components of a development that spans the zones in (a) above if the total development exceeds a regulatory threshold. The Department interprets the statutory intent as excluding developments with relatively minor impacts. In addition, the repair and maintenance of

utilities within rights-of-way on beaches and dunes are not regulated development, as defined at N.J.A.C. 7:7-1.3 provided that all disturbed areas are restored to their pre-disturbance condition. To that end, the following statutory terms are interpreted to mean the following, for the purposes of this section.

1. The method for determining whether an existing development is an intervening development is as follows:

i. For proposed developments other than single family home or duplex and/or accessory development as described in (b)1ii below, extend a line landward and perpendicular to the mean high water line from each of the widest shore-parallel points of the footprint of the existing development (see Appendix B, incorporated herein by reference). If the proposed development does not fall entirely within these lines, then the existing development is not considered intervening development.

ii. For a proposed single family home or duplex and/or accessory development (such as garages, sheds, pools, driveways, excluding shore protection structures) that is not part of a larger development, extend a line landward and perpendicular to the mean high water line from each of the widest shore-parallel points of the footprint of the existing development (see Appendix C, incorporated herein by reference). If the proposed single family home or duplex and/or accessory development extends beyond these lines more than 15 feet on either side or a cumulative total of 20 feet, then the existing development is not considered intervening development.

iii. Existing developments that may be considered intervening development include above-ground structures such as houses, garages, cabanas or bath houses which are fully enclosed and serviced by a municipal sewer system, and commercial, industrial or public buildings provided the above-ground structure received all necessary Federal, State and local approvals and was:

(1) Completed or under active construction as of July 19, 1994;

(2) Exempt from CAFRA; or

(3) Constructed under a CAFRA permit.

iv. Existing developments that are not considered intervening development include shore protection structures, seawalls, bulkheads, retaining walls, gabions, revetments, fences, boardwalks, promenades, patios, decks, carports, prefabricated sheds without foundations, docks, piers, lifeguard stands, gazebos, swimming pools, utility lines, culverts, railroads, roadways, sewage pump stations, or seasonal or temporary structures associated with the tourism industry as defined at N.J.A.C. 7:7-1.3 or constructed under the coastal general permit for the construction of certain types of temporary and seasonal developments at hotels and motels, commercial developments and multi-family residential developments of 75 units, N.J.A.C. 7:7-7.26.

2. If located in an area other than a beach or a dune, public development is not the following:

i. The maintenance, repair or replacement (including upgrade) of existing petroleum, sewage or natural gas pipelines, and associated pump stations and connection junctions, and electrical substations, located completely within paved roadways or paved, gravel, or cleared and maintained rights-of-way, provided that the replacement of sewage pipelines and associated pump stations does not result in an increase in the associated sewer service area;

ii. The maintenance, repair, modification, or replacement of sanitary system components other than pipelines and associated pump stations, including upgrading of systems from primary to secondary treatment, provided that an increase in capacity will not result;

iii. The construction, maintenance, repair or replacement (including upgrade) of water lines, telecommunication and cable television lines, including fiber optic cables, poles and transfer and/or switching stations associated with telecommunication lines, provided the transfer and/or switching station is located completely within paved roadways or paved, gravel, or cleared and maintained

rights-of-way. This does not include the construction of telecommunication towers such as cellular telephone towers;

iv. The maintenance, repair or replacement of existing and functional railroads and related structures located completely within cleared and maintained rights-of-way;

v. The maintenance and repair of existing stormwater management facilities which receive, store, convey or discharge stormwater runoff;

vi. The construction of less than 1,200 linear feet of new stormwater pipes;

vii. The construction or expansion of educational facilities as defined at N.J.A.C. 7:7-1.3;

viii. The construction of seasonal or temporary structures related to the tourism industry as defined at N.J.A.C. 7:7-1.3; or

ix. The construction, maintenance, repair or replacement of power lines.

3. In addition to the activities identified at (b)2 above, if located more than 150 feet from the mean high water line of any tidal waters, or the landward limit of a beach or a dune, whichever is most landward, public development is not the following:

i. The construction of a new road, sanitary sewer pipeline, petroleum pipeline or natural gas pipeline of less than 1,200 feet in length or the extension of a road, sanitary sewer pipeline, stormwater management facility, petroleum pipeline or natural gas pipeline of less than 1,200 feet in length, not to exceed a cumulative total of 1,200 feet in any one municipality at any one site, unless the construction is located within a development requiring a CAFRA permit in which case it shall be considered part of the development for which a permit is required; or

ii. The construction of telecommunication towers such as cellular telephone towers.

4. Equivalent parking areas will be calculated at 270 square feet per parking space, including one half of the associated aisle area, excluding access drives. This calculation shall apply to both paved and unpaved parking areas.

5. A development that is used solely for the storage of food or other merchandise, excluding storage of agri-chemical and petroleum products, and that is not associated with any on-site manufacturing or industrial process and is not specifically included in the definition of industrial development at N.J.A.C. 7:7-1.3 is considered a "commercial development."

6. Municipal or other government administrative, public works or emergency services buildings that are not specifically included in the definition of public development at N.J.A.C. 7:7-1.3 or parks which are publicly owned or controlled are considered commercial developments.

7. Churches, synagogues or other houses of worship are considered commercial developments.

8. Development or expansion of existing developments "either solely or in conjunction with a previous development" is described at (b)8i through iv below. "Previous development" includes developments that either were previously constructed after September 19, 1973 or developments that previously received a CAFRA permit which remains valid but the approved development has not yet been built. For the purposes of (b)8i, ii and iii below, contiguous parcels shall include, but not be limited to, those land areas which directly abut or are separated by a general access roadway or other right-of-way, including waterways, or those land areas which are part of a subdivision existing and under common ownership on or after September 19, 1973.

i. The construction of any residential or commercial development on contiguous parcels of property, regardless of present ownership, where there is a proposed sharing of infrastructure constructed to serve those parcels including, but not limited to, roads, utility lines, drainage systems, open spaces or septic drain fields;

ii. The construction of any residential or commercial development on contiguous parcels of property which were under common ownership on or after September 19, 1973, regardless of present

ownership, or any subdivision or re-subdivision of a parcel of land which occurred after September 19, 1973;

iii. The construction of any residential or commercial development on contiguous parcels of property, where there is some shared pecuniary, possessory, or other substantial common interest by one or more individuals in the units;

iv. The addition of one or more parking spaces or dwelling units or equivalent to any existing dwelling units or parking spaces or equivalent parking area for which construction had commenced subsequent to September 19, 1973 where such addition, when combined with the existing dwelling units or parking area, results in a total exceeding the regulatory threshold. Any dwelling units or parking areas in existence on or before September 19, 1973 which have been determined by the Department to be exempt from the requirements of this subchapter due to on-site construction on or before September 19, 1973 will not be counted when determining if a new or expanded development exceeds the regulatory threshold.

(1) The addition of parking spaces by restriping is not regulated.

v. The total number of dwelling units or parking spaces in a new or expanded development need not be restricted to any single municipal tax block nor to any one period in time in order to require a permit;

vi. The construction of a development below the regulatory threshold as defined in this section, where such construction is part of a larger planned development in which the total development will exceed the regulatory threshold.

9. Commercial development not located on a beach or a dune and not located within 150 feet of the beach, dune or mean high water line unless there is an intervening development as described at (b)1 above, excludes development which:

i. Does not cause the number of parking spaces (either solely or in conjunction with the existing development) to exceed the regulatory threshold of the appropriate zone; or

ii. Does not propose development of any new parking spaces, regardless of whether the total number of existing parking spaces exceeds the regulatory threshold of the appropriate zone.

10. The elevating of an existing residential, commercial, industrial, or public building on pilings does not require a CAFRA permit, unless the elevating of the existing building is associated with an enlargement and such enlargement is not exempt under CAFRA pursuant to (c)4 below or unless the elevating of the existing building involves excavation, filling, or grading on a beach or a dune. Additional parking spaces located under a building elevated in accordance with this paragraph are not counted toward the parking space or equivalent parking area limits at (a) above.

11. Residential developments which include the offsite construction of more than 1,200 linear feet of new sewer pipelines or roads require a CAFRA permit regardless of the number of dwelling units. For all other residential developments which are not located on a beach or dune, whether a CAFRA permit is required is based on the number of dwelling units proposed only and not the length of roadways or sewer pipelines on-site.

12. The classification or removal from classification of the municipality in which a development is located as a "qualifying municipality," as defined at N.J.A.C. 7:7-1.3, affects the requirement for a CAFRA permit for such development as follows:

i. If construction of the development under a valid CAFRA permit has been started and the municipality in which the development is located either becomes classified or is removed from classification as a "qualifying municipality," the permittee is obligated to comply with all conditions of the permit;

ii. If construction of the development under a valid CAFRA permit has not been started at a time when the municipality in which the development is located is classified as a "qualifying municipality" such that the development does not require a CAFRA permit under (a)3 or 4 above, the permittee need not comply with the conditions of the issued permit;

iii. If construction of the development is started in accordance with all necessary approvals at a time when the municipality in which the development is located is classified as a “qualifying municipality” such that the development does not require a CAFRA permit under (a)3 or 4 above, and if subsequently the municipality is removed from classification as a "qualifying municipality," the Department shall not require a CAFRA permit for the development provided construction continues to completion with no lapses in construction that cumulatively total one year or more;

iv. If site plan approval is obtained for the development pursuant to the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.) at a time when the municipality in which the development is located is classified as a "qualifying municipality" such that the development does not require a CAFRA permit under (a)3 or 4 above, and if subsequently the municipality is removed from classification as a "qualifying municipality," the Department shall not, for a period of one year from the date that the municipality is removed from classification as a "qualifying municipality," require a CAFRA permit for the development, provided construction is started within this one-year period and continues through completion with no lapses in construction that cumulatively total one year or more;

v. If preliminary subdivision approval is obtained for a residential development pursuant to the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), and no subsequent site plan approval is required, at a time when the municipality in which the development is located is classified as a "qualifying municipality" such that the development does not require a CAFRA permit under (a)3 or 4 above, and if subsequently the municipality is removed from classification as a "qualifying municipality," the Department shall not, for a period of one year from the date that the municipality is removed from classification as a "qualifying municipality," require a CAFRA permit for the development, provided construction is started within this one-year period and continues through completion with no lapses in construction that cumulatively total one year or more;

vi. For the purposes of (b)12iii through v above, construction means having completed one of the following, as approved as part of the municipal site plan or subdivision approval:

(1) The foundation for one of the buildings or structures;

(2) The subsurface improvements for the roadways; or

(3) The bedding for utilities.

vii. Development under (b)12iii through v above is limited to the specific project depicted on the approved site plan or for residential developments only, the specific project that was the subject of the subdivision approval, namely development of the subdivision which is consistent with the lot coverage, use and density restrictions of the zoning ordinances that were in effect at the time of the subdivision approval or that were authorized by the subdivision approval.

13. Development is not the following:

i. The installation of a wind turbine(s) provided the turbine(s) is:

(1) On or structurally attached to a legally existing building;

(2) Less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position;

(3) No greater than 2,000 square feet in cumulative rotor swept area; and

(4) Any portion of the tower of the wind turbine more than 100 feet above the ground surface is a freestanding monopole;[~~or~~]

ii. The installation of a solar panel(s) provided the solar panel(s) is:

(1) On or structurally attached to a legally existing building;

(2) On or structurally attached to a utility pole (electric, telephone, cable and lighting) within a maintained utility right-of-way or on or structurally attached to a parking lot light pole;

(3) On legally existing impervious cover unless the solar panel would be located in a floodway; or

(4) On a sanitary landfill provided the solar panel is included in the Closure and Post-Closure Care Plan or modified plan as approved by the Department in accordance with N.J.A.C. 7:26[~~.~~]**; or**

iii. The rehabilitation and use of an existing dredged material management area within the same footprint.

(c) – (f) (No change.)

7:7-2.3 Waterfront development

(a) – (c) (No change.)

(d) A permit shall be required for the construction, reconstruction, alteration, expansion or enlargement of any structure, or for the excavation or filling of any area, any portion of which is in the waterfront area as defined in (a) above, with the exceptions listed below:

1. In the waterfront area defined in (a)3 above, the construction, alteration, expansion or reconstruction of an individual single family dwelling unit or addition to such unit, if constructed more than 100 feet landward of the mean high water line;

2. In the waterfront area defined in (a)3 above, the reconstruction, conversion, alteration or enlargement of any existing structure located more than 100 feet landward of the mean high water line, provided that no change in land use results, and that enlargements do not exceed 5,000 square feet;

3. In the waterfront area defined in (a)3 above, minor additions to or changes in existing structures or manufacturing operations that do not result in adverse environmental impacts to Special Areas defined at N.J.A.C. 7:7E-3, provided the additions is located in an existing cleared area of the site, and is set back a minimum of 15 feet landward of the mean high water line, where such changes or additions do not result in a change in the present land use of the site;

4. In the waterfront area defined in (a)3 above, the installation of a wind turbine(s) provided the wind turbine(s) is:

i. On or structurally attached to a legally existing building;

ii. Less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position;

iii. No greater than 2,000 square feet in cumulative rotor swept area; and

iv. Any portion of the tower of the wind turbine more than 100 feet above the ground surface is a freestanding monopole;

5. In the waterfront area defined in (a)3 above, the installation of solar panels provided the solar panels are:

i. On or structurally attached to a legally existing building;

ii. On or structurally attached to a utility pole (electric, telephone, cable and lighting) within a maintained utility right-of-way or on or structurally attached to a parking lot light pole;

iii. On legally existing impervious cover provided the solar panels are not located within a floodway; or

iv. On a sanitary landfill provided the solar panel is included in the Closure and Post-Closure Care Plan or modified plan as approved by the Department in accordance with N.J.A.C. 7:26;

6. The repair, replacement, renovation, or reconstruction, in the same location and size, as **determined in accordance with (d)6i and ii below** [~~measured in three dimensions (length, width and height),~~] of the preexisting structure, of any dock, wharf, pier, bulkhead or building, legally existing prior to January 1, 1981, that appears on the applicable Tidelands Map adopted by the Tidelands Resource Council (base map photography dated 1977/1978) or that appears on the applicable New Jersey Coastal Wetlands maps promulgated by the Department pursuant to the Wetlands Act of 1970 (base map photography dated 1971, 1972) or that received a Waterfront Development permit subsequent to the date of the photograph provided that the repair, replacement, renovation, or reconstruction, **is** in the same location [~~and size of~~] **as** the preexisting structure, and does not increase the size of the structure and the structure is used solely for residential purposes or for the docking of or servicing of pleasure vessels[~~;~~]**.**

i. The size of a dock or pier over wetlands, a low-profile bulkhead where the top of the bulkhead is constructed at an elevation below the spring high water line, or a building over wetlands or water shall be measured in three dimensions, that is, length, width, and height; and

ii. The size of any dock, wharf, pier or bulkhead, or building not identified at (d)6i above shall be measured in two dimensions, that is, length and width;

7. The repair, replacement, renovation, or reconstruction, in the same location and size, as measured in [~~three~~] **two** dimensions [~~(~~] **that is,** length[~~,~~] **and** width [~~and height)~~], of the preexisting structure, of any legally existing floating dock, mooring raft or similar temporary or seasonal improvement or structure, legally existing prior to January 1, 1981, that appears on the applicable Tidelands Map adopted by the Tidelands Resource Council (base map photography dated 1977/1978), or that appears on the applicable New Jersey Coastal Wetlands photographs promulgated by the Department pursuant to the Wetlands Act of 1970 (base map photography dated 1971, 1972), or received a Waterfront Development permit subsequent to the date of the photograph provided that the repair, replacement, renovation, or reconstruction is in the same location and size [~~of~~] **as** the preexisting structure, and does not exceed in length the waterfront frontage of the parcel of real property to which it is attached and is used solely for the docking of servicing of pleasure vessels; and

8. The redecking and replacement of bridge surfaces provided there is no change in width, length or height.

(e) – (h) (No change.)

SUBCHAPTER 7. GENERAL PERMITS AND PERMITS-BY-RULE

7:7-7.2 [~~Permits-By Rule~~] **Permits-by-rule**

(a) This section details the activities authorized by a [~~Permit-By-Rule~~] **permit-by-rule**.

1. – 6. (No change.)

7. [~~Voluntary Reconstruction:~~] **Other than reconstruction within the CAFRA area that meets the exemption from a CAFRA permit at N.J.A.C. 7:7-2.1(c)3**, [~~The voluntary~~] **the** reconstruction**, within the same footprint,** of a [~~non-damaged~~] legally constructed, [~~currently habitable~~] residential or commercial development [~~within the same footprint~~] **that has been or could have been legally occupied in the most recent five-year period**, provided that such reconstruction is in compliance with existing requirements or codes of municipal, State and Federal law and provided:

i. The reconstruction does not result in the enlargement or relocation of the footprint of the development;

ii. In the case of a residential development, the reconstruction does not result in an increase in the number of dwelling units;

iii. In the case of a commercial development, the reconstruction does not result in an increase in the number of parking spaces or equivalent paved area associated with the development;

iv. The construction meets the requirements of N.J.A.C. 7:7E-3.25;[~~and~~]

v. The reconstruction does not increase the area covered by buildings and/or asphalt or concrete pavement[~~.~~]**; and**

vi. This permit-by-rule does not apply to repairs or maintenance of the residential or commercial development, such as replacing siding, windows or roofs.

8. The expansion or relocation (with or without expansion) landward or parallel to the mean high water line of the footprint of a legally constructed residential development, including accessory development such as sheds, garages, pools and driveways, or commercial development that has been or could have been legally occupied in the most recent five-year period, provided:

i. The expansion or relocation is in compliance with the applicable requirements or codes of municipal, State and Federal law;

ii. Except as provided in viii below, the expansion or relocation is not proposed on a beach, dune or wetland;

iii. In the case of residential development, the expansion does not result in an increase in the number of dwelling units;

iv. In the case of commercial development, the expansion does not result in an increase in the number of parking spaces or equivalent parking area associated with the development;

v. Except as provided in viii below, the expansion or relocation does not result in additional impacts to special areas as defined at N.J.A.C. 7:7E-3;

vi. The expansion or relocation meets the requirements of N.J.A.C. 7:7E-3.25 and 3.26; and

vii. The expansion does not increase the surface area of the footprint of the development by a cumulative total of more than 400 square feet on the property constructed after July 19, 1994. For an example of how the cumulative total limitation would apply, see (a)1iii above.

viii. Where the expansion includes structures such as stairs or an ADA-compliant ramp, which are constructed only for access to a residential or commercial development required to be elevated pursuant to the New Jersey Uniform Construction Code, N.J.A.C. 5:23, in accordance with the Flood Hazard Area Control Act rules, N.J.A.C. 7:13, there is no feasible alternative location for these structures outside of a beach, dune, wetland, or other special areas as defined at N.J.A.C. 7:7E-3. ADA means the Americans with Disabilities Act of 1990 (42 USC sect. 1201 et seq.).

Recodify existing 8. through 13. as 9. through 14. (No change in text.)

15. The reconfiguration of any legally existing dock, wharf, or pier located at a legally existing marina, provided the marina is not located within shellfish habitat, submerged vegetation habitat, or a wetland. Activities that qualify for this permit-by-rule also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water , 33 U.S.C. §§1251 et seq. The proposed reconfiguration shall:

i. Not extend outside of the area covered by an existing Tidelands instrument;

ii. Not result in an increase in the number of boat slips;

iii. Not hinder navigation;

iv. Not increase the total linear footage of docks or piers within the marina;

v. Minimize the water area covered by structures by:

(1) Providing a minimum of eight feet of open water between any docks if the combined width of the docks over water exceeds eight feet; and

(2) For sites which have existing dock or pier structures exceeding eight feet in width over water areas and/or wetlands, which were constructed prior to September 1978 and for which the applicant proposes to relocate, the existing oversized structures must be reduced to a maximum of eight feet in width over water areas and six feet in width over wetlands and intertidal flats.

vi. Provide a minimum of four feet from all property lines, for docks which are perpendicular to the adjacent bulkhead or shoreline;

16. The placement of sand fencing to create or sustain a dune, provided the sand fencing complies with (a)16i through iii below. This permit-by-rule does not authorize the excavation or grading of a dune. The sand fencing shall:

i. Be placed on the landward side of the dune;

ii. Be placed parallel to the mean high water line; and

iii. Not prevent perpendicular public access to the beach.

17. The placement of land-based upwellers and raceways, including intakes and discharges, for shellfish aquaculture activities. Activities that qualify for this permit-by-rule also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§1251 et seq. The aquaculture activities shall comply with the following:

i. The structures are located on the upland portion of a lot with a legally existing, functioning bulkhead;

ii. No grading, excavation, filling, or placement of a structure(s) is undertaken on a beach, dune, or wetland; and

iii. The discharge from the aquaculture activities is to a water body and not directly into a wetland.

18. The placement of predator screens and oyster spat attraction devices in an area subject to a valid shellfish lease pursuant to N.J.S.A. 50:1-23. Upon expiration or termination of the shellfish lease, or the cessation of the use of predator screens and oyster spat attraction devices, whichever occurs first, within five days the permittee shall remove all predator screens and oyster spat attraction devices placed within the lease area. This permit-by-rule does not authorize the placement of shell within a shellfish lease area. Activities that qualify for this permit-by-rule also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§1251 et seq. The placement of predator screens and oyster spat attraction devices shall comply with the following:

i. So as not to pose a hazard to navigation, predator screens shall not extend more than six inches above the substrate and oyster spat attraction devices shall not extend more than 24 inches above the substrate; and

ii. No activity undertaken pursuant to this permit-by-rule shall prevent the catching and taking of free swimming fish from the tidal waters of the State in any lawful manner pursuant to N.J.S.A. 50:1-33.

19. The placement of shellfish cages in an area subject to a valid shellfish lease pursuant to N.J.S.A. 50:1-23. Upon expiration or termination of the shellfish lease, or the cessation of the use of shellfish cages, whichever occurs first, within five days the permittee shall remove all shellfish cages placed within the lease area. Activities that qualify for this permit-by-rule also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§1251 et seq. The placement of shellfish cages shall comply with the following:

i. There shall be a minimum of four feet of water between the top of any cage and the water surface at mean low water;

ii. The cages shall be continuously checked and repaired to ensure that they are not displaced off the lease area;

iii. The cages shall be constructed of non-polluting materials; and

iv. No activity undertaken pursuant to the permit-by-rule shall prevent the catching and taking of free swimming fish from the tidal waters of the State in any lawful manner pursuant to N.J.S.A. 50:1-33.

20. The construction and/or installation of a pumpout facility and/or pumpout support facilities in the circumstances set forth at i and ii below. The construction and/or installation of a pumpout facility or pumpout support facility shall have no adverse impacts to any special areas described at N.J.A.C. 7:7E-3.

i. At a marina, boat yard, boat sales facility, yacht club, restaurant, boat ramp or other waterfront facility, the construction and/or installation of a pumpout facility and/or the construction of pumpout support facilities, such as stanchions, hydrants, piping, pumps, holding tanks, a concrete pad for a holding tank (not to exceed a surface area of 100 square feet), a platform to elevate a pump above flood level, macerator pumps or other equipment necessary to transfer sewage from the holding tank on a boat to a sanitary sewer line or holding tank, provided the pumpout discharges to:

(1) A municipal or regional treatment plant where practicable;

(2) A subsurface sewage disposal system; or

(3) A holding tank with waste being removed by a licensed septage hauler.

(A) Any facility using a holding tank for the pumpout discharge shall maintain a record of removal of the waste.

ii. A sewer line connecting a pumpout facility and/or pumpout support facility into an existing sewer line located on-site or located immediately adjacent to the site, provided:

(1) The sewer line and the area of the connection into the existing sewer are located within areas of non-porous cover;

(2) For a sewer line that connects from a pumpout facility and/or pumpout support facility that is located on an existing dock, the sewer line does not extend below the stringers of the dock; and

(3) The sewer line receives a Treatment Works Approval as required in accordance with the Department's rules at N.J.A.C. 7:14A from the Department's Division of Water Quality.

21. The implementation of a sediment sampling plan for sampling in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated site. The Department has prepared a dredging technical manual, titled "The Management and Regulation of Dredging Activities and Dredged Material Disposal in New Jersey's Tidal Waters," October 1997, which provides guidance on dredged material sampling. Activities that qualify for this permit-by-rule also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 §§ 1251 et seq. This permit-by-rule authorizes the implementation of a sediment sampling plan for sampling to be conducted within a water area described at N.J.A.C. 7:7E-4.1, as part of a dredging or dredged material management activity or as part of a remedial investigation, provided:

i. If the sampling is part of a dredging or dredged material management activity, the sediment sampling plan shall be approved in writing by the Department's Office of Dredging and Sediment Technology; or

ii. If the sampling is part of a remedial investigation of a contaminated site, the sediment sampling plan shall be prepared in accordance with the Technical Requirements for Site

Remediation, N.J.A.C 7:26E, and approved by the Department or certified by a Licensed Site Remediation Professional in accordance with the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS), N.J.A.C. 7:26C.

7:7-7.5 through 7.12 (No change.)

7:7-7.13 Coastal general permit for the construction of support facilities at legally existing and operating marinas

(a) This coastal general permit authorizes the construction of support facilities at legally existing and operating commercial marinas including marinas operated by public agencies, commissions and authorities.

(b) The construction of the following support facilities listed at (b)1 through [~~7~~]**6** below is acceptable provided they comply with the specific conditions for each facility and also with (c) below:

1. Construction of boat rack systems/marina support buildings including, but not limited to, showroom, maintenance/repair, marine supplies, bait/tackle, boat sales, dock masters office buildings, sheds, **storage,** excluding residential development provided:

i. Construction of boat rack systems/marina support buildings including, but not limited to, showroom, maintenance/repair, marine supplies, bait/tackle, boat sales, dock masters office buildings, sheds, and storage, excluding residential development provided:

ii. The building(s) shall be set back a minimum of [~~100~~]**15** feet from **a shore protection structure and 25 feet from** the mean high water line **where no shore protection structures are present**;

iii. The building(s) and rack system shall be set back a minimum of 50 feet from the inland limit of any wetlands;

iv. The building(s) and rack system shall be located in an existing cleared and maintained area of the site;

v. The marina must provide or maintain restrooms and at least one portable toilet emptying receptacle in accordance with N.J.A.C. 7:7E-7.3(d); and

vi. Marinas with dockage for 25 or more vessels or any one vessel with live aboard arrangement must provide for adequate and conveniently located pumpout [~~stations~~] **facilities**.

2. Construction of restroom facilities provided:

i. Discharge from the facilities shall either be to a municipal or regional treatment plant where practicable, or to a subsurface sewage disposal system designed with capacity to accommodate the new restroom facilities in accordance with N.J.A.C. 7:9A;

ii. Restrooms shall provide both hot and cold water and shall be maintained in a sanitary, warm, dry, brightly-lit and well ventilated condition;

iii. The restroom building shall be set back a minimum of [~~100~~]**15** feet from **a shore protection structure and 25 feet from** the mean high water line **where no shore protection structures are present** [~~unless the Department determines that there is no alternate location~~]; and

iv. The restroom building shall be set back a minimum of 50 feet from the inland limit of any wetlands, unless the Department determines that there is no alternate location.

3. [~~Construction of pumpout facilities (marine sanitation devices) provided:~~

~~i. Discharge from the facility shall either be to a municipal or regional treatment plant where practicable or to a subsurface sewage disposal system; or~~

~~ii. Discharge to a holding tank with waste being removed by a licensed septage hauler. A marina employing this method shall maintain a record of waste removal.~~

~~4.~~] Construction of fences, water lines and new sewer lines to connect restrooms**,** [~~and~~] pumpout[~~s~~] **facilities, and/or pumpout support facilities** to existing sewer lines provided:

i. The construction has no prudent or feasible alternative alignment which would have less impact to Special Areas as defined at N.J.A.C. 7:7E-3;

ii. The construction shall not result in permanent or long term loss of Special Areas as defined at N.J.A.C. 7:7E-3;

iii. The construction utilizes appropriate measures to mitigate adverse environmental impacts to the maximum extent feasible, such as restoration of disturbed vegetation, habitats, and land and water features; and

iv. For sewer lines only:

(1) The sewer line receives a Treatment Works Approval **as required in accordance with the Department's rules at N.J.A.C. 7:7-14A,** from the Department's [~~Bureau of Connection and Construction Permits;~~]**Division of Water Quality**;

(2) The sewer line shall not result in adverse secondary impacts; and

(3) The sewer line connects to an existing sewer line located on-site or immediately adjacent to the site;

[~~5.~~]**4.** Construction of a gasoline pump(s) and associated pipes and tanks on the upland portion of the marina provided:

i. The marina has available adequate floating containment booms and absorbent materials in the event of hydrocarbon spills;

ii. Fuel pumps include back pressure cutoff valves. Main cut-off valves shall be available both at the dock and in the upland area of the marina; and

iii. [~~Any other required~~] **All necessary** approvals for the construction of underground or above ground storage tanks are obtained.

[~~6.~~]**5.** Construction of boat handling facilities including, but not limited to, winches, gantries, railways, platforms and lifts, hoists, cranes, fork lifts and ramps provided:

i. The boat handling facility (excluding boat ramp and railways) is located landward of the mean high water line; and

ii. The boat handling facility is not located in a wetland area[~~.~~]**;**

[~~7.~~]**6.** The one time construction of a single marina support building not exceeding a footprint of 120 square feet provided the building is located on the upland portion of the marina and is not located within wetlands.

(c) The construction of support facilities listed at (b)1 through [~~7~~]**6** above shall also comply with the following:

1. The marina complies with N.J.A.C. 7:7E-7.3(d), the standards relevant to the construction of marinas;

2. Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7E-3.50, and the public access rule, N.J.A.C. 7:7E-8.11;

3. Trash receptacles along with adequate fish cleaning areas, including separately marked dispensers for organic refuse, shall be provided;

4. The development is consistent with the Water Quality Management Plan adopted pursuant to N.J.A.C. 7:15; and

5. The development shall meet the requirements of N.J.A.C. 7:7E-3.25 [~~and 3.26~~].

(d) (No change.)

7:7-7.14 through 7:7-7.28 (No change.)

7:7-7.29 Coastal general permit for habitat creation, restoration, enhancement, and living shoreline activities

(a) This coastal general permit authorizes habitat creation, restoration, enhancement, and living shoreline activities necessary to implement a plan for the restoration, creation, enhancement, or protection of the habitat, water quality functions and values of wetlands, wetland buffers, and open water areas, which is sponsored by a Federal or State agency or other entity described in (b) below. For the purposes of this general permit, a "sponsor" shall endorse the activities in writing.

(b) The following habitat creation, restoration, enhancement, and living shoreline plans are acceptable provided they demonstrate compliance with (c) through (g) below:

1. A fish and/or wildlife management plan created or approved by the Department's Division of Fish and Wildlife;

2. A project plan approved under the Partners for Fish and Wildlife program, Coastal Program, or a similar program administered by the U.S. Fish and Wildlife Service;

3. A project plan created by the U.S. Department of Agriculture's Natural Resources Conservation Service under the Wetlands Reserve program, the Conservation Reserve program, the Conservation Reserve Enhancement program, the Wildlife Habitat Incentive program (WHIP), or a similar program, and approved by the local Soil Conservation District;

4. A plan approved by the Department's Office of Natural Resource Damages for the restoration, creation or enhancement of natural resources injured as the result of an oil spill or release of a hazardous substance;

5. A mitigation project required or approved by a government agency, such as the U.S. Army Corps of Engineers;

6. A habitat creation, restoration or enhancement plan carried out by one of the Federal or State agencies at (b)1 through 5 above or by a government resource protection agency such as a parks commission;

7. A habitat creation, restoration or enhancement plan carried out by a charitable conservancy, as defined at N.J.A.C. 7:7-1.3, provided that the plan is part of a program listed at (b)2 through 5 above;

8. A living shoreline plan designed and/or sponsored by the Department, the U.S. Fish and Wildlife Service, the Natural Resource Conservation Services, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, or the National Oceanic Atmospheric Administration's Restoration Center; or

9. A living shoreline plan implemented by a college or university for the purpose of research.

(c) Habitat creation, restoration, enhancement, and living shoreline activities that are authorized by this coastal general permit include but are not limited to the following:

1. Altering hydrology to restore or create wetlands conditions, such as by blocking, removing, or disabling a human-made drainage ditch or other drainage structure such as a tile, culvert or pipe;

2. Breaching a structure such as a dike or berm in order to allow water into an area;

3. Placing habitat improvement structures such as:

i. Nesting islands;

ii. Fencing to contain, or to prevent intrusion by, livestock or other animals; and

iii. Fish habitat enhancement devices or fish habitat improvement structures such as placed boulders, stream deflectors, or brush piles;

4. Regrading to provide proper elevation or topography for wetlands restoration, creation, or enhancement;

5. Cutting, burning or otherwise managing vegetation in order to increase habitat diversity or control nuisance flora; or

6. Establishing a living shoreline to protect, restore, or enhance a habitat.

(d) To be eligible for authorization under this coastal general permit, an applicant shall demonstrate that the proposed project:

1. Is part of a plan for the restoration, creation or enhancement of the habitat and water quality functions and values of wetlands, wetland buffers, and/or State open waters;

2. Is consistent with the requirements of the Wetlands Act of 1970, the Waterfront Development Law, the Coastal Area Facility Review Act and the Coastal Zone Management rules;

3. Will improve or maintain the values and functions of the ecosystem; and

4. Will have a reasonable likelihood of success, or, if performed by a college or university, in accordance with (b)9 above, will advance the level of knowledge regarding living shorelines in the State.

(e) Activities under this coastal general permit except for living shoreline activities, which are subject to the requirements of (f) below, shall comply with the following:

1. If the proposed habitat creation, restoration or enhancement activity is to take place in Special Areas, as defined at N.J.A.C. 7:7E-3, the coastal general permit authorization shall be issued only if the Department finds that there are no practicable alternatives that would involve less or no disturbance or destruction of Special Areas;

2. The activities shall disturb the minimum amount of Special Areas as defined at N.J.A.C. 7:7E-3 necessary to successfully implement the project plan;

3. The activities shall not decrease the total combined area of Special Areas on a site. However, the Department may approve a decrease if the Department determines that the activities causing the decrease are sufficiently environmentally beneficial to outweigh the negative environmental effects of the decrease. In addition, the Department may approve conversion of one Special Area to another Special Area if the Department determines that such conversion is environmentally beneficial; and

4. If the activities involve the removal of a dam, the activities shall be conducted in accordance with a permit issued pursuant to N.J.A.C. 7:20 by the Department's Dam Safety Section in the Division of Engineering and Construction.

(f) Living shoreline activities shall comply with the following:

1. The project area below the mean high water line is one acre in size or less, unless the applicant is a county, State or Federal agency that demonstrates that a larger project size is necessary to satisfy the goals of the project;

2. The project shall disturb the minimum amount of special areas, as defined at N.J.A.C. 7:7E-3, necessary to successfully implement the project plan. The Department may approve a reduction in the size of a particular special area in order to allow an increase in a different special area if the Department determines that the activities causing the reduction are sufficiently environmentally beneficial to outweigh the negative environmental effects of the reduction; and

3. Where the living shoreline is intended to restore an existing shoreline to a previous location, the living shoreline, including all associated fill, shall not exceed the footprint of the shoreline as it appeared on the applicable Tidelands Map adopted by the Tidelands Resource Council (base map photography dated 1977/1978), except for a structural component of the project intended to reduce wave energy.

(g) Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7E-3.50, and the public access rule, N.J.A.C. 7:7E-8.11.

(h) This coastal general permit does not authorize an activity unless the sole purpose of the activity is habitat creation, restoration, enhancement, or a living shoreline. For example, this coastal general permit does not authorize construction of a detention basin in wetlands for stormwater management, even if the detention basin or the project of which the basin is a part will also result in habitat creation or enhancement.

(i) In addition to the application and information required under N.J.A.C 7:7-7.3, the following information shall be submitted:

1. Three copies of a site plan(s) showing the following:

2. If a living shoreline activity includes the placement of fill, the applicant shall identify the footprint of the shoreline as it appeared on the applicable Tidelands Map adopted by the Tidelands Resource Council (base map photography dated 1977/1978).

3. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed project complies with (a) through (h) above, including supplemental documents as appropriate, such as maps and survey.

7:7-7.30 and 7:7-7.31 (No change.)

7:7-7.32 Coastal general permit for the dredging of sand from a man-made lagoon deposited as a result of a storm event for which the Governor declared a State of Emergency

(a) This coastal general permit authorizes the dredging of sand from a man - made lagoon that was deposited as a result of a storm event for which the Governor declared a State of Emergency, provided (a)1 through 6 below are met. Sand means, for the purposes of this section, a material consisting of 90 percent or greater of particles by weight retained on a 0.0625 mm sieve.

1. The volume of sand to be dredged is limited to that which was deposited as a result of the storm event;

2. The area to be dredged is limited to that where the sand was deposited as a result of the storm event;

3. The sand removed by dredging is placed on an upland site, dewatered as necessary within a temporary dewatering area, and capped with a six-inch layer of clean fill and stabilized;

4. No wetlands are present within 25 feet of the area to be dredged. A 25 foot buffer shall be provided from any wetlands to the nearest edge of the area to be dredged; and

5. Any debris contained within the dredged sand shall be removed and disposed of properly.

(b) An application that meets the requirements of N.J.A.C. 7:7-7.3 for authorization under this general permit shall be received by the Department no later than 24 months after the date the Governor declared a State of Emergency.

(c) An authorization of dredging issued under this general permit shall not be considered in determining whether a future dredging activity constitutes maintenance dredging as defined at N.J.A.C. 7:7E-4.6 at the same site.

(d) In addition to the application information required under N.J.A.C. 7:7-7.3, the following information shall be submitted:

1. One copy of a site plan(s) showing the following:

i. The mean high and mean low water lines of the tidal waters at the site;

ii. The upper and lower limits of wetlands on site and on adjacent lagoonfront properties;

iii. If available, pre- and post-storm bathymetry of the area to be dredged;

iv. The method of dredging;

v. The location of the dredged material disposal site; and

vi. The method of stabilization of dredged material;

2. A grain size analysis of the material to be dredged. The Department's technical manual, titled, "The Management and Regulation of Dredging Activities and Dredged Material Disposal in New Jersey's Tidal water's;" October 1997 provides guidance on performing a grain size analysis; and

3. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed dredging complies with (a) above, including supplemental documents as appropriate, such as maps or surveys.

7:7-7.33 Coastal general permit for the dredging of material from a waterway at a residential or commercial development deposited as a result of the failure of a bulkhead as a consequence of a storm event for which the Governor declared a State of Emergency

(a) This coastal general permit authorizes the dredging of material from a waterway at a residential or commercial lot that was deposited as a result of the failure of a legally existing bulkhead that was damaged as a result of a storm event for which the Governor declared a State of Emergency, provided:

1. The volume of the material to be dredged is limited to that which resulted from the failure of the bulkhead;

2. The area to be dredged is limited to that where the material was deposited as a result of the failure of the bulkhead;

3. The dredged material is placed on an upland portion of the lot, dewatered as necessary within a temporary dewatering area, and capped with a six-inch layer of clean fill and stabilized;

4. A 25 foot buffer shall be provided from any wetlands to the nearest edge of the area to be dredged; and

5. Any debris contained within the dredged material shall be removed and disposed of properly.

(b) An application that meets the requirements of N.J.A.C. 7:7-7.3 for authorization under this general permit shall be received by the Department no later than 24 months after the date the Governor declared a State of Emergency.

(c) An authorization of dredging issued under this general permit shall not be considered in determining whether a future dredging activity constitutes maintenance dredging as defined at N.J.A.C. 7:7E-4.6 at the same site.

(d) In addition to the application information required under N.J.A.C. 7:7-7.3, the following information shall be submitted:

1. One copy of a site plan(s) showing the following:

i. The mean high and mean low water lines of the tidal waters at the site;

ii. The upper and lower limits of wetlands on site and on adjacent properties;

iii. The alignment of the bulkhead that failed;

iv. If available, the pre- and post-storm bathymetry of the area to be dredged;

v. The method of dredging;

vi. The location of the dredged material disposal site; and

vii. The method of stabilization of the dredged material;

2. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed dredging complies with (a) above, including supplemental documents as appropriate, such as maps or surveys.

7:7-7.34 Coastal general permit for dredging and management of material from a marina deposited as a result of a storm event for which the Governor declared a State of Emergency

(a) This coastal general permit authorizes the dredging and management of material from a marina that was deposited as a result of a storm event for which the Governor declared a State of Emergency, provided (a)1 and 2 below are met. Sand means, for the purposes of this section, a material consisting of 90 percent or greater of particles by weight retained on a 0.0625 mm sieve.

1. The dredged material is sand; or

2. If the dredged material is not sand, the material is temporarily disposed of in an existing upland confined disposal facility located on the marina property until a final placement site is determined in accordance with (e) below.

(b) Dredging activities under this general permit shall comply with the following:

1. The depth in the area after the proposed dredging is completed shall not exceed the depth in that area prior to the storm event;

2. The area to be dredged is limited to the area in which material was deposited as a result of the storm event; and

3. A 25 foot buffer shall be provided from any wetlands to the nearest edge of the area to be dredged, unless the area to be dredged is within an existing maintained navigation channel or basin. In such cases, the area to be dredged shall be limited to the existing channel or basin.

(c) An application that meets the requirements of N.J.A.C. 7:7-7.3 for authorization under this general permit shall be received by the Department no later than 24 months after the date the Governor declared a State of Emergency.

(d) Material determined to be sand shall be placed at either an on-site or off-site location that has been approved by the Department. The beneficial use of this dredged sand is encouraged.

(e) Material determined not to be sand shall be disposed of in an existing upland confined disposal facility located on the marina property, until beneficially used at an on- or off-site location. The dredged material shall remain within the confined disposal facility until a determination of an acceptable final placement site is issued by the Department. Additional testing of the material may be required as part of the Department's assessment of a final placement site. The upland confined disposal facility shall:

i. Be large enough to contain and dewater the dredged material, considering any bulking that occurs during dredging;

ii. Not be located within wetlands or wetlands buffers; and

iii. Be operated and maintained in a manner to minimize the discharge of dredged material into the adjacent surface waters and wetlands.

(f) An authorization of dredging issued under this general permit shall not be considered in determining whether a future dredging activity constitutes maintenance dredging as defined at N.J.A.C. 7:7E-4.6 at the same site.

(g) In addition to the application information required under N.J.A.C. 7:7-7.3, the following information shall be submitted:

1. One copy of a site(s) plan showing the following:

i. The mean high, mean low and spring high water lines of the tidal waters at the site;

ii. The upper and lower limits of wetlands on site and on adjacent properties;

iii. If available, the pre- and post-storm bathymetry of the area to be dredged;

iv. The method of dredging;

v. The location and areal dimensions of the existing on-site disposal area, including inflow and weir discharge points; and

vi. Cross sections showing the heights of the berms of the existing on-site disposal area;

2. A grain size analysis of the material to be dredged. The Department's technical manual, titled, "The Management and Regulation of Dredging Activities and Dredged Material Disposal in New Jersey's Tidal water's;" October 1997 provides guidance on performing a grain size analysis;

3. Calculations demonstrating the available capacity of the upland confined disposal facility located on the marina site; and

4. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed dredging and dredged material management activities comply with (a) through (e) above, including supplemental documents as appropriate, such as maps or surveys.

7:7-7.35 Coastal general permit for commercial shellfish aquaculture activities

(a) This coastal general permit authorizes the construction and/or placement and maintenance of shellfish aquaculture equipment, including floating upwellers, shellfish rafts, racks and bags, lantern nets, and cages, provided:

1. The structures are located in an area with a valid shellfish lease authorized under N.J.S.A. 50:1-23;

2. The structures are not located within submerged infrastructure routes, N.J.A.C. 7:7E-3.12, shipwreck and artificial reef habitat, N.J.A.C. 7:7E-3.13, or wetlands, N.J.A.C. 7:7E-3.27;

3. The structures are not located within 50 feet of any designated navigation channel, unless it is demonstrated that the proposed structure will not hinder navigation. The placement of structures within designated navigation channels is prohibited;

4. The boundaries of the area where the structures are placed are clearly marked in accordance with US Coast Guard requirements for regulatory and informational markers (*(US Coast Guard "U.S. Aids to Navigation System" http://www.uscgboating.org/ATON/index.htm*). Specifically, the corners of the footprint of the area where the structures are placed must be marked with buoys or stakes;

5. The structures are constructed of non-polluting materials:

6. The structures are properly secured; and

7. No activity undertaken pursuant to this general permit shall prevent the catching and taking of free swimming fish from the tidal waters of the State in any lawful manner, pursuant to N.J.S.A. 50:1-33.

(b) Upon expiration or termination of the shellfish lease, or the cessation of shellfish aquaculture activities, whichever occurs first, within five days the permittee shall remove all structures placed within the lease area.

(c) Prior to the commencement of activities authorized by this general permit, the permittee shall notify the Department's Bureau of Shellfisheries in writing:

1. For Atlantic Coast Shellfish Leases:
Nacote Creek Shellfish Office
PO Box 418
Port Republic, NJ 08241

2. For Delaware Bay Shellfish Leases:
Delaware Bay Shellfish Office
1672 East Buckshutem Road
Millville, NJ 08332

(d) The notification under (c) above shall contain the following information:

1. A copy of the permit and associated plans;

2. The shellfish lease number;

3. The shellfish species to be cultured; and

4. The estimated date of commencement of activities.

(e) In addition to the application information required under N.J.A.C. 7:7-7.3, the following information shall be submitted:

1. Once copy of a site(s) plan showing the following:

i. The mean high, mean low and spring high water lines of the tidal waters at the site, any wetlands and navigation channels;

ii. The area covered by the shellfish lease;

iii. Existing waters depths in the area where the structures will be located; and

iv. The location of the proposed structures;

2. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed commercial shellfish aquaculture equipment complies with (a) through (b) above, including supplemental documents as appropriate, such as maps or surveys.

7:7-7.36 Coastal general permit for the placement of shell within shellfish lease areas

(a) This coastal general permit authorizes the placement of shell in an area with a valid shellfish lease authorized under N.J.S.A. 50:1-23, provided:

1. The shell to be planted is comprised of processed oyster, surf clam and/or ocean quahog shell or other shell material approved by the Department;

2. The height of the shell material placed on the bottom of the water body does not exceed six inches above the substrate;

3. The placement of shell does not pose a hazard to navigation; and

4. All shell is clean and free of contaminants.

(b) This coastal general permit does not authorize the stockpiling of shell or dredging activities.

(c) In addition to the application information required under N.J.A.C. 7:7-7.3, the following information shall be submitted:

1. Once copy of a site(s) plan showing the following:

i. The mean high, mean low and spring high water lines of the tidal waters at the site, any wetlands and navigation channels;

ii. The area covered by the shellfish lease; and

iii. Existing waters depths in the area where the shell will be located;

2. The type and quantity of shell to be used, and the source of the shell; and

3. A Compliance Statement prepared in accordance with N.J.A.C. 7:7-6, demonstrating how the proposed shell planting complies with (a) through (b) above, including supplemental documents as appropriate, such as maps or surveys.

Section IV. CZM Rules, N.J.A.C. 7:7E

To facilitate the expeditious rebuilding of more resilient coastal communities and coastal-related industries, and help facilitate the recovery of the coastal ecosystem as described in Section II above, the Department has modified the CZM rules to facilitate the establishment of living shorelines, allow for the maintenance of engineered beaches and dunes, provide flexibility in the design of marinas, facilitate shellfish aquaculture and encourage the beneficial use of dredged material. In addition, the changes to the CZM rules implement the legislative amendments to CAFRA concerning the siting of wind energy facilities on piers within the coastal area.

The CZM rules govern the use and development of coastal resources and are the standards for reviewing CAFRA, waterfront development and coastal wetlands permit applications submitted under N.J.A.C. 7:7. The CZM rules are also used for the review of water quality certificates subject to Section 401 of the Federal Water Pollution Control Act, and Federal consistency determinations under Section 307 of the CZMA. The authority for the CZM rules is founded in the following statutes:

- **N.J.S.A. 12:5-3, Waterfront Development Law:** This Law authorizes the Department to regulate the construction or alteration of a dock, wharf, pier, bulkhead, bridge, pipeline, cable or other similar development on or adjacent to tidal waterways throughout the state. Outside of the CAFRA area and Hackensack Meadowlands District, the Law applies in upland areas adjacent to tidal waters extending from the mean high water line to the first paved public road, railroad or surveyable property line. Upland jurisdiction extends from the mean high water line landward a minimum of 100 feet and not exceeding 500 feet. Within this area, construction, reconstruction, alteration, expansion or enlargement of any structure, or the excavation or filling of any area are subject to this Law;

- **N.J.S.A. 13:9A-1 et seq., Wetlands Act of 1970:** This Act authorizes the Department to regulate activities on coastal wetlands that have been delineated and mapped by the Department. Examples of regulated activities include excavation, dredging, fill or placement of a structure on a mapped coastal wetland;

- **N.J.S.A. 13:19-1 et seq., Coastal Area Facility Review Act (CAFRA):** CAFRA applies to projects near coastal waters in the southern part of the State. The CAFRA area begins where the Cheesequake Creek enters Raritan Bay in Old Bridge, Middlesex County. It extends south along the coast around Cape May, and then north along the Delaware Bay ending at Kilcohook National Wildlife Refuge in Salem County. The inland limit of the CAFRA area is an irregular line that follows public roads, railroad tracks, and other features. The width of the CAFRA area varies from a few thousand feet to nearly 17 miles. The law divides the CAFRA area into zones, and regulates different types and sizes of development in each zone. Regulated activities within the CAFRA area include a wide variety of residential, commercial, industrial or public development such as construction, relocation, and enlargement of buildings and structures; and associated work such as excavation, grading, site preparation and the installation of shore protection structures;

- **N.J.S.A. 13:1D-9, Powers of the Department:** This statute provides that the Department shall formulate comprehensive policies for the conservation of the natural resources of the

State, the promotion of environmental protection and the prevention of pollution of the environment of the State; and

- **N.J.S.A. 13:1D-29 et seq., Ninety-Day Construction Law:** This Chapter establishes application submission requirements, public notice requirements, fees and review procedures for permit applications submitted to the Department under the Waterfront Development Law, N.J.S.A. 12:5-3; Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.; Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq. and Flood Hazard Area Control Act, N.J.S.A. 58:16A -1 et seq. as well as sewer extensions under the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

Table B, Routine Program Change, Coastal Program Permit rules (*Table B-RPC CZM rules.doc*), identifies the changes to the rules and provides an analysis describing the changes and why they are not significant changes to New Jersey's approved CMP. These changes do not change the program approvability area of boundaries nor do they change special management areas. While the changes may affect the program approvability areas of uses subject to management, authorities and organization, or consideration of the national interest, these changes are not substantial for the reasons described in the analysis portion of Table B. The rule text subject to the Routine Program Change is found below.

Coastal Zone Management Rule Text Subject to Routine Program Change

Changes to existing rule text approved by OCRM are shown as follows:
Additions indicated in **underlined boldface**; and
Deletions shown in **[**~~bracketed strikethrough~~**]**.

SUBCHAPTER 1. INTRODUCTION

7:7E-1.7 Correspondence with the Department

Correspondence related to this chapter may be submitted to the Department at the following address:

[~~Land Use Regulation Program~~
~~New Jersey Department of environmental Protection~~
~~501 East State Street~~
~~PO Box 439~~
~~Trenton, New Jersey 08625-0439~~]
New Jersey Department of Environmental Protection
Division of Land Use Regulation
Mail code 501-02A, P.O. Box 420
Trenton, NJ 08625

7:7E-1.8 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise

Engineered beach" means a beach built in accordance with either (1) a Federally authorized beach berm design template for shore protection and/or storm damage reduction purposes for which the Department has issued a Federal consistency determination under this chapter; or (2) a beach berm design template for shore protection and/or storm damage reduction purposes that has been funded through the New Jersey Shore Protection Program and for which the Department has issued a permit under this chapter. For purposes of this definition, the beach berm design template is the height, width, slope and length of the engineered beach.

"Engineered dune" means a dune built in accordance with either (1) a Federally authorized dune design template for shore protection and/or storm damage reduction purposes for which the Department has issued a Federal consistency determination under this chapter; or (2) a dune design template for shore protection and/or storm damage reduction purposes that has been funded through the New Jersey Shore Protection Program and for which the Department has issued a permit under this chapter. For purposes of this definition, the dune design template is the height, width, slope and length of the engineered dune.

"Living shoreline" means a shoreline management practice that addresses the loss of vegetated shorelines, beaches, 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 plants, stone, sand, or other structural and organic materials. There are three types of living shorelines: natural, hybrid, and structural. Natural living shorelines include

natural vegetation, submerged aquatic vegetation, fill, and biodegradable organic materials. Hybrid living shorelines incorporate natural vegetation, submerged aquatic vegetation, fill, biodegradable organic materials, and low-profile rock structures such as segmented sills, stone containment, and living breakwaters seeded with native shellfish. Structural living shorelines include, but are not limited to, revetments, breakwaters, and groins.

"Non-polluting material" means a material such as plastic, natural cedar or other untreated wood, polymer coated pressure-treated wood, concrete, steel or other inert products. Creosote and pressure-treated lumber (that is, treated with preservatives such as CCA-C, ACZA, CC, and ACQ) which is susceptible to leaching is not considered "non-polluting material."

"Pumpout facility" means a facility intended to receive the discharge of wastewater from a marine sanitation device. Pumpout facilities include, but are not limited to, fixed pumpout stations, dockside pumpouts, portable pumpouts, pumpout boats, and dump stations.

"State aid agreement" means a binding agreement between the Department and a municipality or county for the construction of a shore protection project funded through the State Shore Protection Fund. The State Aid Agreement for Federally funded projects contains the project agreement between the Department and the United States Army Corps of Engineers which defines the project design template.

SUBCHAPTER 3. SPECIAL AREAS

7:7E-3.2 Shellfish habitat

(a) – (b) (No change.)

(c) The water located under any boat mooring facility (including docks and associated structures) is automatically condemned and reduced to "prohibited" status pursuant to N.J.A.C. 7:12-2.1(a)1ii. Development which would result in the destruction, condemnation (downgrading of the shellfish growing water classification) or contamination of shellfish habitat is prohibited, unless the proposed development is a dock, pier, or boat mooring, **dredging, living shoreline or a development required for national security** constructed in accordance with (d)**1 and 3, (e), (f), (g), (h) and (k)** below. **In addition, the construction of a dock or pier or the one-time replacement or reconstruction of a legally existing functioning bulkhead outshore of the existing bulkhead when located in waters that have been classified as prohibited for the purpose of harvesting shellfish is acceptable in accordance with (d)2 and (i) below.**

1. The term "destruction" includes actions of filling to create fast land, overboard dumping or disposal of solids or [~~spoils~~] **dredged materials** which would smother shellfish populations, or create unsuitable conditions for shellfish colonization or the creation of bottom depressions with anoxic conditions.

(d) Construction of a dock, pier or boat moorings in shellfish habitat is prohibited, except for the following:

1. Public fishing piers owned and controlled by a public agency for the sole purpose of providing access for fishing;

2. In waters which have been classified as prohibited for the purpose of harvesting shellfish; and

3. A single noncommercial dock, pier, or boat mooring associated with a single family dwelling provided the proposed dock, pier, or boat mooring meets the requirements of (d)3i through v below. If a lot has frontage on both a natural waterway and a man-made lagoon, as defined at N.J.A.C. 7:7-1.3, the dock, pier, or boat mooring shall be located within the lagoon, unless locating the dock, pier or boat mooring on the lagoon would not otherwise comply with the recreational docks and piers rule at N.J.A.C. 7:7E-4.5 or any other provisions of this chapter.

i. The proposed dock, pier, or boat mooring is:

(1) Constructed of non-polluting [~~or other inert~~] material**s** [~~such as natural lumber or other untreated wood, concrete, plastic or vinyl~~]; and

(2) Designed and constructed in a manner that reduces the size of the structure to limit the area of shellfish habitat condemned and reduces adverse impacts to the marine ecosystem to the extent practicable. Reduction of the area of shellfish habitat condemned and adverse impacts to the marine ecosystem may include, for example, adjustment of the dimensions and location of the proposed dock, pier, or boat mooring to reduce the total area covered by the structure while ensuring that the requirements of this chapter are met.

ii. Unless the Department determines that a different length dock or pier is appropriate in order to ensure that the requirements of this chapter are met, the dock or pier shall not extend beyond, and a boat mooring shall not be located beyond, a straight line drawn between the outermost end of decking of the nearest adjacent existing legal dock or pier to each side of the dock, pier or boat mooring, except:

(1) If the dock, pier, or boat mooring is associated with a lot that has frontage on both a man-made lagoon and a natural waterway and the dock, pier, or boat mooring is to be located on the natural waterway as required under (d)3 above, the dock or pier shall not extend beyond, or the boat mooring shall not be located beyond, the outermost end of decking of the nearest adjacent dock or pier on the natural waterway; or

(2) To meet the requirements of the submerged vegetation habitat rule at N.J.A.C. 7:7E-3.6, a dock or pier shall be extended to the minimum length necessary, or the boat mooring shall be located where necessary to ensure that at mean low water a minimum water depth of four feet is present in the designated slips of the dock, pier, or boat mooring;

iii. The dock, pier, or boat mooring shall have no more than two designated slips. Boats shall not be moored at any area other than the two boat slips designated in the Department permit and/or the plan approved under that permit;

iv. Only one dock, pier or boat mooring shall be constructed per buildable lot pursuant to this subsection. Where two or more lots have been assembled for the purpose of building a single family dwelling, only one dock, pier or boat mooring shall be constructed pursuant to this subsection;

v. No dredging shall be performed in conjunction with the construction or use of the dock, pier, or boat mooring; and

vi. Mitigation shall be performed in accordance with the following:

(1) A conservation restriction shall be placed on the subject property governing the construction or reconstruction of a shoreline protection structure, as follows:

(A) If the dock, pier or boat mooring is associated with an unbulkheaded shoreline, the conservation restriction shall prohibit the construction of a shoreline protection structure other than stone rip-rap or other similar sloped revetment; or

(B) If the dock, pier or boat mooring is associated with a previously bulkheaded shoreline, the conservation restriction shall prohibit replacement, reconstruction or rehabilitation of the bulkhead with anything other than non-polluting or other inert material; and

(2) A monetary contribution shall be provided to the Department's dedicated account for Shellfish Habitat Mitigation. The amount of each monetary contribution provided under this section shall be based upon the area of shellfish habitat condemned due to coverage by the structure and boat moorings, the documented shellfish density on the property, and the commercial value of the shellfish resource.

(e) - (g) (No change.)

(h) The establishment of a living shoreline in shellfish habitat to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the living shoreline complies with N.J.A.C. 7:7E-4.23.

(i) The one-time replacement or reconstruction of a legally existing functioning bulkhead outshore of the existing bulkhead is conditionally acceptable in waters that are classified as prohibited for the purpose of harvesting shellfish, provided:

1. The replacement or reconstructed bulkhead is made of a non-polluting material;

2. The replacement or reconstructed bulkhead is located within 18 inches outshore of the existing bulkhead, except in accordance with (i)2i below;

i. Where the replacement bulkhead is constructed of a corrugated material, the replacement bulkhead is located no more than 24 inches outshore of the existing bulkhead, and the replacement bulkhead is located as close as possible to the face of the existing bulkhead; and

3. A conservation restriction is placed on the bulkheaded property requiring that any future replacement bulkhead be located in the same location as the bulkhead replaced or reconstructed under this subsection.

Recodify existing (h) - (j) as (j) - (l) (No change in text.)

[(k)]**(m)** Rationale: Estuarine shellfish are harvested by both commercial and recreational shellfishermen [~~, with sport group concentrating on hard clams~~]. **Hard clams are the most sought after species harvested as they occur in all estuarine waters.** Oysters, bay scallops[~~,~~] **and** soft clams [~~and hard clams~~] are predominantly **harvested by** commercial [species] **fishermen**. [~~Commercial landing values in New Jersey for 1988 were $6.03 million for estuarine mollusks.~~] **In 2008, the commercial dockside landings for estuarine shellfish in New Jersey were valued at approximately $6.63 million (United States Department of Agriculture). Shellfish are typically worth about six times the dockside value to the State's economy through processing, distribution and retail.** [~~As with commercial species, processing and distribution considerably increase the value of this fishery to the State's economy. The commercial harvest is estimated to support employment of 1,500 persons in fishing, distribution, processing and retail. Recreational clammers purchased 13,179 licenses in 1988. Furthermore, it is estimated that there are approximately 10,000 senior citizen recreational clammers.~~] In addition [~~to direct human consumption~~] **to being a harvestable resource**, shellfish play an important role in the overall ecology of the estuary[~~. Young clams~~] **and** are **an** important forage food **source** for a variety of **finfish** species [~~such as winter founder~~], crabs**,** and migratory waterfowl[~~, especially the diving species~~].

There is an inherent conflict between shellfish habitat and water quality protection and boating related activities, such as mooring and dredging, though both are important water-dependent activities in New Jersey. **Boating related activities may affect shellfish habitat and the harvestability of**

shellfish. Mooring facilities **can be** [are] a source of pollution with a high potential for improper disposal of human waste. Shellfish that occur in or near marinas and docks are unsafe for human consumption due to the potential health threats associated with the pollution generated as a result of leaching of toxic chemicals and heavy metals from waterfront construction materials and boat-related antifouling paints and fuels, and human waste disposed in close proximity to these marinas and docks. [Shellfish (bivalve mollusks)]**Bivalve shellfish** readily bioaccumulate and concentrate toxic substances and pathogenic microorganisms within their tissue**,** which poses a human health risk **when contaminated shellfish is consumed**. Due to the potential health threats associated with shellfish grown in polluted waters, shellfish are prohibited from being harvested for human consumption near mooring facilities. Dredging activities typically disturb and degrade the habitat environment.

Dredging activities have a negative effect on the recruitment of shellfish by changing the composition of the substrate. Dredging disturbs and degrades shellfish habitat by adversely altering the water quality, salinity regime, substrate characteristics, natural water circulation pattern and natural functioning of the shellfish habitat.

Motor fuels can be released into the aquatic environment via the operation of boat engines, [fuel spills]**fueling** operations and bilge pumping. The effects of petroleum hydrocarbons on fish and shellfish include direct lethal toxicity, sublethal disruption of physiology, behavior, bioaccumulation, and development of an unpleasant taste to edible species. Motor fuels and exhaust often contain lead, cadmium, zinc and other heavy metals. Heavy metals have been shown to cause suppression of growth or death of eggs, embryos and larvae of hard clams. In addition, such contaminants are known to cause a variety of sublethal effects, including inhibited feeding behavior, retarded shell growth, and depression of cardiovascular function and respiration in various species of shellfish.

Boat maintenance operations **may** [can] also have adverse impacts to estuarine organisms. **Some** [Detergents] **detergents** used to wash boats can be toxic to fish and invertebrates and may contribute to elevated nutrient levels, particularly phosphorous. Toxins from various antifouling paints are harmful to shellfish and other invertebrates.

[Dredging disturbs and degrades shellfish habitat by adversely altering the water quality, salinity regime, substrate characteristics, natural water circulation pattern and natural functioning of the shellfish habitat.]

This rule intends to strike a balance between [resource] protection of **shellfish habitat** and recreational boating-related uses, by allowing maintenance dredging in shellfish habitats where an area has already been previously dredged**,** and new dredging at existing public boat launching facilities and [major mooring/docking facilities and] major mooring/docking facilities with 25 or more dockage units**.** The dredging of larger marinas and boat launching facilities will allow the greatest number of boaters access to the water areas with the least amount of habitat disturbances and degradation. This is partly because the larger marinas are more likely than smaller ones to generate sufficient demand for a full service marina, and are required to provide restrooms, **and** a[marine sanitation disposal device and] pumpout [station]**facility**, as a condition for the dredging approval if they did not already have them. Dredging is allowed at larger marinas and boat launching facilities because their highly concentrated use pattern minimizes the overall physical space required for dockage/mooring area and channel maintenance. Additionally, direct disposal of human waste into the water is expected to be reduced [at]**when** these marina facilities are equipped with pumpout facilities. [The]**Therefore,** maintenance of these facilities is [therefore] considered acceptable [and would be positive to the extent that it leads to less pollution from current boaters].

Living shorelines are a shoreline management practice that addresses the loss of vegetated shorelines by providing protection, restoration or enhancement of these habitats. The

establishment of living shorelines is conditionally acceptable provided the living shoreline activities disturb the minimum amount of special areas necessary to successfully implement the restoration, creation, enhancement or protection of habitat, water quality functions and values of wetlands, wetland buffers and open water areas. This may include a decrease in the existing special area or the conversion of one special area to another where it is determined that such changes are environmentally beneficial.

The one-time replacement, reconstruction or renovation of a legally existing bulkhead outshore of the existing bulkhead within waters classified as prohibited for harvesting shellfish is conditionally acceptable where the bulkhead is constructed of non-polluting materials and is located within 18 inches of the existing bulkhead, except where the replacement bulkhead is constructed of a corrugated material in which case it shall be located no more than 24 inches from the existing bulkhead. Non-polluting materials are required to minimize impacts to water quality. These requirements minimize impacts to water quality and the amount of substrate impacted by the bulkhead. The replacement or reconstruction of a bulkhead outshore of the existing bulkhead is allowed within shellfish habitat in order to encourage the elimination of any polluting material in shellfish habitat and the correction or prevention of erosion, and because, in some cases, replacement in kind (requiring the removal of the existing bulkhead which in most, if not all, instances will be constructed of a treated material that is not considered to be non-polluting) will have a detrimental impact to water quality through the sloughing of soil that has been in contact with the bulkhead sheathing that is being replaced. The replacement or reconstruction is limited to one time only in order to limit the encroachment into shellfish habitat.

The Navesink River, Shrewsbury River and Manasquan River (upstream of the Route 35 Bridge), and St. George's Thorofare [~~are important areas for~~]**contain highly productive** shellfish habitat. The Navesink and Shrewsbury Rivers are unique in that only three estuaries within the State have commercial soft clam densities. St. [~~Georges~~]**George's** Thorofare is **a** commercially and recreationally valuable area that contains a high hard clam density according to the 1985 Shellfish inventory conducted by the Division of Fish, Game and Wildlife. [~~It is~~]**In 1985, this 107 acre area was** estimated to contain 6.2 million hard clams [~~in a 107 acre area~~]. The high abundance of hard clams, together with the fact that this waterbody is poorly flushed makes St. George's Thorofare a critical area that is sensitive to any potential pollution activities. These circumstances led to a moratorium being placed on this waterway against the construction of any new docks. Since then the moratorium has been lifted, however, the circumstances continue to render recommendations of denial for the construction of new docks.

Federal, State and local officials have recognized the importance of these rivers as shellfish habitat and the need to protect their water quality. As a result, pollution control programs have been formed to protect these rivers. For example, the Navesink River Shellfish Protection Program represents a multi-agency pollution control program. On August 21, 1986, a Memorandum of Understanding was signed by the New Jersey [~~Department's~~] **Departments** of Environmental Protection [~~and Energy~~] and Agriculture**,** [~~and~~]**the** United States Department of Agriculture and United States Environmental Protection Agency. The memorandum serves to "...formalize our commitment to the Navesink River Water Control Shellfish Protection Program, its primary goal of improving water quality in the Navesink River watershed to a point at which the river's full shellfishery and recreational potential may be attained." Water quality monitoring during 6 years of implementation of pollution controls (1987-93) has shown significant reductions in bacterial contamination of the Navesink River, to the point where the potential now exists for upgrading the shellfish classification of the river to seasonally

approved. The Shrewsbury River is a unique shellfish habitat in that it is only one of the three estuaries in New Jersey to have commercial densities of soft clams. Studies indicate that the Shrewsbury River is hydrologically connected to the Navesink River. As such, the Shrewsbury River has been included as part of the "Navesink River Shellfish Protection Program". In addition, the Monmouth/Ocean Alliance to Enhance the Manasquan River[,"] was formed by Monmouth and Ocean Counties and the New Jersey Department of Environmental Protection to identify causes of shellfish water degradation and plan solutions for improved water quality and uses in the Manasquan River.

7:7E-3.6 Submerged vegetation habitat

(a) (No change.)

(b) Development in submerged vegetation habitat is prohibited except for the following:

1. Trenching for utility pipelines and submarine cables in the public interest, provided there is no practicable or feasible alternative alignment, the impact area is minimized and that, following pipeline or cable installation, the disturbed area is restored to its preconstruction contours and conditions. This may include subsequent monitoring and replanting of the disturbed area if these species have not recolonized the disturbed area within three years. The use of directional drilling techniques for utility installations is strongly encouraged, rather than the use of trenching;

2. New dredging of navigation channels maintained by the State or Federal government provided that there is no practicable or feasible alternative to avoid the vegetation; and that impacts to the habitat area (for example, dredging width, length and depth) are minimized to the maximum extent practicable. Mitigation will be required for destruction of one acre or more which possess submerged aquatic vegetation;

3. Maintenance dredging, as defined at N.J.A.C. 7:7E-4.6, of previously authorized, existing navigation channels maintained by the State or Federal government and associated disposal areas provided that there is no practicable or feasible alternative to avoid the vegetation and that impacts to the habitat area are minimized to the maximum extent practicable;

4. New and maintenance dredging, as defined at N.J.A.C. 7:7E-4.6 and 4.7, of previously authorized operating marinas and any necessary access channels to the expanded portion of such marinas (this exception does not include the boat basin of the expanded portion of the marina) and existing launching facilities with 25 or more dockage, storage or trailer parking units and their associated access channels, provided the proposed areas to be dredged (such as channel length, depths and widths) are minimized to the maximum extent practicable;

5. Maintenance dredging, as defined at N.J.A.C. 7:7E-4.6, to regain access to existing private docks, piers, boat ramps and mooring piles not associated with marinas that were previously dredged to an authorized channel and/or mooring depth, width and length, provided there is no practicable or feasible alternative on site that would avoid dredging in submerged vegetation habitat;

6. Construction of a single noncommercial dock or pier provided that:

i. There are no practicable or feasible alternatives to avoid impacts to submerged vegetation habitat at the site;

ii. The width of the structure will not exceed four feet, except for that portion of the structure adjacent to the mooring area, where the width and length may not exceed six and 20 feet, respectively;

iii. The pier shall have no more than two designated slips. No boats may be moored at a non-designated pier/dock area;

iv. No more than one pier shall be placed for every building lot and each building lot shall have a forty foot or greater frontage on the water. Where more than one lot has been assembled for the purpose of building, only one pier will be allowed;

v. No dredging shall be performed in conjunction with the use of the dock or pier;

vi. A minimum water depth of four feet at mean low water must be present in the area where the boats will be moored; and

vii. There is no alternative mooring area at the site that would have less impact on the submerged aquatic vegetation; [~~and~~]

7. The extension of existing piers or floating docks through submerged vegetation habitat to water at least four feet deep at mean low water, for the purpose of eliminating dredging or boating through submerged vegetation habitat, provided the width of the extended portion of the pier does not exceed four feet (except for the portion of the pier adjacent to the mooring area where the width shall not exceed six feet), there will be no increase in the number of boat moorings, and no dredging will be performed in conjunction with the use of the structure[~~.~~]**; and**

8. The establishment of a living shoreline in submerged vegetation habitat to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the living shoreline complies with N.J.A.C. 7:7E-4.23.

(c) – (d) (No change.)

(e) Rationale: New Jersey's estuarine waters are relatively shallow, rich in nutrients and highly productive. The submerged vegetation of these shallow habitats serve important functions as suspended sediment traps, important winter forage for migratory waterfowl, nursery areas for juvenile fin fish, bay scallops and blue crabs, and by nourishing fishery resources through primary biological productivity (synthesis of basic organic material) through detrial food webs in a similar manner to salt marsh emergent Spartina cord grasses. In addition, seagrasses absorb wave energy and root networks help stabilize silty bay bottoms. The value of seagrasses was dramatically illustrated during the 1930's when a disease epidemic virtually eliminated eelgrass from the eastern U.S. Atlantic ocean coastline. The number of finfish, shellfish, and waterfowl drastically decreased, threatening their survival. The oyster industry of the Atlantic coast was ruined. Bays became choked with silt and new mudflats were formed.

Most of the submerged vegetation species, in particular the eelgrass and widgeon grass, grow in patches which often cluster together forming a vegetative community and migrate from year to year about shoal areas. Disturbances to the substrate such as dredging usually result in permanent habitat destruction and loss. In shallow areas, propeller action may severely damage the roots and churn up the substrate and increase turbidity, damaging or destroying the plants and reducing their productivity. Other activities that can also have a negative impact on the plants and/or [~~or~~] habitat include wake actions, upland runoff and shading from structures.

This rule aims to protect the submerged vegetation as a resource. Areas where submerged aquatic vegetation grows or has been known to grow are identified as habitat areas which currently or potentially could support the submerged vegetation plant communities. Dredging of the habitat area is permitted for maintaining the depth of existing State and Federal channels since the navigability of these channels is essential to commerce and navigation. New and maintenance dredging to existing large marinas and public launching facilities provides the greatest number of boaters access to the water areas with the least amount of disturbance to the habitat area. Limited boating related uses are

also permitted in habitat areas with greater than four feet of water depth, where impacts from boating are not likely to be destructive to the plants or their habitat environment.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats. The establishment of living shorelines is conditionally acceptable provided the living shoreline activities disturb the minimum amount of special areas necessary to successfully implement the restoration, creation, enhancement or protection of habitat, water quality functions and values of wetlands, wetland buffers and open water areas. This may include a decrease in the existing special area or the conversion of one special area to another where it is determined that such changes are environmentally beneficial.

7:7E-3.15 Intertidal and subtidal shallows

(a) (No change.)

(b) Development, filling, new dredging or other disturbance is discouraged but may be permitted in accordance with (c), (d), (e)**,** [~~and~~] (f)**, (g), and (h)** below and with N.J.A.C. 7:7E-4.2 through [~~4.22~~]**4.23**.

(c) – (f) (No change.)

(g) The establishment of a living shoreline in intertidal and subtidal shallows to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the living shoreline complies with N.J.A.C. 7:7E-4.23.

(h) The construction and/or replacement of a bulkhead within intertidal and subtidal shallows is conditionally acceptable provided the bulkhead meets the requirements of the filling rule at N.J.A.C. 7:7E-4.11(f) and the coastal engineering rule at N.J.A.C. 7:7E-7.11(d).

[~~(g)~~]**(i)** Mitigation shall be required for the destruction of intertidal and subtidal shallows in accordance with [~~(h)~~]**(j)** below. Mitigation shall not be required for the following:

1. Filling in accordance with N.J.A.C. 7:7E-4.10(c) and [~~(e)~~]**(f)**1, 2 and 3;
2. (No change.)
3. Beach nourishment in accordance with N.J.A.C. 7:7E-7.11[(d)]**(f)**;
4. New dredging in accordance with N.J.A.C. 7:7E-4.7 to a depth not to exceed four feet below mean low water; [~~and~~]
5. Construction of a replacement bulkhead in accordance with N.J.A.C. 7:7E-7.11[~~(e)~~]**(d)**2i or ii[~~.~~]**; and**

6. The establishment of a living shoreline to address the loss of vegetated shorelines and habitat in the littoral zone.

[~~(h)~~]**(j)** (No change in text.)

[~~(i)~~]**(k)** Rationale: Intertidal and subtidal shallows play a critical role in estuarine ecosystems. They are a land-water ecotone, or ecological edge where many material and energy exchanges between land and water take place. They are critical habitats for many benthic organisms and are critical forage areas for fishes and many migrant waterfowl. The sediments laid down in intertidal and subtidal flats contain much organic detritus from decaying land and water's edge vegetation, and the food webs in these areas are an important link in the maintenance of estuarine productivity. Preservation is, therefore, the intent of these rules, with limited exceptions to allow for needed water-dependent uses and submerged infrastructure. In most cases, mitigation is required to offset habitat losses where new disturbance of intertidal and subtidal shallows is permitted.

New Jersey's coastal environment is dynamic and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows, and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats.

7:7E-3.16 Dunes

(a) – (c) (No change.)

(d) The maintenance of an engineered dune to the dune design template through alteration of the dune is conditionally acceptable provided:

1. It is demonstrated through pre- and post- construction surveys overlaid on the dune design template, that:

i. The existing dune is not consistent with the design template; and

ii. The proposed alteration of the dune will not result in the reduction of any portion of the dune below the design template;

2. A New Jersey licensed professional engineer certifies that alteration of the dune will not compromise the beach and dune system;

3. The activity:

i. Is conducted in accordance with the State Aid Agreement between the Department and municipality or county; and

ii. Complies with the management plan for the protection of State and Federally listed threatened and endangered species, as approved by the Department's Division of Fish and Wildlife and the U.S. Fish and Wildlife Service;

4. All existing public accessways are maintained;

5. Any existing vegetation disturbed during the maintenance activities shall, at a minimum, be restored in accordance with the dune construction planting specifications in the Federal consistency determination or Department permit for the engineered dune, as applicable; and

6. Any sand transferred as part of the maintenance of the dune design template shall be moved only within the shore protection project and shall be placed within the existing dune

system, or within the engineered beach berm in accordance with the beach rule, N.J.A.C. 7:7E-3.22(b).

[~~(d)~~] **(e)** Rationale: Ocean and bayfront dunes are an irreplaceable physical feature of the natural environment possessing outstanding geological, recreational, scenic and protective value. Protection and preservation in a natural state is vital to this and succeeding generations of citizens of the State and the Nation. The dunes are a dynamic migrating natural phenomenon that helps protect lives and property in adjacent landward areas, and buffers barrier islands and barrier beach spits from the effects of major natural coastal hazards such as hurricanes, storms, flooding and erosion. Natural dune systems also help promote wide sandy beaches and provide important habitats for wildlife species.

Extensive destruction of dunes has taken place in this century along much of the coast. This disruption of the natural processes of the beach and dune system has led to severe erosion of some beach areas; jeopardized the safety of existing structures on and behind the remaining dunes and upland of the beaches; increased the need to manage development in shorefront areas no longer protected by dunes; interfered with the sand balance that is so essential for recreational beaches and the coastal resort economy; necessitated increased public expenditures by citizens of the entire State for shore protection structures and programs; and increased the likelihood of major losses of life and property from flooding and storm surges.

The rule encourages the natural functioning of the dune system and encourages restoration of destroyed dunes, to protect and enhance the coastal beach dune areas, and to devote these precious areas to only those limited land uses which preserve, protect and enhance the natural environment of the dynamic dune system.

The Department strongly supports the creation, enhancement and maintenance of coastal sand dunes as cost-effective shore protection. The value of dunes in protecting the densely developed oceanfront from coastal storm hazards has been well documented by the Department, the Federal Emergency Management Agency, the Army Corps of Engineers, and others. In fact, the New Jersey Hazard Mitigation Plan (Section 406) specifically identifies dune creation and enhancement as a primary storm hazard mitigation strategy.

In addition to the benefits that dunes provide as a natural form of shore protection, dunes often provide important habitat for numerous species of plants and wildlife. Moreover, dunes are important aesthetic resources that complement and promote tourism along the New Jersey shore. With large quantities of sand being placed on New Jersey beaches as part of the State-Federal shore protection program, opportunities to restore beach and dune habitats and associated biodiversity have increased tremendously. Beach nourishment provides the basis for restoration of coastal landforms (beaches and dunes) and biota, and rediscovery of lost environmental heritage. A large variety of species inhabit coastal dune environments, including plants (beachgrass, beach plum, beach pea, goldenrod, bayberry, juniper, cedar, virginia creeper) and animals (sparrows, warblers, waxwings, kinglets, tanagers, tiger beetles, burrowing spiders, grasshoppers, butterflies).

The natural and aesthetic values of habitat restoration are an important byproduct of the State's beach and dune restoration efforts. Dunes can evolve as natural dynamic landforms that restore an important component of New Jersey's coastal heritage, while providing significant areas of vegetated habitat for coastal biota. The restoration of the natural and beneficial functions of beaches and dunes has become the cornerstone of New Jersey's shore protection program. These benefits are described in Nordstrom and Mauriello (2001), Restoring and Maintaining Naturally Functioning Landforms and Biota on Intensively Developed Barrier Islands under a No-Retreat Scenario. In addition, dune

restoration for the purpose of providing wildlife habitat and scenic amenities is consistent with the goals of CAFRA to preserve and enhance the unique environmental and aesthetic resources of the coastal area.

Typically, beach nourishment projects include the construction of dunes for shore protection and/or storm damage reduction purposes. These engineered dunes are designed to a specific height, width, slope, and length, in accordance with a dune design template. In some instances, the engineered dunes may capture sand and grow beyond their design template. In these cases, maintenance of the dune to its design template may be necessary to minimize the effects that an influx of sand can have on infrastructure, access, and public safety. This excess sand can then be utilized along sections of dune or upper beach berm that are below the design template. Engineered dunes are designed to provide storm damage reduction in addition to the beach berm, and are subject to the influx of wind blown sand from the beach berm as well as erosion from wave and tidal current activity. Engineered dunes may be supplemented during periodic renourishment cycles to replenish lost material to maintain the overall design template. Maintenance activities between renourishment cycles can potentially reduce the volume of material needed when accreted sand is transferred from areas that have expanded above the design template to areas that have experienced increased erosion. However, maintenance of the engineered dune must not reduce any part of the dune to less than the dune design template.

7:7E-3.22 Beaches

(a) (No change.)

(b) Development is prohibited on beaches, except for development that has no prudent or feasible alternative in an area other than a beach, and that will not cause significant adverse long-term impacts to the natural functioning of the beach and dune system, either individually or in combination with other existing or proposed structures, land disturbances or activities. Examples of acceptable activities are:

1. Demolition and removal of paving and structures;

2. Dune creation and related sand fencing and planting of vegetation for dune stabilization, in accordance with N.J.A.C. 7:7E-3A;

3. The reconstruction of existing amusement and fishing piers and boardwalks;

4. Temporary recreation structures for public safety such as first aid and lifeguard stations;

5. Shore protection structures which meet the use conditions of N.J.A.C. 7:7E-7.11**[**~~(c)~~]**(g)**;

6. Linear development which meets the Rule on Location of Linear Development (N.J.A.C. 7:7E-6.1);

7. Beach maintenance activities which do not adversely affect the natural functioning of the beach and dune system, and which do not preclude the development of a stable dune along the back beach area. These activities include routine cleaning, debris removal, mechanical sifting, maintenance of access ways and Department approved dune creation and maintenance activities;

8. Post-storm beach restoration activities involving the placement of clean fill material on beaches, and the mechanical redistribution of sand along the beach profile from the lower to the upper beach. These post-storm activities, which are different than routine beach maintenance activities, must be carried out in accordance with the standards found at N.J.A.C. 7:7E-3A; [~~and~~]

9. The following development in Atlantic City provided it meets the standards of N.J.A.C. 7:7E-3.49:

i. Development on or over existing ocean piers;

ii. Pilings necessary to support development proposed on or over existing ocean piers; and

iii. Development on or over the Boardwalk[~~.~~]**; and**

10. The maintenance of an engineered beach to the beach berm design template through the transfer of sand from the upper beach berm to the lower beach berm, from the lower beach berm to the upper beach berm, and/or alongshore provided:

i. It is demonstrated through pre- and post- construction surveys overlaid on the beach berm design template, that:

(1) The existing beach berm is not consistent with the beach berm design template; and

(2) The proposed transfer of sand will not result in the grading any portion of the beach below the beach berm design template;

ii. A New Jersey licensed professional engineer certifies that sand transfer will not compromise the beach system;

iii. The sand transfer:

(1) Is conducted in accordance with the State Aid Agreement between the Department and a municipality or county; and

(2) Complies with the management plan for the protection of State and Federally listed threatened and endangered species, as approved by the Department's Division of Fish and Wildlife and the U.S. Fish and Wildlife Service;

iv. The sand transfer does not impact any existing dunes, unless the transfer complies with the dune rule, N.J.A.C. 7:7E-3.16; and

v. Any sand transferred as part of the maintenance of the beach berm design template shall be moved only within the shore protection project and shall be placed within the existing engineered dune in accordance with N.J.A.C. 7:7E-3.16(d).

(c) (No change.)

(d) Rationale: Undeveloped beaches are vital to the New Jersey resort economy. Unrestricted access for recreational purposes is desirable so that the beaches can be enjoyed by all residents and visitors of the [~~state~~]**State**. Public access will be required for any beaches obtaining [~~state~~]**State** funds for shore protection purposes. Beaches are subject to coastal storms and erosion from wave action and offshore currents. Public health and safety considerations require that structures be excluded from beaches to prevent or minimize loss of life or property from storms and floods, except for some shore protection structures and linear facilities, such as pipelines, when non-beach locations are not prudent or feasible.

Many of New Jersey's beaches, especially those along the Atlantic Ocean, have been nourished through the State's Shore Protection Program. These engineered beaches are designed to a specific height, width, slope, and length, in accordance with a beach berm design template. Engineered beaches are subject to erosive forces of waves, winds, and tidal currents; in many instances, eroded material is moved and deposited in areas within the project area in such a way that the beach grows beyond the design template and thus the beach no longer conforms to the shore protection project design. For engineered beaches to provide the storm damage reduction and shore protection for which they were designed, the beach berm design template must be maintained throughout the entire project area. Municipalities are encouraged to maintain the project design to the maximum extent feasible between project renourishment cycles. However, maintenance of the engineered beach must not reduce any portion of the beach to less than the beach berm design template.

7:7E-3.27 Wetlands

(a) – (c) (No change.)

(d) The establishment of a living shoreline in wetlands to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the living shoreline complies with N.J.A.C. 7:7E-4.23. Where the Department finds the establishment of a living shoreline acceptable, mitigation shall not be required.

Recodify existing (d) – (h) as (e) – (i) (No change in text.)

[~~(i)~~]**(j)** Rationale: The environmental values and fragility of wetlands have been officially recognized in New Jersey since the passage of the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 et seq.) and the passage of the Freshwater Wetlands Protection Act of 1987 (N.J.S.A. 13:9B-1 et seq.). Tidal and freshwater wetlands[~~,~~] are the most environmentally valuable land areas within the coastal zone.

Wetlands contribute to the physical stability of the coastal zone by serving as (i) a transitional area between forces of the open sea and upland areas that absorb and dissipate wind-driven storm waves and storm surges, (ii) a flood water storage area, and[~~,~~] (iii) a sediment and pollution trap.

Also, wetlands naturally perform the wastewater treatment process of removing phosphorous, nitrogenous and other water pollutants, unless the wetlands are stressed.

The biological productivity of New Jersey's wetlands is enormous and critical to the functioning of estuarine and marine ecosystems. The emergent cord grasses and associated algal mats convert inorganic nutrients into organic plant material through the process of photosynthesis. In this way, the primary base for estuarine and marine food webs is provided. The principal direct dietary beneficiaries of organic wetland detritus are bacteria and protozoan, which are in turn fed upon by larger invertebrates. Important finfish, shellfish, and other resources feed upon these invertebrates. New Jersey's wetlands are prime wintering habitat annually for hundreds of thousands of migratory waterfowl. Approximately two-thirds of marine finfish and shellfish are known to be estuarine, and, therefore, wetlands dependent.

Inland herbaceous wetlands, such as bogs and marshes, play an important role in regulating the quality of the water in streams that flow to the estuaries. They retard runoff and store storm waters. They are important areas for primary productivity for estuarine systems. They are critical habitats and movement corridors for several species of plants and animals that are endangered or threatened.

They are productive habitats for other game and non-game animals, such as fur bearers and song birds. These wetlands also serve as fire breaks[~~,~~] and may limit the spread of forest, brush, or grass fires. They are inappropriate development sites due to poor drainage and load bearing capacity of the underlying soils.

Forested wetlands play a critical role in coastal and other ecosystems. Roots and trunks stabilize shorelines and trap sediment. They are physical and biochemical water filter areas maintaining stream water quality. High productivity, high water availability and high edge to area ratio make these areas especially productive wildlife areas.

White cedar stands, as well as other lowland swamp forests, play an important role in purifying water in coastal streams, retarding runoff, providing scenic value, and serving as a rich habitat for many [and]endangered plant and animal species, as well as game species, such as deer. White cedars also act as forest fire breaks. White cedar stands most commonly occur in flood plains and in the

fringe areas of drainage ways and bogs, which are frequently underlain with saturated organic peat deposits. This material is particularly unsuited for development.

White cedar is New Jersey's most valuable timber species and grows in discrete stands. The wood has a long tradition of maritime and local craft uses. Unfortunately, white cedars have been eliminated from much of their previous range in New Jersey.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. To protect development from these forces, shorelines are typically armored with hard structures such as bulkheads, gabions or revetments. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats.

SUBCHAPTER 3A**.** STANDARDS FOR BEACH AND DUNE ACTIVITIES

7:7E-3A.1 Purpose and scope

(a) 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. 7:7E-3.16, Dunes; N.J.A.C. 7:7E- 3.17, Overwash areas; N.J.A.C. 7:7E-3.19, Erosion hazard areas; N.J.A.C. 7:7E-3.22, Beaches; and N.J.A.C. 7:7E-7.11, Coastal engineering. In addition, N.J.A.C. 7:7E-3A.2, 3A.3 and 3A.4 are the standards for the coastal general permit for beach and dune maintenance activities, N.J.A.C. 7:7-7.6.

1. – 4. (No change.)

(b) Beach and dune maintenance activities subject to this subchapter shall comply with any applicable management plan for protection of State and Federally listed threatened and endangered species, as approved by the Department and the U.S. Fish and Wildlife Service.

7:7E-3A.2 Standards applicable to routine beach maintenance

(a) 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). Sand transfers from the lower beach profile to the upper beach profile are specifically designed to restore berm width and elevation, to establish/enhance dunes and to repair dune scarps. Activities which preclude the development of a stable dune along the back beach are not considered to be routine beach maintenance activities, pursuant to this section. Specifically, the bulldozing of sand from the upper beach (berm) to the lower beach (beach face), for the purpose of increasing the berm width or flattening the beach profile, is not considered to be routine maintenance**, except as provided at (a)9 below**.

1. All routine beach maintenance activities shall be conducted in a manner that does not destroy, jeopardize, or adversely modify endangered or threatened wildlife or plant species

habitat; and shall not jeopardize the continued existence of any local population of an endangered or threatened wildlife or plant species.

[~~1.~~]**2.** If the activities in (a) above are proposed to be conducted by a municipal or county agency on property owned by that governing body, then the municipal or county engineer must certify that the activities will be conducted in accordance with these standards. The appropriate municipal or county engineer is responsible for ensuring compliance with these requirements. If these activities are proposed to be conducted on privately owned property, then the property owner is responsible for ensuring that the activities will be conducted in accordance with these standards. If these activities are proposed to be conducted on State owned properties, then the DEP, Bureau of Construction and Engineering must certify that the activities will be conducted in accordance with these standards.

[~~2.~~]**3.** All guidelines and specifications of this section must be incorporated into any contract documents or work orders related to proposed beach and dune activities, as described in this section. The [~~Land Use Regulation Program~~]**Division of Land Use Regulation** is available to assist in the development of specific maintenance plans for oceanfront locations, upon request.

[~~3~~]**4.** In areas documented by the Department as habitat for threatened or endangered beach nesting shorebirds such as Piping Plovers (*Charadrius melodus*), Least Terns ([~~*Sterna albifrons*~~] ***Sternula antillarum***), **and Black Skimmers (*Rynchops niger*),** no beach raking, [~~or~~] other mechanical manipulation [~~or~~]**of** the beach**, or use of non-emergency vehicles**, shall take place between [~~April 1 and August 15~~]**March 15 and August 31**.

i. The Department's Division of Fish and Wildlife shall develop a list of specific areas where this restriction shall apply, based on documented habitat during the most recent nesting season**s**. The list of restricted areas shall be updated annually by the Division of Fish and Wildlife, at the end of each nesting season and **will** be available upon request from the Department's **Division of** Land Use Regulation [~~Program at PO Box 439, Trenton, New Jersey 08625-0439 (609) 292-0060~~]**at the address set forth at N.J.A.C. 7:7E-1.7**. The updated list shall be provided by the Department to each permittee prior to [~~April~~]**March** 1 of each year.

ii. If a particular beach area is identified on the updated list as described in (a)[~~3~~]**4**i above as habitat for threatened or endangered beach nesting shorebirds, regardless of the habitat classification of the previous nesting season, no beach raking, [or]other mechanical manipulation of the beach**, or the use of non-emergency vehicles** shall take place between [~~April 1 and August 15~~]**March 15 and August 31** in those areas.

iii. If a particular beach area is not identified on the updated list as described in (a)[~~3~~]**4**i above, but is subsequently found to contain a nest **or unflighted chick** of a threatened or endangered beach nesting shorebird, the Department shall notify the permittee and no beach raking [~~or~~] **other** mechanical manipulation of the beach**, or use of non-emergency vehicles** shall take place between [~~April 1 and August 15~~] **March 15 and August 31** in those areas.

iv. The restrictions contained in (a)[~~3~~]**4** above may be waived if the Department's Division of Fish and Wildlife determines that the identified areas do not represent suitable threatened or endangered beach nesting shorebird habitat, due to beach erosion or other causes**.** Requests for such a waiver shall be made in writing to the **Division of** Land Use Regulation [~~Program, PO Box 439, Trenton, New Jersey, 08625-0439; and~~] **at the address set forth at N.J.A.C. 7:7E-1.7.**

5. In areas documented by the Department as supporting known occurrences of Federally listed endangered or threatened plant species such as seabeach amaranth (*Amaranthus pumilus*), or known occurrences of State listed endangered plant species, such as sea-beach knotweed (*Polygonum glaucum*) no beach raking, other mechanical manipulation of the beach, or use of non-emergency vehicles shall take place between May 15 and November 30.

i. The Department, in cooperation with the U.S. Fish and Wildlife Service, shall develop a list of present and documented habitat areas where this restriction shall apply based on occurrence locations during the previous seasons. The list of restricted areas shall be updated annually and will be available from the Department's Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7E-1.7. The updated list shall be provided by the Department to each permittee prior to May 1 of each year.

ii. If a particular beach area is not identified on the updated list as described above, but is subsequently found to contain an occurrence of a Federally listed endangered or threatened plant species, or a State listed endangered plant species, the Department shall notify the permittee and no beach raking, other mechanical manipulation of the beach, or use of non-emergency vehicles, shall take place between May 15 and November 30 in those areas.

iii. The restrictions contained in (a)5i may be waived if the Department determines that the identified areas do not support occurrences of Federally listed endangered or threatened plant species, or occurrences of State listed endangered plant species. Requests for such a waiver shall be made in writing to the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7E-1.7.

[~~4.~~]**6.** Mechanical sifting and beach raking shall be limited to recreational beach areas only. For the purposes of this subsection, "recreational beach area" means all areas within 100 yards of a staffed lifeguard stand.

7. The excavation of sand accumulated beneath a boardwalk is conditionally acceptable provided:

i. The elevation of the area after the excavation is completed is not lower than either the upper beach berm design template for an engineered beach, or, for a non-engineered beach, the elevation of the existing beach berm;

ii. The excavated sand is relocated to the seaward toe of the existing dune, if present, or on the upper beach berm;

iii. Where breaching of an existing dune is necessary to allow for sand excavation, the following apply:

(1) The area of the dune breached shall be minimized; and

(2) The dune shall be restored to pre-existing conditions immediately upon excavation of the sand;

iv. Where sand is excavation from the landward slope of the dune, the slope shall be:

(1) Restored to the preexisting conditions and in no case be steeper than three horizontal to one vertical; and

(2) Revegetated in accordance with N.J.A.C. 7:7E-3A.4(b) and (c).

8. Any sand excavated from boardwalks, street ends, and single family lots shall be placed on the seaward toe of the existing dune, if present, or on the upper beach berm.

9. Placement of temporary sand fencing during the winter months, which results in the accumulation of sand that is later redistributed on the beach berm, is conditionally acceptable, provided:

i. The sand fencing is:

(1) Placed a minimum of 15 feet waterward of the seaward toe of any existing dune or, if no dune is present, from the waterward side of any structure;

(2) Installed no earlier than October 15 and removed prior to the Memorial Day weekend, unless threatened and endangered species timing restrictions apply;

(3) Installed in a manner that does not prevent public access along the tidal water and does not restrict public access to the beach from existing public access points; and

ii. The accumulated sand that is redistributed:

(1) Is placed on the beach;

(2) Does not result in the grading of the beach below the beach berm design template for an engineered beach or, for a non-engineered beach, below the elevation of the beach berm elevation existing prior to the redistribution; and

(3) Where feasible, does not result in the grading of the beach face to a slope steeper than 10 horizontal to one vertical.

(b) Projects involving the [~~mechanical redistribution~~] **transfer** of sand from the lower beach profile to the upper beach profile, or alongshore, are acceptable, in accordance with the following standards:

1. All sand transfer activities shall be conducted in a manner that does not destroy, jeopardize, or adversely modify endangered or threatened wildlife or plant species habitat; and shall not jeopardize the continued existence of any local population of an endangered or threatened wildlife or plant species.

[~~1.~~]**2.** The amount of sand transferred at any one time shall be limited to one foot scraping depth at the borrow zone. This borrow zone may not be rescraped until the sand volume from the previous scraping activities has been fully restored.

[~~2.~~]**3.** The borrow zone shall be limited to the area between the low water line and the inland limit of the berm. It is strongly recommended that a program of beach profiling be utilized to monitor the condition of the beaches and to ensure compliance with the standards of this section.

[~~3.~~]**4.** If the purpose of the sand transfers is to repair eroded dunes (dune scarps), all filled areas shall be stabilized with sand fencing and planted with beach grass in accordance with [~~DEP and/or SCS~~]**Department or Soil Conservation Service** standards. Fencing shall be in place within 30 **calendar** days of the transfer operation, while the vegetative plantings may be installed during the appropriate seasonal planting period (October 15 through March 31, anytime the sand is not frozen).

[~~4.~~]**5.** There shall be no disturbance to existing dune areas.

[~~5.~~]**6.** In areas of documented habitat for threatened or endangered beach nesting shorebirds such as Piping Plovers (*Charadrius melodus*)**,** [~~and~~] Least Terns ([~~*Sterna albifrons*~~]***Sternula antillarum***)**, and Black Skimmers (*Rynchops niger*)** no sand transfers shall take place between [~~April 1 and August 15~~]**March 15 and August 31.**

i. The Department's Division of Fish and Wildlife shall develop a list of specific areas where this restriction shall apply based on documented habitat during the most recent nesting seasons. The list of restricted areas shall be updated annually by the Division of Fish and Wildlife, at the end of each nesting season and **will** be available upon request from the Department's **Division of** Land Use Regulation [~~Program at PO Box 439, Trenton, New Jersey 08625-0439 (609) 292-0060~~]**at the address set forth at N.J.A.C. 7:7E-1.7**. The updated list shall be provided by the Department to each permitee prior to [~~April~~]**March** 1 of each year.

ii. If a particular beach area is identified on the updated list as described in (b)[~~5~~]**6**i above as habitat for threatened or endangered beach nesting shorebirds, regardless of the habitat classification of the previous nesting season, no sand transfers shall take place between [~~April 1 and August 15~~]**March 15 and August 31** in those areas.

iii. If a particular beach area is not identified on the updated list as described in (b)[~~5~~]**6**i above, but is subsequently found to contain a nest **or unflighted chick** of a threatened or endangered beach

nesting shorebird, the Department shall notify the permittee and no sand transfers shall take place between [~~April 1 and August 15~~]**March 15 and August 31** in those areas.

iv. The restrictions contained in (b)[~~5~~]**6** above may be waived if the Department's Division of Fish and Wildlife determines that the identified areas do not represent suitable threatened or endangered beach nesting shorebird habitat[~~,~~] due to beach erosion or other causes. Requests for such a waiver shall be made in writing to the ~~**Division of**~~ Land Use Regulation [~~Program, PO Box 439, Trenton, New Jersey, 08625-0439; and~~]**at the address set forth at N.J.A.C. 7:7E-1.7.**

7. In areas documented by the Department as supporting known occurrences of Federally listed endangered or threatened plant species, or known occurrences of State listed endangered plant species, no sand transfers shall take place between May 15 and November 30.

i. The Department, in cooperation with the U.S. Fish and Wildlife Service, shall develop a list of present and documented habitat areas where this restriction shall apply, based on occurrence locations during the previous seasons. The list of restricted areas shall be updated annually and will be available from the Department's Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7E-1.7. The updated list shall be provided by the Department to each permittee prior to May 1 of each year.

ii. If a particular beach area is not identified on the updated list as described above but is subsequently found to contain an occurrence of a Federally listed endangered or threatened plant species, or an occurrence of a State listed endangered plant species, the Department shall notify the permittee and no sand transfer on the beach shall take place between May 15 and November 30 in those areas.

iii. The restrictions contained in (b)7i above may be waived if the Department determines that the identified areas do not support occurrences of a Federally listed endangered or threatened plant species, or occurrences of State listed endangered plant species. Requests for such a waiver shall be made in writing to the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7E-1.7.

8. Sand transfers to or from wetland areas that may exist on a beach are not authorized by this permit.

9. Records of all sand transfer activities shall be maintained by the property owner, beach association, governmental agency or other authority conducting the activities, and shall be available for inspection by the Department, upon request. These records shall include, but not be limited to, dates of transfer, borrow area limits, fill area limits, estimates of the amount of sand transferred, the name of the person(s) supervising the transfer activities, and the engineering certification required (if appropriate) for all sand transfer activities.

7:7E-3A.3 Standards applicable to emergency post-storm beach restoration

(a) (No change.)

(b) Beach restoration activities, as part of an emergency post-storm recovery, include: the placement of clean fill material with grain size compatible with (or larger than) the existing beach material; the bulldozing of sand from the lower beach profile to the upper beach profile; the alongshore transfer of sand on a beach; the placement of concrete**,** [~~or~~] rubble **or rock**; and the placement of sand filled geotextile bags or tubes. [~~The placement of sand filled geotextile bags or tubes is preferred to the placement of concrete, rubble or other material.~~]

(c) - (d) (No change.)

(e) The **a**longshore transfer of sand from one beach area to another, as part of an emergency post-storm beach restoration plan, is acceptable, in accordance with the following standards:

1. - 4. (No change.)

(f) The placement of sand filled geotextile bags or geotubes, as part of an emergency post-storm beach restoration plan, is acceptable, in accordance with the following standards:

1. In areas where dunes are present, the geotextile bags or geotubes shall be placed along the toe of any scarped dune, or seaward of the dune toe, and not on the dune itself;

2. In areas where dunes are not present, the geotextile bags or geotubes shall be placed at the landward limit of the beach and in no case be placed below the mean high water line;

3. The geotextile bags or geotubes shall be tapered at the end of the project area, to minimize the impact to adjacent areas which are not protected by the geotextile bags or geotubes;

4. The crest and seaward side of the geotubes shall be buried to achieve a gradual, uniform slope from the upper beach to the crest of the geotextile bag or geotube;

5. The length of shoreline along which the geotextile bags or geotubes are installed shall not exceed a cumulative length of 500 feet;

6. Fill material for the geotextile bags or geotubes shall be from an upland source excluding the beach and dune **or from suitable dredged material**; [~~and~~]

7. The geotextile bag or geotube shall be installed parallel to the shoreline[~~.~~]**; and**

8. The geotextile bag or geotube shall be installed with the manufacturer's recommended scour apron.

(g) The placement of sand, gravel, rubble, concrete, **rock,** or other inert material, as part of an emergency post-storm beach restoration plan, is acceptable, in accordance with the following standards:

1. All material shall be non-toxic sand, gravel, concrete, rubble, **rock,** or other inert material;

2. The placement of concrete**,** [~~or~~]rubble**, or rock** shall be temporary in nature, and is not to be used as permanent protection, unless it is part of a Department-approved, engineered design for permanent shore protection;

3. All concrete**,** [~~and~~]rubble**, or rock** placed on the beach shall be removed within 90 **calendar** days, unless **an application is filed within 90 calendar days of** the placement **of the material for** [~~is part of a~~]Department [~~approved,~~]**approval of an** engineered design for permanent shore protection**. If a permit application is filed within this period, the material may remain on the beach until a determination is made on the application;** and

4. The use of automobiles, tires, wood debris, asphalt, appliances or other solid waste is prohibited.

7:7E-3A.4 Standards applicable to dune creation and maintenance

(a) - (b) (No change.)

(c) All proposed dune vegetation **shall be native to New Jersey and** should be limited to the following coastal species**, to the maximum extent practicable**: American Beachgrass (*Ammophila breviligulata*), Coastal Panicgrass (*Panicum amarulum*), Bayberry [~~Myrica pennsylvanica)~~] (***Myrica pensylvanica***), Beach Plum (*Prunus maritima*), [~~and Shore Juniper (Juniperus conferta). Although they may not be currently available from commercial nurseries at this time, the following plant~~

~~species are also well suited to the dune environment: ~~]Seaside Goldenrod (*Solidago sempervirens*), Beach Pea (*Lathyrus japonicus*), [~~Sea Oats (Uniola paniculata),~~]Bitter Panicgrass (*Panicum amarum*), **Switchgrass (*Panicum virgatum*), Partridge Pea (*Chamaecrista fasiculata*), Eastern red cedar (*Juniperus virginiana*), Groundsel tree (*Baccharis halimifolia*),** and [~~even~~]Saltmeadow [~~C~~]**c**ordgrass (*Spartina patens*).

1. American beachgrass is the preferred species for the stabilization of newly established dunes, and for stabilization of the primary frontal dune. Woody plant species are suitable for back dune and secondary dune environments. Herbaceous plant species are preferred as supplemental plantings for all dune areas.

2. Dune vegetation should be diversified [~~as much as possible~~]**to the maximum extent practicable**, in an effort to provide continuous stabilization in the event that pathogens reduce or eliminate the effectiveness of one species. A complex of associated grasses, herbaceous species and woody species is preferred to the planting of one species.

3. A landscape plan is required as part of any dune creation activity. The landscape plan shall depict the proposed vegetative community on the dune and include:

i. Species and quantity to be planted;

ii. Spacing of all plantings;

iii. Stock type (plugs, potted, seed); and

iv. Source of the plant material.

(d) The construction of elevated timber dune walkover structures shall be in accordance with the standards and specifications (or similar specifications) described in Beach Dune Walkover Structures (Florida Sea Grant, 1981). The construction of elevated dune walkover structures, particularly at municipal street-ends and other heavily used beach access points[~~,~~] is preferred to the construction of pathways or walkways through the dunes.

1. Copies of the DEP and Florida Sea Grant reports are available from the [~~DEP~~]**Department at the address set forth at N.J.A.C. 7:7E-1.7.** [~~Land Use Regulation Program, PO Box 439, Trenton, NJ 08625-0439. Copies of the Soil Conservation Service report are available directly from the Soil Conservation Service, Plant Materials Center, 1536 Route 9 North, Cape May Court House, NJ 08210.~~]

(e)- (f) (No change.)

SUBCHAPTER 4. GENERAL WATER AREAS

7:7E-4.2 [~~Aquaculture~~] Shellfish aquaculture

(a) [~~Aquaculture is the use of permanently inundated water areas, whether saline or fresh, for the purposes of growing and harvesting plants or animals in a way to promote more rapid growth, reduce predation, and increase harvest rate. Oyster farming in Delaware Bay is a form of 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 solidissma*), 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*).**

(b) **Shellfish** [~~A~~]**a**quaculture is encouraged in all [~~General Water Areas~~]**general water areas** as defined at N.J.A.C. 7:7E-4.1, provided **the activity**:

1. [It does]**Does** not unreasonably conflict with [~~resort or recreation uses~~]**other marine uses**;
2. [~~It does~~]**Does** not cause [~~significant~~] adverse [off-site]environmental impacts; and
3. [~~It does~~]**Does** not present a hazard to navigation. A hazard to navigation includes all potential impediments to navigation, including access to adjacent moorings, water areas and docks and piers[.]**;**
4. **Does not prevent the catching and taking of free swimming fish from the tidal waters of the State in any lawful manner, in accordance with N.J.S.A. 50:1-33; and**
5. **Is located in an area for which the person conducting the activity holds a valid shellfish lease pursuant to N.J.S.A. 50:1-23.**

(c) Upon expiration or termination of a shellfish lease, or the cessation of aquaculture activities, whichever occurs first, the permittee shall within five days remove all structures relating to the aquaculture activity placed within the lease area.

[~~(c)~~]**(d)** Rationale: Aquaculture is a means of food production which can be at least as efficient as land-based agriculture. It is, therefore, encouraged provided that it does not unreasonably affect the coastal recreational economy, the coastal ecosystem or navigation. **Aquaculture is considered one the fastest growing food-producing sectors and in 2011, it accounted for nearly 50 percent of the worldwide production of aquatic food products. In 2011, there were 189 shellfish leaseholders who held 775 individual leases which occupied 2,154 acres and 30,137 linear feet of bottom in New Jersey's Atlantic coastal bays and rivers. Additionally, there were 86 leaseholders who held 920 shellfish leases occupying 32,124 acres in Delaware Bay. The predominant species of shellfish produced are hard clams and oysters. Shellfish aquaculture is vital to the economy in the coastal communities of New Jersey as it was worth $4.50 million dockside in 2007 (USDA 2008) for hard clams and oysters. In addition, New Jersey shellfish are shipped throughout the United States and sold at retail locally.**

7:7E-4.10 Filling

(a) – (c) (No change.)

(d) Filling to establish a living shoreline to protect, restore or enhance a habitat area is conditionally acceptable provided the living shoreline complies with N.J.A.C. 7:7E-4.23.

[~~(d)~~]**(e)** Except as provided in (b) [~~and (c)~~]**through (d)** above, filling is discouraged in all other water 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 practical alternative site on an existing Water's Edge;
4. The minimum practicable area is filled;

5. The adverse environmental impacts are minimized, for example, by compensating for the loss of aquatic habitat by creation of an area of equivalent or greater environmental value elsewhere in the same estuary;

6. Minimal feasible interference is caused to Special Areas; and

7. Pilings and columnar support or floating structures are unsuitable for engineering or environmental reasons.

[~~(e)~~]**(f)** Mitigation shall be required for the filling of tidal water areas at a ratio of one acre created to one acre lost in the same estuary. The mitigation standards for the filling of intertidal and subtidal shallows are found at N.J.A.C. 7:7E-3.15[~~(g)~~]**(i)** and [~~(h)~~]**(j)**. Mitigation shall not be required for the following:

1. Filling in accordance with N.J.A.C. 7:7E-4.10(c);
2. Beach nourishment in accordance with N.J.A.C. 7:7E-7.11[~~(d)~~]**(f)**; [~~and~~]
3. Construction of a replacement bulkhead in accordance with N.J.A.C. 7:7E-7.11[~~(e)~~]**(d)**2i or ii[~~.~~];

4. Establishment of living shorelines in accordance with N.J.A.C. 7:7E-4.23; and

5. Construction of a boat ramp in accordance with N.J.A.C. 7:7E-4.3.

[~~(f)~~]**(g)** Filling of wetlands must comply with the wetlands rule, N.J.A.C. 7:7E-3.27.

[~~(g)~~]**(h)** Filling using clean sediment of suitable particle size and composition**, or dredged material for which the Department has issued a determination of acceptable use,** is acceptable for beach nourishment **and living shoreline** projects provided it meets the standards of the coastal engineering rule, N.J.A.C. 7:7E-7.11[~~(d)~~]**(f) or the living shoreline rule, N.J.A.C. 7:7E-4.23, respectively**.

[~~(h)~~]**(i)** (No change in text.)

[~~(i)~~]**(j)** Rationale: In general, filling is discouraged because it results in: loss of aquatic habitat including nursery areas for commercially or recreationally important species; loss of estuarine productivity since shallow estuarine water frequently has a higher biological value and is more important than deeper water; loss of habitat important for certain wading birds and waterfowl; and loss of dissolved oxygen in the water body since the shallows facilitate oxygen transfer from air to water.

Lagoons, as a result of limited freshwater inflow, multiple dead-end branches, and deeper bottoms than adjacent bay waters, have poor circulation which causes anoxic (devoid of oxygen) and stagnant bottoms. However, the shallow water edges of lagoons have been shown by the Department (1984) to support a wide variety of finfishes and shrimp. The above rules are intended to conserve this aquatic productivity found along shallow lagoon edges, while allowing use by the property owners.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living

shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats.

The use of dredged material of appropriate grain size and chemical composition in beach nourishment and living shoreline projects promotes the State's long-standing policy of treating dredged material as a resource.

7:7E-4.19 [~~Breakwaters~~] Vertical wake or wave attenuation structures

(a) [~~Breakwaters~~]**Vertical wake or wave attenuation structures**, [~~including, but not limited to, those constructed of concrete, rubble mound and timber,~~]are structures designed to protect [~~shoreline areas or~~]boat moorings**~~, including those at marinas,~~** by intercepting **wakes or** waves and reducing the **wake or** wave[~~s~~] energy which would normally impact the adjacent [~~shoreline areas or~~]boat mooring areas. Typically, timber**~~, metal or vinyl~~**[~~breakwaters~~] **wake or wave attenuation structures** are designed and utilized to protect boat moorings. [~~In most cases concrete or rubble mound breakwaters are designed and utilized to protect shoreline areas which are subject to storm waves and associated erosion.~~]**For the purposes of this rule, 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. 7:7E-4.10 and the coastal engineering rule, N.J.A.C. 7:7E-7.11.**

(b) Construction of a vertical wake or wave attenuation structure is conditionally acceptable. The porosity of a wake or wave attenuation structure, including spacing of planking and the distance between the structure and the bottom of the water body, shall be determined on a case-by-case basis, taking into consideration vessel traffic, water depth, and tidal flow.

(c) A vertical wake or wave attenuation structure may be designed as follows.

1. High wake or wave energy areas: Boat mooring areas in or near deep water that are exposed to port, harbor, and/or ferry traffic, such as the Hudson River between New Jersey and New York, are subject to high wake or wave energy. In this case, the structure may be designed to have no spacing between planking and extend to a depth of between 30 and 40 feet, or to the bottom of the water body, whichever is less, to intercept almost all wave energy. The distance between the structure and the bottom of the waterbody will be dependent upon the water depth of the area in which the structure will be located.

2. Medium wake or wave energy areas: Boat mooring areas adjacent to or near navigation channels, such as boat moorings located in Cape May Harbor, are subject to medium wake or wave energy. In this case, the structure may be designed to provide approximately one inch spacing between planking, and extend to the bottom of the water body.

3. Minor wake or wave energy areas: Boat mooring areas that do not meet the criteria of (b)1 or 2 above, such as boat moorings located in the Upper Manasquan River, are subject to minor wake or wave energy In this case, the structure may be designed to provide approximately three inch spacing between planks to ensure flushing, and the distance between the structure and bottom of the water body shall be determined on a case-by-case basis taking into account the potential wake or wave energy at that mooring location. In areas of low tidal flow, that is, where the tidal range is less than two feet, the distance between the structure and the bottom of the water body shall be at least 18 inches.

[~~(b)~~]**(d)** [~~Construction of breakwaters is conditionally acceptable provided:~~

~~1. Timber, vinyl or plastic breakwaters shall be at least 18 inches above the bottom of the waterway and shall provide a minimum of three inch spacing between planks except as provided at (b)3 below. The individual plank width shall not exceed six inches;~~

~~2. For detached breakwaters~~]**Detached vertical wake or wave attenuation structures** which are not fixed directly to a dock or pier structure[~~, marking~~] **shall be marked** with photocell lights and/or reflectors**.**[~~is required; and~~

~~3. The construction of breakwater structures other than those which comply with (b)1 above shall be consistent with the acceptability conditions for filling, N.J.A.C. 7:7E-4.10 and structural shore protection N.J.A.C. 7:7E-7.11.~~]

[~~(c)~~]**(e)** Rationale: [~~Breakwaters~~]**Vertical wake or wave attenuation structures** are designed to protect boat moorings**, including those at marinas.**[~~and may be suitable as shore protection structures. Breakwaters~~] **These structures** may be fixed or floating, attached or detached, depending on the water depth, tidal range and wave climate. The design of a [~~breakwater~~]**vertical wake or wave attenuation** structure must consider location, height **and** porosity [~~and purpose~~], in order for the [~~breakwater~~]**structure** to function without adversely affecting the movement of sediment and marine organisms **and**[~~or adversely affecting~~] water circulation patterns.

7:7E-4.23 Living shorelines

(a) 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.

(b) The establishment of a living shoreline to protect, restore or enhance a habitat area is conditionally acceptable provided:

1. It is demonstrated that the project:

i. Is part of a plan for the restoration, creation or enhancement of the habitat and water quality functions and values of waters of the State or waters of the United States;

ii. Is consistent with the requirements of the Wetlands Act of 1970, the Waterfront Development Law, and this chapter;

iii. Will improve or maintain the values and functions of the ecosystem; and

iv. Will have a reasonable likelihood of success, or, if performed by a college or university, will advance the level of knowledge regarding living shorelines in the State; and

2. The living shoreline complies with the following:

i. It disturbs the minimum amount of special areas, as defined at N.J.A.C. 7:7E-3, necessary to successfully implement the project plan. The Department may approve a reduction in the size of a particular special area in order to allow an increase in a different special area if the Department determines that the activities causing the reduction are sufficiently environmentally beneficial to outweigh the negative environmental effects of the reduction; and

ii. It does not include placement of fill beyond the footprint of the shoreline as it appeared on the applicable Tidelands Map (baseline photography dated 1977/1978), except for a structural component of the project intended to reduce wave energy.

(c) The beneficial use of dredged material is acceptable in the establishment of a living shoreline provided it is determined by the Department that the material is acceptable for use in a living shoreline.

(d) Rationale: New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address the loss of vegetated shoreline habitat as an alternative that adds diversity to other shore protection measures. The establishment of living shorelines is conditionally acceptable provided the living shoreline activities disturb the minimum amount of special areas necessary to successfully implement the restoration, creation, enhancement, or protection of habitat, water quality functions and values of waters of the State and waters of the United States. This may include a reduction in the size of a particular special area in order to allow an increase in a different special area where the Department determines that the activities causing the reduction are sufficiently environmentally beneficial to outweigh the negative environmental effects of the reduction.

The use of dredged material of appropriate grain size and chemical composition in the establishment of a living shoreline promotes the State's long-standing policy of treating dredged material as a resource.

SUBCHAPTER 7. USE RULES

7:7E-7.3 Resort/recreational use

(a) – (c) (No change.)

(d) Standards relevant to marinas are as follows:

1. Marina means any dock, pier, bulkhead, mooring or similar structure or a collection of adjacent structures under singular or related ownership providing permanent or semi-permanent dockage to five or more vessels.

2. New marinas or expansion or renovation (including, but not limited to, dredging, bulkhead construction and reconstruction, and relocation of docks) of existing marinas for recreational boating are conditionally acceptable if:

i. [~~The marina includes the development of an appropriate mix of dry storage areas, public launching facilities, berthing spaces, repair and maintenance facilities, and boating and hardware supply facilities, depending upon site conditions.~~

~~ii.~~] The marina posts prominent signs indicating discharges shall not be allowed within the basin and provides restrooms and marine septic disposal facilities for wastewater disposal from boats. For marinas with dockage for 25 or more vessels or any on vessel with live-aboard arrangement, adequate and conveniently located pumpout [~~stations~~]**facility** shall be provided.

[~~iii.~~] **ii.** Restrooms and at least one portable toilet emptying receptacle shall be provided at a marina. The portable toilet emptying receptacle requirement may be satisfied either by the installation of a receptacle device or by the designation of either a pumpout **facility** or restroom facility for this use; and

(1) Discharge to a municipal or regional treatment plant where practicable;

(2) Discharge to a subsurface sewerage disposal system constructed in accordance with N.J.A.C. 7:9-2 and N.J.A.C. 7:7E-8.21; or

(3) Discharge to a holding tank with waste being removed by a licensed septage hauler. A marina employing this method shall maintain a record of waste removal; and

[iv.] **iii.** New marina facilities and expansions and renovation of existing marinas shall provide public access in accordance with the lands and waters subject to the public trust rights rule, N.J.A.C. 7:7E-3.50, and the public access rule, N.J.A.C. 7:7E-8.11.

3. New marinas or boat launching facilities that provide primarily for sail, oar or rental boating are encouraged.

4. Expansions of existing marinas shall be encouraged by limiting non-water dependent land uses that preclude support facilities for boating.

5. Publicly funded marinas shall be designed to be part of multiple use parks, to the maximum extent practicable.

6. Recreational boating facilities are acceptable provided that they are designed and located in order to cause minimum feasible interference with the commercial boating industry.

7. New marinas are encouraged to locate on filled water's edge sites, where minimal dredging is required.

8. Construction of new marinas within areas designated by the Department as shellfish habitat is prohibited. Expansions of existing marinas within shellfish habitat areas shall comply with the standards of the Shellfish Habitat rule (N.J.A.C. 7:7E-3.2) and Submerged Vegetation rule (N.J.A.C. 7:7E-3.6).

9. Marinas shall comply with the design standards set forth in N.J.A.C. 7:7E-7.3A to the maximum extent practicable.

10. In addition to complying with all other applicable portions of these rules, all new, expanded and renovated boat mooring facilities with five or more slips which are located on any portion of the Navesink River, Shrewsbury River or Manasquan River (upstream of the Route 35 Bridge) or the St. George's Thorofare shall meet the conditions in (d)[10]**8**i through iii below. Renovation shall include complete or partial alteration of any portion of a structure, including construction, reconstruction of or relocation of existing docks, piers, moorings and bulkheads and dredging. The conditions are:

i. A pumpout facility shall be constructed and maintained at those facilities at which boats over 24 feet in length or those with on-board septic facilities (heads) shall be docked. All other facilities shall construct and maintain on site marine septic disposal facilities;

ii. [~~No pressure treated lumber or other lumber treated with any other substance shall be used in any portion of the project. This restriction applies only to bulkhead sheathing and planking, and dock planking, and does not apply to pilings.~~] **With the exception of pilings, bulkhead sheathing and planking, and dock planking, shall be constructed of non-polluting materials.** In addition, this requirement does not apply to any construction upland of the mean high water line; and

iii. The applicant and/or property owner shall finance monthly sampling and testing of fecal coliform levels per milliliter of water at five locations selected by the Department in the water in which the project is located. Testing shall be performed by a State-certified laboratory and shall be conducted beginning in the first month following the mooring of vessels and monthly thereafter for two full seasons of operation (that is, May 1 through October 31). The monitoring shall occur on the day of the month selected by the Department and no advance notice of the sampling day shall be given to the property-owner. Results of the monitoring shall be provided to the Department and the property-owner in writing by the laboratory within 10 calendar days after the date of sampling.

11. (No change.)

(e) (No change.)

[~~7:7E-7.11 Coastal engineering~~

~~(a) Coastal engineering includes a variety of structural and non-structural measures to manage water areas and the shoreline for natural effects of erosion, storms, and sediment and sand movement. Beach nourishment, sand fences, pedestrian control on dunes, stabilization of dunes, dune restoration projects, dredged material disposal and the construction of retaining structures such as bulkheads, gabions, revetments and seawalls are all examples of coastal engineering.~~

~~1. The standards relevant to shore protection priorities in (b) below do not apply to water dependent uses within existing ports.~~

~~(b) Standards relevant to shore protection priorities are as follows:~~

~~1. Non-structural solutions to shoreline erosion problems are preferred over structural solutions. Vegetative shore protection measures have been proven effective, and are preferred at shoreline sites in which they are feasible. Feasibility is dependent on the following factors: shoreline geometry; shoreline slope; sediment type; boat traffic; and wind and extent of exposed land/water surface (fetch). The infeasibility and impracticability of a non-structural solution must be demonstrated before structural solutions may be deemed acceptable.~~

~~2. Rationale: See the note at the beginning of this Chapter. Past reliance on costly structural shore protection measures, such as groins and jetties to retard the longshore transport of sand by the littoral drift, and seawalls, bulkheads and revetments to prevent waves from reaching erodible materials has proven to be an inadequate and incomplete solution. Bulkheads are deteriorating. Groins are starving the natural longshore transport of sand. Man has modified and destroyed dunes that provide natural protection against storm surges. Inlets frequently develop shoals which prevent safe navigation. The natural processes along the shoreline must be carefully evaluated over reaches or regions of the coast to determine the likely long term effects of shore protection measures.~~

~~Non-structural measures realistically recognize the inevitability of the ocean's advancement and the migration of barrier islands. Yet this concern must be balanced against the short term benefits of structures to protect the present intense recreational use of the narrow strip of oceanfront land in New Jersey.~~

~~(c) Standards relevant to dune management are as follows:~~

~~1. Dune restoration, creation and maintenance projects as non-structural shore protection measures, including sand fencing, revegetation, additions of non-toxic appropriately sized material, control of pedestrian and vehicular traffic, are encouraged. These projects shall comply with N.J.A.C. 7:7E-3A, Standards for Beach and Dune Activities.~~

~~2. Rationale: See the note at the beginning of this Chapter. As documented by the NJDEP, 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 is a preferred shore protection alternative where feasible.~~

~~(d) Standards relevant to beach nourishment are as follows:~~

1. Beach nourishment projects, such as non-structural shore protection measures, are encouraged, provided that:

i. The particle size and type of the fill material is compatible with the existing beach material to ensure that the new material will not be removed to a greater extent than the existing material would be by normal tidal fluctuations;

ii. The elevation, width, slope and form of the proposed beach nourishment projects are compatible with the characteristics of the existing beach;

iii. The sediment deposition will not cause unacceptable shoaling in downdrift inlets and navigation channels;

iv. Public access to the nourished beach is provided in accordance with the lands and waters subject to the public trust rights rule, N.J.A.C. 7:7E-3.50, and the public trust rights rule, N.J.A.C. 7:7E-8.11.

2. Rationale: See the note at the beginning of this Chapter. Beach nourishment depends upon an adequate quantity and suitable quality of beach nourishment material, otherwise the material may quickly return to the ocean.

(e) Standards relevant to structural shore protection are as follows:

1. The construction of new shore protection structures or expansion or fortification of existing shore protection structures, including, but not limited to, jetties, groins, seawalls, bulkheads, gabions and other retaining structures to retard longshore transport and/or to prevent tidal waters from reaching erodible material is acceptable only if it meets all of the following five conditions:

i. The structure is essential to protect water dependent uses or heavily used public recreation beach areas in danger from tidal waters or erosion, or the structure is essential to protect existing structures and infrastructure in developed shorefront areas in danger from erosion, or the structure is essential to mitigate, through, for example, the construction of a retained earthen berm, the projected erosion in an erosion hazard area along a headland and provide erosion protection for a development that is otherwise acceptable under the Coastal Zone Management rules;

ii. The structure will not cause significant adverse impacts on local shoreline sand supply;

iii. The structure will not create net adverse shoreline sand movement downdrift, including erosion or shoaling;

iv. The structure will cause minimum feasible adverse impact to living marine and estuarine resources;

v. The structure is consistent with the State's Shore Protection Master Plan;

vi. If the proposed project requires filling of a water area it must be consistent with the General Water Area rule for Filling (N.J.A.C. 7:7E-4.10) and all other relevant coastal rules.

2. Maintenance or construction of an existing bulkhead is conditionally acceptable provided that it meets (e)2i, ii or iii below. All measurements shall be made from the waterward face of the original bulkhead alignment of the existing bulkhead to the waterward face of the replacement bulkhead.

i. The replacement bulkhead is located within 18 inches outshore of the existing bulkhead, except in accordance with (e)2ii or iii below;

ii. The replacement bulkhead is located no more than 24 inches outshore of the existing bulkhead when the replacement bulkhead is constructed of a corrugated material, and the replacement bulkhead is located as close as possible to the face of the existing bulkhead; or

iii. Maintenance or reconstruction of an existing bulkhead which does not meet (e)2i or ii above shall be considered new construction, unless it can be demonstrated that the existing bulkhead cannot physically accommodate a replacement in accordance with (e)2i or ii above. In such case, the

~~replacement bulkhead shall be as close as physically possible to the original bulkhead alignment.~~

~~3. Stone rip-rap and sloped concrete and gabion revetments which allow for growth of vegetation are the preferred form of retaining structures.~~

~~4. Public access to the shore protection project is provided in accordance with the Lands and waters subject to public trust rights rule, N.J.A.C. 7:7E-3.50 and the Public trust rights rule, N.J.A.C. 7:7E-8.11.~~

~~5. The construction of bulkheads subject to wave runup forces (V-Zones) must be designed and certified by a professional engineer to withstand the forces of wave runup, and must include a splash pad on the landward side. The splash pad must have a minimum width of 10 feet, and may be constructed of concrete, asphalt or other erosion resistant material. If a cobblestone or similar splash pad is utilized, appropriate subbase and filter cloth must be incorporated into the design. A provision for the use of rip-rap along the seaward toe of the bulkhead structure may be required on a case-by-case basis, as a means to limit the scour potential.~~

~~6. Rationale: Structural solutions to shore protection are appropriate and essential at certain locations, given the existing pattern of urbanization of New Jersey's shoreline. However, the creation, repair, or removal of publicly-funded shore protection structures must serve clear and broad public purposes and must be undertaken only with a clear understanding of the regional consequences of natural shoreline sand systems. Retaining structures are acceptable in some cases because of the need to protect existing development or to allow limited appropriate new development.~~

~~Sloped revetments allows vegetation to recolonize a site. Both rip-rap and sloped concrete revetments absorb wave energy without reflecting it back into the water to create turbulence and erosion of existing areas. Rip-rap also provides a habitat for aquatic life.~~

~~The Public Trust Doctrine requires that access be provided to publicly funded shore protection structures and that such structures not be used to impede.~~

~~The New Jersey Supreme Court in Borough of Neptune v. Avon-By-The-Sea 61 NJ 296 (1972) held that:~~

> ~~"... at least where the upland sand area is owned by a municipality a political subdivision and creature of the state and dedicated to public beach purposes, a modern court must take the view that the Public Trust Doctrine dictates that the beach and the ocean waters must be open to all on equal terms and without preference and that any contrary state or municipal action is impermissible. (61 N.J. at 308-309)."~~

~~Such structures, when located on wet sand beaches, tidally-flowed or formerly tidally-flowed lands, are subject to the Public Trust Doctrine. Once built, most publicly funded shore protection structures become municipal property and are, therefore, subject to the Public Trust Doctrine in the same manner as municipally owned dry beaches.~~]

7:7E-7.11 Coastal Engineering

(a) 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.

(b) Nonstructural, hybrid, and structural shore protection and/or storm damage reduction measures shall be used according to the following hierarchy:

1. Non-structural shore protection and/or storm damage reduction measures that allow for the growth of vegetation shall be used unless it is demonstrated that use of non-structural measures is not feasible or practicable. Factors considered in determining whether use of a non-structural measure is feasible include the type of waterway on which the site is located, the distance to the navigation channel, the width of waterway, water depth at the toe of bank, the bank orientation, shoreline slope, fetch, erosion rate, the amount of sunlight the site receives, substrate composition, and presence of shellfish habitat, submerged vegetation and wetlands at the site. For guidance on measures that may be appropriate depending upon factors impacting a site, see Guidance for Appropriate Shoreline Protection and/or Storm Damage Reduction Measures for a Site available from the Division of Land Use Regulation's website at www.state.nj.us/dep/landuse. **This guidance follows N.J.S.A 52:14B-3a and does not impose any new or added requirements nor can it be used for enforcement purposes.**

2. Where the use of non-structural shore protection and/or storm damage reduction measures under (b)1 above is demonstrated to be not feasible or practicable, then hybrid shore protection and/or storm damage reduction measures that allow for the growth of vegetation, such as stone, rip-rap, sloped concrete articulated blocks or similar structures, or gabion revetments, shall be used. Factors considered in determining whether use of a non-structural measure is feasible include the type of waterway on which the site is located, the distance to the navigation channel, the width of waterway, water depth at the toe of bank, the bank orientation, shoreline slope, fetch, erosion rate, the amount of sunlight the site receives, substrate composition, and presence of shellfish habitat

3. Where the use of hybrid shore protection and/or storm damage reduction measures under (b)2 above is demonstrated to be not feasible or practicable, then structural shore protection and/or storm damage reduction measures such as bulkheads, revetments, sea walls, or other retaining structures shall be used. Factors considered in determining whether use of a hybrid shore protection measure is feasible include the type of waterway on which the site is located, the distance to the navigation channel, the width of waterway, water depth at the toe of bank, the bank orientation, shoreline slope, fetch, erosion rate, the amount of sunlight the site receives, substrate composition, and presence of shellfish habitat.

(c) The hierarchy set forth at (b) above does not apply to water dependent uses within existing ports.

(d) The construction, maintenance, or reconstruction of a bulkhead shall comply with the following:

1. A bulkhead that is subject to wave runup forces, specifically, a bulkhead in a V-Zone as described at N.J.A.C. 7:7E-3.18, shall be designed and certified by a professional engineer to withstand the forces of wave runup, and shall include a splash pad on the landward side. The splash pad shall have a minimum width of 10 feet, and may be constructed of concrete, asphalt or other erosion resistant material. If a cobblestone or similar splash pad is used, an appropriate sub-base and filter cloth shall be incorporated into the design. The use of rip-rap along the seaward toe of the bulkhead structure may be required on a case-by-case basis as a means to limit the scour potential;

2. Maintenance or reconstruction of an existing bulkhead is conditionally acceptable provided that it meets (d)2i, ii, or iii below. All measurements specified below shall be made from the waterward face of the original bulkhead alignment of the existing bulkhead to the waterward face of the replacement bulkhead.

i. The replacement bulkhead is located within 18 inches outshore of the existing bulkhead, except in accordance with (d)2ii or iii below;

ii. The replacement bulkhead is located no more than 24 inches outshore of the existing bulkhead when the replacement bulkhead is constructed of a corrugated material, and the replacement bulkhead is located as close as possible to the face of the existing bulkhead; or

iii. Maintenance or reconstruction of an existing bulkhead that does not meet (d)2i or ii above shall be considered new construction, unless it can be demonstrated that the existing bulkhead cannot physically accommodate a replacement in accordance with (d)2i or ii above. In that case, the replacement bulkhead shall be as close as physically possible to the original bulkhead alignment.

(e) Dune restoration, creation and maintenance projects as non-structural shore protection and/or storm damage reduction measures are encouraged. These projects, including sand fencing, revegetation, additions of non-toxic appropriately sized material, and measures to control pedestrian and vehicular traffic, shall comply with N.J.A.C. 7:7E-3A, standards for beach and dune activities.

(f) Beach nourishment projects as non-structural shore protection and/or storm damage reduction measures are encouraged, provided:

i. The particle size and type of the fill material is compatible with the existing beach material to ensure that the new material will not be removed to a greater extent than the existing material would be by normal tidal fluctuations;

ii. The elevation, width, slope, and form of the proposed beach nourishment projects are compatible with the characteristics of the existing beach;

iii. The sediment deposition will not cause unacceptable shoaling in downdrift inlets and navigation channels;

iv. Public access to the nourished beach is provided in accordance with the lands and waters subject to the public trust rights rule, N.J.A.C. 7:7E-3.50, and the public access rule, N.J.A.C. 7:7E-8.11.

(g) Structural shore protection and/or storm damage reduction measures that are conducted using monies from the Shore Protection Fund established by N.J.S.A. 13:19-16 and/or any other Department monies shall comply with (g)1 and 2 below.

1. The construction of new shore protection structures or expansion or fortification of existing shore protection structures, including, but not limited to, jetties, groins, seawalls, bulkheads, gabions and other retaining structures to retard longshore transport and/or to prevent tidal waters from reaching erodible material, is acceptable only if the structure meets the following conditions:

i. The structure is essential to protect water dependent uses or heavily used public recreation beach areas in danger from tidal waters or erosion, or the structure is essential to protect existing structures and infrastructure in developed shorefront areas threatened by erosion, or the structure, for example, a retained earthen berm, is essential to mitigate the projected

erosion in an erosion hazard area along a headland and provide erosion protection for a development that is otherwise acceptable under this chapter;

ii. The structure will not cause significant adverse impacts on local shoreline sand supply;

iii. The structure will not create net adverse shoreline sand movement downdrift, including erosion or shoaling;

iv. The structure will cause minimum feasible adverse impact to living marine and estuarine resources;

v. The structure is consistent with the State's Shore Protection Master Plan; and

vi. If the proposed project requires filling of a water area, the filling is consistent with filling rule, N.J.A.C. 7:7E-4.10, and all other applicable rules in this chapter; and

2. Public access to the shore protection project shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7E-3.50 and the public access rule, N.J.A.C. 7:7E-8.11.

(h) Rationale: New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves and storms. To manage the effects of these forces on development, water areas, and the shoreline, non-structural and structural shoreline stabilization measures and shore protection and storm damage reduction measures are employed. These measures, collectively known as coastal engineering, include living shorelines, rip-rap and gabion hybrid structures, bulkheads, revetments, seawalls, and dune restoration and beach nourishment projects.

Vegetated or living shorelines are a shore protection and/or storm damage reduction measure 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 measure provides "living space" for organisms through the strategic placement of plants, sand or other structural and organic materials.

Structural solutions as shore protection and storm damage reduction measures are appropriate and essential at certain locations, given the existing pattern of urbanization of New Jersey's shoreline. However, the creation, repair, or removal of publicly-funded shore protection structures must serve clear and broad public purposes and must be undertaken only with a clear understanding, on a regional basis, of the consequences to natural shoreline sand systems.

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 is therefore encouraged.

New Jersey's unique geography places the State in the potential path of hurricanes, tropical storms, and nor'easters. Healthy beaches provide mitigation from these natural disasters by acting as a buffer between the ocean or bay and the homes, businesses, and infrastructure along the coast. Beach nourishment projects consist of the initial placement of sand along a beach that has experienced erosion. Beach nourishment depends upon adequate quantity and suitable quality of beach nourishment material; otherwise the material may quickly return to the ocean or bay. Sources of sand for such projects can include a local source such as from a neighboring beach or sandbar, a dredged source such as a nearby inlet or waterway, an inland source such as a mining quarry, or, as used most commonly in large-scale projects, an offshore source such

as a borrow site along the ocean bottom. This sand can be brought in with trucks or barges, hydraulically pumped or any combination of the above, and is then spread evenly along the beach using a common bulldozer. This completes the initial beach nourishment phase. As nourished beaches undergo erosion, they must be maintained through beach re-nourishment.

The Public Trust Doctrine requires that access be provided to publicly funded shore protection structures and that such structures not impede public access.

The New Jersey Supreme Court in *Borough of Neptune v. Avon-by-The-Sea* 61 N.J. 296(1972) held that:

"…at least where the upland sand area is owned by a municipality - a political subdivision and creature of the state –and dedicated to public beach purposes, a modern court must take the view that the Public Trust Doctrine dictates that the beach and ocean waters must be open to all on equal terms and without preference and that any contrary state or municipal action is impermissible. (61 N.J. at 308-309)."

Shore protection structures, when located on wet sand beaches, tidally flowed or formerly tidally flowed lands, are subject to the Public Trust Doctrine. Once built, most publicly funded shore protection structures become municipal property and are, therefore, subject to the Public Trust Doctrine in the same manner as municipally owned dry beaches.

7:7E-7.12 Dredged material placement on land

(a) Dredged material placement is the disposal or beneficial use of sediments removed during dredging operations. Beneficial uses of dredged material include, but are not limited to, fill, **capping material,** topsoil, bricks and lightweight aggregate. This rule applies to the placement of dredged material landward of the spring high water line. The standards for dredged material disposal in Water Areas are found at N.J.A.C. 7:7E- 4.8.

(b) (No change.)

(c) Dredged material disposal **and/or construction of a confined disposal facility** is prohibited [~~on~~]**in** wetlands unless [~~the disposal satisfies~~] the criteria found at N.J.A.C. 7:7E-3.27 **are met**.

(d) The **beneficial** use of dredged material of appropriate quality and particle size for purposes such as restoring landscape, enhancing farming areas, capping and remediating landfills and brownfields, **transportation projects,** beach protection, creating marshes, capping contaminated dredged material disposal areas, and making new wildlife habitats is encouraged.

(e) **Adverse** [~~Effects~~]**effects** associated with the transfer of the dredged materials from the dredging site to the **upland confined** disposal **facility** [~~site~~]**or upland placement site** shall be minimized to the maximum extent feasible.

(f) - (g) (No change.)

(h) All potential releases of water from confined (diked) disposal [sites] **facilities** and rehandling basins shall meet existing State Surface Water Quality Standards (N.J.A.C. 7:9B) and State [~~Groundwater~~]**Ground Water** Quality Standards (N.J.A.C. 7:9**C**).

(i) (No change.)

(j) Rationale: Dredged material disposal **and/or beneficial use** is an essential coastal land and water use that is linked inextricably to the coastal economy. Dredged material placement on land could have serious impacts in the coastal environment. In the past decade, evolving [state] **State** and federal policies for protection of the marine and estuarine coastal environment have sharply limited the designation of new open water dredged material disposal areas. Yet maintenance dredging must continue if inlets and navigation channels are to be maintained. This rule recognizes the importance of this use of coastal resources and the need for sites landward of the spring high water line where this material can be placed.

Dredged material may contain pollutants and thus dredging and dredged material placement must be managed to minimize impacts on water, air and habitat. Further, every precaution should be taken to ensure that the placement of dredged material on land does not endanger the natural coastal resources, human health or the environment. Therefore, due investigation is required prior to approval of dredged material placement on land.

SUBCHAPTER 8. RESOURCE RULES

7:7E-8.2 Marine fish and fisheries

(a) - (b) (No change.)

(c) The following coastal activities are conditionally acceptable provided that the activity complies with the appropriate general water area rule(s) at N.J.A.C. 7:7E-4;

1. Construction of submerged cables and pipelines;

2. Sand and gravel mining to obtain material for beach nourishment, provided:

3. The establishment of Aquaculture Development Zones in accordance with N.J.S.A. 4:27-1 et seq. and any regulations developed and adopted pursuant thereto[~~.~~]**; and**

4. The establishment of living shorelines to protect, restore or enhance a habitat area, in accordance with N.J.A.C. 7:7E-4.23.

(d) Rationale: Finfish (freshwater, estuarine, and marine) and shellfish resources, and the habitats that support these resources provide significant recreation experiences for residents of New Jersey and interstate visitors. These resources also help the State's economy, by leading to expenditures of approximately [~~$747 million~~]**$1.4 billion** per year ([~~New Jersey Department of Agriculture, 1995, American Sportsfishing Association, 1996, and Southwick Associates, 1999~~] **US Department of Commerce, National Marine Fisheries Service, 2008**). The Department also estimates that [~~944,000~~]**1.2 million** people participated in marine/estuarine recreational fishing in [~~1996~~]**2010** in New Jersey. (US Department of Commerce, National Marine Fisheries Service, [~~1996~~]**2011**) The value of and participation in recreational saltwater fishing is underestimated here as these figures only include finfish data and do not include recreational crabbing and clamming, which are important activities in New Jersey. Commercial landings for all finfish and shellfish in New Jersey during [~~1996~~]**2010** were [~~182,859,637~~]**161,831,909** pounds, valued at [~~$94.8~~] **$177** million dockside, according to **US** Department of Commerce statistics ([~~1996~~]**2011**). The total ripple effect on the State economy is estimated at [~~$2.1~~] **$2.6** billion, with recreational fishing yielding [~~$1.5~~]**$1.6** billion and commercial fishing yielding [~~$590.7 million~~] **$1.06 billion**. ([~~Southwick Associates, 1999~~]**US Department of Commerce, National Marine Fisheries Service, 2008 and 2011**).

Activities which may interfere with marine fish and fisheries include blockage of diadromous finfish spawning runs, reduction in the critical capacity of estuaries to function as finfish nursery or spawning areas, reduction of summer dissolved oxygen level below 4 pm stimulating anoxic phytoplankton blooms, introduction of heavy metals or other toxic agents into coastal water, rise in ambient water temperature regime especially during summer and fall periods, unacceptable increase in turbidity levels, siltation, or resuspension of toxic agents, excavation of marine substrate to obtain sand resources or to install submarine cables and pipelines, and introduction of effluents from domestic and industrial sources.

Water presently condemned for shellfishing may not be directly or immediately important to human economics although these areas have been used as resource recovery programs, relay and depuration, source areas. These areas however serve for restocking fishable areas through production of motile larvae. Shellfish in condemned waters also are not lost to estuarine ecological food-webs, but serve as a food source to other species of wildlife.

Sand mining for the purpose of beach nourishment has the potential to impact marine fish and fisheries by altering the contours of the water bottom (bathymetry) within borrow areas or by covering fishery resources and/or habitat through the placement of sand, thereby reducing the productivity of these areas. In order to conduct mining activities in a manner that does not adversely affect marine fish and fisheries. Design measures may include, but are not limited to, modifying the location and dimensions of proposed borrow areas, creating and/or enhancing habitat at or near the borrow site, requiring timing restrictions on sand mining activities, limiting frequency of borrow activities, and reducing allowable sand mining volumes.

Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses the loss of vegetated habitats by providing for their protection, restoration or enhancement.

Fishery Management Plans are developed by the Regional Fisheries Management Councils, National Marine Fisheries Service and Atlantic States Marine Fisheries Commission in accordance with the Federal Fisheries Conservation and Management Act of 1976, P.L. 94-265, as amended or the Federal Atlantic Coastal Fisheries Cooperative Management Act, P.L. 103-206, as amended. Fishery Management Plans are also developed by the Department pursuant to the State's Marine Fisheries Management and Commercial Fisheries Act**,** [~~pursuant to~~] N.J.S.A. 23:2B-1 et seq. Fishery Management Plans are intended to prevent overfishing of marine fish and to achieve optimal yield from each fishery on a continuing basis. These Plans are adopted on a regional basis and provide for long-term viability of marine fish and fisheries. This rule provides the Department the ability to ensure that Fishery Management Plans, as well as developmental and other activities, will not adversely affect New Jersey's recreational and commercial marine fisheries.

Appendix A

New Jersey Register Notice

Appendix B

Individual notice sent to federal agencies, local governments and adjacent State Coastal Management Programs

Appendix C

Mailing List